

Cultural Impacts on the Globalisation of a Virus

Dhanasundara, Sukhavichai; Sløk, Camilla; Turunen, Jaakko; Panza, Alessio; Cavallari, Marina; Quellec, Charles-Amaury

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CASE STUDY

CULTURAL IMPACTS

ON THE

GLOBALISATION

OF

A VIRUS

BINGO

COVID



Sukhavichai Dhanasundara MA
Associate Professor (lektor) Camilla Sløk Ph.D.
Jaakko Turunen PhD (Pol.Sci.)
Alessio Panza MD. MPH. DTM&H
Marina Cavallari MA
Charles-Amaury Quéllec MA

CULTURAL IMPACTS ON THE GLOBALISATION OF A VIRUS

SUKHAVICHAI DHANASUNDARA MA, Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand, and the Lucerne University of Applied Arts and Sciences (HSLU), Institute of Business and Regional Economics (IBR), Lucerne, Switzerland.

DR. CAMILLA SLØK, Associate Professor, PhD., Th.M. Cand.Theol., Copenhagen Business School, Copenhagen, Denmark

DR. JAAKKO TURUNEN PhD (Pol.Sci), Senior Lecturer, Social Work, School of Social Sciences, Södertörn University, Stockholm, Sweden.

DR. ALESSIO PANZA MD. MPH. DTM&H. Formerly Coordinator of governmental Tanzania – Italy Health Cooperation, and Coordinator of the European Union HIV and Adolescent Reproductive Health programs in South East Asia; and currently lecturer at Chulalongkorn University, College of Public Health Sciences, Health Systems Development, Bangkok, Thailand.

MARINA CAVALLARI, M.A. (Applied Linguistics), Lucerne, Switzerland,

CHARLES-AMAURY QUELLEC MA, Rennes Business School, Rennes, France, and Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand.

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IN MEMORIAM

Geert Hofstede

It was with deep sorrow to learn of the passing away of Professor Emeritus Geert Hofstede on February 12, 2020, which according to his son Gert Jan, was in peace and surrounded by his family.

His research, findings, and assessments of global cultural dimensions were, and are, enduring insights into humanity and the elements that make up the “homo sapiens sapiens” behavioural patterns.

Hofstede launched his cultural dimensions studies while working for one of the largest international corporations at the time, IBM. Today, Geert Hofstede stands on his own as a global intellectual heritage.....

Sukhavichai Dhanasundara, February 1, 2024. Bangkok, Thailand.

CULTURAL IMPACTS ON THE GLOBALISATION OF A VIRUS

Section One: CULTURAL ISSUES ON NATIONAL LEADERSHIP AND BEHAVIOURAL RESPONSES

SUKHAVICHAI DHANASUNDARA MA, Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand, and the Lucerne University of Applied Arts and Sciences (HSLU), Institute of Business and Regional Economics (IBR), Lucerne, Switzerland.

Section Two: CASE STUDIES OF COUNTRY PROFILES IN CRISIS MANAGEMENT

SUKHAVICHAI DHANASUNDARA MA, Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand, and the Lucerne University of Applied Arts and Sciences (HSLU), Institute of Business and Regional Economics (IBR), Lucerne, Switzerland.

“PEOPLE’S REPUBLIC OF CHINA: ORIGIN OF THE COVID-19 OUTBREAK AND THE LAST FRONTIER OF DEFENCE”

“THAILAND: FIRST CASUALTY FROM CHINA - SURVIVAL AND RECOVERY THROUGH RESILIENCE”

DR. CAMILLA SLØK, Associate Professor PhD., ThM., Cand.Theol., Copenhagen Business School, Copenhagen, Denmark, and Sukhavichai Dhanasundara.

“DENMARK: LEADERSHIP AND CULTURE”

DR. JAAKKO TURUNEN PhD (Pol.Sci), Senior Lecturer, Social Work, School of Social Sciences, Södertörn University, Stockholm, Sweden.

“SWEDEN: BETWEEN THE PANDEMIC AND AN INCAPACITATED STATE”

DR. ALESSIO PANZA MD. MPH. DTM&H. Formerly Coordinator of governmental Tanzania – Italy Health Cooperation, and Coordinator of the European Union HIV and Adolescent Reproductive Health programs in South East Asia; and currently lecturer at Chulalongkorn University, College of Public Health Sciences, Health Systems Development, Bangkok, Thailand.

MARINA CAVALLARI, M.A. (Applied Linguistics), Lucerne, Switzerland,

SUKHAVICHAI DHANASUNDARA

“ITALY: THE HIGHEST GLOBAL INFECTION AND DEATH RATE PER CAPITA DURING THE FIRST WAVE (2020)”

CHARLES-AMAURY QUELLEC MA, Rennes Business School, Rennes, France, and Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand.

“FRANCE, THE FIRST EUROPEAN NATION INFECTED WITH COVID-19”

Section Three: THE OUTBREAK, FACT FINDINGS AND ASSESSMENTS, and

Section Four: GLOBALISATION OF THE COVID-19 PANDEMIC

SUKHAVICHAI DHANASUNDARA MA, Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand, and the Lucerne University of Applied Arts and Sciences (HSLU), Institute of Business and Regional Economics (IBR), Lucerne, Switzerland.

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PREFACE

This book is written by academicians for academicians, students, and non-academicians such as politicians, public administrators, and the general public. The key target readers are the non-academic sector because fundamentally they are most critical in the planning and execution of crisis management strategies, and the general public who are most affected by the Covid-19 pandemic. Therefore this is not an academic textbook in the traditional sense. It is a report on the development of a global pandemic in real-time, with insights into the ‘findings, assessments, and lessons learned’ as they emerge. An ideal contribution of this work would be to give insights into the elements of a global pandemic crisis along with some critical issues to be considered in addressing, designing solutions, and motivating effective public responses to generate the best outcomes according to the cultural landscape of each nation.

Consequently, the principle objective of this book is the dissimilation of valuable and meaningful information, knowledge, and lessons learned, so as to be better prepared for the inevitable re-occurrence, of similar, or different, life-threatening viruses. This book is not about gaining ‘intellectual’ knowledge, but more pertinently, ‘smart’ knowledge, that is applicable and can be applied during any reoccurrence of a similar crisis. In essence, this book’s goal is to transfer practical and applicable ‘life-saving’ knowledge. ‘Life-saving’ is the key issue because Covid-19 can result in deaths, especially the old, the weak, the sick, and those with low immunity against various forms of diseases and infections. The coronavirus is spread and transmitted through human interaction and connectivity. The virus is in the air that we breathe, or on the surfaces of objects that we touch. Transmission of infection is as easy as breathing the air around us.

This book is not about the medical aspects or perspectives of Covid-19 as a disease. It is about the negative impacts of Covid-19 on our lifestyles, and our social and economic well-being. Therefore the focus and primary objective of this book is to explain and advise on how to protect ourselves to prevent getting infected through appropriate behavioural practice. Consequently, the language, structure, and context of the book are designed to be easily assimilated and understood. This means that this book is not structured to be highly academic or geared for the intellectual audience but to be easily and well-understood by the general public globally. To quote Andy Grove, Co-founder and CEO of Intel, “How well we communicate is determined not by how well we say things, *but by how well we are understood*”.¹ Configuring this wisdom into crisis management actions would be something like, ‘To bring about optimum effective outcomes is not limited to only how well we plan the strategies and execution plans, but on the level of comprehension, acceptance, and conformity of the general public response.’

This book is a Case Study of how Man’s (the species, not the gender) response to the Covid-19 crisis may be significantly overshadowed by deep-rooted cultural beliefs, values, and behavioural norms

¹ <https://www.azquotes.com/quote/536787>

which are inherent or reflect Man's environment. Culture is part of the DNA profile of a nation's people and therefore would influence and have an impact on the crisis response behavioural patterns accordingly. This is why the same Covid-19 that is infecting the world results in significantly different outcomes in different nations. However, these negative outcomes in terms of infections, hospitalization, and deaths don't seem to be associated with economic wealth, political maturity, or advanced technology because the Top 20 nations most negatively impacted are mostly wealthy. Conversely, the lowest levels of negative impacts from Covid-19 were mostly the poor, under-developed, or developing nations of the world. This would suggest that other aspects more related to human behaviour patterns may have a greater impact on generating negative outcomes. This could be related to the differences in cultural values and aspects.

This book presents case studies and country profiles of selected nations in Asia, namely China, and Thailand, and in Europe, namely Denmark, France, Italy, and Sweden, describing the crisis management leadership of their respective governments, combined with the behavioral responses of their population in confronting the Covid-19 pandemic in Part One. Part Two presents a bigger picture of the globalisation of the coronavirus (Covid-19) along with the possible implications of cultural influences.

However, there is no attempt to compare or make judgments on the crisis management responses of individual nations, nor on their cultural behavioural traits. The readers are best qualified to consider and evaluate the responses, outcomes, and lessons learned with respect to their respective societies.

Sukhavichai Dhanasundara. Bangkok, February 1, 2024.

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INTRODUCTION

As the title of the book suggests, Man's behavioural patterns during this global crisis may be significantly influenced by cultural values and customary norms. The globalisation of this singular coronavirus pandemic has created a unique opportunity to observe and measure, through statistical outcomes, research, and analysis, the diversity of cultural influences and impacts on the variety of national responses. This book, therefore, focuses on identifying and analysing the various cultural dimensions, factors, and other relevant elements which can influence the behavioural responses of both government leadership and the general population of a nation, and how they may lead to or result in, the level of negative outcomes in terms of infections, hospitalisations, and deaths. Therefore one of the goals of this book is to give insight into this global crisis response and management issue, by identifying whether nations respond universally objectively universally, and scientifically, or, with particular subjectively according to local culture, objectively customs, values, and norms.

This book is divided into four sections, and are is summarized as follows.

SECTION ONE: CULTURAL ISSUES ON NATIONAL LEADERSHIP AND BEHAVIOURAL RESPONSES

Chapter 1. The Influence of national culture on crisis management response and behavior

Various aspects of cultural dimensions are considered and compared to the behavioural responses of both government leadership and the general public response to the Covid-19 pandemic. Cultural differences are assessed on how they influence and impact crisis management initiatives of the different national leadership. Comparisons are made between the cultural implications of implementing social distancing protocols under different environments such as the non-pharmaceutical versus pharmaceutical protocols.

Chapter 2. Cross-cultural influence on the covid-19 pandemic crisis management

More detailed and specific analyses and assessments of the various cross-cultural dimensions are considered and compared in association with crisis management initiatives by government leaders, and how they contribute to the differentiated outcomes. Four of Hofstede's cultural dimensions considered to be most relevant to the Covid-19 crisis management scenario are applied as the basis for the analysis of behavioural responses of nations with the highest negative outcomes in terms of infections and deaths. Assessments are made regarding the cause and effects of these outcomes.

Chapter 3. The DNA of national political-cultures

Understanding government leadership responses to the Covid-19 pandemic requires an appreciation of the key elements that make-up the national political-culture under which it functions. A nation's political-culture is molded by its history and is shaped and carved by both its inner values and the influences imposed by its external environment.

Chapter 4. The social-cultural perspectives

The same values that shape political-culture of a nation also impact the social-culture. In fact, political-culture and social-culture are intertwined and inter-dependent with the one influencing and having an impact on the other, and vice-versa. Just like political-culture, the Social-culture is also linked to national history, along with evolution and transfers of social traditions, customs, religious beliefs, and values through past generations. Consequently, social-culture has a predominant influence and impact on behavioural responses to the Covid-19 pandemic, as a threat on the one part, and in the level of acceptance of government leadership initiatives in crisis management. It can be said that most of the outcomes derived from the Covid-19 pandemic have been influenced by social-culture-induced behavioural traits.

SECTION 2. CASE STUDIES OF COUNTRY PROFILES IN CRISIS MANAGEMENT

Chapter 5. An introduction :Case studies of targeted country profiles

Chapter 6. PR China : The origin of the covid-19 outbreak and the last frontier of defence.

Describes the events following the outbreak, along with the timeline of the government leadership actions, initiatives, and implementations, in response to the outbreak. The China case study and profile describe its crisis management protocols post-outbreak to contain the Covid-19 pandemic along with the behavioural responses of the general public. China follows by far the most stringent and controlled crisis management policies with strictly enforced social distancing protocols. China was the first nation to impose this initiative and probably the last nation to lift lockdowns and closures.

Chapter 7. Thailand: the first casualty from China - survival through resilience

Thailand was the first country infected by China's coronavirus which was 'imported' through Chinese tourists. Thailand, having had previous experience with the previous coronavirus infection (SARS-COV-1) during 2002 – 2004, was quick to impose stringent controls, restrictions, and quarantine conditions, following the Chinese strict non-pharmaceutical – based social distancing protocols. Thailand was one of the earliest nations to mandate the wearing of sanitary protective masks in public at all times. Today, Thailand is one of the few nations still practicing (voluntary) wearing masks and sanitizing hands in public places.

Chapter 8. France: the first European nation infected with Covid-19.

As the first European nation to 'import' the coronavirus, France has a longer history of exposure to the deadly virus, and it showed as the country continually is listed among the Top 20 nations with the highest infection cases and death rates.

Chapter 9. Italy: the first major shock wave in Europe (2020).

Italy had the highest infection and death rates in the world during the first 5 months of the Covid-19 pandemic which centered in the Lombardy region. Throughout 2021 and 2022 Italy continued to have high spikes in death rates.

Chapter 10. Denmark: leadership and culture.

When the United Nation's World Health Organization declared Covid-19 as a global pandemic, Denmark was the first nation in Europe to initiate selective 'lock-downs' by declaring closures of schools, care centers, and government offices with orders for civil servants to work from home (WFH). During the first two years of the Covid-19 pandemic, the Danish government leadership has taken various stringent if not bold steps to control the infection spread and mortality rates.

Chapter 11. Sweden: between the pandemic and an incapacitated state.

Unlike all the other nations in Europe, especially its Scandinavian neighbours, Sweden was reluctant to follow the WHO advisory for strict social distancing protocols, including closures, lockdowns, and mobility restrictions. However, when the infection levels and death rates were speedily sky-rocketing the government leadership eventually followed the other European nations, and the rest of the world, in imposed restrictions and controls.

Chapter 12. Impressions and comments from the country profile researchers.

The country case study contributors were requested to express personal opinions and observations regarding Covid-19. This also included their goals and objectives in undertaking this research and contribution to this book.

SECTION THREE: THE OUTBREAK, FACT-FINDINGS AND ASSESSMENTS

Chapter 13. The virus and mankind - an inseparable bond.

Traces of known origins of the virus, before the age of the dinosaurs (Jurassic period), and long before the age of Man, and how it evolved and intertwined with the existence and evolution of Mankind, representing the oldest 'marriage', "for better or for worse, in sickness or in health....."

Chapter 14. The outbreak, the W.H.O. response timeline, and the declaration of the global Covid-19 pandemic.

Following China's declaration of the outbreak, the United Nations' World Health Organization (WHO) went into action to undertake initial investigations, and analysis to determine the health risks to both China and the rest of the world.

Chapter 15. The joint W.H.O. - China fact-finding mission to Wuhan City, China.

Initial investigations led to the establishment of a selected team of international experts forming a fact-finding mission to observe the situation on-site and to discuss and learn first-hand from the Chinese front-line health workers. The goal was to learn the nature and extent of health risks and threats of serious illnesses and potential death from the coronavirus. Based on findings and assessments, the Joint Mission group drew up a series of recommendations for addressing and responding to the coronavirus infections as well as preparedness to stem its spread.

Chapter 16. Observations and comments on the WHO – China joint mission

Highlights the key findings and assessments of the Joint Mission Report and Recommendations, including how the virus was transmitted, guidelines for preventive and protective protocols (non-pharmaceutical initiatives (NPIs), in the absence of any existing appropriate vaccines, the possibility of symptomatic vs. asymptomatic cases, and recommendations for government leadership initiatives and actions. The Joint Mission also studied and discussed the lessons learned from China's response initiatives in response to the outbreak, and how they may be applied in other nations.

SECTION FOUR: GLOBALISATION OF THE COVID-19 PANDEMIC

Chapter 17. From globalisation to localisation of the Covid-19 pandemic

Traces the spread and globalisation of the coronavirus from China, as well as analysing the spread and growth of the virus in terms of infections, and deaths at the regional, and national levels. Key aspects of data collection and recording, processing, and dissemination infrastructure, are considered for the reliability of statistical records and reference.

Chapter 18. Non-pharmaceutical interventions (NPIs) period (2020)

In the absence of existing applicable vaccines for this new coronavirus, the only reliable and effective defence and protection against the Covid-19 infection is through the human-based behaviour of social distancing. This was the first strategy initiated by the Chinese after the outbreak, subsequently adopted by most of the world, and continues today even after the availability of vaccines.

Chapter 19. Pharmaceutical interventions (PIs) with Covid-19 vaccines

Vaccines considered appropriate for Covid-19 were developed by the end of 2020 and were duly approved for inoculation by the WHO but only under the special Emergency Use Authorization (EUA). This Chapter presents the development, production, and distribution of vaccines globally, along with the launching of vaccinations in the respective countries. The effectiveness, reliability, and durability of these vaccines were also discussed, as well as the issue of additional booster doses.

Chapter 20. Anti-vaxxers, transparency, and credibility

The speed at which these vaccines were developed and approved by both the UN's WHO and the national Centers for Disease Control and Prevention (CDC) worldwide raised various issues and concerns regarding their reliability in terms of effective protection, as well as safety as an inoculation. The speed of development and approval raises concerns and credibility on the level of due diligence by the regulatory agencies and under the umbrella of strong suspicions regarding the transparency of the pharmaceutical companies. These fears and concerns gave rise to the emergence of “anti-vaxxers” worldwide who challenged both the safety and true level of effective protection of these vaccines.

Chapter 21. The elusive endemic

The arrival of the Omicron variant in November 2021 following the previous deadly Delta variant was viewed as a positive-oriented ‘mixed blessing’. This Omicron variant was highly contagious and therefore amplified the spread of infections, but at the same time, it was proven to be significantly less threatening to cause serious illnesses or risk of death. Many nations saw this development as the initiation of the Covid-19 endemic and projected an end sometime in 2022. However, while the Omicron spread more widely and frequently, as expected, the death rates continued to be significant into the first quarter of 2023. The WHO did not declare an end to this ‘emergency’ status until almost the end of the second quarter of 2023.

Chapter 1

INFLUENCE OF NATIONAL CULTURE ON CRISIS MANAGEMENT RESPONSE AND BEHAVIOUR

The focus on cultural influences and impacts on the development and spread of the Covid-19 pandemic globally emerged as a consequence of elimination. Generally in identifying, quantifying, and analysing the cause and effects of global crises, the popular tendency is to revert to the traditional and well-established “triumvirate” elements and structure of political stability, economic wealth, and social maturity. However, as is demonstrated in the following chapters and their respective topics, the key significant and dominant factors in either influencing or deterrent to the rapid and widespread of the Covid-19 pandemic globally were none of these factors. These common well-established ‘strengths of a nation, were no defense against the onslaught of the pandemic. The only remaining common denominator of nations was “culture” which applies and embraces different values.

Since this virus targets humans, it is rational that human behavioural patterns would play a critical role and pivotal role in addressing and containing the pandemic. This leads to the role and influence of culture in guiding and directing human behaviour, especially in times of crises. This work research can be said to be an ‘ice-breaker’ into the cultural-based or culturally-induces behavioural patterns and responses. What is most significant, and underscores the impacts of culture on behavioural patterns is the ‘cross-cultural’ divergence and contrast characteristics between the Western and Oriental cultures in responses to the pandemic, and how this reflects on the outcomes.

A. National culture and the diversity of behavioural response

The Covid-19 outbreak and the globalisation of the pandemic create a rare and unique opportunity to observe, study, and evaluate the influences and impacts of a singular global death-threatening crisis, how the diversified cultural traits and values of each national government addresses, and how the national general public responds, in terms of the behavioural response to this common threat. The first SARs-Cov-1 (2002 – 2004), despite being multinational in specific nations, only covered 29 nations, with about 8,000 infections and 775 deaths. This SARs-Cov-1 coronavirus could not be said to be “globalized” which is the case for the SARS – Cov – 2 (December 2019 – date), which has been referred to as Covid-19 by the WHO, covering 229

nations and spreading in every continent on the planet with 691 million confirmed cases and around 6.9 million deaths (almost 10% of infection rate) as at July 2023.¹

This very unique ‘globalisation’ of the coronavirus infection creates the unique opportunity to study the corresponding government leadership responses to this crisis, the general public behavioural patterns during this crisis, and the solution-oriented technological initiatives from the pharmaceuticals industry. All things that underscore our self-proclaimed status as a modern, civilized, and progressive race. It would seem that Mother Nature is slapping the challenge on Mankind to justify and substantiate this claim.

Through the globalized Covid-19 pandemic, Mother Nature is challenging the 21st. century Mankind, with its modern social lifestyle, and progressive technology. Through the Covid-19 pandemic, perhaps Mother Nature has found a niche in human nature to test its strengths and frailty, through its evolution of social values, human instincts, and cultural behaviour. From the point of view of the Researchers, Mankind’s cultural behaviour in response to the globalized coronavirus pandemic plays a part, in some nations this may be significant, and in others maybe less so. Only the national government leaders and their citizens can verify the extent of the cultural influence and impacts on the design, implementation, and level of conformity in the execution of national responses. Only the leadership and population of each nation can rationalize and confirm the level of influence and justification for the outcomes resulting from the Covid-19 pandemic. Only they can establish the verifiable link, whether high or low, between theoretical perception of cultural attributes and dimensions, and actuality as assessed in the following sections.

The speed and the nature of the spread of the Covid-19 pandemic globally by regions are covered in more detail in subsequent Chapters as well as identifying the western regions of The Americas and Europe as being the most infected regions for confirmed cases and deaths amounting to about 60% and about 75% respectively of the total global figures throughout the pandemic. Also remarkable about the globalisation of the Covid-19 pandemic is that the highest levels of confirmed infections and deaths centre on nations with wealth, advanced technology, and high social standards. In fact, most of the Top 20 listed with the highest rates are members of the G-20 group. This would indicate that these global values were not significant factors for protection against the coronavirus pandemic. It would therefore suggest that the only remaining viable factor that is common to *homo sapiens sapiens* would be behaviour patterns, where differentiated outcomes would be influenced by national culture. Since the coronavirus is biological and attacks the human body, then human responses through behaviour patterns become the key remaining element in defense and containment of Covid-19. Of significance with regard to both confirmed infection and death rates outcomes, is the ‘high – low’ difference between the ‘high’ of the western regions (the Americas and Europe) and the ‘low’ of the eastern regions (Eastern Mediterranean, South East Asia, and Western Pacific). This has been and remains to be, the consistent scenario for pandemic outcomes globally. This seems to indicate that the differences between the Western and Eastern cultures, and their influences and impacts on behaviour patterns play an important, and compelling role in the defense against the Covid-19 pandemic. These differentiated outcomes would seem to underscore Kipling’s observation, “Oh,

¹ <https://www.worldometers.info/coronavirus/countries-where-coronavirus-has-spread/>

East is East, and West is West, and never the twain shall meet....”² This was put to the test during Covid-19 and is based solely on cultural roots, and shows that despite globalisation emerging since the end of the 20th. century, many elements of national culture are still deep-rooted in national identity in the 21st. century. The ‘East – West’ cultural phenomenon has also been demonstrated throughout the Covid-19 pandemic, where from the beginning until now (January 2020 – January 2023), the Western nations seem to take the high road, and the Eastern nations take the low road, in terms of infections and deaths rates. Part Three attempts to identify and discusses cultural issues and influences on national leadership and behavioural responses, and within this framework, and this Chapter 10 focuses on the influence of national culture on crisis management in terms of behavioural response to the Covid-19 pandemic, both by the government and by the general public.

Any form of analysis of national behavioural patterns would necessarily include considerations related to national values, cultures, and beliefs that may have evolved from the fusion of history, longstanding indigenous traditions, customs, and religion(s). However, these elements of national culture are often surrounded by current-day political, economic, and social-cultural environments, by globalization, social media interactions, media influencers, and particularly the cultural interchange between the East and West (through Netflix, YouTube, Twitter, cable TV, Facebook, etc.). The greatest impacts of globalization have been in the entertainment industry, such as movies (Hollywood, Bollywood, Korean, Japanese, and European productions), music (J-Pop, and K-pop such as Blackpink), and fashion. Just as Man’s evolution is continuous, and often influenced by technical innovations which impact lifestyles, i.e. mobile phones, the internet, online business, etc. so also will certain aspects of national culture such as traditions, customs, and behavioural norms can also evolve, influenced by the integration or fusion of international cultural influences with the national. Cultural evolution can result from a combination of adaptation, adoption, and innovation. This cultural evolution was accelerated and globally widespread through the rapid globalization of information and communications technology and has contributed significantly to influencing social adjustment and change in terms of attitudes and values. The continuous cultural evolution is like a global ‘cultural’ supply chain where on the one side it channels the ‘inputs’ of multi-national cultures into the global connectivity stream, and on the other side, it is distributing the cultural mix and diversity ‘output’ at various levels of cultural influences, impacts, and implants. These, in turn, have also influenced a nation’s social, political, and economic cultural values and beliefs, and are discussed in further detail in the following Chapters.

However, as previously stated, many deep-rooted cultural values and beliefs of a nation will not change....yet, especially if linked to religion. Religious beliefs and values implanted as part of the political, social, and economic cultures would not change easily, especially in the East such as eating beef in Hinduism, pork in Islam, or trefah food in Judaism. Buddhists are lucky, they eat everything! Similarly, certain behavioural patterns based on national culture do not inter-change or adapt easily. For example, one cannot expect a Swiss to think and behave like an Italian or a

² Rudyard Kipling. The Ballad Of East And West. (1889)

English novelist, short-story writer, poet, and journalist. He was born in Mumbai (then called Bombay) in 1865, as well as worked there during his early adult life (1882 – 1889), in British colonial India, which inspired many of his literary works. India became an independent nation in August 1947 with the exit of Great Britain.

Spaniard to behave like a German even though they may have shared some history, or religion, and belong to the same geographic region. Some cultures accept 'high power distance' which is common to authoritarian governments, while others cultures only accept 'low power distance' which is common to democratic governments. In all these cases, there is no right or wrong. The analytical objective here is to comprehend, acknowledge and accept things as they are to understand why things happen as they do, in each nation, and how it affects the behavioural responses to the Covid-19 pandemic.

Cultural factors have contributed to the behavioural patterns of both government leadership and the general public. These behavioural patterns emanated from each nation's cultural beliefs and values which impacted and influenced the nature of responses and reactions to the Covid-19 pandemic crisis and were the root causes for the variable levels of infections and deaths in different nations and regions. Therefore in order to understand, analyze or rationalize the statistical outcomes for the various nations, it would be necessary to consider and understand the individual culture of each nation and how it influences national behavioural patterns for both government leadership as well as the general public. This involves looking at some of the key national cultural elements which may contribute to the variety of behavioural responses, particularly government initiatives in crisis management strategies on one part, and the likely behavioural responses from the general public on the other. Analyzing and evaluating the roots of national culture could help to understand why one common global problem, the coronavirus, is addressed differently by nations and resulting in very variable outcomes, from high to low.

Another aspect is to evaluate whether regionalism, in terms of politics, economics, or society, can also somehow influence national cultural beliefs and values. The previous parts have indicated how sometimes, regional policies and strategies become concrete guidelines for national responses within that region, i.e. the European Union determines and establishes specific strategies and guidelines for its member countries to follow and abide by accordingly, such as closing or opening borders, vaccination certification or travel restrictions.

For example, Europe as a geographical region is made up of 44 nations (the United Nations listing), which do not always share or embrace the same cultural values, traditions, or beliefs even though there may be some 'cross-over' values such as religion or in the arts or music in the region. However, behavioural culture, within the European region is a mix of various beliefs and values among the members such as France, Germany, Italy, Poland, Russia, Spain, Switzerland, Turkiye, and the United Kingdom. One cannot say because Germany and Spain belong to the European Union that they have the same values and behavioural culture. Or even Switzerland, which shares the same border with Italy, could not be said to have the same cultural behaviour as the Italians. Therefore it is very likely that the crisis management responses to the Covid-19 pandemic could be different in some aspects, both in terms of government leadership and the popular nature of response and compliance. Past and current European government-led initiatives to address and contain the Covid-19 pandemic have also indicated that in times of serious national crisis, even though belonging to the same regional association, the need for survival (economic or social health factors) requires more nationalist values for self-preservation, i.e. imposing more stringent travel or entry conditions and requirements such as quarantines and vaccination certificates. These differentiated government policies and actions, coupled with the cooperation, or lack of it,

from the general public, would result in individualized outcomes for infection cases and mortality levels for each nation, as has been demonstrated in WHO's regular situation reports and updates. Therefore, to better understand the cultural phenomenon, where the different values, traits, traditions, and customs of each nation effectively influence different behavioural responses, it is necessary to break down each region into individual nations. The same is also applicable to the other regions also which share significant differences in cultural roots and patterns such as Eastern Mediterranean (compare the cultures of Afghanistan, Dubai, Egypt, Libya, Pakistan, Saudi Arabia, and Sudan), or South East Asia (compare the cultures of India, Indonesia, Nepal, Myanmar, and Thailand), or the Western Pacific (compare the cultures of Cambodia, China, Japan, Malaysia, South Korea, and The Philippines). Due to the variety of cultures in each region which are generally associated with the history, customs, traditions, and religions of the member countries, it is not surprising that national responses to the pandemic crisis would demonstrate different government strategies and behavioural responses, and which eventually results in different outcomes in term of infections and deaths. These variables in policies and strategies along with the different levels of outcomes indicate that culture plays a primary and critical role in crisis management. This becomes a critical factor when the growth and expansion of the coronavirus are based on human-to-human transmissions, which essentially means based on human behaviour, not on technology, or wealth.

The primary causal theory with regard to the spread of the Covid-19 pandemic centres on human behavioural patterns, which in turn are influenced and guided by cultural values and beliefs. An understanding of this cultural-based phenomenon would make it easier to under the rationale and even the logic of government leadership in nations in the design and execution of national crisis management strategies (why does the Italian government do this? Why does the Chinese government do that?) on the one hand, and how these cultural traits affect population and generate responses to such government initiatives, strategies, and directives, on the other (Why do the French not always obey government directives? Why do the Thais inevitably obey?)³. This would lead to understanding and evaluating the key determinants in bringing about differentiated outcomes from one nation to another, and in significant instances, from the western regions compared to the eastern regions of the world.

B. The various aspects and scenarios of national culture

Every nation has its 'cultural roots and values ' which establish its 'unique' nationalism' which defines its values, and beliefs, and influences the behaviour of its government and general public indicating who they are, and what they stand for, as a people. The previous section describes the development, and evolution, of national culture as reflected in its historical roots, and the accumulation of traditions, customs, and religious beliefs and values through the process of nation-building and national evolution towards the current modern age. The evolution of national building in turn also forms and establishes the parameters and foundations for national government and rule, through regulations, laws, as well as political, social, and economic norms that regulate their community and social behaviour. These cultural deep-rooted elements directly affect the social way of life, the environment, and well-being, which includes the health and

³ These questions and issues are covered under the country profile studies presented in Part Four which include China, France, Italy, Sweden, and Thailand.

wellness, of its people. These are represented in the various 'dimensions' of a nation's culture as listed below:

1. The political organization and structure (political – culture)
2. The economic status, structure, and system (economic - culture)
3. The social structure and community (social - culture)
4. The religious beliefs and faith (morals, beliefs, and values)
5. The arts and leisure (audio-visual reflection of culture)

The study of the political-culture, economic-culture, and socio-culture aspects of these nations could reveal the key influencers on their behavioural patterns, in terms of national leadership and population responses in addressing the Covid-19 pandemic. It is likely that these behavioural patterns, with roots in these three fundamental cultural dimensions, could lead to understanding their crisis management strategies, and the reasons for the variable and differentiated outcomes. These three key national cultural dimensions are introduced and briefly summarized as follows but are covered in more detail in subsequent sections.

The Political-culture

This refers to the government and leadership structure under the influence and values of national culture and constitution. Each nation's cultural value influences the establishment and structure of its respective government organization and leadership through its constitution which can be either democratic-based or authoritarian-based. Whichever the case, the constitution represents the power of government, which can be full democracy, flawed democracy (covert), or autocratic (overt). Within the framework of constitutional powers, governments can issue regulations, laws, and acts including the enforcement thereof through established procedures and processes in dealing with a national crisis. The parameters of empowerment become the framework as well as the boundaries of government leadership and initiatives. In flawed democracies and authoritarian governments, the concentration of power is more individualized and autocratic. For full democracies, power is exercised by the people, with governments submitting proposals and being merely the executors. The goals may be the same for all these political cultures, but the methodology of approach and implementation would be different. This would also impact the outcomes.

The Economic-culture,

The economic-culture looks into how the economic wealth of nations influences behavioural patterns of government leadership and the general public. Economic wealth refers to the economic strengths and resources leading to the level of national incomes and reserves of a nation which sets the foundations for a nation's well-being. Essentially this means the difference between the 'haves' and the 'have nots' which establishes the levels of quality of life for the population, such as healthcare, welfare, education, and availability of modern technology. These are all essential elements in combatting the Covid-19 pandemic such as hospitals and medical facilities, the healthcare workforce, communications networks, logistics, and infrastructures. The economic environment in terms of the 'haves' and the 'have not' establishes the parameters of

cultural traits which determine the values, and behavioural responses in times of crisis of a nation and its people. The economy of a nation sets the strengths and weaknesses of a nation, which in turn establishes the key elements of cultural values and behavioural responses. A nation cannot have a policy of distributing protective masks or rolling out mass vaccinations for its people if they cannot afford to buy masks and vaccines. The economic -culture defines and sets boundaries on what a nation can, and cannot do in the defense against the Covid-19 pandemic.

The socio–community culture.

The socio–community culture evolves from the history, religion, traditions, and customs of nations and influences community beliefs, values, and behavioural responses in times of crisis. The socio–community culture both influences and shapes attitudes, emotions, and reactions to events and circumstances, and can be linked also to the political-culture. Based on this social - culture, behavioural patterns, and responses will vary according to the democratic government or authoritarian government. For example, people in the United States can take its government to court for enforcing mandatory vaccinations and have won. This is possible because their social – culture determines the parameters and powers of government through their constitution.

As will be better explained, social – culture is a very broad-based cultural dimension. It can also be dynamic meaning some aspects may change through adaptation or adoption in response to the external social environment brought about by the globalization of information and connectivity technologies. However, many cultural values and beliefs will not change due to religious factors or deep-rooted norms in some cultures.

C. Cultural differences result in contrasting behaviours and diversified outcomes

i. Key considerations on cultural influences on behaviour

First, cultural influences on behaviour patterns vary from the nature and source of the culture, such as religion, customs, traditions, norms, and practices. This means that some cultural traits, influences, and impacts are more significant and durable than others. In most nations, cultural values, and beliefs, based on religion, or deep-rooted in a long tradition are generally more enduring and resilient and embedded in a community or society. Other aspects of cultures that are based on other elements such as customs, norms, and practices may be shorter-term or considered transitory since their origins are generally derived from the external environment and social influences through interactions and exposures to internationalization and globalization. This is not the transmission of culture from one generation to another, but more or less through mass ‘osmosis’ via social media or the internet. Therefore the concept of cultural influences can be somewhat fluid depending on the conditions and elements described above. This dynamic element would have some level of impact on the level of cultural influence as well as the behavioural outcomes.

A common example of changing cultural values is reflected in the difference between tradition and customs. Frequently these two terms are used interchangeably as if they mean the same. In fact, they are different due to the mode of transfer, and the associated or perceived, resilience and durability of the cultural behaviour. “Tradition” is perceived to be longer-term with the

transmission of beliefs, practices, and values passing directly and specifically from generation to generation. Therefore it is easy to imagine, the longevity and durability of subjective-oriented tradition when we consider it a cultural 'heritage' which passes from generation to generation and can be associated with the evolution of the community or social development. This cultural trait is more 'internally' generated and therefore becomes more sustainable within a society.

On the other hand, the evolution or mutation of custom is a common and natural behavioural response and adoption in response to external stimulation in the form of environmental surroundings, conditions, influences, and commonly accepted norms. Consequently, certain customs brought about by the external environment are generally dynamic because they are continually changing. As a result of environmental change, such as in globalization, these customs tend to have shorter durability or staying power, until it is replaced by another externally emerging 'custom' to become the new 'norm'.⁴ While the process of change for deep-rooted traditions going back thousands of years remains slow, changes in customs actually were faster and more frequent. This was due to the rapid development and expansion of international commerce, trade, and tourism during the latter half of the 20th. century. This was further expanded and accelerated towards the end of the century with globalization and was enhanced and stimulated by the growing and technically advanced social media platforms including the Internet. This led to the emergence and evolution of a 'globalized' culture which brought about certain changes in customs in many nations. The relevance of change in this cultural element can have an impact on global crisis management and responses to the Covid-19 pandemic. Behavioural patterns are changing faster, and not always in the best direction.

Second, comparative considerations between the different cultures are not based on which is 'right' or 'wrong' or which is 'better' or 'worse'. It is merely a consideration, acknowledgment, and acceptance of how things are in various communities, societies, and nations. Just as it is illogical and impractical to compare a cat's behaviour to that of a monkey, even if both belong to the animal kingdom, so also it would be illogical to compare a Frenchman to an Austrian just because they belong to the human race. For the French, they would probably shout " Vivre la Difference.!" However, this does mean that when we interact with each other, it is not necessary to know, understand, and to the extent possible, to 'accommodate' that culture, if it belongs to the host nation.

Third, there is no such thing as absolute consistency and universality in the cultural behaviour of a nation. This means that not all Germans behave the same, just like robots, or according to the popular stereotype perception of German behaviour. The cultural traits and behavioural patterns and perceptions as indicated in the various cultural dimension represents the 'generally accepted majority' of behavioural traits and responses. There will always be some level of behavioural exceptions resulting from differentiated cultural values and beliefs, which could be influenced by upbringing, education, economic status, or social environment.

Therefore the analyses, and interpretations of cultural influences on behavioural patterns with regard to the management and response to the Covid-19 pandemic need to be undertaken with

⁴ Difference Between Custom and Tradition

Pediaa.com. December 10, 2015. <https://pediaa.com/difference-between-custom-and-tradition/>

these potentially impactful elements and issues being duly considered, and rationalized in proper perspective.

ii. Different national cultural values and their impacts on Covid-19 pandemic outcomes

The existence of potential influences and implications of national cultural values and attributes on behavioural patterns during crisis, of both the government leadership and the general public, is indicated and evidenced, in part, by the variable strategies implemented, and outcomes as a result of these initiatives and responses. This is somewhat evident in addressing the classic question ‘why the same problem (Covid-19) generates different approaches (by various governments) and results in variable outcomes (high and low infection and death rates)?’. To appropriately address this question it is necessary to understand how the three fundamental cultures linked to the political, economic, and social aspects, influence and impact government leadership in preventive and containment strategies on the one part, and the reciprocating and conformity of the general population in terms of responses. These variances in outcomes are consistently demonstrated in WHO’s situation reports on Covid-19 where the data on confirmed infections and deaths consistently indicates significant differences between the western regions of The Americas and Europe compared to the eastern regions, of Eastern Mediterranean, South East Asia, and Western Pacific. When the WHO declared the global Covid-19 pandemic on March 11, 2020, infections had already spread to 113 countries with confirmed infections rapidly reaching 118,391 cases and 4,292 deaths. About one-third of these figures were outside of China. However, within two weeks of this declaration, the level of confirmed infections had reached 750,290 cases (an increase of over 650%), and the number of deaths had risen to 36,398 (an increase of over 800%). Of these figures, 89% of the confirmed cases and 90% of deaths, were outside China. Covid-19 had become a global pandemic. Table 1.10 below illustrates the Top 20 nations with the highest Covid-19 infection and death rates as of the end of March 2020, almost three weeks following WHO’s declaration of the Covid-19 pandemic. Note the predominance of nations from the western regions as opposed to those from the eastern regions on the Top 20 listing.

| Table. 1.1. TOP 20 GLOBAL CONFIRMED CASES AND DEATHS AS AT MARCH 31,2020 | | | | |
|--|---|----------------|-----------------------------------|------------------|
| RANK | COUNTRY | CASES | DEATHS | WHO REGIONS |
| 1 | USA* | 140,640 | 2,398 | THE AMERICAS |
| 2 | ITALY* | 101,739 | 11,591 | EUROPE |
| 3 | SPAIN * | 85,195 | 7,340 | EUROPE |
| 4 | CHINA* | 82,545 | 3,314 | WEST PACIFIC |
| 5 | GERMANY* | 61,913 | 581 | EUROPE |
| 6 | FRANCE* | 43,977 | 3,017 | EUROPE |
| 7 | IRAN | 41495 | 2757 | E. MEDITERRANEAN |
| 8 | UNITED KINGDOM* | 22,145 | 1,408 | EUROPE |
| 9 | SWITZERLAND | 15,412 | 295 | EUROPE |
| 10 | BELGIUM | 11,899 | 513 | EUROPE |
| 11 | NETHERLANDS | 11,750 | 864 | EUROPE |
| 12 | TURKEY* | 10,827 | 168 | EUROPE |
| 13 | SOUTH KOREA * | 9,786 | 162 | WEST PACIFIC |
| 14 | AUSTRIA | 9,618 | 108 | EUROPE |
| 15 | PORTUGAL | 6,408 | 140 | EUROPE |
| 16 | CANADA* | 6,317 | 66 | THE AMERICAS |
| 17 | ISREAL | 4,831 | 17 | EUROPE |
| 18 | AUSTRALIA* | 4,359 | 18 | WEST PACIFIC |
| 19 | BRAZIL* | 4,256 | 136 | THE AMERICAS |
| 20 | SWEDEN | 4,028 | 146 | EUROPE |
| | TOTAL TOP 20 (a) | 679,140 (90%) | 35,039 (96%) | 5.1% (d) |
| | G-20+1 MEMBERS* (b) | 573699 (84%) | 30199 (86%) | 5.2% (d) |
| | THE AMERICAS REGION (c) | 151,213 (20%) | 2,600 (7%) | 1.7% (d) |
| | EUROPEAN REGION (c) | 389,742 (52%) | 26,188 (72%) | 6.7% (d) |
| | GLOBAL CASES | 750,890 (100%) | 36,398 (100%) | 4.8% (d) |
| | (a) Percentage of global total | | (b) Percentage of Top 20 Total | |
| | (c) Percentage of global total | | (d) Cases : deaths percentage (%) | |
| | *G-20+1 Members 11 out of 19 nations (excl. EU seat) + Spain. | | | |
| | Source: WHO Weekly Situation Report : March 31, 2020 | | | |

As can be seen from Table 1.1. above, of the total global figures, the Top 20 list represents the 679,149 confirmed infections representing 90%, and 35,039 deaths representing 96% respectively. Of this listing thirteen nations were from the European region, with total infection cases and deaths at 52% and 72% of the global total respectively; followed by three nations from the Americas region with total infection cases and deaths representing 20% and 7%, of the global total respectively. Combined, the Americas and European regions represented 72% of total global infection cases and 79% of total global deaths. With regards to the infection cases: death ratio, the Top 20 nations registered an average of 5.1%, which was higher than the global average of 4.8% which was most likely due to the unusually high death rates of 6.7% among the European nations. Significantly also, 13 nations out of 20 are members of the G-20 Group. Remarkable is the fact that these G-20 Group members include 8 of the top 10 richest nations by GDP ranking in 2020, with many consistently on the Top 20 listings for the period 2020 - 2023 as shown in Table. 1.2. below

| Table. 1.2. NATIONS CONSISTENTLY LISTED AMONG THE TOP 20 HIGHEST NUMBER OF COVID-19 CONFIRMED CASES (2020 – 2023) | | | | | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| MARCH.2020 | AUG.2020 | NOV.2020 | JAN.2021 | FEB.2021 | MAR.2021 | NOV.2021 | DEC. 2021 | JUN.2022 | DEC.2022 | APR.2023 |
| USA | USA | USA | USA | USA | USA | USA | USA | USA | USA | USA |
| BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL | BRAZIL |
| SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN | SPAIN |
| FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE | FRANCE |
| UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK |
| ITALY | ITALY | ITALY | ITALY | ITALY | ITALY | ITALY | ITALY | ITALY | ITALY | ITALY |
| GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY | GERMANY |
| IRAN | IRAN | IRAN | IRAN | IRAN | IRAN | IRAN | IRAN | IRAN | IRAN | IRAN |
| TURKEY | TURKEY | | TURKEY | TURKEY | TURKEY | TURKEY | TURKEY | TURKEY | TURKEY | TURKEY |
| | INDIA | INDIA | INDIA | INDIA | INDIA | INDIA | INDIA | INDIA | INDIA | INDIA |
| | COLOMBIA | COLOMBIA | COLOMBIA | COLOMBIA | COLOMBIA | COLOMBIA | COLOMBIA | COLOMBIA | | |
| | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO | MEXICO |
| | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA | ARGENTINA |
| | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA | RUSSIA |
| Source: WHO: Coronavirus (Covid-19) Das www.worldometers.info/coronavirus | | | | | | | | | | |

The consistency of these nations on the Top 20 listing would seem to indicate that economic wealth, social lifestyles, and advanced technology, are not likely to be the key elements in the defense against the Covid-19 pandemic. On the other hand, it seems that significantly poorer nations, by comparison, were achieving low infection and death rates, i.e. most nations in Africa, and many nations in Eastern Mediterranean, South East Asia, and Western Pacific regions. This would seem to point to human nature and behavioural patterns, as being a more pertinent, effective, and sustainable defense element against the coronavirus pandemic. Nations that adopted the original practice of non-pharmaceutical protocols (NPI) consisting of social distancing accompanied by wearing masks and sanitizing hands when in public were more successful. In fact, data for Covid-19 infections and deaths were significantly better during the non-pharmaceutical phase of the pandemic (2020) than during the following year of pharmaceutical solutions when vaccines were available (2021). Of course, human action-based behaviour requires a high level of sustainable discipline, commitment, and herd response temperament which is generally derived from a cultural attitude of self-reliance and preservation of the community or collectivism. Essentially these behavioural patterns are linked to the cultural values of people and vary by the cultural roots, and practices of the nation. This would explain why the poorer and less technically developed nations in Africa and Asia had lower infection cases and deaths than the developed and industrialized nations which is verified by the almost absence of nations from these regions on the Top 20 list. The ability of these nations to remain off the Top 20 list is likely due to their cultural-based behavioural patterns, which are more adaptable and acceptable to pursue non-pharmaceutical initiatives (NPI).

Again, it should be reiterated and emphasized that in differentiated cultural values and patterns, there is no right or wrong, nor is one better or worse. National cultures are inherent and specific to a nation, and in essence, establish the individuality, uniqueness, and ‘character’ of a nation. Just as one cannot blame a poodle for behaving like a poodle, or an Alaskan malamute for behaving accordingly, so also one cannot expect a poodle to behave like an Alaskan malamute. Similarly, one cannot expect a German to behave and embrace values and beliefs other than those which are culturally German. The same also goes for a Chinese, an Indian, or a Saudi. There is no ‘right’ or ‘wrong’. It’s just ‘different’. Although globalisation can and in some cases does

impact and bring about some form of cultural change, such as fashion, music, and even to some extent international business practices, it does not change or alter deep-rooted cultural values built on a nation's history, religious beliefs, and traditional values.

It has already been established from the very beginning, with examples and lessons learned from the initial outbreak in Wuhan, that this coronavirus is transmitted through human-to-human interactions and connectivity. In fact, globalisation has played a key role in stimulating the widespread of Covid-19 through lifestyles and connectivity, such as in tourism, business travels, and personal trips and visits all of which involve significant human mobility and interaction. This was how the coronavirus originating in Wuhan China, could rapidly spread globally within just one month. It spread globally in the air, but not by Mother Nature, but inside wide-bodied Airbus or Boeing jets, on the seas on cruise ships, and on land, on various cross-border routes on buses, trains, and cars. It was 21st-century transportation technology at its best which helped the global spread of the coronavirus pandemic. Global pandemics will become increasingly normal and prevalent under the rapid and expanding environment of globalization. It is no longer the case of "if or maybe", but more of "how rapid and widespread". Data and outcomes of the current Covid-19 pandemic indicate that the rate, speed, and level of the pandemic globally, can be determined by the inherent cultural traits of individual nations through their people. It is also statistically indicated that similar cultural practices and behavioural patterns of nations within specific regions seem to result in the same level of infection and death rates, i.e. the western regions of Europe and the Americas, compared to the eastern regions of Africa, Southeast Asia, and the Western Pacific. This circumstance is underscored by the fact that the first 1% of the coronavirus infections originated from Wuhan, China during the initial outbreak period of four to six weeks. However, since then, 99% of the global infection spread has been localized within each nation, with the infections being self-generated within and by the local population, and exclusive of any connection to China. This was due to the fact that following the declared outbreak in late December 2019, most nations closed their borders to China with travel restrictions to and from China, by air, sea, and land.

The compelling variances in infections and death rates between nations, and in particular the similarities within specific regional clusters, indicate that behavioural culture played a significant role in the Covid-19 pandemic outcomes. Understanding this phenomenon requires further study of the cultural factors, particularly the global cross-cultural elements that may indicate why the same globalized coronavirus should generate such differentiated behavioural patterns and results in terms of outcomes.

D. Adoption of the non-pharmaceutical initiatives (NPIs)

The influences and impacts of culture on general public behavioural patterns during the Covid-19 pandemic are best seen during the pre-vaccine and vaccination period (2020). This was when reliance on prevention and protection from infection rested solely on the adoption and practice of the non-pharmaceutical initiatives (NPIs). This essentially required "dramatic" human behavioural adjustments to the "new normal social distancing protocols." During this period therefore it was possible to observe, evaluate, and compare the national cultural influences on the direction of general public behavioural responses, particularly with respect to government initiatives and laws. Much has already been covered with regard to the important role and impact

of “social distancing” in global and national containment and control of the Covid-19 pandemic. Reference to this issue is made here only in relation to the influence and impacts of cross-cultural elements and dimensions on general public behavioural patterns and responses.

Almost immediately following the initial outbreak of the coronavirus in Wuhan City, China, then referred to as SARS – Cov – 2,⁵ the initial primary protective response against the spread of this infection was through the adoption of various ‘non-pharmaceutical initiatives (NPIs)’ by the Chinese government and health authorities. NPIs were the only option for immediate adoption by the Chinese population due to the uncertain identification of the virus strain, and the unavailability of suitable and reliable vaccines. Non-pharmaceutical initiatives meant total reliance on self-protection through human behaviour. The primary strategy was the implementation of “social distancing protocols” to prevent infection transmission through human connectivity.

i. Social-distancing protocols

a. Phase One: The ‘choice’ of behavioural change and conformity

Since the beginning of the SARS – Cov -2 (later renamed by the WHO as Covid-19) outbreak it was established that this coronavirus was infectious, and transmissions were through ‘human-to-human’ interaction. The term ‘human interaction’ was used because it was not necessary to have physical contact for the transfer of the virus. It was in the air we breathe, and therefore even at a distance of up to 2 – 3 meters, the virus could be transferred and infect another person. By the same logic and process, on a windy day, the spread could expand very much further. From this discovery of the inherent threat to both exposure and transfer of the coronavirus through human interactions, both near and moderately far, emerged and evolved the various aspects in the practice of ‘social distancing’. This was essentially the creation of personal protective space, known as ‘proxemics’. Consequently, various forms of social distancing policies and regulations were developed and ‘imposed’ on the general public globally by their respective governments. However, the enforcement by governments, along with the level of participative cooperation by the general population, with regard to this “social distancing” protocol was limited and generally ineffective in many regions of the world. This resulted, within a very short period of time in the rapid, and expansive spread of the infection globally. Within three months of the outbreak (March 2020), the WHO declared Covid-19 a global pandemic, as well as creating serious illnesses including death-threatening risks, particularly to the weak, the aged, and immunity-deficient segments of the global population. Underscoring the importance of “social distancing” protocols, the WHO reminded the world that there existed to date no reliable protective vaccines or medication to effectively and expeditiously cure this infection, including saving lives of those infected.

Following the Joint WHO – China fact finding and solution-seeking options, it was agreed that the first protective defense against the coronavirus infection adopted by the Chinese government through practicing the ‘non-pharmaceutical’ initiatives (NPIs), was significantly effective in stemming the spread in China. The Joint Mission recognized and acknowledged the various forms

⁵ The previous SARS – Cov -1 (severe acute respiratory syndrome coronavirus 1 occurred during 2002–2004).

of social-distancing behaviours and practices initiated by the Chinese in Wuhan and throughout the nation. The focus of China's NPI was on 'prevention' rather than the 'cure'. Without available appropriate vaccines and medications, the only viable and "workable" methodology had to be based on human effort and behaviour. Reliance mainly on human rational and situational response during a crisis normally means the need for attitudinal and behavioural change. On a globalized, nation-by-nation basis, this would mean recognizing, acknowledging, and taking into consideration the influence of indigenous national cultural values, beliefs, traditions, customs, practices, and norms, on the community, society, or population of each nation in terms of behaviour patterns and traits during this crisis.

b. Phase Two: The 'enforcement' of conformity through strict controls and laws

Just as China was the first nation to launch social distancing measures to combat and contain the spread of the coronavirus, so also was it the first nation to enforce absolute social distancing behaviour, through the segregation and confinement of communities, cities, and provinces. There were no exceptions as the top populated cities of Shanghai, Beijing, Tianjin, Shenzhen, and Guangzhou were placed under strict lockdowns in an effort to isolate identified clusters of the Covid-19 pandemic from the rest of the country. In addition to lockdowns, other strict measures include travel restrictions, quarantines, closures of public venues, entertainment, and sports facilities, social venues such as restaurants, coffee shops, and bars, transportation systems and networks (land, sea, and air), and schools and universities, etc.

Originally declared by other nations as being overly authoritarian these controls segregation and limitations on public movements were soon adopted globally by other nations that were under pressure when infection levels, hospitalization requirements, and rapidly increasing death rates had 'exploded' to dangerously high levels, especially in the Western regions of The Americas and Europe during the first two waves of the Covid-19 pandemic (2020). Even the governments of nations in the Asian and Middle Eastern regions, who were registering reasonably low levels by comparison with the other regions, adopted a more forceful and authoritarian approach to enforce widespread social distancing. Naturally, all these imposed restrictions on freedom of movement superseded as well as challenged the issue of freedom of choice and self-determination by the general public. The shift from the original "passive or laissez-faire" attitude regarding social distancing to a more active and aggressive, albeit legalized under emergency decrees, imposition of this initiative and protocol would establish a significant challenge to the cultural values, norms, and constitutional rights, with regard to behavioural patterns for most Western governments and their respective population. However, this was generally accepted initially as the "new norm" under the Covid-19 pandemic.

ii. Wearing protective clothing and masks in public places

Continuous and uninterrupted maintenance of social distancing is not always practical or possible during the daily lifestyles of the general public. The obvious example is traveling to and from work, going to schools or universities, or undertaking any chores on a daily basis since most people generally use mass transit systems (trains, buses, boats, and planes). Under these conditions, it is not practical or possible to maintain a social distance of 2 – 3 meters at all times so the only option is to wear masks in such crowded public places. Consequently, all governments

of the world have stipulated that the general public should, and in many countries “must”, wear protective face masks at all times in public places and crowded areas where social distancing is not possible. Provided, of course, that these people have sanitary masks to wear, which most cases in the third world, many don’t.

Nevertheless, the level of willingness for the general public to conform to this rule varies from country to country, with particular significant differences being evident between nations in the Western regions where masking was still a new ‘experience’, compared to the Eastern and Mediterranean regions where masking was both a common and frequent practice by the general public’. Consequently, the differences in cultural practice and norms would be an influential factor in the level of the general public’s willingness to conform and cooperate with this masking policy. As already covered and described in other Chapters, the reception to compulsory wearing of masks in public places was initially widely opposed in several nations, mostly in the Western regions where it was considered an imposition on the freedom of choice, sometimes considered unnecessary, and over-reacting. In some cultures, wearing a mask would be interpreted more as being socially undesirable due to the perception of being infected by a contagious disease or some form of socially hazardous sickness and therefore would be generally viewed negatively by society. There were numerous incidences of protests and demonstrations against the policy of enforced compulsory masking in public places. Opposition to this policy was not limited to the general public but also was expressed by both health workers, and various related agencies and institutions.

In other cultures, especially among nations with frequent and widespread exposure and experience with infectious diseases, such as in Africa, Asia, and the Middle East, wearing a mask would be considered both pragmatic and normal practice in times of known widespread of infections. These nations would support and favor the demonstration of collective cooperation and responsibility to disrupt and contain the threat from spreading within the community or society. Therefore the wearing of a mask would be viewed from a positive perspective, and therefore there were no protests or objections to the wearing of masks. In fact, the main problem in these nations was the inability to access sufficient masks to effectively protect the population due to the lack or shortage of supplies.

Eventually, the importance of wearing protective masks became critical with the rapid widespread of the deadly Delta variant of Covid-19, which emerged towards the end of 2020 and became the dominant strain globally by June 2021 and was recorded in over 179 nations by November 2021.⁶ Wearing masks in public places continues to be effectively practiced globally until early 2022 when it was relaxed and even became non-compulsory in many nations in the various regions. However, masking continues to be a common and widespread practice in many nations in Asia, particularly popular destinations for tourism, such as Japan, South Korea, China, and Thailand. In some nations wearing masks by foreign tourists is not compulsory but recommended. However, in most cases, the locals continue to wear protective masks. This is mainly due to the waiver of vaccination requirements as well as quarantines on arrival. This masking practice by the citizens could be said to relate to the cultural practice of collective

⁶ Lovelace, Berkeley Jr. (18 June 2021). "WHO says delta is becoming the dominant Covid variant globally". CNBC. Retrieved 1 November 2021.

protection. In the absence of complete dependability and accessibility to Covid-19 vaccines, the non-pharmaceutical protocol of masking is still the best sustainable option.

E. The pharmaceutical solution to Covid-19 - vaccines and vaccination.

Even during the pharmaceutical solution in terms of vaccines and vaccinations for Covid-19 in 2021 the influence and impacts of national culture on the general public continued. Cultural attitudes were still evident between the different nations with regard to the level of acceptance for the newly developed vaccines and vaccination roll-outs.

Again, the various issues related to Covid-19 vaccines and vaccination roll-outs have also already been discussed in detail under separate Chapters. References made in this section are only considered under the various relevant implications related to cross-cultural elements and implications.

Much has already been mentioned and discussed regarding the Covid-19 vaccines and vaccinations, as well as the general public's response and level of acceptance to be inoculated accordingly. The existence and a growing number of "anti-vaxxers", particularly among the Western nations has been evident and visible since the launching of the Covid-19 vaccination roll-out in early 2021. It is most likely that opposition to these vaccines is based on the questionable reliability of safety and performance testing of these vaccines before launching public inoculations. The fact that all initial vaccination roll-outs globally were based only on vaccines with the emergency use authorizations (EUA) raised both safety and performance issues.

Nations with a highly advanced history of reliably tested and proven vaccines would have a culture of credibility and dependability on publicly distributed vaccines. Consequently, this would be a culture demanding verification, transparency, and accuracy in the declared efficacy of these newly developed Covid-19 vaccines, both the primary series as well as the subsequent 'booster' doses. This culture would demand that pharmaceutical companies "do it right, and only right".

On the other hand, nations with little or no technical capability in developing vaccines would only be too glad to get whatever vaccine that is available to them. This culture would be most receptive to receiving vaccines and vaccinations and the belief that " fifty percentage of protection is better than none!".

As a result, during the height of the global vaccination roll-out (2021 – 2022), mainly in the Western regions of the Americas and Europe, the process was not completely smooth or without challenges. The emergence and growing influence of the "anti-vaxxers" have already been discussed in Part Two. Suffice it to mention at this point that the stimuli and undercurrent of these protests probably have been influenced in part by the cultural values and the corresponding expectations of the general public in these highly technical and intellectually advanced nations. It is therefore not possible to consider these actions without acknowledging the cultural implications also.

F. National cultural impacts on behavioural patterns during the Covid-19 pandemic crisis

The previous Part Two presented, illustrated, and discussed the variable and differentiated global outcomes in terms of infections, hospitalizations, and deaths related to the Covid-19 pandemic in the different regions. Since the outbreak of the coronavirus in December 2019, these outcomes have increased both rapidly, as well as expansively until the United Nations' World Health Organization had to declare it to be a global pandemic by mid-March 2020. Consequently, one of the most frequently asked questions and observations raised since the beginning of the outbreak and still continues throughout the current pandemic period is why the same coronavirus infection, Covid-19, can result in significantly different outcomes globally. Not only that but why the highest levels of negative outcomes were predominantly concentrated in the politically, economically, and technically developed Western regions, i.e. the Americas and Europe? There is no record or reference that regionalism in terms of geographical location would have any unique or significant negative effects on the spread and growth of the coronavirus. Similarly, there were no indications that wealth, advanced technology, or political stability would bring about greater risks of coronavirus exposure and infection. For these reasons, it would seem that the human factor, in terms of behavioural patterns, was the key element in the differentiation of responsive behaviour, and the corresponding outcomes of the Covid-19 pandemic. This would then link to the cultural influences and impacts on the human behaviour of each nation, and cumulatively, possibly on the regional level.

These differentiated human behavioural attitudes and responses, for both governments and the general public of populations, could and would influence the outcomes in infection, hospitalization, and death levels of each nation. Community culture incorporating its beliefs, values, customs, and traditions, would be embedded and integrated with a community's evolution, and through time and evolution, can become the foundations of a nation's cultural roots. The cultural traits of a nation can also have a significant role in defining a nation and its people. Such has been and continues to be the case for the oldest nations on this planet, dating back two to three millennia before the Christian era (BCE). Examples are⁷:

| | |
|----------|----------|
| Iran | 3200 BCE |
| Egypt | 3100 BCE |
| Vietnam | 2879 BCE |
| N. Korea | 2333 BCE |
| China | 2070 BCE |
| India | 2000 BCE |
| Isreal | 1300 BCE |

One cannot deny that all these nations have deep-rooted cultural traits which are integrated with their history and national evolution. The relevance of these deep-rooted cultural values and traits could and would influence their population's behavioural patterns of these people during the

⁷ World Population Review. <https://worldpopulationreview.com/country-rankings/oldest-countries>

Covid-19 pandemic crisis. The nature of cross-cultural dimensions along with the applicability and level of national cultural influence and impact are studied in the following Chapters.

Chapter 2

CROSS-CULTURAL DIMENSIONS INFLUENCING THE COVID-19 PANDEMIC CRISIS MANAGEMENT

A. The case for cross-cultural considerations regarding influences on global crisis management

Statistics from the World Health Organization (WHO)¹, along with other institutional and organizational resources such as Our World in Data², and Worldometer³ have regularly and continuously tracked the globalised growth and expansion of the Covid-19 pandemic. These Covid-19 situation reports and data are regularly reviewed, analysed, and cited by various globally recognized institutions such as the Johns Hopkins University and Medicine,⁴ or the Yale School of Medicine⁵, along with various governmental organizations and agencies such as the Centres for Disease Control and Prevention (CDC) around the world.⁶

Although there are variances in the data reports from each source, mainly due to differences related to reporting cycles, data gathering channels, and consolidation processes, differences in the statistics are considered minor. The findings and assessments of these data, along with the analysis of statistical outcomes and trends have been discussed in detail in Part Two of this research. Most prominent in these findings is the concentration of infections, hospitalisations, and deaths related to Covid-19 to be centred in certain regions, mainly in the Americas, and Europe, throughout this pandemic crisis. These findings are statistically supported in the numerous listings of the Top 20 nations impacted by the Covid-19 pandemic from the beginning of the pandemic in March 2020 to the current in 2023.

Most significant in the findings, and the ensuing consequential assessments, is the discovery that listed in the Top 20 countries most highly affected by Covid-19 are for the most part member nations of the exclusive G-20 Group known for their economic wealth, political stability, technologically advanced, and socially developed with particular focus on their healthcare systems. Conversely,

¹ <https://covid19.who.int/>

² <https://ourworldindata.org/coronavirus>

³ <https://www.worldometers.info/coronavirus/>

⁴ <https://coronavirus.jhu.edu/>

⁵ <https://medicine.yale.edu/research/covid/>

⁶ <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

nations well down in the same listing were middle to low-income groups of nations and mostly in the developing, and some under-developed, economies. Technology was limited in these nations and was mostly imported from the developed and industrialized nations, where social welfare including healthcare, was both scarce and dispersed, if not non-existent. These statistics and findings would seem to indicate that the above-enumerated traditionally accepted strengths of a nation do not offer guaranteed protection against Covid-19 infections and deaths.

It would seem that the only other ‘common denominator’ linking everyone to the Covid-19 pandemic, would be human behavioural patterns. Based on this premise and assumption, the only apparent key variable and element of differentiation between the different human behavioural traits globally would be national cultural values. Is it possible, and if so to what extent, could, or would, national cultural values, beliefs, and customs influence and impact on the behavioural responses of each nation to the Covid-19 pandemic crisis?

Is this a case of culturally-induced behavioural responses to a national crisis? Does the current globalisation of the Covid-19 pandemic, and the corresponding contrasting outcomes reflect how a universally accepted response protocol, such as “social distancing”, could be applied differently under cross-cultural behavioural traits? Is this a root cause for the contrasting outcomes between the different nations and regions?

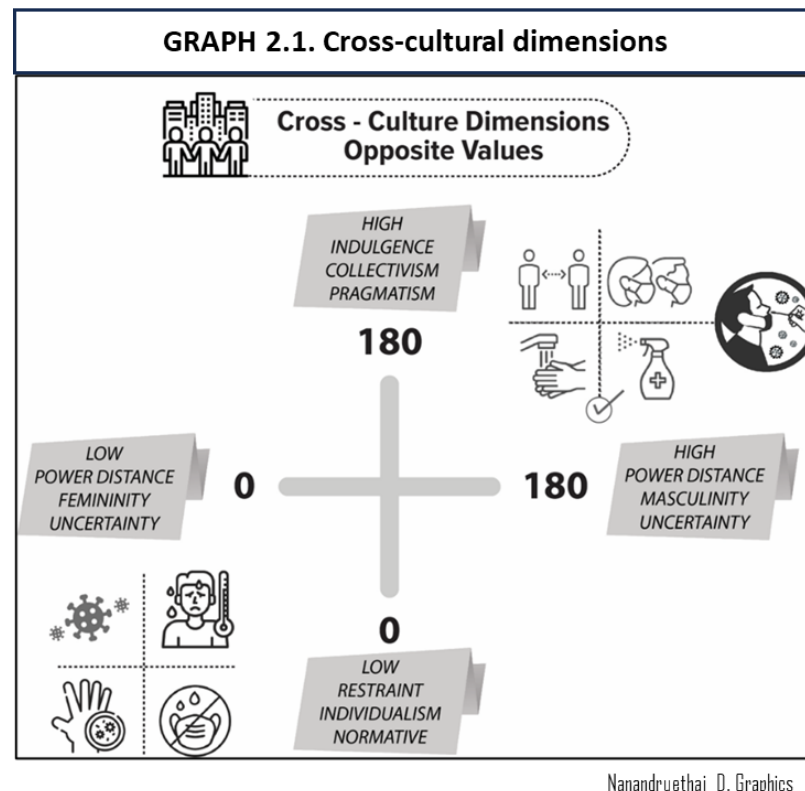
These questions are addressed in the following sections. However, there is no goal to establish a definitive and absolute link between cross-cultural behaviour and the outcomes of Covid-19 infections. The objective of this research is to identify the existence of possible relationships and to suggest and identify, possible links between culturally – induced behavioural responses and outcomes.

B. Rationalising cross-cultural behaviour with contrasting Covid-19 outcomes

Do the contrasting outcomes from the globalised Covid-19 pandemic suggest the influence of ‘cross-cultural’ behavioural responses? Is it possible that the cross-cultural element of the various cultural dimensions is the root cause of why ‘one common global problem (Covid-19), can generate such a significant contrast in both the national leadership and population responses and the outcomes? The previous Part Two demonstrated the contrasting outcomes as evidenced by the significant variances in terms of infection levels, serious illness and hospitalization rates, and mortality. Consequently, it would seem likely that these variances in outcomes could be linked to the cross-cultural dimensions that reflect the social-cultural values and behavioural patterns of the different nations.

If such was the case, it is necessary to establish a common understanding of the term “cross-culture”. The key word is “cross”. The “cross” of ‘cross-culture’ is comparable to the “cross” of a ‘cross-road’ (same road, different direction), or in the term ‘cross-purpose’ (directly opposing objective or intention). Based on these examples, we would then better understand the key factor of the meaning of ‘cross-culture’.

Therefore the study and analysis of cross-cultural dimensions and how they could influence each nation's responses to deflect and contain the Covius-19 pandemic would focus on the differentiated government policies and strategies along with the level of acceptance, conformity, and participation of their respective general public. Such cross-cultural differences would range from "0" degrees to "180" degrees (index 0 to 100) as demonstrated in the Graph. 2.1. below.



Notwithstanding the foregoing definition of cross-culture, since every nation has its own history, culture, traditions, social values, and religious beliefs which become the foundation for its political, economic, or social structure and orientation, it is not surprising that each nation's culturally – induced behavioural patterns would be different, even under normal circumstances. The cross - cultural index is only a term of reference indicating the state of one culture in comparison to another for a specific cultural dimension. The numerical index does not signify 'good or bad', but merely indicates 'high or low index references', or the range between 'similar or dissimilar' cultural traits in comparison to other nations. Therefore, it must be underlined that in considering cross-cultural dimensions there is no intention or foundation to be judgmental by comparing one culture's response as being better or worse than another. Each nation has to address and deal with the Covid-19 pandemic national crisis in its own way, based on what resources are available, and in accordance with its cultural parameters. Therefore, an under-developed nation cannot be expected to adopt the same social lifestyles as the developed industrialized nations, nor conversely, can one expect a highly developed society to behave under the same constraints and limitations as a low-income nation.

Similarly, one cannot compare the social – cultural behaviour of someone living in the mountains, with one living on the seashore, living in the countryside, or living in a city.

Each nation confronting the Covid-19 pandemic has its own attributes in terms of strength, weakness, opportunity, and threats (SWOT), which are also under the umbrella of different political, economic, social, technological, environment, and legal (PESTEL) conditions. Consequently, it would be rational to consider and accept that each nation would have a different culturally – induced approach to addressing and responding to the Covid-19 pandemic. These differences would range along the index of cross-cultural dimension as illustrated in Graph 11.1 above.

The cross-cultural element of the different cultural dimensions is non-judgmental regarding national policies or strategies in addressing and responding to the Covid-19 pandemic and only indicates and offers some insights as to the possible cause or contributory factors to the outcomes. As previously stated, the keywords are crisis management, culturally-induced influences and impact on responsive or reactionary behavioural traits, death-threatening sickness or hospitalization. Of course, these globalized crises are not limited to the Covid-19 pandemic, (although there could be future Covid-20 or 22), but there could just as easily be other biologically generated infections from Mother Nature, or natural disasters such as earthquakes, floods, radiation from the sun, or worst, if not more likely, man-made weapons of mass destruction and toxic chemicals, etc. How does Man instinctively respond to these threats? What are the influences and impacts of culturally-induced behavioural patterns? How would the outcomes be significantly different from one nation to another? What is the level of relevance between behavioural response and negative outcomes?

There is no doubt that the Covid-19 pandemic presents the first opportunity for intensive and comprehensive observation, practical experience, statistically-based analysis and measurement of a singular common globalized threat in the modern world of the twenty-first century and second millennium. The findings, assessments and lessons learned from the Covid-19 pandemic experience could, and should, be a valuable knowledge-based indicative benchmark and criterion in addressing similar future occurrences. However, the key question which remains is, “Will Mankind, jointly and severally, change and adapt willingly, and accordingly?”.

C. Selecting the cross-cultural dimensions based on Geert Hofstede as the common standard

There have been and continue to be initiated many studies and research on cross-cultural patterns resulting in the formulation of numerous and various cultural dimensions based on their findings and assessments of national cultural behaviours. However, for the purpose of this research, and with specific relevance to the Covid-19 pandemic it was necessary to establish a common standard for cross-cultural behavioural dimensions in referring to the cultural behaviours of different nations. In this regard and with reference and relevance to the critical ‘social distancing protocols’, being the proven most effective defence to the Covid-19 pandemic, the works and findings of Geert Hofstede in this field were considered to be the most universally understood and applicable as the cross-cultural dimensional baseline.

Geert Hofstede (1928 – 2020) was a Dutch Social Psychologist and Professor Emeritus of Organizational Anthropology and International Management at Maastricht University in the Netherlands. It was during his early professional career, in the 1960s he founded and became manager of the Personnel Research Department of IBM International. During this period (1967 to 1971) he had the opportunity through the organization's worldwide personnel network covering over 70 national subsidiaries around the world to survey and analyse their behavioural traits. These surveys also included questionnaires to IBM's managers and employees which generated over 110,000 respondents. This research culminated with his first book entitled *Culture's Consequences*, published by Sage, in 1980.⁷ The original book established four cross-cultural dimensions, namely Power Distance, Individualism vs. Collectivism, Masculinity vs. Femininity, and Uncertainty Avoidance. Hofstede's research and surveys continued after leaving IBM which included Hofstede's Co-founding of the Institute for Research on Intercultural Cooperation (IRIC), in 1980 of which he became its first Director. Hofstede's latest book was the 2010 popular edition *Cultures & Organizations, Software of the Mind*, in which he was also joined by his son, Gert Jan, and culturologist Michael Minkov as co-authors⁸. The original four dimensions were increased to include Long-term vs. Short-term and Indulgence vs. Restraint.⁹

Today, Hofstede's cross-cultural dimensions, along with the assessments and findings are as universal as you can get for the study of this topic and are popularly used in referencing and comparative-oriented citations.¹⁰ Obviously, it should be stated that Hofstede's research was undertaken long before the Covid-19 crisis, and therefore not expected or assumed to embrace or encompass a global pandemic crisis environment. However, in applying the principle that although there are many ways to 'cook' an egg, the element of being an egg remains, the researcher believes that culturally-induced human instincts and behavioural responses to crisis management under the organizational or business environment, or social environment could be extended to include the global crisis associated with the Covid-19 pandemic. Consequently, the researcher took some liberties in interpreting the 'essence' of Hofstede's assessments of certain cross-cultural dimensions, and the perceived associated cultural traits considered applicable and pertaining to the Covid-19 pandemic. Nevertheless, the researcher also recognizes and accepts that the level of cross-cultural 'association and relevancy' to the Covid-19 pandemic crisis could also be equally less synergic than perceived.

The goal and objective of reconfiguring Hofstede's cross-cultural dimensions are to get an insight and better understanding of why a singular globalised infection crisis in the form of the Covid-19 pandemic should generate such oppositional responses and corresponding outcomes in terms of infections, serious illnesses, and hospitalisations, and fatalities. Essentially, everyone on the planet is drinking from the same 'waterhole' and yet there are clusters of populations in certain regions of

⁷ <https://geerthofstede.com/geert-hofstede-biography/>

⁸ Geert Hofstede, Gert Jan Hofstede, Michael Minkov, *Cultures and Organizations: Software of the Mind*, McGraw Hill Professional. 3rd. Edit. 2010

⁹ <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>

¹⁰ <http://geert-hofstede.com/index.php>

the world with very high negative outcomes and others which are very low by comparison. Statistical records and trends have consistently indicated that the same regions experienced the same trends throughout the Covid-19 pandemic period to date.

The cultural attributes of each nation are considered to be potentially influential in determining and directing the instinctive responses that influence priorities, judgments, and behaviours of people in times of crisis, such as the Covid-19 pandemic. In this respect, this Chapter looks into some national cultural aspects under the various cultural dimensions to determine as well as evaluate their potential impacts on behavioural patterns during a crisis. This would also indicate how the behavioural traits due to cultural differences of nations can contribute to the variable outcomes of the Covid-19 pandemic crisis. Nevertheless, it is important to note that these cultural dimensions represent the general cultural values of the majority of a nation's population during a specific period. It does not assume that everyone in a country follows this cultural value or behaviour. Globalisation has not only changed the economic environment or social lifestyles of many countries, but it has also been the root cause of initiating many changes to historically or traditionally established values and customs around the world. Globalisation of trade and commerce, and more significantly in tourism, has had enormous impacts on cultural awareness, cultural expansion, cultural fusion, or even cultural imposition between nations. These changes have substantially impacted established customs and values and in many cases have been the instigator of behavioural change. Globalisation has significantly contributed to the adaptations or even adoptions, of other cultural values and customs, which has had a significant influence on behavioural trends. Essentially, this also means that historically well-established traditions could be facing changes as a result of globalisation and the ensuing interchange of cultures, especially between Western and non-Western cultures. This means that the national index even Hofstede's cross-cultural dimensions would be dynamic and reflect global changes. Culture is no longer a constant. Today's "Z Generation" (globalisation and Internet era) are already changing some cultural-based values which existed in the previous "X and Y" Generations. What this means is that the influence and impacts of current cultural values, on behavioural patterns to the Covid-19 pandemic today could probably be different in response to the next pandemic at some future point in time.

D. Hofstede's cross-cultural dimensions^{11 12} in relation to the Covid-19 pandemic

Of Hofstede's six cross-cultural dimensions, only four are referred to based on how they were considered relevant and pertinent to the Covid-19 pandemic crisis management of each nation in terms of potential significant influence and impacts on behavioural responses of both governments and population.

These four cross-cultural dimensions are High Power distance versus Low Power Distance, Indulgence versus Restraint, Individualism versus Collectivism, and Pragmatism (Long-term

¹¹ Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). <http://dx.doi.org/10.9707/2307-0919.1014>

¹² Geert Hofstede, Gert Jan Hofstede, Michael Minkov, Cultures and Organizations: Software of the Mind, McGraw Hill Professional. 3rd. Edit. 2010

orientation) versus Normative (Short-term orientation). Again, these dimensions were developed by Hofstede and his co-authors, Gert Jan, and Michael Minkov prior to the Covid-19 pandemic, and probably were not designed for the likelihood of any global or national pandemic crises. Nevertheless, the principles and concepts underlining the selected cultural dimensions were considered viable possibilities for application to the Covid-19 pandemic conditions. As previously mentioned, the focus is not on the Covid-19 pandemic itself, but rather on the crisis management elements and responses arising from it. The focus is on the culturally – induced behaviour patterns in addressing and responding to crisis management. This assumption is also based on the theory that in times of crisis, behavioural patterns tend to revert to natural instincts which can be significantly influenced by deep-rooted environmentally-oriented cultural values and norms. However, the researcher also acknowledges and accepts that the application and assignment of Hofstede's original cross-cultural dimensions to the behavioural response under the Covid-19 pandemic would also have flaws and inaccuracies. Therefore the application of these cross-cultural traits under the Covid-19 pandemic conditions should therefore be considered as “perceived indications and impressions” of influences and associations on behavioural responses accordingly.

It is important to take note that these cultural dimensions represent the general cultural values of the majority of a nation's population. It does not assume that everyone in a country follows these cultural values or behaviour. Just as globalisation has changed the lifestyles of many countries, it has also been the root cause of initiating many changes to historically or traditionally established values and customs around the world. Globalisation of trade and commerce, and more significantly in tourism, has had enormous impacts on cultural awareness, cultural fusion, or cultural transmission between nations. These changes have substantially impacted established customs and values and in many cases have been the instigation of change. In other words, through globalisation, there has been relentless expansion and flourishing of cultural adaptations and adoptions, which in turn, have had significant influences on cultural values and behaviours. Essentially, this also means that well-established traditional cultural dimensions could be facing changes as a result of globalisation and the interchange of cultures, especially between the Western and non-Western social-cultures. Consequently, the level of applicability of previously established cross-cultural dimensions, including those by Hofstede, could, and would, be going through the process of evolving and changing. Consequently, over time, national cultures would tend towards, regionalism, and even universalism, unless globalisation declines and the world reverts back to selective internationalism in trade, commerce and industry.

Two of the four selected cross-cultural dimensions, namely Power Distance and Restraint versus Indulgence can be said to be related to the political-culture aspects, namely to government leadership; while the remaining two dimensions, namely Individualist versus Collectivism, and Long-term versus Short-term (or Pragmatism versus Normativism) are more associated with the social-culture aspects associated with the general public, with respect to the behaviour patterns in crisis management in response to the Covid-19 pandemic. These four cross-cultural dimensions were considered in light of their compelling cultural elements as well as their significant underlying cultural influence on the national crisis management response to this global disease.

Based on the foregoing focus and objective, only the key elements and factors associated with each of the four cross-cultural dimensions and considered pertinent and relevant to the Covid-19 pandemic crisis management are covered and discussed under their respective headings below. The objective is not to discuss or to teach Hofstede's complete principles and concepts, but to see how certain aspects can be interpreted and applied to the differentiated global behavioural traits in addressing and responding to the Covid-19 pandemic.

i. Power Distance: Cross-cultural dimension

This power distance cross-cultural dimension recognizes that there is an unequal distribution of power. There are two extreme levels of power distance. High power distance represents the embodiment, empowerment and importance associated with the possession of superior power, and can be represented by position, (positional power in an organization), might (military or political power), wealth, heritage, and even charisma (family elder, community leaders, or religious titles). This is generally reflected in the pyramid or hierarchy of authority. Low power distance does not necessarily mean 'less power' but rather that the display and use of power are and the associated authority are controlled and subject to constraints through legitimate justification. This interpretation of Hofstede's Power Distance dimension is adopted for relevance to the Covid-19 pandemic crisis management.

With respect of Covid-19 pandemic crisis management power distance refers to the national government leadership structure and style with regard to the high versus low level in the display and exercise of government empowerment. Corresponding to this power distance in terms of authority by government leadership is the level of acceptance and conformity to this exercise and display of power by the general public. Nations with high-power culture-oriented governments and populations are generally authoritarian, such as communist states, absolute monarchies, and hybrid regimes, which are found in Asia, Africa, and the Eastern Mediterranean regions. The extent and exercise of power and authority among these nations are more liberal, less controlled, and generally without controlled limitation. Therefore nations with "centralized" high-powered government leadership are quick to issue decrees and strict rules regarding widespread lockdowns, closures, quarantines, travel restrictions, and strictly controlled social interactions, in the enforcement of social distancing protocols. High power distance governments can do this because they are administering and governing 'low' powered populations. Consequently, the governments of these nations are assured of almost complete compliance and obedience by the general population to their policies, strategies, and the execution thereof accordingly. In terms of the Covid-19 pandemic containment outcomes for most high-powered governments, statistics have consistently shown significantly lower rates for both deaths and infections among the Eastern Mediterranean, African, South East Asian, and Western Pacific regions. In this respect, high power distance-oriented governments are generally authoritarian regimes, communist states, or absolute monarchies, such as China, North Korea, Russia, Myanmar, or Saudi Arabia.

Conversely, low power distance-oriented governments are generally nations under the democratic political ideology, where the power and authority of leadership are restrained through Parliamentary

procedures and are well-defined under constitutions establishing the parameters of legitimate positional power and authority. Consequently, low power distance governments have powers that are controlled and regulated by the confines of a constitution, statutes, or laws. Governments are accountable for the outcomes associated with the exercise of such authority and power. Correspondingly, low power distance government leaders have to rely on the rationalisation, freedom of choice, and exercise of constitutional rights to get acceptance, participation or cooperation from the general population to follow government policies. Low power distance governments are administering and governing constitutionalised 'high' powered populations. Low power distance cultures and governments are prevalent in the Western regions of North America, Europe, and Oceania and also include most democratic governments and constitutional monarchies such as Australia, Austria, Denmark, Eire, Finland, the Netherlands, Sweden, Switzerland, United Kingdom, and the United States of America. Statistically, low power distance-oriented governments (democracies) are the minority compared with semi or full-authoritarian governments.

Statistics on crisis management related to the Covid-19 pandemic indicate a significant association and co-relationship between government leadership related to the high – low power distance cultural dimension, and political-culture, in generating the outcomes in terms of infection rates, levels of hospitalisation, and deaths. In fact, after the first wave, most governments associated with the low power distance culture eventually partially adopted the policies, and strategies of the high power distance governments through specific and 'closed-ended' emergency decrees in response to the Covid-19 pandemic. Accordingly, under an acceptable and justifiable crisis management situation and environment, and following the established constitutional process, these nations initiated the imposition of certain controls and restrictions initiated by the Chinese and quickly adopted by the other Asian nations with regards to quarantines, travel restrictions, closures, curfews, and eventually widespread lockdowns. Many Western nations justified this approach by comparing the Covid-19 pandemic to a 'war' situation in order to generate acceptance and conformity to their crisis management initiatives. The French and British governments compared the Covid-19 pandemic to a 'war' that requires extraordinary behavioural change and response by their respective population. Following the WHO declaration of Covid-19 as a global pandemic in mid- March 2020 French President Macron went on TV to announce that the country was "at war with an invisible, elusive enemy, and the measures were unprecedented, but circumstances demanded them".¹³ Therefore, in the event of a national and global crisis, resulting from the enduring and rapid widespread of the deadly Covid-19 pandemic, 'extraordinary' empowerment of the government was required. The established standard of power and authority under low power distance was deemed insufficient to address this crisis, resulting in the shifting from the normal low power distance cultural behaviour to a 'new normal' high power distance cultural pattern albeit on a temporary basis. This cultural adjustment was soon adopted by other nations in the Americas and European regions in addressing the Covid-19 pandemic by applying the high power distance cultural patterns to enact various authoritarian policies such as enforcing curfews, travel restrictions, quarantines, lockdowns,

¹³ BBC News: Coronavirus: 'We are at war' – Macron. March 16, 2020
<https://www.bbc.com/news/av/51917380>

workplace closures, etc., under the legitimacy of emergency decrees. By justifying such actions on a “need to do “ basis, these acts were generally acknowledged and accepted by the population. Nevertheless, there were also many democratically elected governments which were reluctant to impose stringent controls on the general public, even though they were considered necessary by both the WHO and the local CDC agencies and health authorities.

The principle for a unified ‘extraordinary’ effort to fight the Covid-19 pandemic can be expressed differently according to different terms of cultural values and beliefs. Previously it was mentioned that France and the United Kingdom conjured up the metaphor of war to generate public support and cooperation. Another example is the case of India, one of the oldest civilizations, which applied a cultural approach combining tradition, values, and religion to generate a unity of effort to underscore the principle of social distancing. A few days following the WHO declaration of Covid-19 a global pandemic, Indian Prime Minister Narendra Modi made a video address to the nation on March 24, 2020, referring to the 21-day lockdown in the country to contain the spread of the coronavirus infection and to enforce the rule of social distancing. (Note: India is the largest democracy on the planet with a population of about 1,400 million people, compared to the EU with about 450 million. Yet in terms of Covid-19 pandemic outcomes, as of April 6, 2023,¹⁴ India’s figure for accumulated deaths was 375 per million population compared to the EU’s 2,716). In urging his countrymen to strictly abide by social distancing to keep coronavirus infection from spreading Modi invoked the metaphor of the ‘line of containment’ (Lakshman Rekha - Sanskrit: लक्ष्मण रेखा)¹⁵ from a famous mythology epic The Ramayana. "Do not cross Lakshman Rekha of social distancing." Social distancing is not to be broken under any circumstances. This is the panacea for breaking the corona chain," Modi appealed to people.¹⁶

Modern-day interpretation refers to a strict convention or a rule, never to be broken. This government “request” by Modi was well received and worked well throughout the 1.4 billion Indians (2021) because everyone knows and understands the importance and significance of this story. The Indian Prime Minister, follows the ancient rulers’ tradition in his role as the benevolent patriarch, invoking the need for discipline and sacrifice from the citizens for self-preservation. This is an obvious contrast to the ‘war’ and external enemy analogy used by France and the United Kingdom. Nevertheless, these government initiatives indicate that ‘in desperate times, desperate actions were required, and these start with adjustments to established cultural values and beliefs.

¹⁴ <https://ourworldindata.org/covid-deaths>

¹⁵ (Note: This is a line drawn by Lakshmana around the dwelling he shares with his brother Rama and Rama's wife Sita in the forest. While he goes searching for Rama, Sita is not to cross this protective line. Anyone crossing this line other than the three would be burned by the line.)

¹⁶ Don't cross 'Lakshman Rekha' of social distancing: PM Modi urges countrymen

The Times of India. Apr 3, 2020,

<https://timesofindia.indiatimes.com/india/dont-cross-lakshman-rekha-of-social-distancing-pm-modi-urges-countrymen/articleshow/74960581.cms>

Some governments avoided taking any sensitive political risk by strictly adhering to the low power distance cultural approach and allowing the general public to rationalize their own behaviour with respect to social distancing. During the first wave of the Covid-19 pandemic (March 2020 – February 2021), the Swedish government adopted a policy similar to the ‘laissez-faire’ approach passing the ownership of responsibility to the population to make the right choices or doing the right thing regarding self-discipline and carrying out the social distancing protocols responsibly. In practice, this did not happen. The outcome was a high surge of infections and deaths in Sweden. During the second wave (February 2021 – June 2021), the Swedish government leadership decided to take matters into their own hand and followed the other nations, both in Europe and worldwide, in adopting a more authoritarian approach by exercising ‘extraordinary’ government powers and authority. During the third wave (from June 2021 to the end of the year 2021) Sweden was able to surpass all the other European nations in effectively reducing and containing the coronavirus deaths and infection rates.

The issue of government leadership in addressing and responding to the Covid-19 pandemic under crisis management is further discussed in the following section on “political – culture”. This research and its findings, also indicate that there is a significant link between longstanding cultural customs and traditions and modern-day political ideologies.

ii. Indulgence versus Restraint: Cross-cultural dimension

Reference and interpretations associated with Hofstede cultural dimension ‘indulgence versus restraint’ are based on the expression and display of civil rights in response to government actions. The “indulgent” culture represents high levels of political empowerment, freedom of expression and the exercising of individual rights under democratic governments. As a consequence of the expectation that the general public would openly and legitimately oppose government’s exercise of power and authority beyond those stipulated under the national constitution, would force governments to consider any repercussions and objections or protests from the general public before making policies, planning strategies and launching actions accordingly. Constitutional legitimacy and the people’s sentiments have to be considered.

Conversely, controlled freedoms, the limited exercise of rights, or failure to attain natural human desires, would represent low gratification levels and therefore reflect a “restrained” culture of contained, regulated and inhibited public response. Authoritarian governments need not fear to initiated drastic policies, directives or mandates knowing that there would be empowered protests from the general public.

Within the context of the Covid-19 pandemic crisis management, the second most important and relevant cross-cultural dimension could be the ‘indulgence versus restraint’ dimension. As with the power distance dimension, the ‘indulgence versus restraint’ dimension has strong political implications and defines the interaction and relationship between the government and the general public. It can even be said that the two are significantly intertwined and inter-dependent in terms of cause and effect with regard to national political culture. Within this Covid-19 pandemic crisis management context, the power distance dimension refers to the power and authority of the government leadership to ‘command’ with limitations (democracy), or without (authoritarian).

Similarly, the indulgence and restraint dimension, refers to the power and authority of the general population that exists under constitutional rights and freedoms (indulgence - democracy), or not (restraint – authoritarian), thus determining the level of acceptance and obedience to government initiatives and mandates. This cross-cultural dimension also allows the ‘indulgent’ general population to publicly oppose and demonstrate against unpopular government mandates.

Consequently, with respect to the indulgence and restraint cultural dimension, the policies, strategies, and initiatives of governments in addressing the Covid-19 pandemic, would depend on the general public’s level of possessing and exercising their freedoms and rights, or not. This cross-cultural dimension exercising civil rights and political freedoms ranging from high (indulgence) to low (restraint) would influence and impact the interaction and levels of cooperation between the government and the population in terms of executing Covid-19 responses. Specifically, this would relate the behavioural responses of the general public to government edicts, decrees, laws, regulations, directives, or mandates. Governments established under the democratic-oriented ‘indulgent culture’ would have to justify and/or seek appropriate constitutional approvals for any policy, laws, decrees, or enactments which go beyond the normal legitimate levels of empowerment. This would mean requiring or, seeking temporary ‘extraordinary’ powers and authority through the established constitutional process, i.e. under the ‘emergency’ status. Since the outbreak, the coronavirus has been anything but ordinary, or predictable due to its frequent and numerous mutations. Consequently, governments had to rely more on the protective and defensive approach through aggressive ‘social distancing’ protocols, which required the need to execute certain strategies and solutions such as the enforcement of lockdowns, curfews, quarantines, and mobility restrictions, including both domestic and foreign travel, and for both national and international tourists and visitors.

For the nations under the indulgent culture, the challenge for their governments was to be able to rationalize with the population to get acceptance, cooperation, and participation in these crisis management initiatives. However, although there has been generally positive and cooperative response from the population to government emergency acts and laws in handling the Covid-19 pandemic, there were of course also exceptions, albeit a small percentage of the population, resisting, protesting, and demonstrating against the government’s ‘extended’ powers and authority. In 2021 when President Biden of the United States issued a blanket mandate for compulsory vaccination or testing of all health workers and large businesses with high employment numbers, his mandates were challenged by several groups of the general public through the courts in several states. In January 2022, the U.S. Supreme Court overturned Biden’s blanket compulsory mandates and only allowed a limited mandate for health workers receiving federal funding to undergo compulsory vaccination or testing.¹⁷ This act by the U.S. Supreme Court was an example of the indulgent culture being exercised by the general public, and more importantly, being observed and respected by the State authorities. Nations with indulgent cultures include Australia, Denmark,

¹⁷ Adam Liptak, Supreme Court Blocks Biden’s Virus Mandate for Large Employers
New York Times. Jan. 13, 2022

<https://www.nytimes.com/2022/01/13/us/politics/supreme-court-biden-vaccine-mandate.html>

Mexico, the Netherlands, Sweden, Switzerland, the United Kingdom, and the United States of America.¹⁸

Conversely, under the restrained culture status (i.e. 180 degrees opposite from the indulgent culture), public expression of freedoms and rights is significantly limited or controlled under authoritarian administrative rule. Consequently, issuing restrictive or autocratic-style mandates would be tolerated and accepted without public protest or objection. The restraint culture is generally found in hybrid regimes as well as in many democracies with a high power distance culture. These are commonly found in low-income and under developed economies, where political freedom is secondary to the feeling that life is hard, fatalistic, tied to duty and responsibility, and is the normal state of being.

However, this does not necessarily mean that those living under the restrained culture are necessarily under intolerable authoritarian rule or political oppression. Many nations under an absolute monarchy or theocratic rule¹⁹ (commonly found in the Middle East, Africa or Asia) with somewhat restrained cultures are content with regulated behaviour and strict deportment norms. Restraint cultures in these regions do not consider political freedom in the same light or with the same importance as the more indulgent Western cultures. Restraint cultures believe in orderliness, standardization of behaviour, and maintaining the norms as a sustainable and stable way of life which requires a certain level of social control and discipline. Many societies have opted for the restraint culture as a preference based on deep-rooted beliefs related to customs, traditions, and values (religious or social), as well as a long history of difficult and hard times. Examples of this restraint are seen throughout the Middle Eastern nations where the perception and value of freedoms and rights are different, such as social equality, and legal rights (for women). Restraint cultures, frequently compared to discipline, are displayed and evidenced in many forms and levels and are found in the Arab nations, China, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Russia, and Spain.²⁰

This cross-cultural dimension of indulgence and restraint can also be associated with the 'power distance' cultural dimension. The 'restrained' culture can be linked to the high power distance culture which encourages dependency on the centralization of power, while the indulgent culture with political and social freedoms can be linked with the low power distance culture which encourages self-determination and decentralization of power. Therefore in reviewing and evaluating government leadership effectiveness in the design, formatting and execution of national policies and strategies for addressing and containing the Covid-19 pandemic, it would be necessary to also

¹⁸ Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). <https://doi.org/10.9707/2307-0919.1014>

¹⁹ Theocracy is a form of government in which priests or religious leaders rule, e.g. Vatican City, Saudi Arabia, Afghanistan, and Iran.

²⁰ Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). <https://doi.org/10.9707/2307-0919.1014>

consider the influences and impacts of indulgent and restraint cultural dimensions. This is due to the critical interaction and inter-dependency between government initiatives and general public acceptance, cooperation and effective participation to deliver positive outcomes. Depending on the political structure and ideology of the government, i.e. democratic, or authoritarian. its policies and strategies would be under the control and limitations of the respective national constitutions, and thereby would be within the framework of either indulgent or restrained political-culture and behavioural patterns of the population. This is why there are significant differences in the approaches of various governments, in the handling and management of the Covid-19 pandemic. This is also why the outcomes in terms of infections, hospitalisations and deaths vary so significantly, not so much in terms of from one nation to another, but more so, from one culture to another. This is also another reason why 'one common problem, generates different socio-political cultural responses and outcomes.'

iii. Individual versus Collective: Cross-cultural dimension

While the previous two cross-cultural cultural dimensions were linked to government leadership, and the political-culture behavioural patterns, including the general population, this individual vs collective cultural dimension, focuses more on the cultural behavioural patterns of the general public. Hofstede's definition of the 'individual versus collective' culture expands over a wide and comprehensive area. However, for the purpose of this Covid-19 pandemic research, a more precise and concise definition is adopted and refers to a culture that believes in self-determination, independence, and being in control of its life (individualist) while at the other extreme, greater importance is placed on the group or community's well-being (collectivist) where most values and actions are considered and taken as a group. Within the environment of an essentially borderless global infection, the perspective of community survival and concerted effort become very important and crystal clear.

The individualist culture wants to control his destiny, and maintain independence, along with the environmental factors which impact their lifestyle, existence, and well-being (including their families). Individualists desire to take care of themselves and take benefit of their rights to create their own fate through self-determination and freedom of choice, which includes making their own decisions and choices according to their needs, requirements, or satisfaction of gratification without consideration of, or being subjugated to, other people. They want to keep and exercise their options and are willing to take responsibility for their actions and outcomes. Individual benefits are more important, with essentially everyone looking out for himself or herself and the immediate family. Relations with others (outside their circle) are loose and unsustainable being mainly on a 'need to' basis. As a result, individual rights and benefits are stressed and emphasized within their society. Individualist cultures are mainly found in Western regions such as North America and Western Europe. Most democratic nations in Europe and North America have a strong individualist culture which is generally linked to the low power distance and indulgent dimensions. In times of crisis, such as the Covid-19 pandemic and the threat of widespread infections and deaths, it is possible that an

individual culture would behave in unison to individually follow certain acts ‘as a group’, not so much in terms of deciding as a group, or for the group, but deciding individually in a collective manner to do “the right thing” under specific conditions and on a temporary ‘emergency’ basis. This would be a temporary agreement to follow the social distancing initiatives, or wearing masks, or getting vaccinated.

Conversely, in collectivist cultures, emphasis and social importance are focused on the group or community’s safety and well-being, therefore, community relations, integration, and inter-dependencies are strong and important. The concepts and acts of responsibility and care are shared and extended to the group members and beyond their own families. Collectivist cultures, therefore, embrace harmony, consensus, group decisions, and sharing of benefits, responsibilities, and accountabilities. The collectivist culture sees the environment from a broader perspective which goes beyond the focus on the ‘self’. Situations, circumstances and manifestations are considered, evaluated and measured against the impact on the group, community, or society. Examples of collectivist cultures are China, Indonesia, Japan, the Republic of Korea, Thailand, Brazil, Venezuela, and Guatemala. Collectivist cultures always think in terms of community grouping, and not only during a crisis. Governments of nations with a collective culture assume the responsibility for taking the right actions and following government decrees and mandates will be undertaken as a group, with the view that it would be for the wellbeing of the group.

The differences between the individualist versus the collectivist cultures are evident in the responses to the Covid-19 pandemic crisis management. There is demonstrated unity in attitude and response to government initiatives and mandates regarding community lockdowns, curfews, quarantines, closures, and social interaction activities. The individualist culture would consider these government initiatives in terms of impacts on the ‘self’ and the immediate family circle, the deprivation of individual rights, and therefore is more likely to demonstrate resistance. Conversely, the collective or community-based culture sees everything from the group perspective and is content to make choices in consideration of that perspective. Therefore in response to the Covid-19 pandemic crisis management, the collectivist culture is likely to be more receptive to government directives and mandates and view the safety of the nation as the focus of priority. The collectivist culture shares a common consideration for the welfare and wellness of the other members of the community which is also contemporaneously reciprocated. The collectivist culture would likely respond more positively to government mandates, rules and controls regarding social distancing, including wearing masks, as well as getting vaccinated, for the overall protection of the collective community in the containment of an obviously contagious infection. Statistically, there are more collectivist-oriented cultures than individualists on the planet.

iv. Pragmatic (Long-term orientation) versus Normative (Short-term orientation) Cross-cultural Dimension

Hofstede defines pragmatic (long-term orientation) culture as accepting the long-term perspective of life and the environment, which would inevitably undergo changes in accordance with

circumstances and surroundings. This cultural aspect calls for resilience, and the ability to adapt accordingly to changing situations and environments (the pragmatic perspective). The long-term (pragmatic) orientation culture acknowledges and accepts the inevitability of change brought about by external factors which would impact human well-being and lifestyles. Change is considered to be constant, continuous, and dynamic, and is an integral part of the evolution of life, to which it is intertwined. Generally, therefore, the lifestyle and cultural behavioural traits of this culture would tend towards tolerance, perseverance, and persistence, as well as being adaptable to changes. Examples of pragmatic (long-term orientation) cultures include Belgium, China, France, Germany, Japan, the Republic of Korea, the Netherlands, Russia, Singapore, and Switzerland.²¹

On the other extreme of the same cultural dimension is the normative (short-term orientation) culture which tends towards maintaining the status quo, well-established processes, quick results and outcomes. This culture also desires everything to remain fundamentally under control, and within a predetermined order of events, without any changes, uncertainty, or surprises. This aspect of the cultural dimension essentially desires to keep to standard practices and traditions and wants to maintain the status quo of all things (normative perspective). Examples of normative (short-term orientation) cultures include the Arab nations, Argentina, Australia, Brazil, Canada, Colombia, Denmark, Eire, Mexico, South Africa, and Spain.²²

Regarding the application of this cross-cultural dimension to the Covid-19 pandemic crisis management, the fundamental relevant cultural element would be to accept the long-term perspective which encompasses and incorporates the inevitability of change. Therefore the acceptance of the need for adaptability to change. Right from the outbreak of the coronavirus in China, and the discovery of the highly contagious human-to-human transmission element of the disease, change to normal lifestyles was inevitable. Since then the greatest impact of the Covid-19 pandemic has been the global disruption and restructuring of the social, and economic environment. The Covid-19 pandemic instigated widespread change and brought about the “new normal” globally in all important aspects of life on the planet. Consequently, nations with a long-term (pragmatic) orientation culture were more adaptive in adjusting to the “new normal” world order with a more positive response in cooperating with the crisis management strategies of their governments. Nations with short-term (normative) orientation culture would be less willing to personally adapt to changes in their lifestyles and behavioural values and would be more inclined to expect that other means, such as technology, would be the principal option to solve the Covid-19 pandemic crisis. This cultural orientation would therefore expect that the solution would come from the development of vaccines so that they can maintain their status quo. Governments of these nations would be challenged to initiate solutions without disrupting their ‘normal’ way of life. This culture would most

²¹ Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). <https://doi.org/10.9707/2307-0919.1014>

²² Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). <https://doi.org/10.9707/2307-0919.1014>

likely also challenge, if not protest, any government efforts in the Covid-19 crisis management if it means impacting their freedoms and rights.

E. Influence and impacts of cultural dimensions on the Covid-19 pandemic outcomes

First of all, it should be noted that no 'one' single cultural dimension is solely responsible for influencing the outcomes of the Covid-19 pandemic in a nation. The behaviours of both governments and the general public are usually the result of a combination of various different cultural dimensions which in one way or another, and at one level or another, influence and impact the total behavioural response patterns. The four cultural dimensions taken from Hofstede's cross-cultural dimensions model were selected based on the assumed probability and likelihood of playing a role in influencing a nation's response to the Covid-19 pandemic crisis.

The possible influences of these selected four cross-cultural dimensions developed by Hofstede on behavioural patterns in response to the Covid-19 pandemic could indicate that,

- Nations with low Power Distance culture would enjoy civil freedoms and not be intimidated or willingly subjugate to authoritative governments and their controls
- Individualist culture nations would ensure being able to focus on independence and self-gratification (to enjoy freedoms and rights), along with their immediate family circle,
- Indulgent culture nations would ensure and demand the exercising of freedoms to safeguard and secure their constitutional rights and control government authority.
- Normative (short-term) orientation cultures would protect their rights and lifestyles to maintain the status quo, stability, and norms, and therefore would oppose and protest against any changes accordingly or disruptions to their established lifestyles.

Second, cultural influences are not limited to the scope of Hofstede's cross-cultural dimensions, but other cultural factors as well. Of significant importance are the political-culture and social-culture factors which will be covered in subsequent Chapters.

Second, it should also be noted that Hofstede's cross-cultural dimensions are not necessarily the sole cause or the principal decisive factor influencing both government leadership and general public behavioural responses to the Covid-19 pandemic and to the outcomes but probably may have had some influence and impact on the underlying behavioural patterns which contribute to these outcomes. Certainly, other factors outside of Hofstede's cultural dimensions, such as the the political-culture, social-culture , and even economic-culture factors may have had a more compelling and decisive influence on the behavioural responses of the general public. These issues and topics are covered in subsequent Chapters.

This cultural phenomenon could also be linked to another interesting and noteworthy factor, namely that many Top 20 infected nations are members of the wealthy and technically advanced G-20 group. As technically advanced nations, their culture would naturally expect that solutions to various crises would be found through technology, and not through their personal efforts or sacrifices to existing

lifestyles. Therefore with regard to the Covid-19 pandemic, the expectation of the G-20 group probably would be that this should be solved through technological solutions such as the development of vaccines or other forms of pharmaceutical-related solutions, rather than the non-pharmaceutical initiatives associated with social distancing.

Vaccines became available and were certified by the WHO at the end of 2020. The roll-out of vaccination was initiated globally beginning of 2021. By 2023, not only were these vaccines still considered by the general public (not government authorities, WHO, CDCs, and the pharmaceutical industries) as being ineffective in protecting against infections or deaths, their effectiveness continued to be limited to 5-6 months and requiring additional ‘booster’ doses. Nevertheless, it cannot be denied that the death rates per million population continued to increase even after the post-vaccination launch, particularly during 2021 – 2022, and only registered significant declines into 2023 as illustrated in Table. 2.1. below for selected nations. With regards to the 2023 death figures, it should be noted that the decline was also likely due to the characteristics of the new Omicron mutation which emerged in 2022 and which was significantly less death-threatening than the previous Delta mutation. Therefore these vaccines cannot claim to be the sole cause for declines in death rates.

| Table. 2.1. Comparative growth in deaths per one million population (2020 - 2023) | | | | |
|---|--------------|--------------|--------------|--------------|
| | OCT. 2020 | OCT. 2021 | OCT. 2022 | MAR.2023 |
| COUNTRY | DEATH/1 MIL. | DEATH/1 MIL. | DEATH/1 MIL. | DEATH/1 MIL. |
| USA | 676 | 2225 (+229%) | 3210 (+ 44%) | 3307 (+3%) |
| BRAZIL | 739 | 2807 (+280%) | 3239 (+15%) | 3252 (+0.4%) |
| ITALY | 620 | 2178 (+151%) | 3009 (+38%) | 3204 (+6%) |
| UNITED KINGDOM | 663 | 2023 (+205%) | 2868 (+42%) | 3138 (+9%) |
| BELGIUM | 940 | 2208 (+135%) | 2860 (+29%) | 2924 (+2%) |
| ARGENTINA | 639 | 2529 (+296%) | 2856 (+13%) | 2867 (+0.4%) |
| FRANCE | 532 | 1791 (+238%) | 2367 (+32%) | 2819 (+19%) |
| PORTUGAL | 230 | 1779 (+673%) | 2453 (+38%) | 2573 (+5%) |
| SPAIN | 743 | 1858 (+150%) | 2435 (+31%) | 2532 (+4%) |
| SWEDEN | 587 | 1462 (+149%) | 2009 (+37%) | 2263 (+12%) |
| SWITZERLAND | 221 | 1278 (+478%) | 1567 (+23%) | 1599 (+2%) |
| THE NETHERLANDS | 412 | 1061 (+157%) | 1298 (+22%) | 1309 (+0.8%) |
| TURKEYE | 117 | 784 (+570%) | 1187 (+51%) | 1188 (+0.08) |
| Source: Coronavirus (COVID-19) Deaths - Our World in Data | | | | |

It should be noted that more than half of the nations listed are members of the G-20 Group. Equally interesting and significant is that the highest rate of the increase in deaths occurred during 2021, the year of technical–pharmaceutical solutions through vaccinations. All these nations had access to the best vaccines from the United States and Europe and already started rolling-out vaccination in January 2021. These figures would indicate that the pharmaceutical solution appears to be less effective than the non-pharmaceutical protocols which during 2020 had much lower death rates per

one million population. By 2022 the rate of increase in death rates declined. This was probably more due to the Omicron variant being less deadly, compared to the Delta variant than the effectiveness of protection from the pharmaceutical solution through vaccination.

By comparison, it is interesting to note that the above listing of the Top 20 highest affected nations from the Covid-19 pandemic excluded any nation from the “Third World”, low-income and under-developed economies, mostly from the African and Asian regions. These nations were without the means (fiscal or physical) to obtain vaccines to be vaccinated. Their only sustainable defence against the Covid-19 pandemic would be reliance on non-pharmaceutical solutions based on human efforts which basically include the deep-rooted cultural behavioural patterns of tolerance, discipline, and adapting to changes for survival. This would suggest, for the majority of the global general public, that the continuous practice of social distancing protocols was not the only option available, but seemed to result in more effective protection against the Covid-19 pandemic, i.e. in the absence of the technology-oriented pharmaceutical solution.

It is also interesting to note that by back-tracking several years more than half of the nations have been listed in the Top 20 list continually for the highest negative levels of outcomes from the Covid-19 pandemic as seen in Table. 2.2. below. The consistency of their being listed would suggest the consistency of their behavioural pattern in response to the pandemic and could indicate the deep-rooted cultural traits during a national crisis.

| Table. 2.2. Top 20 nations listed as of March 29th. (2020 - 2023) | | | | |
|---|------|------|------|------|
| Country | 2023 | 2022 | 2021 | 2020 |
| Peru | | | | |
| Bulgaria | | | | |
| Hungary | | | | |
| Czechia | | | | |
| Slovakia | | | | |
| Greece | | | | |
| Romania | | | | |
| United States | | | | |
| Chile | | | | |
| Brazil | | | | |
| Italy | | | | |
| United Kingdom | | | | |
| Poland | | | | |
| Paraguay | | | | |
| Belgium | | | | |
| Argentina | | | | |
| Ukraine | | | | |
| Colombia | | | | |
| Russia | | | | |
| Mexico | | | | |
| Reference data: Our World in Data - Coronavirus (Covid-19) | | | | |

F. Assessments of cross-cultural dimensions.

1. Indications are apparent that culture influences human behavioural patterns. It is also clear that national culture could and most likely would, influence both the actions of government leaders as well as the behavioural responses of the general public. During a crisis, especially with death-threatening risk, the natural tendency of humans is to revert to their 'safe-zone' natural instinctive mindset and stance based on deep-rooted beliefs and values generated from 'cultural osmosis' from the national environment and upbringing.

2. Cultural dimensions reflect certain common behavioural traits and responses associated with a given situation or environment. The 'cross-cultural' elements of these dimensions, as the name suggests, reflect different and contrasting beliefs, values, perceptions, and perspectives resulting in contradictory behavioural responses. These elements are reflected in Hofstede's cross-cultural

dimensions where he elucidates and intellectualises the cultural elements and impacts to give insights and explain these differences, and contrasts to rationalise behavioural outcomes.

3. Statistical records and data reflecting the outcomes from the Covid-19 pandemic clearly indicate that cultural differences are also reflected in regionalised cultural behavioural patterns, i.e. the Western nations of North America, South America, and Europe, are consistently listed with the highest infection cases compared to the Middle Eastern, African, and Asian nations who are conspicuously absent in these tables. This seems to echo the adage, 'East is East, and West is West, and never the twain shall meet'²³ referring to the cultural difference between the Western and Eastern societies.

4. However, it should be noted that the above references to Hofstede's cultural dimensions are interpretations by the researcher in limited aspects and scope which could be associated with the globalized behavioural patterns and responses to the Covid-19 pandemic crisis. There is no doubts that Hofstede's cultural dimensions provide significant insights into cultural influences on human behaviour in times of crisis.

5. Nevertheless it is important to keep in mind that there are also numerous other forms of cultural elements which can influence and have an impact on human behaviour such as political culture, social culture, and economic culture which are discussed in the subsequent Chapters. All these cultural factors contribute to the behavioural traits of both governments and the general public in response to the Covid-19 pandemic.

²³ "The Ballad of East and West," a poem by Rudyard Kipling.

Chapter 3

THE DNA OF NATIONAL POLITICAL CULTURES

A. The impacts of culture on behavioural patterns and outcomes

If truth be told, religious beliefs and values go back to the prehistoric period, which means long, long, before nations were formed. Beliefs and values are considered the foundation of the 'culture' of humans. The religious culture defines human behaviour, both in life and in death, as seen in the prehistory burial grounds and associated artefacts. Just as Man has undergone millennia of evolution, so also has religious culture, now commonly referred to as social culture (which includes religious culture but in relatively less prominent standing).

Analysis of national behavioural patterns would necessarily include considerations related to national values, cultures, and beliefs that may have evolved from the fusion of history, longstanding indigenous traditions, and customs, religion(s), and the current-day political, economic, and social cultural environment, i.e. globalisation, social media interactions and influencers, the entertainment and social cultural interchange between the East and West (such as Netflix, You-tube, K-Pop, cable TV, Facebook, etc.). Just as Man's evolution is continuous, so also will certain aspects of culture such as customs and behavioural norms will also evolve. Globalisation would be the key influencer for change through the integration or fusion of multi-cultural exposure, made possible through technological innovations (i.e. mobile phones, the internet, online business, etc.), which would impact lifestyles, and social values accordingly. Globalisation and its continuous evolution, made possible through various forms of information communication technologies, can be likened to a 'cultural' supply chain that receives and funnels multi-national cultural 'inputs' into the global connectivity stream, and then channels and distributes the 'cultural diversity and mix' globally. As with globalisation of goods and services, this results in the dispersal of cultural influences, some impacting to adjust or adapt, and others to implant new cultural values. Generally, the globalisation of cultural influences and impacts extends to the three key elements of national building or development, namely the political, economic, and social foundations of a nation.

Consequently, when discussing government leadership and general public responses to a national crisis such as the Covid-19 pandemic, considerations have to go beyond the political culture perspective, to include also the economic and the social culture aspects. All these three cultural dimensions are intertwined and interdependent in the makeup of national culture. Each cultural dimension influences and has an impact on the other in terms of direction, development, and denouement. In order to understand the cause and rationale for the differentiated outcomes of each nation with respect to their response to the Covid-19 pandemic, it is necessary to

understand, analyse, and evaluate these three national 'pillars' under the umbrella of their respective cultures. Therefore understanding the 'cause and effect' of the pandemic outcomes in these nations, requires focusing on the political-culture, economic-culture, and social-culture factors that represent the environment in which the coronavirus propagates. The cultural analyses of nations from the political, economic, and social (including the customs and traditional aspects), are important because these factors would have a significant influence on the direction, design, formation, and execution of government initiatives in handling, managing, and the containment of the Covid-19 pandemic for each nation.

Therefore these cultural attributes, attitudes, and behavioural patterns would naturally have a significant impact on the national leadership through government policies and strategies for the management and containment of the global Covid-19 pandemic crisis. Similarly, the understanding of the national cultures would also give insights into the behavioural patterns of the general public, not only in terms of their responses to their government's initiatives but also with regard to their attitude to the pandemic itself. The combination of these two national cultural elements, whether synergized in harmony, or contradictory and conflicting, would significantly have an impact on the outcomes in terms of infections, serious illnesses hospitalisations, and deaths.

B. The political culture

The roots of national political – culture are said to be based on its history, traditions and customs, which are also influenced by its religious, economic, and social values or cultures. In terms of a nation's timeline, its religion, traditions, and customs, maybe more deep-rooted than its history, because they probably existed before the formation of the nation. Therefore it is likely that the political leadership of a nation most likely started earlier with the earliest forms of community groupings, and subsequent inter-community social interactions. Going back to the age of cavemen, the politics leadership was probably based on power and prevalent with the strongest person in the group. Often this leadership is shared with the 'medicine man' or one who can communicate and represents the spirits, the undisputed 'superior' power (which of course refers to the influence of religious culture). The principle of shared authority between and among these men with power (might, medical, and spiritual), continued to exist and eventually evolved throughout the millenniums to become the foundations of modern day political culture and structure in terms of division of powers and authority. Obviously from the time of national formation, its political culture evolves accordingly with the nation's history. A nation established through authoritarian rule as a military power and dictatorship, would perhaps evolve into empires, and be ruled either by individuals, such as the Roman Empire, or as dynasties and monarchies with lineage-based rulers, such as existed in pre-communist China, the still remaining absolute monarchies in several Middle Eastern nations, Africa and Asia. Other monarchies, such as in Europe, still retained the lineage-based structure, but no longer rule, as this has been transferred to elected individuals through the democratic political ideology where power is transferred to the people. Consequently, the different political power structures have also defined the nature and structure of the political culture of these nations.

As previously mentioned, the 'roots' and foundations of a nation's culture can be said to have emerged and evolved from its history and religious foundations. Between these two national

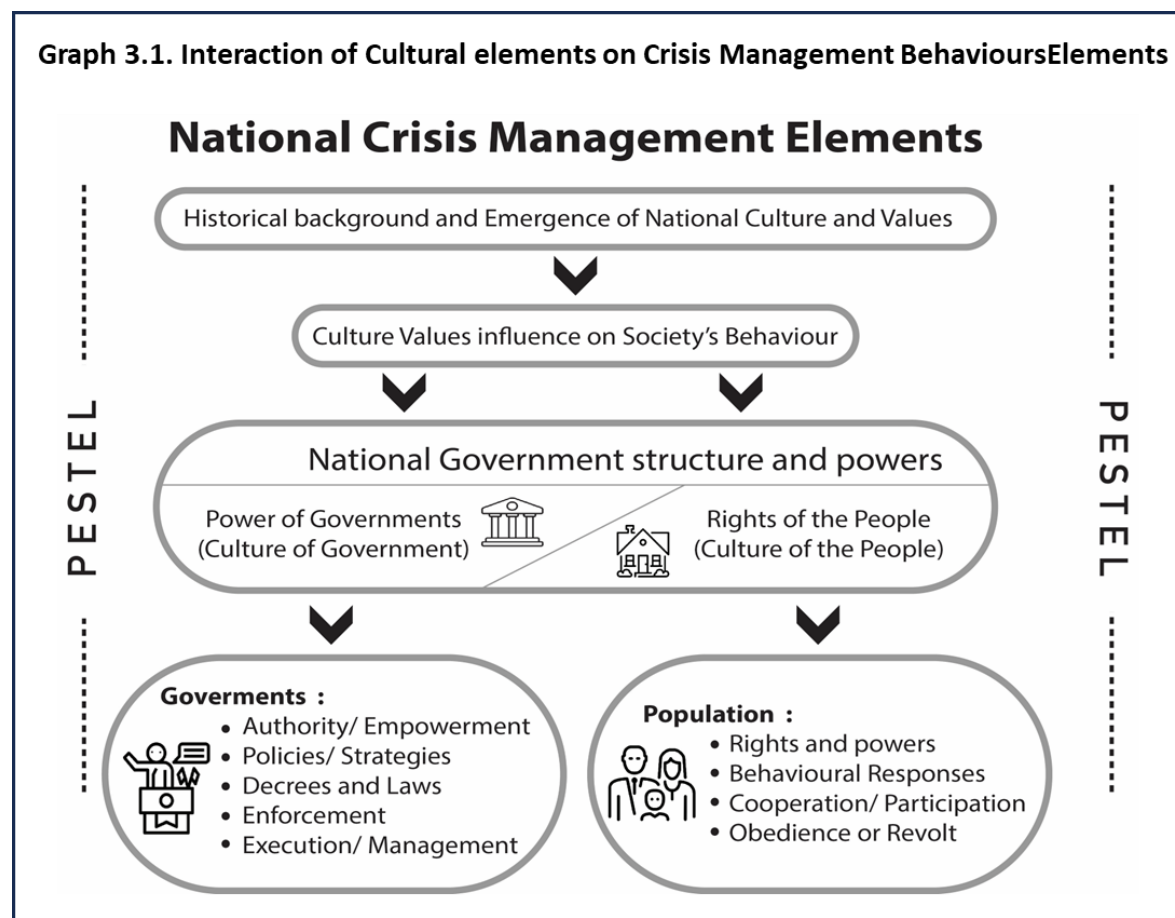
foundations emerged and evolved the roots of national culture in the form of beliefs, values, customs, and traditions. These were to define the people of the nation in terms of what they are, who they are, and what they stand for. These were the foundations for establishing and building the national political culture. The roles and functions of leadership and governments are built on and around these values and beliefs. A nation under a leadership style that is authoritarian, autocratic, or dictatorial would establish one form of political culture that reflects its political power. Similarly, other political power systems such as republics or democracies where power is transferred and shared with the people would result in different forms of political cultures accordingly. Most nations in Western Europe that were originally established or ruled under absolute authoritarian monarchies or emperors' rule eventually during the past 2 – 3 centuries, evolved into democracies as constitutional monarchies. Needless to say, this evolution of leadership and ruling power has also brought about changes in the political culture of the respective nations. However, while the political state of a nation can change quickly, the cultural aspects associated with such political power can take more time to change or adjust accordingly. Many nations that have changed from authoritarian regimes to adopt the constitutionalised democratic structure could still retain or exercise some remnants of past authoritarian political culture.

The influence and impacts of political culture on the behavioural patterns of nations in the crisis management of the Covid-19 pandemic would be at two levels.

- a) Firstly at the Government level or the national leadership level with regard to the influence of the national political culture on the design, planning, and organization of national policies, strategies, enforcement, and execution.
- b) Secondly at the population level (general public), where national political culture could influence the level of acceptance along with the behavioural response with regard to government leadership and directives. The nature and direction of political culture would be reflected in the level of independent-oriented self-determination with regard to conformity or the level of dependent-oriented community-shared responsibility to conform.

The influence of cultural elements in national crisis management, not only with regard to the Covid-19 pandemic but all other threats to the nation's well-being, both in terms of the State and the people, arise and originate from different elements which influence, determine, or 'moulds' the cultural behavioural patterns of a nation. On the one part, these factors shape and form the national cultural patterns, and on the other part, they are reflected in the cultural behavioural traits. These then form National Crisis Management elements. This starts with the nation's deep-rooted historical DNA, and establishing the foundations for national cultural values. These establish and form the political culture under which both the government's and people's scope and structure of empowerment are formed and constituted, setting out the parameters of joint national control and responses to national crises. This becomes the 'core' of the national political culture and the link to relevant social cultural values in terms of rights, and privileges as embodied in the nation's constitution. This political culture 'core' undergoes continuous interaction with the key surrounding determinants of the national culture, namely the political, economic, social,

technical, environment and laws (PESTEL)¹. Every nation has its own PESTEL, a kind of national identity, and in crossing over from one border to another, different PESTEL values will be evidenced, and national culture will be embodied within the ‘social’ category. The PESTEL environment is dynamic with active interaction and having impacts on the nations, and their cultural values as a consequence, of the ‘cause and effects’ internally within nations, as well as reflecting and adapting to the global environment. Globalisation has had both rapid and dynamic influence on the political, social and economic cultural evolution of nations as demonstrated in Graph 3.1.below.

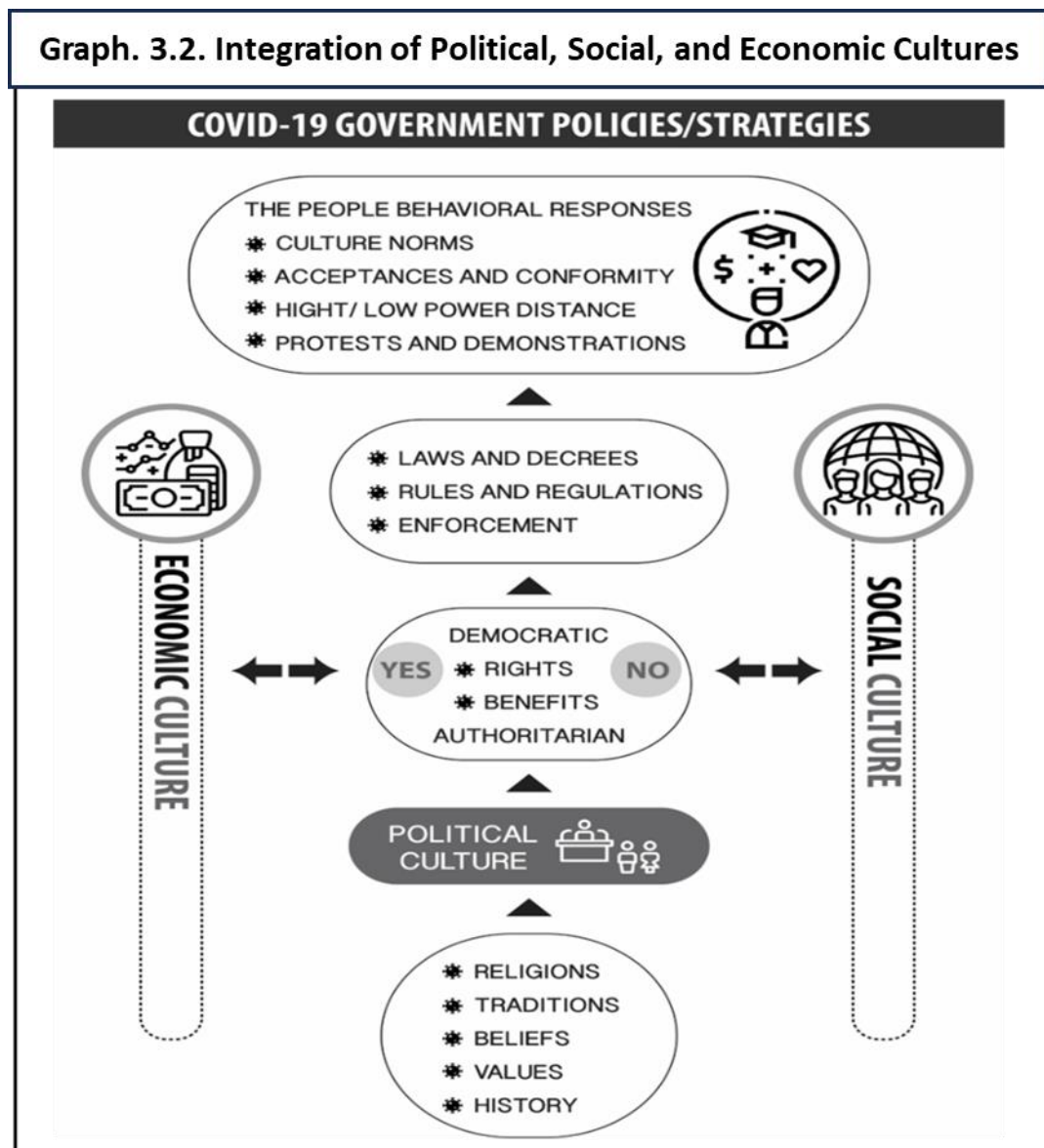


Nanandruethai D. Graphics

In fact, the rapid spread of the Covid-19 pandemic was brought about by globalisation (of all things). All these three cultural factors are in fact interlinked, inter-twined and inter-active. Every nation is encompassed by its PESTEL influences and dimensions which would determine and direct its responses to crises. The PESTEL differences between one nation and another would explain the disparity and contrasts of outcomes in different nations in response to the same Covid-19 pandemic.

¹ No one person is identified as having developed the PESTEL country analysis model. However, the original ‘economic, technical, political and social’ ETPS acronym was said to have been initiated by Harvard Professor Francis J. Aguilar In the 1967 publication "Scanning the Business Environment". Since then this evolved into PESTEL with the addition of environment and laws.

Therefore the political culture of a nation also reflects the influences and impacts imposed by the economic and social cultural environments, and vice-versa with each other. Consequently the ‘ behavioural patterns ’ of government leaders along with those of the general public under the influence brought about by their political cultural ‘line of influence’ can be illustrated by Graph 3.2. below. The following sections also discuss and describe the economic culture and social culture elements and impacts on national culture.



Nanandruethai D. Graphics

The above Graph 3.1. illustrates the ‘line of political culture ’ and how it has played an influential and key role in government leadership crisis management initiatives. The differentiation of approaches, and ultimately, the outcomes in addressing and responding to the Covid-19 pandemic between the various global regions can be said to be linked to this political culture phenomenon. This ‘line of political culture ’ also indicates the economic and social cultural elements which influence the direction of the political culture including its evolution over time.

It can be said that this triumvirate of political – economic – social cultures are continually interactive, and any significant change in one of the three cultural dimensions, can, and would likely impose or have an impact on the direction and stability of the others. For example, any significant change in the economic culture could invariably have an impact on the political and/or social culture of a nation. This factor was very evident with regard to the Covid-19 pandemic which has negatively impacted the economies of most nations globally, and consequently has had significant impacts on the political and social cultures in these nations. Conversely, changes in the political culture of a nation could also have a significant influence on the growth, or decline, of the national economy and social well-being.

The roots or DNA of a nation's political culture can be traced to its religious foundation which also contributes to the establishment of the beliefs and values. Concurrent with this development, and an inherent part of the national evolution is the accumulation of traditions and customs. These cultural elements merge and intertwine with the nation's history and culminate in establishing a significant portion of the foundations for a nation's political culture.

This political culture then determines the direction of cross-cultural government leadership with the rights and benefits of the people as the common denominator. On the 'high' index is a democracy, with the 'low' index representing authoritarianism.

Based on the political culture/ideology, whether democracy or authoritarianism, government leadership is established through laws, and decrees, along with the empowerment to enforce power and authority.

This empowerment, whether under democratic or authoritarian rule establishes the parameters of government policies, acts, strategies, and execution, which are matched and synergized with the level of acceptance, conformity, obedience, cooperation and participation by the people.

As indicated in the 'line of political culture' above there are two fundamental types of political culture. The first and oldest form of political culture is authoritarianism, representing absolute rule, where might is right and historically based on military strength. The birth of most nations in the world has its DNA in military strength and warlordism. The earliest civilizations and most likely under some form of political rule were traced to their emergence around four millennium BCE (before the Christian era). These include such empires as Mesopotamia, The Indus, China, and Egypt, which were founded based on absolute authoritarian rule, from emperors to pharaohs. Of ancient 'civilizations' only China remains unchanged today in terms of an authoritarian form of government, now known by the name of "communism". India (emerging from the ancient Indus), and Egypt are now under different forms of modern-day Democracy. Mesopotamia is now divided into Turkiye, Kuwait, Iraq, which are under different forms of democracy or federal parliamentary republic; and Syria, which alone continues with a form of absolute rule.

The second and more recent political culture is based on democracy², which was established by the Greeks around 500 BCE. Under this political culture, the power of leadership is exercised through the national constitution which is promulgated by the people and built on ensuring and protecting, the rights and benefits of the people. Democracy today has undergone some changes

² Greek "demos" (= the people) + "kratia" (= power, rule)

and encompassed varying interpretations regarding the power of government leadership and the rights and benefits of the populous.

The political – culture can be classified into three dimensions, based on the balance or imbalance of power or authority between the ruler and the ruled. At one end would be the democratic ideology, and at the other end would be the authoritarian (also associated with communism) ideology. Between these two political culture extremes is a rule of government which combines both democratic and authoritarian values of government. A popular term for this ‘conjoined’ political culture is “hybrid regime” which is likened to a hybrid car that can switch from one energy source (gasoline) to another (battery) according to opportunity or suitability. Unlike the traditional definition of ‘hybrid’ this is not an offshoot from the fusion of the two elements (the car does not use gasoline and battery simultaneously) but more the case of independent functioning according to appropriateness and choice. The key concept is probably a ‘combined’ or ‘conjoined’ political culture where governments or ‘regimes’ adopt to practice either of these two political ideologies depending on the political expediency or objective of the ruling government at the time. The tempo and make-up of the culture between democratic and authoritarian rule can also change from one regime to another. There are many circumstances for conjoined or hybrid regimes. For example, some countries may be transitioning from authoritarian rule or military dictatorship towards democracy, and currently undergoing the political ‘learning curve’. Of course, the same is applicable also for nations shifting from democracy to authoritarian rule. Some nations declare themselves a democracy even to become more acceptable in the global community though the leadership and government style remain autocratic-oriented. Some governments are a form of oligarchy where power rests with a select group of people based on wealth, nobility, power, business, education, religion, or political control. There are also well-established democratic governments which still retain or exercise certain authoritarian powers both within and outside the constitutional stipulations.

These political culture considerations as stated above are only considered in this research in the light of the national crisis management initiatives of each country in addressing and confronting the Covid-19 pandemic, to observe, understand, and assess the rationale of their behavioural responses, both governments and the general public, as reflected in their outcomes in terms of confirmed infection cases and death rates. Therefore the focus is on political culture, and not national politics, although of course these two factors are inextricably inter-twined. Consequently, the wide ‘spread’ of hybrid regimes’ exercise of power in terms of political culture swings from constitutional democracy to autocratic authority, would have a significant influence and impact on the governments’ policies and strategic responses in crisis management with regards to the Covid-19 pandemic. According to the Economist Intelligence Unit’s (EIU)³ this wide “spread” of political culture experienced in the hybrid regimes category is also present and evident in democracies. The democratic government category has also displayed significant swings (highs and lows) in the practice and exercise of constitutional democratic rights. Under the EIU classifications, democratic governments are awarded scores above 6.0 to 9.9 out of 10.0.

³ The Economist Intelligence Unit(EIU) is the research and analysis division of The Economist Group, the sister company of The Economist newspaper. The Economist Intelligence Unit publishes data and research on democracy and human rights.

This clearly indicates the significant wide ‘spread’ of democratic values and practices between these units. This wide “spread” in democratic scoring indicates the broad spectrum of democracy in each nation and ranging from EIU classification of ‘full democracy’ to ‘flawed’ democracy (note: the latter category is twice the number of the former). Nations with scores below 6.0 categorise them as hybrid regimes and those below 4.0 fall into the authoritarian status.⁴ These differentiated political cultures (based on the level of power and authority exercised by governments) would have an influence on the nature and level of the respective government’s initiatives in terms of policies, strategies, and mandatory decrees with respect to the handling of the Covid-19 pandemic. This would also help answer the question of why the same global pandemic problem is addressed differently from one nation to another. These would be reflected in the outcomes in terms of confirmed infection cases and deaths for each nation which will be illustrated below as well as in subsequent Chapters.

Also, in addition to the political culture aspect, cultural differences are also influenced by other cultural elements inherent in each nation. For instance, the practice of democracy in the nations of North America would be different to those in South America, Europe, or Asia. Consequently, the political response (policies, strategies, executions, etc.) to the Covid-19 pandemic, by both governments and populations, would be somewhat different and by virtue of which, the outcomes in terms of infection levels and death rates.

In 2020, following the outbreak of the SARS – Cov – 2 in China and the real threat of the coronavirus spreading globally, several nations started to impose Emergency Acts or Decrees, which included restrictions and mandates such as lockdowns, curfews, travel restrictions, quarantines, forced vaccinations, enforcement of social distancing protocols, and restrictions on social interactions, etc. These government initiatives became the norm when the WHO declared the outbreak to be a global pandemic March 2020. All these government-declared emergency decrees in response to the Covid-19 pandemic, eroded democratic rights. It was not surprising therefore that from the early stages of the Covid-19 pandemic in 2020, there were widespread demonstrations across Europe against government directives and mandates under the umbrella of Emergency laws and regulations (short-term / normative-oriented culture). These public protests and demonstrations continued through 2021 and 2022 in response to forced vaccinations which were developed on the ‘fast track’. In the United States, a presidential mandate for the vaccination of health workers and large businesses with a high number of employees was challenged by the public, who exercised their democratic rights through the Supreme Court. The Supreme Court ruled in the people’s favour against President Joe Biden’s mandates for general vaccination or testing but allowed the mandate to remain for selected healthcare workers.⁵

However, as a demonstration of differentiated political culture, these same Emergency acts and decrees by governments in non-Western democratic nations were accepted more positively by

⁴ The_Economist_Democracy_Index (2022) retrieved from Wikipedia.org
https://en.wikipedia.org/wiki/The_Economist_Democracy_Index

⁵ Supreme Court rulings on nationwide vaccine and testing mandate for large businesses, health care vaccine mandate. CNN: Updated 1954 GMT (0354 HKT) January 13, 2022.
<https://edition.cnn.com/2022/01/13/politics/read-supreme-court-vaccine-rulings/index.html>

the general public without protest or demonstrations. This was mainly due to their long-term / pragmatic-orientation culture which was adaptable to change and pragmatic necessity. This behavioural response was common in the Middle East, Africa, and Asia. The previous Philippine president, Rodrigo Duterte, ordered the arrest of unvaccinated people who violated the stay-at-home orders aimed at curbing the explosion of infections driven by the Omicron variant, (AFP reports.) In a country made up of over 7,000 islands, and a total population of over 100 million, containment of the coronavirus was critical for economic and social survival. Since vaccination was voluntary in The Philippines, restrictions were imposed on the non-vaccinated to be isolated to reduce infection spread. As the government leader and defender of democratic constitutional rights, Duterte set the priorities of his authority. “Because it’s a national emergency, it is my position that we can restrain” people who have not got their shot”. If anyone “goes out of the house and goes around in the community or maybe everywhere, he can be restrained. If he refuses then the [official] is empowered to arrest the recalcitrant persons.”⁶ Most nations in non-Western regions that accept and abide by the high power distance culture consider curfews, lockdowns, and social distancing-based mandates as the responsibility of governments to instigate, plan, launch, and impose for the overall safety of the population. Guidelines and decrees by governments are generally followed as a common community act (collective culture), along with the willingness to cooperate in behavioural change accordingly (long-term / pragmatic-oriented culture). In fact, for this cultural orientation, governments are expected to be responsible for taking the initiative in giving appropriate safety guidance as well as assuring the availability and supply of the necessary medical solutions, such as vaccines, in the eradication of the Covid-19 pandemic. The issue of imposing vaccination is not considered a threat to people’s rights but to ensure and underscore the rights of citizens to due care and safety by the government are adhered to.

The contrast in political cultures between Western nations in The Americas and European regions (mainly consisting of full democracies, and flawed democracies as a political culture) and the other regions of the Eastern Mediterranean, Africa, South East Asia, and Western Pacific. The nations of all these regions were made up of different political cultures either democratic, conjoined or hybrid, or authoritarian which would be significant factors in the differentiated approached to crisis management strategies to contain the Covid-19 pandemic.

Whereas democratic governments would be required to follow the constitutional process in declaring emergency responses, an authoritarian government does not require justification or constitutional protocol to carry out or execute extraordinary actions in crisis management in addressing the Covid-19 pandemic. Similarly, a conjoined government would generally retain sufficient authoritative power to enact emergency decrees without depending on parliamentary approval. This was clearly demonstrated by China’s speed of response along with a ‘carte blanche’ to initiate response and enforce the ‘zero tolerance’ policy in addressing the Covid-19 pandemic since the outbreak. China was the first country to exercise and enforce widespread lockdowns to contain the spread of the coronavirus infection. In 2022 China had no hesitancy in locking down both Peking (with a population of 21 million) and Shanghai (with a population of 27 million) for extended periods of time in response to numerous upsurges in infection clusters.

⁶ THE GUARDIAN: 7 Jan 2022

C. Drastic times call for drastic measures: Political-culture transmutation under crisis

The Covid-19 pandemic was declared a global crisis by the World Health Organization (WHO) three months after the outbreak. However, this reference is not limited to only the globalisation of infections, hospitalisations, and deaths but also, of significance, to the side effects of the pandemic on the sustainable well-being of the human race in terms of economic, social, and political aspects. As previously mentioned, all three elements are intertwined and therefore they become the joint responsibility of the government leadership of each nation to protect and maintain sustainability. As the official national administrator, whether elected through the democratic process or self-imposed through military or other power pressures, the national government is mandated with the power, authority, and responsibility (and dare we say it, the accountability) to lead and guide the nation through this global pandemic. However, being a democratic, or authoritarian government does not guarantee outcomes. Governments are like corporations. They are managed by people, not pre-programmed robots. Both types of governments can be competent, efficient, effective, fully committed, or not. In a corporation, the level of performance outcome is dependent on the combined and interdependent capability and capacity of both management leadership and the employees. In the case of national administration, and especially during crisis management, the level of success in outcome is similarly dependent on the integration of government leadership and population support. However, there is a fundamental difference between the private sector and public sector operations, with the greater challenge in the latter. Salaried employees are self-motivated to obey the management. Their jobs and consequently the well-being of their families depend on following corporate management directives. In the case of the public sector, specifically in democracies, the government, along with all the civil servants, are employed by the people. In addition, the people have certain empowerment and authority which are established and protected by the national constitution and legislation to ensure these rights. Therefore democratically elected governments, do not dictate or issue authoritarian directives to the people. They have to rationalize, motivate, create credibility, and justify their actions to win the people's trust to get their acceptance, cooperation, and participation, especially in a crisis. Authoritarian governments generally exercise similar power as corporate leaders to induce popular acceptance and cooperation. This is because (theoretically) the people mostly depend on the government for their needs and livelihoods.

Government leadership and politics are challenged to contain and manage the contagion and threats arising from the Covid-19 pandemic to national stability and the population's well-being. Statistics of the rapid growth and expansion of the Covid-19 pandemic in terms of confirmed cases and mortality since the declared outbreak in China at the end of December 2019 to December 2022 clearly demonstrate that in many countries, the government leadership response was not winning the battle to contain the pandemic. The latest Omicron variant seems determined to remain and continually spread globally. Many members of the industrialized "G – 20" Group⁷ continue to be listed as highly infected nations. As a result, national economies are

⁷ The G-20 Group was established in 1999 in response to the global economic crises, with a membership of nations reflecting regional representation of the world's largest economies. Annual summit meetings, starting in 2008 are generally attended by the Heads of State and relevant Ministers from each member nation. Members of the G 20 consist of 19 nations which are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United

still struggling due to disruptions to the supply chains, depleted purchasing power, and the degradation of national wealth. Similarly, basic social activities and lifestyles were also interrupted due to lockdowns, curfews, quarantines, closures, and travel restrictions. Even students and children were effected due to schools and universities having to close numerous times, and though this was replaced by “on-line” education, these interruptions and changes have impacted both the quality and continuity of education. Undoubtedly, during the past three years, all segments of society were negatively impacted by the Covid-19 pandemic.

However, the situation could very well have been significantly worse if these government leaders had not adopted some ‘extraordinary and abnormal’ policies and strategies. Drastic times call for drastic measures which means both the political and social cultural values of highly infected nations need to adapt quickly and accordingly, including an interruption to certain constitutional rights and freedoms. This would be needed to establish the necessary collective–community behavioural response to fight the Covid-19 pandemic. Traditional cultural values and traits need to be adjusted to conform and reconcile with the ‘new normal’ way of life imposed by the coronavirus pandemic. This meant adjusting the mindset and behaviour of certain cultures to promote and ensure the effectiveness of social distancing as a defence against the pandemic spread. To this extent, governments declared and implemented certain ad hoc emergency decrees, legislations, and rules to ensure full nationwide cooperation and conformity, even though these acts would contravene certain democratic rights and freedoms of the people.

Such drastic measures by democratic government leadership include enforcing curfews, lockdowns, quarantines, and limiting or banning certain social activities, sports events, and business conventions. This also meant a disruption of both internal and external travel with the closure of borders with other countries to stop tourism and international trade. Drastic times call for drastic measures. Democratic rights and privileges of these countries shifted towards more authoritarian governance. These measures in democratic societies could only be undertaken and implemented under special legislation or decrees, and only on an ad hoc or provisional basis. Needless to say, the effectiveness of this change in political culture is solely based on the level of acceptance, cooperation, and participation of the general population.

The constitution of democratic nations, allows governments to issue extraordinary legislature and decrees, such as during a declared national crisis. However, government powers and authority still fall within the parameters established under the constitution. Democratic governments that are not prepared to rely on the general public’s rationality to do the right thing, issue emergency decrees (within the bounds of the constitution) giving extraordinary administrative powers with legitimate authority to enforce action and compliance. Consequently, in addressing and responding to the life-threatening Covid-19 pandemic, many democratic governments have adopted the emergency decree option, to enforce lockdowns, curfews, quarantines, travel restrictions, closures of businesses, entertainment, or social venues to limit crowded gatherings, vaccination, etc. However, “enforcement” tend to have different meanings and perspectives between democratic and authoritarian political cultures.

There are also some governments, generally classified as ‘full democracy’ which are reluctant to exercise or impose extraordinary powers and authority, or to enforce ‘excessive’ compliance

States, and the European Union making up the twentieth member of the group. From the beginning, Spain has been established as a permanent observer.

through laws and regulations. These governments, such as Sweden, tend to advise, recommend or give guidelines on how to act, relying on the general public's rationality to 'do the right thing' (theoretically). However, this does not always work, including in Sweden, as presented in the Swedish profile in Part Three.

Table 3.1AB below presents the listing of the Top 20 and Bottom 20 nations (from a total of 124 nations) indicating confirmed cases, and death rates per one million population. This Table may indicate or give some insight into these nations' crisis management policies and strategies of their governments, and the corresponding levels of cooperation and participation of their general public in addressing the Covid-19 pandemic. These statistics on infections and deaths were all based on cases per one million population so that all nations were measured under the same denominator, whether large or small (with populations over 5 million). Of interest, nearly all the Top 20 nations with the highest rates were either in Europe or The Americas regions and were associated with the democratic government structure, with the exception of Ukraine and Russia. At the same time, the Bottom 20 nations with the lowest rates were nearly all under the conjoined/hybrid or authoritarian government structure except for Ghana. Also, it should be noted that nearly all these nations were in the African region. The remaining nations in Europe, The Americas, Africa and all the Asian nations were ranked between these two groups of nations.

| Table 3.1A. Top 20 nations (per million population as of March 29, 2023) | | | | | Table 3.1B. Bottom 20 nations (per million as of March 29, 2023) | | | | |
|--|----------------|--------|---------|------------------|---|----------------------|--------|-------|------------------|
| RANKING | COUNTRY | DEATHS | CASES | GOVERNMENT | RANKING | COUNTRY | DEATHS | CASES | GOVERNMENT |
| 1 | Peru | 6,454 | 131,848 | DEMOCRATIC | 20 | Madagasa | 48 | 2298 | CONJOINED/HYBRID |
| 2 | Bulgaria | 5,640 | 191,480 | DEMOCRATIC | 19 | Uzbekistan | 47 | 7273 | AUTHORITARIAN |
| 3 | Hungary | 4,887 | 220,503 | DEMOCRATIC | 18 | Ghana | 44 | 5120 | DEMOCRATIC |
| 4 | Czechia | 4,063 | 440,960 | DEMOCRATIC | 17 | Nicaragua | 35 | 2257 | AUTHORITARIAN |
| 5 | Slovakia | 3,737 | 330,425 | DEMOCRATIC | 16 | Guinea | 34 | 2762 | AUTHORITARIAN |
| 6 | Greece | 3,516 | 570,096 | DEMOCRATIC | 15 | Mali | 33 | 1456 | CONJOINED/HYBRID |
| 7 | Romania | 3,451 | 170,904 | DEMOCRATIC | 14 | Togo | 33 | 4457 | AUTHORITARIAN |
| 8 | United States | 3,302 | 303,126 | DEMOCRATIC | 13 | Ivory Coast | 30 | 3136 | CONJOINED/HYBRID |
| 9 | Chile | 3,290 | 266,962 | DEMOCRATIC | 12 | Eritrea | 28 | 2766 | AUTHORITARIAN |
| 10 | Brazil | 3,251 | 172,518 | DEMOCRATIC | 11 | Central African Rep. | 20 | 2754 | AUTHORITARIAN |
| 11 | Italy | 3,200 | 434,490 | DEMOCRATIC | 10 | Burkina Faso | 17 | 973 | AUTHORITARIAN |
| 12 | United Kingdom | 3,117 | 362,155 | DEMOCRATIC | 9 | Dem. Rep. Congo | 15 | 969 | AUTHORITARIAN |
| 13 | Poland | 2,992 | 162,520 | DEMOCRATIC | 8 | Sierra Leone | 15 | 902 | CONJOINED/HYBRID |
| 14 | Paraguay | 2,932 | 108,507 | DEMOCRATIC | 7 | Nigeria | 14 | 1220 | AUTHORITARIAN |
| 15 | Belgium | 2,915 | 408,157 | DEMOCRATIC | 6 | Tanzania | 13 | 656 | CONJOINED/HYBRID |
| 16 | Argentina | 2,867 | 220,718 | DEMOCRATIC | 5 | South Sudan | 13 | 1683 | AUTHORITARIAN |
| 17 | Ukraine | 2,810 | 136,703 | CONJOINED/HYBRID | 4 | Tajikistan | 13 | 1787 | AUTHORITARIAN |
| 18 | Colombia | 2,750 | 122,630 | DEMOCRATIC | 3 | Niger | 12 | 363 | CONJOINED/HYBRID |
| 19 | Russia | 2,745 | 155,659 | AUTHORITARIAN | 2 | Chad | 11 | 434 | AUTHORITARIAN |
| 20 | Mexico | 2,615 | 58,911 | DEMOCRATIC | 1 | Burundi | 1 | 4165 | AUTHORITARIAN |

Sources: [Total confirmed COVID-19 deaths and cases per million people \(ourworldindata.org\)](https://ourworldindata.org/)

The Economist Democratic Index (2023). Economic Intelligence Unit

No assessments are made as to the outcomes as indicated above since other factors, not related to political culture may have had significant impacts, such as the differentiated data collection and dissimulation network, along with the timeliness and pertinence of the data gathering and methodology of processing in many developing nations in the Africa and Asian regions. Suffice to say, that political culture, in association with the political ideology and structure, could influence the nature and effectiveness of government initiatives coupled with the general public behavioural responses with regards to the Covid-19 pandemic.

In this regard, it should also be noted that authoritarian and conjoined/hybrid governments would have more or less a 'free hand' in deciding and enforcing the compliance of their mandates and directives on the public.

In contrast, with democratic nations, due to the very nature of their constitution and principles, there is need for justification, rationalisation, and even public discussion, in accordance to established procedural protocols which must be followed to the satisfaction of the general public, especially in crisis management situations. This form of political culture tends to be more bureaucratic in terms of controls and checks to ensure transparency and legitimacy. In other words, "before doing it, ask for, and get justification". Needless to say, under the political culture of these two contrasting ideologies, the policies, planning, and execution of crisis management strategies were different and resulted in different outcomes. As the Covid-19 pandemic became more contagious and deadly, even democratic governments needed to attain and exert extraordinary authority and powers through the declaration of a temporary state of Emergency. This was justified by the need to enact certain restrictive laws such as lockdowns, curfews, and closures, to implement social distancing protocols, including mandates to wearing of masks and undergoing vaccinations.

However, emergency powers are not without controls or limitations and can be challenged and even revoked through constitutionalized legal processes by the people as demonstrated in the United States. Also, not all democratic nations are quick to turn to Emergency decrees as a primary option. Some nations, such as Sweden were very reluctant initially to exercise extraordinary powers on their people and relying on the rationality and sense of responsibility of the people to 'do the right thing' voluntarily. However, even Sweden eventually had to adopt a more directive if not authoritative stance in enforcing appropriate behaviour of social distancing.

Chapter 4

THE SOCIAL-CULTURAL PERSPECTIVES

A. The Social – Cultural environment and the Covid-19 outcomes

The sociol-cultural environment can be described as the result of the interaction between society and culture (values, beliefs, and customs) which results in certain behavioural patterns. The social-culture therefore reflects the society's culture of a nation. Undoubtedly, globalisation, particularly in the business and entertainment sectors of society, coupled with easy and continuous access to information through communication technologies, has increased connectivity and cultural exposure globally. Through globalized interaction, culture could, and would influence society, and vice-versa. i.e. society can influence cultural-based behavioural through changes in social values. The increased spread of cultural interactions and exchanges globally can lead to the adaptation or adjustment of traditional values and beliefs. The accumulation of these changes and modifications as a result of globalisation over an extended period of time would likely impact the foundations and scope of a nation's traditional customs and culture. Globalisation of world economies, society, and even politics, has contributed to accelerating changes and reevaluation of cultural foundations and values. Consequently, today's 21st. century national culture is already significantly different compared to the pre-globalisation era in the previous 20th. century in terms of beliefs and values

Changes to cultural behaviour are commonly instigated by changes in social beliefs, values, and attitudes. Today we live in the digital era, where digitization has permeated most of our lifestyles through multitudinous forms of communication technologies. This has shaped and driven the globalisation of social behaviour, lifestyles, and the cultural environment. This evolution into the digitalized lifestyles has been a dramatic change from the previous analog style of living and has significantly impacted cultural behaviour. Consequently, the modern-day socio-cultural environment reflects these developments and changes in attitudes, and values, which ultimately impact behavioural patterns. These cultural traits include changes to lifestyle, tastes, customs, traditions, and norms. In this regard, the focus is only on the sociol-cultural aspect which focuses on the behavioural response patterns to the Covid-19 pandemic crisis.

Globalisation has already shown how a virus in China can reach any country in Europe within 12 - 13 hours through modern jet air travel. The globalisation of business, industry, and trade has established a high level of connectivity between nations, and their peoples through various forms of modern transportation systems. Consequently, the rapid spread of the Covid-19 pandemic has demonstrated that not only are we importing and exporting products and services, but apparently, also diseases and viruses. Not only that but with equal efficiency and speed also. The spread of the coronavirus to over 220 nations and territories within a couple of months (from December 2019 to February 2020) demonstrates how globalized connectivity can impact and change the sociol-cultural environment globally. However, the over 5.4 million deaths globally¹, which is almost the size of many European nations (Norway, Slovakia, Finland, and Ireland), is the result of localized connectivity and the spread of the coronavirus within each nation. Globalisation may have brought the coronavirus into the country, but the proliferation and propagation of the coronavirus within each nation were the results of localized transmissions. This is because the Covid-19 is based on human-to-human connectivity and transmissions.

Statistics of the growth and spread of Covid-19 have continually demonstrated that it indiscriminately infects and potentially can kill people through contact and contamination. Humans both breathe in and touch contaminated air and objects. The only effective defence against getting infected is by 'no contact' through social distancing. Therefore the effectiveness of social distancing as a defence against infections depends on behavioural discipline, which can be linked to certain cultural traits and behavioural patterns. Nevertheless, it has been proven that the high and low levels of infections and deaths can be linked to the effective practice and discipline with regard to social distancing. Actually, as previously stated, effective prevention of infection is really more the case of 'social separation' than social distancing. Social separation requires wearing some form of personal protective equipment (PPE) such as masks, gloves, clothing, etc. If a person is wearing PPE, then this establishes the social separation element, without 'distancing'. Failures to effectively put the social separation into practice have been the main cause of the explosion of confirmed infections and deaths globally from January 2020 to date. Governments are aware that continuous real social 'distancing' is very unlikely, and have advocated for the wearing of masks and the practice of sanitization of hands (and fingers) after touching exposed surfaces. However, even this requires a certain level of behavioural discipline which again may be influenced by cultural patterns.

Past statistics since the declaration of Covid-19 as a global pandemic by the WHO in mid-March 2020, have indicated that over two-thirds of total infections and deaths were concentrated in The Americas and European regions. The spread and rise of the infection levels in various countries were attributed to the more relaxed attitude, regarding the observation of social distancing or social separation practice. In other regions such as South East Asia, Western Pacific, and the Eastern Mediterranean regions, government controls, and general public conformity with regards to the wearing of masks in public and frequent hand sanitization was high, and resulted in lower infections and death rates. It is obvious that social distancing or separation practices were particularly critical in stemming widespread and rapid transmission during the first year of the pandemic (2020) when vaccines were

¹ <https://www.worldometers.info/coronavirus/>

not yet fully developed and tested for public inoculations. Consequently, full dependency was on the non-pharmaceutical solution, namely, social distancing or separation.

For this reason, China declared almost immediately after the outbreak in December 2019 the practice of non-pharmaceutical solutions based on human behaviour and discipline, i.e. strict adherence to the social separation discipline through wearing masks at all times when in public, or interaction with strangers, and sanitizing hands and fingers frequently to kill and remove any virus contamination from touching. These social-culture-oriented community-based behavioural patterns and norms are generally linked to the national cultures of each country. Needless to say, there are 'cross-cultural aspects that could and would influence the behavioural responses and acceptance of non-pharmaceutical solutions. Statistics of infection and death rates indicate a link between different cultures embracing diverse behaviour patterns. Some cultures which are more used to relying on technical tools and solutions to solve problems and crises would be reluctant to adopt any solution that requires having to change their ways and behavioural norms, even in the face of the Covid-19 pandemic. For mainly Western cultures changing their behaviour and standard practice would not be easily acceptable. Conversely, for mainly non-Western cultures, whose political history and economic status are more used to relying on human-based solutions as opposed to the technology-based solution, there is greater adaptability, and willingness to accommodate behavioural change to contain a problem or crisis. The cross-cultural impacts affecting the responses to the Covid-19 pandemic are clearly evident and well illustrated in the previous sections which indicated the levels of infection and deaths were by far higher in the Western regions of The Americas and Europe than in the Asian, Middle Eastern, and African regions.

i. The Top 20 nations with the highest infection rates (per 1 million population)

The sociol-cultural analysis of the Top 20 infected nations focuses on the relevant customs and traditions of a nation with regard to their handling of, and their responses to, the global Covid-19 pandemic. This is to identify and evaluate the correlation between national cultural elements through government leadership and the general public's behavioural responses on the one side, and the level of infections and deaths, on the other side. The objective of the analysis is to understand the relationship between behavioural responses in handling the containment of the coronavirus and the differentiated outcomes.

Based on the number of cases per 1 million population (so that all nations large and small) nations with a population of 5 million up), were on the same common denominator platform for evaluation, the Top 20 and Bottom 20 nations with the highest and lowest rates of deaths and infection cases as of March 29, 2021, were as follows,

Table. 4.1. Top 20 nations (per million population as of March 29, 2023)

| RANKING | COUNTRY | DEATHS | CASES | REGION |
|---------|-----------------------|--------|---------|--------------|
| 1 | Peru | 6,454 | 131,848 | THE AMERICAS |
| 2 | Bulgaria | 5,640 | 191,480 | EUROPE |
| 3 | Hungary | 4,887 | 220,503 | EUROPE |
| 4 | Czechia | 4,063 | 440,960 | EUROPE |
| 5 | Slovakia | 3,737 | 330,425 | EUROPE |
| 6 | Greece | 3,516 | 570,096 | EUROPE |
| 7 | Romania | 3,451 | 170,904 | EUROPE |
| 8 | United States | 3,302 | 303,126 | THE AMERICAS |
| 9 | Chile | 3,290 | 266,962 | THE AMERICAS |
| 10 | Brazil | 3,251 | 172,518 | THE AMERICAS |
| 11 | Italy | 3,200 | 434,490 | EUROPE |
| 12 | United Kingdom | 3,117 | 362,155 | EUROPE |
| 13 | Poland | 2,992 | 162,520 | EUROPE |
| 14 | Paraguay | 2,932 | 108,507 | THE AMERICAS |
| 15 | Belgium | 2,915 | 408,157 | EUROPE |
| 16 | Argentina | 2,867 | 220,718 | THE AMERICAS |
| 17 | Ukraine | 2,810 | 136,703 | EUROPE |
| 18 | Colombia | 2,750 | 122,630 | THE AMERICAS |
| 19 | Russia | 2,745 | 155,659 | EUROPE |
| 20 | Mexico | 2,615 | 58,911 | THE AMERICAS |

Sources: [Total confirmed COVID-19 deaths and cases per million people \(ourworldindata.org\)](https://ourworldindata.org)

WHO Regional zones

As can be seen from Table. 4.1. above, the Top 20 list of nations with the highest levels of deaths and infection cases were all from The Americas and European regions. This is despite the fact that these regions were the first to roll-out vaccinations and had the most access to the best vaccines available. This seems to indicate some common behavioural traits which are most likely linked to the cultural values and elements common in these two regions, as well as underscore the influence of cultural attributes and traits over political stability, wealth, and economic status. Also as previously mentioned, calculating infections and death rates based on cases per million instead of total absolute figures gives a true ‘across the board’ representation of nations, large and small impacted by the Covid-19 pandemic. Based on a cut-off in population size of 5 million and above, many smaller and mid-sized nations such as Slovenia, Belgium, Switzerland, Ireland, and Israel which were previously overshadowed by the larger nations, were identified among the nations most affected and impacted by the coronavirus. Clearly, demonstrated are how these mid-sized nations’ infection rates exceeded those of many larger nations such as Spain, France, Italy, Germany, the United Kingdom, India, China, Mexico, and Brazil. In terms of global infections, Greece with a population of about 10.3 million came on top with over 570,000 accumulated cases per million population, followed by Czechia with a population of about 10.5 million with 441,000 accumulated cases per million population.

The death rates were headed by Peru with a population of about 34.3 million and averaging 6,454 accumulated deaths per million population, followed by Bulgaria with a population of 6.7 million and averaging 5,640 accumulated deaths per million population. By this method of comparative analysis, the United States and Brazil, traditionally leading the Top 20 listings in absolute terms, dropped to 8th. and 10th. ranking respectively. Remarkably, no nations from any of the other four global regions (Eastern Mediterranean, Africa, South East Asia, and Western Pacific) were included on this list.

Most of the nations in the remaining four non-western regions are mostly low-income and middle-income developing economies, with limited technological capabilities and resources. For these nations, the non-pharmaceutical and 'low tech' options have proven to be the most effective and sustainable strategies in protection against Covid-19 infections, serious illnesses, and deaths. Among these regions, the African region would be considered as having the lowest economic wealth and social well-being. These regions would rely more on self-sufficiency, and human-based solutions depending on behavioral patterns and discipline. Yet, the African region represents 90% of the Bottom 20 nations listed with the lowest deaths and infection rates as indicated in Table. 4.2 below,

| Table. 4.2. Bottom 20 nations (per million as of March 29, 2023) | | | | |
|---|-----------------------------|--------|-------|--------|
| RANKING | COUNTRY | DEATHS | CASES | REGION |
| 20 | Madagasa | 48 | 2298 | AFRICA |
| 19 | Uzbekistan | 47 | 7273 | EUROPE |
| 18 | Ghana | 44 | 5120 | AFRICA |
| 17 | Nicaragua | 35 | 2257 | AFRICA |
| 16 | Guinea | 34 | 2762 | AFRICA |
| 15 | Mali | 33 | 1456 | AFRICA |
| 14 | Togo | 33 | 4457 | AFRICA |
| 13 | Ivory Coast | 30 | 3136 | AFRICA |
| 12 | Eritrea | 28 | 2766 | AFRICA |
| 11 | Central African Rep. | 20 | 2754 | AFRICA |
| 10 | Burkina Faso | 17 | 973 | AFRICA |
| 9 | Dem. Rep. Congo | 15 | 969 | AFRICA |
| 8 | Sierra Leone | 15 | 902 | AFRICA |
| 7 | Nigeria | 14 | 1220 | AFRICA |
| 6 | Tanzania | 13 | 656 | AFRICA |
| 5 | South Sudan | 13 | 1683 | AFRICA |
| 4 | Tajikistan | 13 | 1787 | EUROPE |
| 3 | Niger | 12 | 363 | AFRICA |
| 2 | Chad | 11 | 434 | AFRICA |
| 1 | Burundi | 1 | 4165 | AFRICA |

Sources: [Total confirmed COVID-19 deaths and cases per million people \(ourworldindata.org\)](https://ourworldindata.org/)
WHO Regional zones

The question is why? Even though it cannot be stated conclusively, it is not possible to ignore the social-cultural implications or to consider culturally-oriented behavioural patterns of nations in different regions.

The Western social-culture is fundamentally based on the democratic-oriented political-culture where empowerment is Constitutionally shared with the people. This means that the general public can, and does, question and, or, challenge, any government initiatives and policies in addressing the Covid-19 pandemic crisis. Western social-culture emphasizes exercising constitutional rights by seeking and obtaining satisfactory justification for government decrees, directives, and mandates in crisis management. With regards to addressing and responding to the Covid-19 pandemic this includes such acts as the mandatory wearing of masks, curfews, lockdowns, and closures of workplaces, controlled access to entertainment places, closed sports facilities, regulated entry into restaurants, etc. The right to protest against government mandates and decrees is upheld, resulting in many demonstrations taking place across Europe and North America. Needless to say, the level of abidance and conformity to government dictates by the general public does have an impact on the outcomes in terms of infections which consequently in some cases, also lead to deaths.

However, there were also many governments, constrained by similar constitutional limitations, who were reluctant to impose any stringent controls, despite being strongly advocated by the WHO, the local CDC, and the relevant 'front-line' health authorities. During the first year of the coronavirus pandemic when the only defence depended on non-pharmaceutical initiatives, social-cultural, and the corresponding behaviour attitudes, were critical to the practice of social distancing or separation.

B. Cultural Impacts on Crisis Management Outcomes

Previous findings and assessments have indicated how the political, economic, and social cultures of a nation can influence and impact the behavioural responses of both government leaders and the general public in addressing the Covid-19 pandemic crisis. Each of these three factors exerts a particular influence on a nation's behavioural responses. They also play significant roles in the formation of crisis management policies and strategies, and inevitably, in the outcomes.

The political-culture factor represents the power and authority, or the limitations thereof, for governments in designing, planning, executing, and directing crisis management strategies. Correspondingly, this political-culture factor also represents the power and authority, or the limitations thereof, of the population in accepting, challenging, or rejecting government directives and mandates. Both these elements would have a direct impact on the outcomes.

The social-culture factor represents the influences and impacts of traditions, customs, beliefs, and values on population behaviour and how they would react or respond to the whole process of crisis management from design content, implementation, and execution. Social-cultural behaviour would also reflect the influence of the political-culture as well. All these elements would have a direct impact on the outcomes.

The economic-culture factor can overshadow the political and social cultures also since wealth and the abundance of resources can both facilitate and enrich the crisis management parameters. Conversely, the lack or shortage of wealth and resources would limit or impose constraints on the

scope of crisis management efforts. This essentially represents the difference between ‘the haves’ and the ‘have nots’ and thereby establishes the level of capability and resources of each nation to address the Covid-19 pandemic crisis. It is clear that the ‘have nots’ with limited options and resources would most likely base their crisis management strategy on self-reliance depending on human behaviour and efforts. Theoretically, this should mean that the poorer nations would fare worse than the wealthy ones in managing the defence against the Covid-19 pandemic, and result in worse outcomes. However, as the WHO statistics have indicated, even right from the beginning of the Covid-19 outbreak, the Top 20 nations with the highest rates of infections and deaths are wealthy nations with most being members of the G-20. It would seem that while the economic-culture may have an influence on the crisis management make-up and structure, it is not necessarily the most influential factor.

Not all three cultural factors mentioned above have the same impact on every nation. The uniqueness of a nation’s cultural roots whether historical, religious, or traditional, means that these cultural dimensions will have different levels of influence and impact. Also, a society’s behavioural pattern is not influenced by just one cultural factor, but usually a combination of cultural values and influences which result in the behavioural outcome. Similarly with respect to Hofstede’s cultural dimensions, as discussed in a previous Chapter, behavioural outcome could be the result of interaction or combination of different cultural dimensions, e.g. combination of low power distance, individualism, and normative, to bring out a cultural value that embraces individual self-determination and a structured and disciplined lifestyle. Or it could be the cultural combination of high power distance, collectivism, and pragmatism that brings out a behavioural pattern that recognizes and accepts authority, community support and teamwork, and flexibility in adjusting to changing circumstances for survival and sustainability. These cultural traits would be better suited to responding and surviving in abnormal crises. This is further discussed in the following section.

Therefore in understanding or analysing the behavioural patterns of nations based on cultural influences, it should be noted that generally, no single cultural factor, (political, economic, and social) or cultural dimension (power distance, individualism, uncertainty avoidance, long-term/pragmatism, and indulgence) has complete control and influence on behavioural response, whether under normal situations or during crisis management. This is evident during the Covid-19 pandemic crisis where the integration, and interlinking of cultural factors and dimensions, have exerted significant influence on the responsive behaviours of societies. These in turn have contributed to the outcomes of each society, in each nation. Therefore to comprehend and rationalise the crisis management outcomes of the different nations, it would also be necessary to understand and figure out the cultural determinants involved.

It is undeniable that the outcomes, due to the extended period of the Covid-19 pandemic, have brought about the emergence of the ‘new normal’ social culture. This ‘new normal’ culture did not evolve naturally through time and evolution but was suddenly imposed on Mankind, changing the well-established way of life and norms of each society. Crisis management in addressing the Covid-

19 pandemic, is not to reverse or terminate the pandemic, both of which are well beyond the capability and capacity of Mankind, but rather to accommodate the 'new normal' into society. There is no doubt that despite declaring a return to 'normalcy', society and social-culture have changed during the past three years of the Covid-19 pandemic with the 'lessons learned' imprinted into every society that has been impacted by the Covid-19 pandemic around the globe.

C. Crisis management impacts on adjusting cultural values

The foregoing discusses how cultural values impact national crisis management strategies in terms of behavioural responses, both on the part of the government leaders, as well as the general population. This heading discusses how national crises can bring about changes in cultural values which includes impacts on behavioural response patterns also. Death-threatening crises such as war, terrorism, or natural disasters can bring about changes in established traditional cultural values, perspectives, and attitudes which influences behavioural responses or reactions. Abnormal situations and circumstances require abnormal changes to values, attitudes, and sometimes even scruples, which culminates in general behavioural change. In several countries, the fight against the spread of Covid-19 pandemic has been compared to a war effort with governments calling for national unity, participation, and cooperation in following government policies and initiatives.

Essentially crisis management requires behavioural change the extent of which is determined by the nature and level of the crisis. Extreme crisis situations require a reciprocal and corresponding extraordinary mindset and behavioural change. In the case of the Covid-19 pandemic, government responses and initiatives not only reduce the multiplier effect of infection spread as well as can save lives, but equally important and critical, is the need to protect the national economy from collapsing and sliding into recession due to extended drastic disruptions. Threats to national economic sustainability and stability are caused by the frequent disruptions of trade and industry within the nation coupled with, and influenced by, the external global supply chains, for both 'demand' and 'supply'. Of significance in terms of economic disruptions for many developing economies are the services industry such as tourism and hospitality. A classic example of crisis-induced behavioural adjustments and change is demonstrated by 'cross cultural u-turns' to accommodate social distancing protocols advocated by governments in addressing the Covid-19 pandemic. Social-cultures of certain nations which are normally individualistic, self-reliant, and self-sufficient, have to adjust accordingly to become more community and collective-oriented, in a unified defence against the contagious coronavirus. Also, some nations with a social-culture that traditionally respects and enforces individual freedoms and rights have to undergo attitudinal change and behavioural adjustment to accept obeying government directives, mandates, and restrictive laws under temporary emergency decrees such as travel restrictions, social distancing rules in public places, closures of business operations, wearing masks, and getting vaccinated to combat the Covid-19 pandemic. Essentially, certain national behavioural norms may have to undergo "cross- cultural u-turns" if they are fundamental to the success of the crisis management strategy.

Such would be the case regarding crisis management during the Covid-19 pandemic, where change in cultural values and attitudes may be particularly appropriate and necessary. Particularly for nations with cultural dimensions such as a) low power distance, b) individualistic orientation, c) normative/short-term, and d) self-indulgent as categorized by Hofstede's cultural dimensions. Nations with low power distance cultural do not respond well to authoritarian style directives from governments but need to be satisfactorily convinced, through justifiable rationalisation and constitutional legitimacy. Unlike high power distance cultures, they do not accept being forced to obey 'by default'. Similarly, a culture that embraces individualism only considers the direct rights and benefits of the individual (or the individual family circle) rather than the collective or community. For the effective implementation of the non-pharmaceutical initiatives, particularly with regard to social distancing or social separation protocols, collective efforts for collective benefits have priority. It's like "all for one, and one for all!"² where the macro-society requires effective unity of participation and cooperation of everyone. Correspondingly, nations with indulgent cultures that believe in individual Constitutional rights and benefits, which also include the freedom of movement and expression, as well as the control of one's own destiny. Such cultural values are most common in Western nations such as in the North American and European regions. Cross-cultural u-turns would mean nations with low power distance cultures need to be more high power distance-oriented in accepting and obeying government directives and rules regarding social distancing for the sake of national 'infection cleansing'; individualistic cultures need to join the community efforts in wearing masks in public; and indulgent cultures need to forgo their Constitutional rights and accept the more authoritarian rule in the enforcement of curfews, lockdowns, travel restrictions, and quarantines. These are all idealistic theories regarding behavioural adjustments in national crisis management. However, in practice, the outcomes would be determined by the level of general public acceptance and adjustments to the 'new cultural norm'. In reality, statistical records of crisis management outcomes in response to the Covid-19 pandemic continue to indicate the highest infection levels and death rates to be concentrated in the Americas and European regions.

D. Situational cultural adaptation

The situational cultural adaptation principle is based on the concept of adjusting cultural values and norms to the situation and circumstances at hand. This has been demonstrated by both governments and the general public in their responses to the Covid-19 pandemic in the form of cross-cultural u-turns as previously discussed. Essentially it means that abnormal situations call for abnormal behavioural responses which would also mean cultural and attitudinal adaptation to situations and circumstances beyond control. In this case, it refers to the life-threatening coronavirus infection from Mother Nature. Similar adjustments or adaptations in cultural values and norms would probably also occur for wars, natural disasters, economic meltdowns, political instability, social disintegration, etc. Actually, globalisation during the past decade has already initiated universal cultural transformation and evolution with tendencies leaning towards a uniform universal perspective of values, and norms.

² Unus pro omnibus, omnes pro uno is a Latin phrase that means One for all, all for one. It is the unofficial motto of Switzerland; or, Tous pour un, un pour tous, by Alexandre Dumas in the novel The Three Musketeers.

Leading this cultural evolution, or maybe revolution (?) has been the entertainment industry through music, movies, and media. Over time, it is probable that similar to the dissolution of most trade barriers, so also would traditional cultural barriers eventually dissipate. However, the main deterrent to significant cultural change would be the political culture factor. This essentially means the political cross-culture conflict between democracy and authoritarianism, which is currently evidenced in the Ukraine war between the democratic Western nations and the authoritarian Russia, or the growing political and economic conflict between the Western democratic nations and authoritarian China. This cross-culture element is also evident in the cross-cultural values and behavioural patterns between the Americas and European regions and the Asian, African and Middle Eastern regions.

The lessons learned from the Covid-19 pandemic have shown that all nations need to adopt the situational cultural adaptation principle by temporarily changing the national cultural values and attitudes according to the critical situation. Consequently, according to this principle, most Western governments have resorted to adopting more authoritarian-oriented emergency decrees to enforce social distancing or social separation through closures, travel restrictions, curfews, quarantines, and lockdowns. For many Western national cultures, these restrictions represent a change to their cultural values and norms, with the greatest impact falling on the general population since such policies require their full cooperation and participation to be effective. Political and social cultures were aligned with the crisis management effort demonstrating situational cultural adaptation in response to the Covid-19 pandemic. Nevertheless, the level of situational cultural adaptation depends on the level of cooperation and participation of the general population. The corresponding outcomes can be measured through the Top 20 listings of nations with the highest infection cases and death rates. Throughout the current pandemic period which started in March 2020 with the declaration by the WHO, these listings were predominantly dominated by the Western nations in the Americas and European regions.

It is hoped that by virtue of the lessons learned from the current Covid-19 pandemic (and still learning), the effectiveness of practicing the principle of situational cultural adaptation in generating appropriate behavioural responses would improve. There is no doubt that pandemics, along with other forms of biological diseases, and natural disasters, would continue to threaten Mankind into the future.

E. Findings and Assessments

1. Almost immediately following the coronavirus outbreak in China, it was discovered that transmission of the deadly infection was through human-to-human interaction, either through direct physical contact, indirect contact through intermediary objects, or breathing in contaminated air. Consequently, throughout the Covid-19 pandemic, the key to effective and sustainable protection against infection and risk of death was through social distancing. Efficient and effective social distancing relies on appropriate social-culture-oriented values and subsequently behavioural responses.

2. The consistency of differentiated outcomes in infection levels and death rates between nations in the Western regions of the Americas and Europe, and nations in the non-Western regions of the Middle East, Africa, and Asia would suggest a clear division of behavioural patterns which could be linked or associated with social-cultural values. Social-cultural values can have a significant influence on the attitude and conduct of both government leadership and the general public in addressing and responding to the Covid-19 pandemic. This is continually reflected in the invariably differentiated outcomes between the two regional groupings in terms of infections and death rates.
3. Consequently, culturally-induced behavioural responses have a strong impact on crisis management initiatives and their outcomes. The numerous Top 20 listed nations throughout the Covid-19 pandemic period and up to the present, were consistently from the Americas and European regions. By calculating infection levels and death rates based on cases per one million population (instead of just the absolute figures), these Top 20 lists have been persistently dominated by small to midsized populated nations ranging from 15 to 70 million. Noticeable is the consistent absence or limited listing of nations from the remaining regions of the Middle East, Africa, and Asia which were consistently ranked closer to the bottom listings.
4. Almost all the Top 20 nations listed follow the democratic political-culture which exerts influences and determines the make-up, organization, scope, and execution of government crisis management initiatives, as well as the attitude and behavioural responses by the general public. To a significant extent, the political-culture and the social-culture are intertwined and inter-related in terms of exercising government power and authority on the one side, and the level of acceptance, cooperation, and conformity by the general public on the other. In democratic societies, the effectiveness and optimization of outcomes depend largely on the acceptance, cooperation, and participation of the populace within the boundaries of their social-cultural values.
5. As the Covid-19 pandemic 'waves' increased along with rising infection levels and death rates, both political-culture and social-culture of Western nations adopted the situational cultural adaptation principle. Traditional and deep-rooted social-cultural values were replaced by temporary 'cultural u-turns' considered to be more appropriate and conducive to generating positive outcomes in crisis management. Examples of these culturally-induced behavioural changes and adjustments include the reduction of certain freedoms and rights, to be replaced by authoritarian-style restrictions, directives, and mandates under various 'ad hoc' emergency decrees, such as travel restrictions, business closures, curfews, quarantines, and lockdowns.
6. Throughout the Covid-19 pandemic it has become very clear that Mother Nature sets the 'rules of engagement', and it is Man who has to adapt and change accordingly. This is best carried out through social-cultural adjustments. Even despite the development of vaccines and global implementation of vaccinations, their limitations in effective protection against Covid-19 means that the truly sustainable course continues to be social distancing through human efforts and initiatives. This means that the social-culture has to adapt to the continually mutating virus threat.

Chapter 5

CASE STUDIES OF TARGETED COUNTRY PROFILES

A. Europe as the target for case studies

The European region was targeted for the selection of country profile case studies because it had the highest levels of infected cases and deaths throughout the ongoing Covid-19 pandemic period. This started even before the WHO declared the Covid-19 as a global pandemic. It is significantly probable that the declaration of this global pandemic could be as a result of the rapidly growing high rates generated in the European region, and centred in the northern part of Italy. With-in three months of the officially declared outbreak in Wuhan City, Hubei province, by the Chinese government, Europe had already become the centre of the Covid-19 pandemic, as indicated in Table 5.1. below.

| Table. 5.1. COVID-19 COMPARISONS BY REGION (March 2020 and August 2023) | | | | | | | | |
|---|---------------|-----------|-------------|----------|-----------|---------|--|--|
| Regions | Pop. Mil/2020 | Infection | | Deaths | | | | |
| | | Mar.2020 | Aug.2023 | Mar.2020 | Aug. 2023 | Per.Mil | | |
| Europe | 742.16 | 423 946 | 275 912 918 | 26 694 | 2 247 113 | 3 030 | | |
| The Americas | 1 045.12 | 163 014 | 193 210 684 | 2 836 | 2 958 886 | 2 801 | | |
| Western Pacific | | 104 868 | 206 823 836 | 3 671 | 416 682 | | | |
| Western Mediterranean | | 50 349 | 23 388 656 | 2 954 | 351 395 | | | |
| South East Asia | | 4 215 | 61 201 773 | 166 | 806 661 | | | |
| Africa | | 3 786 | 9 547 082 | 77 | 175 423 | | | |
| Source: WHO. Covid-19 Situation Report - Dashboard. | | | | | | | | |

As can be seen from the above Table 5.1. The European region had already taken the lead recording the highest infection and death levels when the WHO declared Covid-19 as a global pandemic by mid-March 2020. At the end of March 2020, the total global figures for infection cases and deaths were 750,890 and 36,405 respectively, of which the European region accounted for 56% and 73% respectively.¹ Europe's highest ranking in infections continued through to August 2023. However, this research considered that the statistics recorded for infection cases in 2023 were most likely not a realistic or a true reflection of actual infections occurred, due to two influencing factors. First, the low

¹ WHO. Coronavirus disease 2019 (COVID-19). Situation Report – 71. March 31, 2020.

risk of serious illnesses from the latest Omicron variant of Covid-19, and second, the availability, since 2022, of self-administering medical treatments for non-hospitalisation infection cases. These factors have resulted in many infected cases not being reported and recorded. However, Covid-19 related deaths still continued to be duly reported and recorded. As of August 30, 2023, the global total for deaths was 6,956,173 of which almost one-third, 32%, were in Europe, although by this time The Americas region passed the European region in recording the highest death rates. However, these rates are absolute figures. When these figures are tied to the population size for each region, Europe (with about 742 million people) still had the highest rate at 3,030 deaths per million compared to The Americas (with about 1,045 million people) with the rate of 2,801 deaths per million.

PART ONE of this book presents the case studies of the different approaches of government leadership and the corresponding general public responses in selected target countries in addressing and managing the Covid-19 pandemic crisis. The selected target nations for undertaking case studies and country profiles are based on their unique events related to the Covid-19 pandemic as follows:

Chapter 6. PEOPLE'S REPUBLIC OF CHINA (PRC) : ORIGIN OF THE COVID-19 OUTBREAK AND THE LAST FRONTIER.

CHINA, the source and origin of the coronavirus outbreak, later to be designated as Covid-19 by the UN World Health Organization (WHO) and declared a global pandemic in March 2020.

Chapter 7. THAILAND: FIRST CASUALTY FROM CHINA - SURVIVAL THROUGH RESILIENCE.

THAILAND, was the first nation to be infected by the coronavirus transmission from China, and 'step one' to the eventual and rapid globalisation of the Covid-19 pandemic.

Both case studies and profiles are contributed by Sukhavichai Dhanasundara MA, Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand, and the Lucerne University of Applied Arts and Sciences (HSLU), Institute of Business and Regional Economics (IBR), Lucerne, Switzerland.

Chapter 8. FRANCE, THE FIRST EUROPEAN NATION INFECTED WITH COVID-19.

FRANCE, was the first European nation to be infected with covid-19 which was 'imported' from China through a Chinese tourist.² France continued to follow with several other 'firsts'. The first death in Europe caused by Covid-19 in February 2020,³ and the first European nation to top over 2,000,000 infection cases.⁴

² Jacob, Etienne (24 January 2020). "Coronavirus: trois premiers cas confirmés en France". Le Figaro

³ <https://www.bbc.com/news/world-europe-51514837>

⁴ <https://www.reuters.com/article/us-health-coronavirus-france-record-idUSKBN27X2QC>

Case study and country profile contributed by Charles-Amaury Quéllec, Rennes Business School, Rennes, France, and Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand.

Chapter 9. ITALY: THE FIRST MAJOR SHOCK WAVE IN EUROPE.

ITALY was the first European nation to have the highest infection and fatality rates both in Europe and globally, during the first three months of the Covid-19 spread. Italy was also the first European nation to declare a national 'lockdown' to halt and stem the Covid-19 spreading. This was before the WHO declared Covid-19 as a global pandemic.

Case study and country profile contributed by a team consisting of Dr Alessio Panza MD. MPH. DTM&H. Formerly Coordinator of governmental Tanzania – Italy Health Cooperation, and Coordinator of the European Union HIV and Adolescent Reproductive Health programs in South East Asia; and currently lecturer at Chulalongkorn University, College of Public Health Sciences, Health Systems Development, Bangkok, Thailand, Marina Cavallari, M.A. (Applied Linguistics), Lucerne, Switzerland, and Sukhavichai Dhanasundara.

Chapter 10. DENMARK: LEADERSHIP AND CULTURE.

DENMARK was the quickest country to react and impose strict controls, including being the second European country to declare a national 'lockdown' immediately after Italy with nationwide restrictions and controls and the first nation to do so following the WHO's declaration of Covid-19 a global pandemic on March 11, 2020.

Case study and country profile contributed by Associate Professor (lektor), Camilla Sløk Ph.D., Copenhagen Business School (CBS), Copenhagen, Denmark.

Chapter 11. SWEDEN: BETWEEN THE PANDEMIC AND AN INCAPACITATED STATE.

SWEDEN, followed a more 'laissez-faire approach with the government issuing advisories to the general public to follow social distancing protocols without enforced lockdowns during the early months of the Covid-19 epidemic and into the second quarter of 2020. The outcome resulted in Sweden becoming the nation with the highest level of infections and deaths per million population among the Scandinavian nations as well as many nations in the European Union.

Case study and country profile contributed by Jaakko Turunen PhD (Pol.Sci), Lecturer, Social Work, School of Social Sciences, Södertörn University, Stockholm, Sweden.

The comparative case studies of these targeted nations indicate that different national values, and cultures, particularly the political and social cultures, do influence and impact to a certain extent, the nature, scope, and level of reactions, and subsequently the actions, of the different governments and the respective population. The differential results and outcomes are evidenced in the wide range of levels of infections and deaths between these nations as indicated in Table 5.2 below.

| Table 5.2: Country comparisons | | |
|--|--------|-----------|
| Per 1 Mil | Deaths | Infection |
| Italy | 3 206 | 434 946 |
| France | 2 583 | 599 598 |
| Sweden | 2 392 | 262 799 |
| Denmark | 1 508 | 586 556 |
| Thailand | 494 | 68 143 |
| China | 83 | 67 495 |
| Source: WHO Covid-19 - Dashboard, August 2023. | | |

It is well-noted that all the targeted nations from the European region, dominated the top four rankings in deaths and infection rates, with the remaining Asian nations being the lowest in terms of rates per million population. The more reliable statistic is the death rates which generally are reported and recorded accordingly. The same cannot be said for the infection rates where reports are made for serious cases and hospitalisations. Generally, most people infected with the dominantly globalised Omicron variant, do not get seriously sick requiring hospitalisation, and can self-treat and self-cure with publicly available medication and treatments for Covid-19. Consequently, such cases, most likely in significant numbers, do not get recorded.

The underlying factor undergoing research is essentially that while each nation is infected by the same coronavirus variant, the outcomes or negative impacts differ significantly from one nation to another. A major premise is that these outcomes are due to the unique (culturally-orientated) behavioural patterns in the responses of each nation. These case studies and country profiles reflect how each nation responds differently to the Covid-19 pandemic which consequently results in different outcomes in terms of infection cases and deaths. The various crisis management initiatives of governments may reflect on differences in the political – culture and social-cultural ‘roots’ of each nation. The pandemic outcomes from the outbreak through to August 2023 are illustrated in the following Graphs for each targeted nation as sourced from the WHO Covid-19 Country Dashboards, as follows,

ITALY

25,940,840
Confirmed cases

191,211
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/euro/country/it>

FRANCE

38,997,490
Confirmed cases

167,985
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/euro/country/fr>

SWEDEN

2,714,082
Confirmed cases

24,701
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/euro/country/se>

DENMARK

3,415,375
Confirmed cases

8,782
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/euro/country/dk>

THAILAND

4,756,406
Confirmed cases

34,459
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/searo/country/th>

CHINA

99,304,445
Confirmed cases

121,671
Deaths

Source: World Health Organization
Data may be incomplete for the
current day or week.

Source: World Health Organization. <https://covid19.who.int/region/wpro/country/cn>

B. Cross-cultural perspectives on Covid-19 crisis management

This research studies the levels of national cultural influences on behavioural responses to the Covid-19 pandemic. This includes identifying any rational link between cross-cultural behaviours and the significant differences in the levels of infection cases and death rates. Of significant interest is why the targeted nations from the European region differed substantially compared to those from the Asian region. These studies also take into consideration the target countries' cultural values, traditions, and norms, in relation to the political-culture and social-culture and how they reflect on the outcomes. Research is carried out on these targeted six nations using a common standard based on recognised determinant cultural traits. In order to put the cultural context of each nation on the same basis or criteria for evaluation and comparison, selected cultural dimensions developed by Hofstede were tested for applicability in the Covid-19 pandemic crisis management to measure the cross-cultural traits and behavioural responses accordingly. This is because the cross-cultural dimensions developed by Hofstede are widely studied and recognised in Europe and therefore would greatly enhance the understanding of cultural differences between these nations. It should be mentioned that the findings and assessments by Hofstede were not originally geared toward the cultural exposure and response to a global pandemic such as Covid-19. However, it was deemed possible that the fundamental principles and concepts as expounded by Hofstede, could viably be applied in the context of crisis management response to the global Covid-19 pandemic. By establishing a common denominator in terms of cultural dimensions makes it easier to rationalise the relationships between national cultural values and traditions on the corresponding behavioural patterns of each nation in response to the pandemic. It also makes it easier to understand the resulting outcomes in terms of infection cases and death rates in these targeted European and Asian nations.

Certain cultural perspectives may influence and impact behavioural responses to the Covid-19 crisis management. These are seen at two levels. The first level is the government as the national administrator, and being responsible for crisis problem-solving which involves, but is not necessarily limited to, the design, planning, execution controlling and monitoring of the Covid-19 crisis management process and level of success (basic Management 101). How they go about their business of governing and exercising legitimate power and authority may be guided, influenced, and somewhat controlled or limited by the national culture in terms of values, beliefs, traditions, and norms. This means that governments must also consider the population's expected response and behaviour to their policies and strategies since they will be guided and influenced by the same political-cultural values. Therefore the political-cultural of governments needs to reflect and abide by the constitutionalised conventions in the exercise of power and authority in crisis management. The second level is the general public and population, who will be guided by cultural (political and social) values, traditions, and customs in accepting, and implementing these government policies, directives or mandates. This means that government crisis management strategies' effectiveness and success are subject to the general public's level of conformity, participation, and cooperation. This relies on the essential political-cultural "bridge" between the government's strategies and the general public's responses to the Covid-19 pandemic. Consider the widespread public

demonstrations against certain government controls, such as curfews, closures and lockdowns in many European countries as compared with the more receptive responses in the non-western regions.

At this time, it is practical for a better understanding of this research and its findings to define, within the context of this topic, the definition and interpretation of the term 'cross-cultural' dimensions. Cross-culture is generally comparable to the concept of 'cross-road' where traffic intersects to and from opposite directions, i.e. east-west, or north-south. The term 'cross-culture' therefore, refers to behavioural traits going in opposite or significantly different directions, where one end is designated as 'high', and the other extreme is designated as 'low' on the dimensional index. Cultural indexing of nations either puts them in the 'high-end' or the 'low-end' of the index scale.

In this context and with regard to the crisis management of Covid-19 pandemic for each targeted nation, the key four relevant cultural dimensions are Hofstede's High versus Low Power Distance, Indulgence versus Restraint, Individualism versus Collectivism, and Pragmatism (Long-term perspective) versus Normative (Short-term perspective). These four cross-cultural dimensions seem to be the most influential factors in political-culture and social-culture of these nations and are the key links between the government leadership and the general public of each nation in the execution of crisis management with regard to the Covid-19 pandemic.

It should be noted that the term 'comparison' relates to the levels of cross differences between each nation and underscores the 'cross-cultural' element. There is no intention to make any comparison in terms of better or worse, between these nations, just as it would be impractical to compare apples to bananas. Correspondingly, there is no intention to imply that a high index is better than a low index or vice-versa. The high/low index merely indicates the cultural trait of a nation within the scope of the specified cross-cultural dimension. These issues are further discussed in Chapter 19 as indicated above.

It should also be noted that the indexing of a nation's culture only represents a guideline indicating the general majority of behavioural attributes and traits with respect to the relevant cultural dimension under focus. These cultural indexes in no way suggest the complete cultural uniformity of a nation. They merely indicate the general overall majority of behavioural attributes. That being the case, it is also foreseeable that in a national crisis, such as wars, natural disasters, or a global pandemic such as Covid-19, certain national cultural values and behavioural traits could, and would, undergo certain changes under such 'force majeure' conditions, both in terms of unity of action, or even to significant behavioural change and adjustment. In times of crises, it has been the responsibility of government leaders to determine when, as well as to what extent, to exercise or declare national 'emergencies'. In the case of the Covid-19 pandemic, the governments of most nations have adopted 'emergency' initiatives and protocols to address this crisis under which conditions, the normal cultural-induced behavioural patterns would be adjusted accordingly. This means that the cultural index would shift cross-culturally from the traditional 'high' to 'lower' or vice-versa in terms of political-culture and, or, social-culture.

Note: The researcher wishes to point out that Hofstede's cross cultural dimensions works are certainly not limited to these issues discussed in this research and go far deeper and more expansively into each topic. The interpretations presented are only a small extract of issues with relevance to the research on the cultural influences and impacts on behavioural patterns and responses related to the Covid-19 pandemic.

The numerous and various references to Hofstede's works in cross-cultural dimensions in the country profiles and case studies in this section are sourced from his book, *Cultures, and Organizations: Software of the Mind*, written in partnership with Gert Jan Hofstede, and Michael Minkov. (2010)⁵.

⁵ Geert Hofstede, Gert Jan Hofstede, Michael Minkov, *Cultures and Organizations: Software of the Mind*, McGraw Hill Professional. 3rd. Edit. 2010, and <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>

Chapter 6

PR CHINA: ORIGIN OF THE COVID-19 OUTBREAK AND THE LAST FRONTIER OF DEFENSE

Note: Information on the Covid-19 pandemic in China, along with the various statistical indicators and data are based on both official sources, as well as third-party reports outside of China. Accordingly, and consequently, there would be some discrepancies, disparities, and inconsistencies in this report. No judgment or preference is being made with regard to the source, or the outcome. Information has been collected and compiled from different sources for the enlightenment of the reader in determining or establishing an understanding and insight into the Covid-19 situation in China. Unlike all the other nations highlighted and selected for the presentation of “country profiles” regarding the Covid-19 pandemic development and situation, the collection, dissemination, and flow of information in China are uniquely under State policy and authority. For reasons of practicality, uniformity, and transparency, most of the information in terms of statistics and data is referenced from the WHO, which is the common resource base for all country profiles under this research. However, as has been indicated previously, as well as hereafter, the ‘outputs’ from the WHO are solely dependent on the ‘inputs’ reported by the member nations. However, in preparing this country profile research, much effort has been made to include third-party resources in order to give a balanced picture and information on the situation in China.

A. Government structure and crisis management empowerment

The People's Republic of China (PRC) is governed as a socialist republic run by a single party, the Communist Party of China (CPC), which is headed by the Chairman of the Central Committee (this title was changed to General Secretary of the Central Committee during the Jiang Zemin administration). The Chairman of the Central Committee of the Communist Party of China is typically the Paramount Leader of China. Mao Zedong was the first ruler to hold this position. As the Paramount Leader Mao was able to exercise absolute power in the execution of his policies which he applied, through ruthless and violent revolutionary tactics, his policy in shaping the People's Republic of China (PRC).

The first Chinese Constitution was promulgated on September 20, 1954, and the current Constitution is the fourth version dating back to December 4, 1982. The Constitution guarantees the legal power of the Communist Party as the supreme political authority in the People's Republic of China through

its comprehensive control of the state, military, and media. The Chairman of the Central Committee who is also the Paramount Leader is therefore the highest political authority in China.

China is one of the remaining five communist nations with the remaining four nations being, Cuba, Laos, North Korea, and Vietnam. With the exception of Cuba, all the remaining communist nations are in Asia. In terms of government and empowerment, China has a totalitarian government which is classified as “authoritarian” according to the Economist Intelligence Unit (EIU) Democracy Index. However, China’s authoritarian or totalitarian rule is not derived from being a communist state. On the contrary, China is a communist state by having been an authoritarian state since the birth of the nation said to be over 5,000 years ago. China is one of the planet’s oldest civilizations with the longest continuous history supported by about 3,500 years of written history. China is regarded as one of the ‘cradles of civilization’¹ having one of the oldest civilizations with the longest continuous history under a unified original cultural heritage and nationality from the beginning of its history. Historically speaking, China’s totalitarianism precedes the birth of communism and the establishment of the USSR, Europe, and the Roman Empire by at least 1,500 years. Throughout its over 5,000 years of history, China has retained her authoritarian rule which can be broken down into three eras as follows:

- The Dynastic era – a period of absolute monarchies (2070 BCE – 1912 AD)
- The Republic of China era – a period of warlords and military dictatorship competing for the transfer of absolute powers from the dynasties (1912 – 1949)
- The current People’s Republic of China era – the period of Communist China and absolute power (1949 to present)

These eras represent and are the ‘roots’ of three historical elements that formed the foundations of China’s political-cultural heritage:

1. Long continuous Chinese homogenous civilization which was originally established on the Yellow River as the cradle of Chinese civilization
2. Except for the period of foreign rule during the Yuan dynasty (1279-1368) under the Mongolian Khubilai Khan and incidences of foreign occupancy of certain provinces (mainly The British and Japanese and to a lesser extent Russia, France, and Portugal), China enjoyed long and continuous self-rule and cultural freedom without foreign colonization and enforced cultural impregnation² and determination along with the development of indigenous cultural heritage
3. Sense of ownership of her nation and destiny without any inferiority complex to any other nation, civilization, or power. This is further enhanced through globalization in the 21st century as China

¹ Murowchick, Robert E., ed. (1994). *Cradles of Civilization-China: Ancient Culture, Modern Land*. Norman, Oklahoma: University of Oklahoma Press.

² As compared to the Romans throughout Europe, and then the Europeans who colonized the rest of the world, i.e. in North and South America, Africa, Middles East, Asia, and Oceana).

developed into a world-leading economic and political power with the largest population and fast-growing stakeholder in the global economy.

These are the foundations on which the Chinese political – culture was built which is unlikely to change at the behest or dictates of anyone in the near future. This totalitarian political ideology continues to form the political structure, as well as determine the political outlook and behavior of China today. These would also be the basis for the design and execution of China's crisis management with regard to the Covid-19 pandemic as illustrated in the section below.

China's totalitarianism is reflected in the centralization of power, which remains, since the time of Mao Zedong, with the position and authority of the General Secretary of the Central Committee of the Communist Party of China (CPC). This position is currently held by Xi Jinping, the incumbent President of the People's Republic of China, and following Chairman Mao's example, also makes him the Paramount Leader, a position he has held since 2012. In 2018, the term limit of the Presidency was abolished. This equates Xi Jinping's power and term of office with Mao Zedong, who held the position of Paramount Leader for life until his death in 1976. The government structure of the People's Republic of China (PRC) is under the exclusive political leadership of the CPC and consists of the legislative, executive, military, supervisory, judicial, and procuratorial branches.³

The powers in government are separated between the executive, legislative and judicial branches. The Executive branch is the responsible authority for the governance of the nation and is empowered under the Constitution with this responsibility including the enforcement of its laws. In this respect, the executive branch (government) does not pass laws (which is the role of the legislative branch) nor interprets to enforce them (which belongs to the judiciary). The executive branch (government) only enforces the law as written by the legislature and interpreted by the judiciary. However, the executive branch can be the source of decrees, regulations, or executive orders which are issued through the executive bureaucracies. These include regulations, laws, and enforcement procedures from the government leadership which have been exercised with regard to the containment of the Covid-19 pandemic.

B. Timeline of the Chinese government leadership to contain the initial outbreak in Wuhan is listed as follows⁴,

- **November to February** is the normal winter season in China, with temperatures dropping from 10 degrees to possibly -5 degrees or more. It was the high season for influenza with cases rising during this period.
- Towards the end of **December 2019**, the Wuhan Health Commission (WHC) notice an unusual rise in cases of unknown causes of pneumonia in Wuhan, the capital of central China's Hubei

³ Wang, Peijie, (2015). "State structure and organs of state power". China's governance: Across vertical and horizontal connexions. SpringerBriefs in Political Science. Plymouth: Springer. pp. 3–12. doi:10.1007/978-3-319-45913-4_1. ISBN 9783319459127.)

⁴ THE FRONT LINE: CHINA'S FIGHT AGAINST COVID-19 /1 CHINA GLOBAL TELEVISION NETWORK / CGTN
<https://www.youtube.com/watch?v=h4lfp3mvKAE>

province. Wuhan city alone had a population of just over 11 million people. There were more and more patients who had been in contact with the Huanan Seafood Market.

- **December 27, 2019** first case of pneumonia of unknown cause was reported in Wuhan city.
- **December 30, 2019** the WHC issued an urgent 'internal notice requesting all Wuhan medical establishments in all districts to report on similar cases of pneumonia from an 'unknown cause' and having similar symptoms from the past week.
- **December 31, 2019** initial feedback indicated that there were 27 such cases of which 7 were regarded as critical.
- **January 1, 2020**, local authorities shut the wet Huanan Seafood Market. China's Center for Disease Control and Prevention (CDC) and Complementary and Alternative Medicine (CAM) begin the pathogen identification process
- Closing the wet seafood market didn't appear to have stopped the virus spread. More infections were reported. There was no indication of human-to-human transfer.
- **January 2, 2020** three hospitals in Wuhan were designated to handle this unknown infection.
- **January 3, 2020** the first patient who had visited the Huanan Seafood Market was admitted with these unknown causes of pneumonia to the Hankou Hospital, one of the three designated hospitals in Wuhan. Dr Lyu Qingquan, Medical Department Head at the Hankou Hospital who had only learned of this unknown causes of pneumonia situation from the WHC on December 30th. internal notice five days earlier instructed all the frontline medical staff to wear masks. Also to prepare extra beds for the eventual increase in cases. As of January 3rd. China began to update the WHO regularly on developments and findings.
- Dr Lyu already felt that something was not right as more and more people were becoming infected with this coronavirus resulting in unknown causes of pneumonia.
- **January 4, 2020** China's CDC briefs the United States' CDC also
- **January 10, 2020** ten days after initiating the pathogen identification process Chinese scientists released data on the new coronavirus and shared the genes sequencing of the virus with the world and the WHO. It seemed that this had been around previous to this finding.
- **Robert Garry**, virologist, School of Medicine, Tulane University, USA explains, " (the virus) probably spread in humans for a while we don't know how long, it could have been months. It could've been decades of this virus spreading and evolving in some other animals or humans and then finally just that one little mutation that occurred and allowed it to spread more rapidly."
- This knowledge was not known in Wuhan during the first week of January, especially the risk of human-to-human transfer. It meant that doctors in Wuhan were under-protected from exposure to this coronavirus through contact with the growing number of patients. Dr Zhou Ning from the Wuhan Tongji hospital was infected by his patient when he performed heart surgery on January 19th. the patient was fine from the surgery, but the doctor got the infection.
- **January 19, 2020** a top-level medical expert team from the China National Health Commission was sent by the central government and met with local health officials for briefings and

updates on the situation. **Dr Zhong Nanshan**⁵, a leading Chinese epidemiologist led the team and is regarded as a national hero, from the first SARS crisis. After getting feedback from the local CDC officials he had critical questions. “ I had a lot of questions asking the local CDC people. One, how many patients exactly have been infected in Wuhan? Second, were there some patients dying? Third, were there any medical staff being infected?” He was looking for and received due indications, that the possibility of ‘human-to-human transfer’ was very likely. This was the critical factor. This was also confirmed by **Dr Du Bin**, a member of the Commission who revealed their findings, “ We came to Wuhan to determine if there had been any cases of human-to-human transmission. We then learned from the city and provincial health authorities of cases of human-to-human transmission and medical workers being infected. We inspected Wuhan on January 19th, 2019, and returned to Beijing that same night. We reported what we learned to the State Council on January 20th. 2019

- **January 20, 2020 President Xi Jinping**, General Secretary of the Central Committee of the Communist Party of China, President of the People's Republic of China, and paramount leader issued his instructions on fighting the coronavirus. He called for resolute efforts to curb the spread of the coronavirus and made it clear that the top priority is the safety and health of the people. He instructed all responsible agencies for the timely release of information as a vital foundation to deepen international cooperation.
- On the same day, (**Jan. 20th, 2019**) China’s Health Commission announced officially confirmed that the coronavirus could spread among humans (human-to-human transfer). During the executive meeting of China’s State Council, the threat of the coronavirus was upgraded to the same level as bubonic plague and cholera. This makes it possible to trigger a mechanism for large-scale quarantine enforcement under Section 3, Article 3, of the Law of the People’s Republic of China with regard to the treatment of infectious diseases. This article of the Law states” The people’s government of a province, autonomous region or municipality can decide whether to lockdown an epidemic area infected by a Class A disease.; however, the decision of locking down an epidemic area in a large or medium-sized city, which would lead to the blocking of main traffic networks or borders, must come from the State Council.”
- **Zeng Guang**, Chief Expert, the Chinese Center for Disease Control and Prevention (CDC) confirmed that “Covid-19 was classified as a Class B infectious disease but to be managed the same as a Class A disease, and therefore this provides a legal basis for locking down Wuhan.”
- **Dr Zhong Nanshan** China’s leading Chinese epidemiologist who led the central government’s first top-level fact-finding team to Wuhan went on national TV in that position to informed the people that this coronavirus was a human to human transferable infection, and as of outbreak, he recommended that no one should either leave or enter Wuhan city. He was essentially pointing to the eventual lockdown of Wuhan.

⁵ On the 2020 TIME List for 100 most influential people. Margaret Chan: <https://time.com/collection/100-most-influential-people-2020/5888415/zhong-nanshan/>. On Sept. 8, President Xi Jinping awarded Dr. Zhong a Medal of the Republic, the highest state honor, for his great contribution to China’s fight against the epidemic.

- **Richard Horton**, Chief Editor, The Lancet comments “ We knew in the last week of January, that this was coming. The message from China was absolutely clear that a new virus with pandemic potential was hitting cities.”
- By this time, there were 217 identified infected cases were reported across China, but mainly in Wuhan with 198 cases, Beijing 5 cases, and Guangdong 14 cases. Already, cases linked to Chinese tourists and business travellers were found in Thailand (first exported case), Japan and Korea.
- Within five days of Xi Jinping’s call for the entire country to be mobilized to curb the nationwide spread of the coronavirus, 25 provinces and regions⁶ put in place the highest level of public health emergency response covering 1.2 billion people.
- Wuhan city designated more hospitals in addition to the original three hospitals and set up 61 fever clinics to handle this epidemic. In addition to the 800 beds already allocated a further 1,200 beds were planned to be added. Hospitals were converting their regular wards to treating patients who contracted the coronavirus. In a short time, they still ran out of beds. People were lying on the hospital floors waiting for beds, and treatment. Medical staff were overworked. They were also running out of protective equipment, so there was limited protection for medical staff against the onslaught of infected patients. Running out of medical supplies.
- **January 22, 2020**, is three days before the Lunar New Year, also referred to as the Spring Festival, the season for the largest human migration on the planet and estimated to involve about 15 million people would be travelling in and out of Wuhan, one of the largest transportation hubs in central China. Under this situation, Wuhan’s containment of the coronavirus threatened to spiral out of control and spread all over China. **Zeng Guang**, Chief Expert, of the Chinese Center for Disease Control & Prevention (CDC) explained “We were worried that the travel rush would spread the virus throughout China. We had no other choice,
- On the afternoon of **January 22, 2020**, **President Xi Jinping** gave the order to execute the lockdown of Wuhan city. To understand the scale of this executive order, Wuhan city had a population of just over 11 million, a little more than Thailand’s capital city Bangkok, about three times the population of Los Angeles, about the same as the whole population of Sweden, and about equal to the combined populations of Denmark and Norway.
- **January 23, 2020**, less than 24 hours following this decision to lockdown and two days before the Chinese Lunar New Year all mass transit and long-distance passenger transportation networks (buses, trains, ferries, and planes) stopped operations starting at 10:00 a.m. The government made announcements to warn the citizens of the pending lockdown at 02:00 a.m. that morning. Many succeeded in exiting the city before the lockdown deadline. After Wuhan was put under lockdown no one was allowed to come in or leave the city. In addition

⁶ China has 23 Provinces (include Taiwan), 5 Autonomous Regions (Inner Mongolia, Xinjiang, Guangxi, Ningxia, and Tibet), 4 Municipalities (Beijing, Shanghai, Chongqing, and Tianjin), and 2 Special Administrative Regions (Hong Kong and Macao).

to the city's airport and three railway stations, police had to control hundreds of roads connecting Wuhan to the rest of the outside world including expressways, national routes, ring roads, and highways. **Lei Inbin**, Wuhan traffic police reported, "The people in Wuhan are really heroic. Once the lockdown was ordered everyone cooperated with the traffic police. Immediately there were no cars on the road. By the evening of the same day (January 23rd, 2020) Wuhan was an empty city. 11 million people vanished from the streets." This lockdown had never happened in modern-day China before.

- Following soon after Wuhan, transportation suspensions were also enforced in other major cities in the Hubei provinces such as Huanggang, Ezhou, Zhijiang and Chibi, with more cities added on the following day such as Xiantao and Qianjiang. Eventually, this extended to all 15 cities in Hubei with an impact on about 57 million people.⁷ "This was a very difficult choice," **Wang Xiaodong**, the governor of Hubei Province, told the Chinese state television.⁸
- **Ding Xiangyang**, Member of Central Steering Group, and Deputy Secretary-General of China's State Council explained, "locking down Wuhan was a crucial step. It cut off the channels of transmitting the virus to the rest of the country. It was a contribution to China and even to the world."
- Controlling, containment, and eradicating the coronavirus in Wuhan along with the surrounding cities in Hubei province was China's primary and only goal. As the source of origin and focal centre of the coronavirus epidemic, Wuhan was China's key battleground. Loose Wuhan means losing China to the coronavirus pandemic. They treated Wuhan as a cancer that must be treated or cut off ASAP. From the paramount leader to the central government, regional and local leaders, bureaucrats, the armed forces, the business community, and the people, all had critical roles to play. The order to execute may have been centralized, but the execution, efficiency, and effectiveness, were very much decentralized to all responsible agencies with accountability in performance and responsibilities which would be measured in lives lost.
- **January 24, 2020** the eve of the Lunar New Year, the Central government gave orders to send additional medical workers from other parts of China, both state and military to assist Wuhan. The first batch of 450 medics from the Navy was dispatched to Wuhan and arrived on January 25th, 2020.
- On the same day, Guangdong sent 128 medics including ICU Specialist Dr Wu Jianfeng. They had only a few hours to get ready for departure.
- **January 25, 2020**, the first day of Lunar New Year, **President Xi Jinping** chaired another Politburo Standing Committee meeting and declared the containing of the epidemic the most important task for China. Xi congratulated and expressed gratitude towards the medical workers especially those working in the front line. He also stressed that government bodies

⁷ • James Griffiths; Amy Woodyatt. "Wuhan coronavirus: Thousands of cases confirmed as China goes into emergency mode". CNN. Archived from the original on 28 January 2020. Retrieved 1 February 2020.

⁸ Chris Buckley and Javier C. Hernández, The New York Times, Published Jan. 23, 2020. Updated Jan. 25, 2020

at all levels must be mobilized to strengthen their efforts and undertake comprehensive plans.

- By the end of **January 25th, 2020**, the first day of the Lunar New Year, more than 1,400 medical workers had arrived in Wuhan from all over China. Not only were they there to add to the number of health workers, but equally important to replace many who had been incapacitated through being infected by their patients and could no longer work. During the first two weeks of lockdown over 1,000 medical workers had been infected, but had no other choice but to carry on as long as they could and until replacements arrived. Outside Wuhan city, in other cities of Hubei province, over 2000 medical workers had been infected also.
- Since Hubei province and in particular, its capital city Wuhan was the centre for China's infection containment strategy all available resources were prioritized to the location accordingly.
- **January 27, 2020 President Xi Jinping** sent Chinese Premier **Li Keqiang** to Wuhan with the promise that additional 2,500 medical workers would arrive within two days. He also promised that all patients would be cared for and receive free medical treatment.
- **Jiao Yahui**, Deputy Head, the Bureau of Medical Administration, China National Health Commission explained, "We need to anticipate and make proper adjustments to ensure the rapid deployment of medical resources. In my opinion, these reflect our country's institutional advantages. Our health system is mainly comprised of public hospitals which allow us to assign tasks at any time. "
- The business sectors were also given vital roles to play in meeting the dangerously low stock of protective medical equipment for the growing number of frontline medical workers. Even during the Lunar New Year holidays, manufacturers of medical protective gear across China were asked to resume operations. In response, many companies cancelled or stopped all other regular production plans and freed up more space to produce the critically needed protective garments. Other industrial sectors across China such as home appliance, car and phone manufacturers started to convert their assembly lines to produce various medical supplies and equipment.
- The dire shortages of beds were alleviated partly by the building of two emergency hospitals totalling 2,600- beds within 12 calendar days. The design which meets all the requirements of a full-fledged communicable disease hospital was completed within 24 hours. Construction of both hospitals began on the same day. The Huoshenshan Hospital, with 1,000 beds, and over 7,500 workers started on January 24th, 2020 the eve of the Lunar New Year. It was completed and handed over to the People's Liberation Army medics to operate as an emergency hospital on February 2nd, 2020 ten days later. The Leishenshan hospital with 1600 bed was completed two days after the Huoshenshan hospital after a total construction period of 12 days. During this construction period, everyone worked for 12 hours with only one food break which consisted of bread and steamed buns. They were easy to make in large volumes, easy to distribute and involving less time to make and eat.
- When both hospitals were completed, Wuhan's new infections had increased to 2000 cases per day. To maintain a sufficient supply of beds Wuhan would have to build two new hospitals

a day, which of course wasn't going to happen. They had to convert some wards in general hospitals to accommodate the infectious patients for treatment and quarantine.

- Since publishing and making public the genetic sequence of the coronavirus on January 10th, 2020 many Chinese companies in the business sector worked to develop testing kits. Chinese authorities set up a fast-track approval channel to obtain the official license required before being used. This process normally takes 18 months. The timeframe had to be reduced as much as safely possible to start testing patients and suspected cases. However, the supply of testing sets was not the main problem. The testing process had to be done individually and manually so it takes time. The problem was the capacity to test. The problem was a shortage of testers, not testing sets.
- By the **end of January 2020**, while Wuhan was still under lockdown, all 31 provinces and regions across China had executed a top-level emergency response process. **Ding Xiangyang**, Member of the Central Steering Group, and Deputy Secretary-General of China's State Council, "After the Central Steering Group and the National Health Commission called for help, essentially all 31 provinces, regions and municipalities in the country responded. Remarkably, about 70% of these respondents were women. ..heroic women."
- Beijing railway stations had almost come to a standstill and everybody's temperature was screened and wearing masks was compulsory.
- **February 10, 2020 President Xi Jinping** visited a residential community, hospital, and District Centre for Disease Control and Prevention (CDC) in Beijing. He declared that communities are the first line of defence against the coronavirus and as long as this line is safeguarded, the spread of the virus would be effectively contained. Xi also spoke to doctors in Wuhan by video call, "We must bravely fight this war of resistance, this total war and the people's war. We must be confident that we will win. "
- By the end of February 2020, over US\$ 2 billion of medical supplies had been donated from all over China to Hubei province. In addition, according to a foreign ministry spokesperson China also received donations of epidemic prevention and control supplies from 21 countries and the UN Children's Fund to assist China in its battle against the deadly epidemic.⁹
- Thai Airways International Public Company Limited (THAI) joined Toyota Tsusho (Thailand) Co., Ltd. and Worldwide Logistic Services (Thailand) Co., Ltd. to deliver medical supplies and COVID-19 anti-diffusion equipment such as masks and medical gowns to help people and the medical teams in China. Toyota Tsusho and Worldwide Logistics selected medical supplies and prevention devices from 30 countries around the world and THAI gave support in the transportation of the first set of four tons of medical supplies to donate to the Chinese Red Cross and Hubei Foundation. These would be distributed to Chinese government-approved

⁹ Those countries are the Republic of Korea (ROK), Japan, Thailand, Malaysia, Indonesia, Kazakhstan, Pakistan, Germany, Britain, France, Italy, Hungary, Belarus, Turkey, Iran, the United Arab Emirates, Algeria, Egypt, Australia, New Zealand, as well as Trinidad and Tobago, spokesperson Hua Chunying said at an online press briefing.
Source: Xinhua | 2020-02-06 00:58:51 | Editor: Mu Xuequan

donation centers and hospitals in Wuhan to support the medical team in treating patients and the general people.¹⁰

- China's central government continued to send more medical and healthcare resources from other regions into Wuhan and other cities in Hubei province. Within 30 days, by March 8th, 2020, a total of 42,000 medical workers were drafted from all over China with 35,000 going to Wuhan city, and the remaining to other cities in Hubei province. They were also joined by over 4,000 army medics. In addition, about 10% of China's specialists were also sent to Wuhan.
- A team of scientists from Tulane, Scripps Research Institute, Columbia University, University of Edinburgh and University of Sydney analyzed the genome sequence of the novel SARS-CoV-2 from the city of Wuhan, China, and found no evidence that the virus was made in a laboratory or otherwise engineered. "We determined that SARS-CoV-2 originated through natural processes by comparing the genetic sequences and protein structures of other coronaviruses to those of new virus that causes COVID-19," said study senior author Robert F. Garry, PhD, professor of microbiology and immunology at Tulane University School of Medicine.¹¹
- **April 8, 2020**, after about two weeks of almost zero daily new cases the central government lifted the lockdown of Wuhan, which had lasted for 76 days. During this period there were 50,000 infections and over 2,500 deaths in Wuhan, accounting for 77% of all coronavirus deaths across China, according to the National Health Commission. The successful containment of the coronavirus in Wuhan meant the rest of China was safe from a pandemic with any new infections being kept under control. For over a year after the end of the Wuhan lockdown, China was able to maintain the flat level of new cases and as of June 5th, 2020, China continues to keep the coronavirus (Covid-19) under control.
- However, **Luo Ping**, an epidemic control official in Wuhan, told CCTV Sunday that "the reopening of Wuhan does not mean the all-clear, neither does it mean a relaxing of epidemic prevention and control measure. The lifting of the lockdown allows the city to "restart economic and social activities from their previous "suspension." Luo Ping warned the city still faces the challenge of preventing a recurrence of infections. "After work and production resumed, the movement of people increased and so did the risk of cross-infections from mass gatherings. Some residents have dropped their guard and don't wear masks when they go on the streets," he told the broadcaster.¹²

The Chinese government's success in the containment of the coronavirus outbreak in Wuhan was the critical key factor in saving China from widespread infections of the coronavirus throughout the

¹⁰ THAI Sawadee magazine, <https://www.sawasdeemagazine.com/thai-airways/news-promotions/thai-deliver-medical-supplies-to-help-people-in-china/78959>

¹¹ Keith Brannon, Study: Coronavirus pandemic sparked by nature, not bioengineering March 18, 2020. Tulane University.

<https://news.tulane.edu/pr/study-coronavirus-pandemic-sparked-nature-not-bioengineering>

¹² Nectar Gan, CNN. Updated 1417 GMT (2217 HKT) April 8, 2020

<https://edition.cnn.com/2020/04/07/asia/coronavirus-wuhan-lockdown-lifted-intl-hnk/index.html>

nation. This was due to two key elements. Firstly the timeliness and speed of the response. Timeliness and speed of response were critical because of the impending Chinese New Year scheduled to start during the last week of January 2020, about within four weeks following the declaration outbreak in Wuhan because the traditional mass movement of people during this period would exacerbate the spread of COVID-19 across the whole of China. With a population of 11 million people, Wuhan would be the catalyst for the spread of the disease throughout China, which would lead to disastrous economic, political, and social impacts on the nation. Therefore the speed of action, and reaction, to the coronavirus outbreak, were paramount, even if it means having 'blindly' into an unknown crisis situation.

Secondly, the intensity and comprehensiveness of the response with the full integration of national resources, both human and material, and unified coordinated efforts in addressing and dealing with the handling, prevention, and containment of the coronavirus through treatment, testing, lockdowns, and quarantines focusing mainly on Wuhan city, and expanding through the Hubei province. This integration of strategies represented the initial line of China's crisis management response to the coronavirus outbreak and was to be the mainstay of her responses throughout the Covid-19 pandemic. This relied on mainly armies of medical workers from across China and was made up of both draftees and volunteers from both the general public and military sectors. This was a demonstration of the cultural roots in collective behavior and values. For medical doctors and nurses to leave the safety of their homes and families, and be free from exposure to the coronavirus being located in provinces thousands of kilometers from Wuhan city and the Hubei province, the idea of going to Wuhan, a city under medical lockdown was an issue of the 'need to do' without question. Of these health workers, about 70%, were female medical workers, meaning they were mothers, wives, and daughters with a willingness to go into the infection 'red-zone' demonstrating the spirit of collective responsibility.

The act of total and complete lockdown of the 11 million people of Wuhan was a pragmatic decision by the Chinese leadership to contain the spread of the disease to protect and ensure the safety of the whole nation with a population of about 1,400 million people. The timing of the decision was essential, just before the Chinese New Year (Spring Festival). In 2019, about 400 Chinese traveled throughout China. Most use this holiday to visit families, relatives, and friends in other parts of China. About 7.0 million people are estimated to travel abroad¹³. In 2020 the numbers are expected to be the same, if not more. Wuhan would be the catalyst for the spread of the coronavirus throughout China and the world. Imagine 400 million people or 30% of the total population possibly spreading the disease throughout China. Popular destinations for Chinese tourists are Thailand, Japan, Indonesia, Singapore, Vietnam, Malaysia, the United States, Australia, the Philippines, and Italy¹⁴. Other European nations include France, Switzerland, and the United Kingdom. Imagine the impact of 7 million Chinese tourists exploding in these Western nations during the one-week holiday period of Chinese New Year. The lockdown of Wuhan had a definitive impact on reducing the spread of the

¹³ <https://touristsfromchina.com/chinese-newyear-2019-what-should-tourism-related-businesses-in-europe-expect>

¹⁴ Ditto.

coronavirus in China and the Western world. This was due to the timeliness of the decision and the speed of execution and enforcement by the Chinese government leadership. The sacrifice made by 11 million people under lockdown was an acceptable option in the collective culture of the Chinese people. The 76 days of total lockdown by the citizens of Wuhan were for the good of the nation. In appreciation of their sacrifice, a day of remembrance was declared in China on Saturday, April 4th, 2020 to honour the more than 2,650 people who died of the coronavirus in Wuhan during the period, representing 80% of the total deaths in China of over 3,300 people. At 10:00 am, President Xi Jinping, government leaders, and the general public stood still nationwide for three minutes in tribute to the dead. Cars, trains, and ships then sounded their horns, air raid sirens rang as flags were flown at half-mast in a demonstration of national unity.

“Achieving China’s exceptional coverage with and adherence to these containment measures has only been possible due to the deep commitment of the Chinese people to collective action in the face of this common threat”. (WHO – China Joint Mission)¹⁵

C. Key factors contributing to the success of the initial Wuhan city containment

The success in the government’s containment of the Wuhan coronavirus outbreak which was the critical key factor in saving China from the Covid-19 pandemic and the potentially disastrous economic, political, and social repercussions can be attributed to the following key factors:

i. Complete unity of command in executing government policies, strategies, and preventive actions (authoritarianism and high power distance cultural dimension)

China’s totalitarian government having only one political party means the execution of administrative power and authority to handle national crises is centralized, streamlined, and consolidated into one system, process, and person. The line of authority is clear and unquestionable. When the paramount leader Xi Jinping gives an order, there is only the execution to follow. The line of command is from President Xi Jinping to the central government which then is dispersed accordingly to the relevant government commission, committees, agencies, and organizations, through to the functional units at the regional, provincial, and community. The style of management swings between autocratic and participative. In this case, because of the very unique, but deadly threat to the safety and health of the people at all levels, the tendency is very much towards the participative style where experts and local frontline government officials and staff are consulted for feedback for situation reports and practical recommendations. A survey was taken for qualitative and quantitative feedback and data was followed by a top-level team of experts who gave their reconfirming reports before President Xi made the decision to lock down Wuhan city and its 11 million people. This was demonstrating the classic participative style of government. Those who know make the suggestions, and give opinions and recommendations, but it is the paramount leader alone, President Xi Jinping who decides based on their inputs. The key factor for the ultimate success of the containment of Wuhan was the timeliness of the decision-making process. As a result, the

¹⁵ Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 February 2020. <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-Covid-19-final-report.pdf>

lockdown lasted only 76 days. Delays in the decision-making, along with the execution and implementation of the executive order, could have led to a much longer lockdown and high rates of infections and fatalities.

Culturally speaking, this was a classic case of high “power distance” with a foundation going back through four thousand years of history. When the emperor speaks, all must listen. When the emperor commands, all must do. There is no emperor in the People’s Republic of China today, but the ‘paramount leader’ fills this slot.

ii. Unity of direction (authoritarianism and high power distance cultural dimension)

Unity of direction is linked to the unity of command in which it is interdependent. Being a centralized government all functional units are integrated into a single whole. It is bureaucracy in its highest form. Things are done in conformity with the system and process. Once the line of command gives the direction and goal, the unity of direction either dovetails or bottle-neck to a focal objective.

In the execution of directives to contain the coronavirus pandemic in Wuhan, and to which end the need to direct and channel all necessary resources, both materials and human, to achieve that goal, it can be seen that the unity of direction was critical to the ultimate success of the containment strategy. During the lockdown period, medical workers from both government and military hospitals totaling at least 50,000 persons were drafted from across China to Wuhan.

As an integrated effort, the various lines of authority and functional responsibilities drafted the needed medical workers, acquired and shipped medical supplies and equipment, and designed, built, managed, and staffed several emergency hospitals not to mention reconfiguring and adapting wards in existing hospitals to cater to the infected patients for treatments and quarantine.

The same also goes for medical equipment and protective gear produced by both the public and private sectors. When the private sector designed and produced the critically required Covid-19 testing units, the government worked on finding ways to cut the red tape, reduce the lead time, and certify and issue the necessary licenses for distribution and usage in the fight against the growing and expanding coronavirus.

iii. Protecting the Community

The collectivist cultural dimension was a key factor contributing to the speed and timelines of cooperative and participative action from the Chinese health workers and the various supporting elements, of which the most important was the general public, specifically in Wuhan City and the Hubei province. The collectivist culture had nothing to do with government enforcement. It was established and existed with the birth and ‘aging’ of China throughout her history. The government just utilized an obviously powerful resource of the nation, its cultural values. Reliance on the collective culture would be the continuing basis and foundation of China’s crisis management strategy in addressing the Covid-19 pandemic, with repeated lockdowns, isolation of cities and provinces, quarantines, testing, etc., and the continuous mobilization and sourcing of health workers countrywide. This was due to China’s policy of “zero-tolerance” for infection spread.

Following its 'zero-tolerance' policy, the government continued with partial and complete lockdowns of cities and provinces into 2022. In 2022 both Shanghai and Beijing were among several cities under either partial or full lockdowns during the first half of the year until the infection numbers were reduced to 'zero'.

D. Means and nature of government leadership communications to the public

Efficient and effective communication are the key factor in any crisis management. It is the critical and main link between government policy and implementation by the people. There are regular updates on various platforms such as the CCTV, People's Daily Newspaper, Xinhua News Agency, Peng Pai XinWen(Newspaper), Jin Ri Tou Tiao (Social Media), TencentWeChat (Facebook China), Tencent QQ,¹⁶ South Morning Post (Newspaper), Sohu.com (Internet), the Phoenix net, Wangyi Net,¹⁷ to name but a few.

CCTV (China Central Television) is a Chinese state-controlled broadcaster with a network of 50 channels broadcasting different programs and is accessible to more than one billion viewers in six different local languages. Even though China has a literacy rate of about 97% of adults (aged 15 years and over), the nationwide communications systems and logistics remain a constant challenge in terms of effectiveness and efficiency given the size of the country, the population spread, the communication networks and platforms, and the over 300 languages and dialects in China. In a country with a population of 1,350 million, a minority language group of just 1% represents 13.5 million people, greater than the total population of Sweden. Given the Chinese government's declared and committed policy of 'zero-tolerance' for the Covid-19 pandemic, such a high-risk figure beyond communication reach and control would create a high risk of the coronavirus spread.

In China, due to its authoritative culture, government communications are generally one-way, meaning "top-down" directives in crisis management. Top-down communication is a reflection of Chinese culture relative to the 'high power distance' dimension, which accepts and respects communications from a 'higher authority or seniority'. Coming from the government, this form of communication must be respected and obeyed. Very often, the importance is not in the 'message' but rather 'who is sending the message' in terms of seniority and the power hierarchy. In China, usually, people tend to follow top-down directives and believe in the power of authority, especially when representing state organizations. This is particularly important and relevant in crisis management, such as in the case of the Covid-19 pandemic. Civil servants usually wait (=depending) on their superiors to make the decision because subordinate officers do not want to risk their position and future with any mistakes. In this environment of uncertainty and risk avoidance, information flow and feedback can be disruptive and unreliable both in terms of context and

¹⁶ <https://news.qq.com/zt2020/page/feiyan.htm#/> (Tencent QQ, daily updates)

¹⁷ [https://wp.m.163.com/163/page/news/virus_report/index.html?_nw_=1&_anw_=1\(Wangyi Net, daily updates\)](https://wp.m.163.com/163/page/news/virus_report/index.html?_nw_=1&_anw_=1(Wangyi Net, daily updates))

timeliness of transmission. Also, in high power distance cultures, it is expected that the highest authority takes responsibility for making the decision.

Communications are either to inform, dictate, or declare government actions. In a totalitarian society with centralized authority, communications will usually be top-down and one-way. Sometimes the general public can express their opinions and convince the authorities to change decisions. However, in practice, this is not common. Ordinary people and even social elites cannot always express whatever they want for fear of creating disfavor, losing their jobs, or bringing harm to their families. Language censorship is becoming increasingly stronger under President Xi's leadership. Usually, if someone is unclear or afraid of certain aspects, it is better to turn a blind eye to those matters for the best personal well-being. This kind of cultural environment between authority and the general public is also a key factor in the nature and influence of communications. This is especially the case during crises when quick and cooperative responses and obedience are essential to achieve a certain goal. Communications in the form of directives were common and frequent leading to and during the Wuhan lockdown. Government and municipal leaders need the people to follow instructions, such as quarantine, stay at home, obey curfews, wear masks, regular sanitization of hands, etc. The people need to realize that these communications are for their safety and well-being. The collective will is greater than that of individuals. Challenging the authorities or existing customs can be unpleasant, and costly.

In contrast to the nature and level of internal communications with her population, China has been accused of controlled and limited communications with the outside world, particularly with respect to the sharing of information and data on cases, findings, and outcomes. This could have been for the following reasons:

- Right from the beginning, President Xi, as paramount leader promised confidently, "I'll take care of the incident 100%". The early period of the outbreak was trending to be a serious epidemic and running out of control in Wuhan. Those on the front-line of the outbreak, especially the health workers were reluctant to criticize the efficiency or effectiveness of government actions. Everyone was still going through the 'learning-curve' of this coronavirus. Responsibility for absolute decision-making was an important factor and no-one was prepared to point fingers.
- Until more was known about the epidemic behavior and impacts, and positive results were demonstrated through government responses and actions, communications, feedback, and analytical reports were kept 'under the lids.'
- Also, at the early stages of the epidemic, there was still no absolute certainty that the origin of the coronavirus was in Wuhan and China.¹⁸

¹⁸ China was the first whistleblower in late December 2019. Now new research indicated that it was found in Italy earlier. Italy identified the coronavirus in a 4-year-old boy on December 5, after he developed a cough as early as November 21, 2019, according to a study published by the US Centers for Disease Control and Prevention's Emerging Infectious Diseases journal. The same study also indicated that the virus was also circulating in France and the USA. The

- During the early months of the coronavirus epidemic, even though the spread of the coronavirus was spreading locally in Europe and The Americas, there were growing negative feelings and attitudes towards China by certain segments of the global community as the origin of the global spread, putting China into a disadvantaged position, so the natural reaction is silence. This has led to the controlled limited context of China's communications.

E. The Rise and Fall of China's Covid-19 'zero policy'

China's Covid-19 zero policy was initiated as a national strategic policy almost immediately following the outbreak in Wuhan in December 2019. This policy was aimed at preventing the spread of the Covid-19 pandemic throughout the nation. The urgency for implementing this policy was most likely due to the fact that the coronavirus outbreak coincided with the Chinese Lunar New Year, also known as the Spring Festival, in January 2020, the following month. The same festival In 2019, the recorded movements of hundreds of millions of Chinese residents and accumulating what was estimated to be about 2.9 billion total trips, by car, train, and air.¹⁹ Imagine the "rolling stone" effect in the rapid and wide-spread flood of the coronavirus immediately following the outbreak in Wuhan City with a population estimated at 11 million during the 2020 Chinese New Year festivities. To stem this threat, the Chinese government has had to enforce "draconian measures", including the strategy of enforcing strict, lockdowns and mass testing, resulting in entire neighbourhoods being sealed off across the country, especially in all large highly populated communities that have had clusters of infection spread. As a result, millions of Chinese people in Shanghai, Beijing, Peking, and other large cities have faced strict lockdowns. This is in spite of the negative economic impacts on China's industry, commerce, and trade. Keeping in mind that China is the 21st. century global supply-chain hub, these economic repercussions would be felt worldwide, especially in nations that rely on China for its inputs and supplies. The global B2B supply-chain literally stops when China's production machine stops.

"Zero" is a big word to enforce resulting in families being separated after testing positive for COVID, while essential medical treatment has been delayed due to lockdowns. Although not uniquely limited to China only, the situation was exacerbated by bureaucratic red tape, coupled with officials' efficiency under crisis. This included reports of forcing people with negative Covid-19 tests into state quarantine and demanding keys to enter and disinfect their homes. While such acts would be considered illegal, even in China under normal conditions, the emergency protocols seem to lack any stop-gate controls.²⁰

In March 2022 following massive outbreaks, Shanghai, a city of 25 million residents (similar to Australia) was put under complete lock-down, which lasted several weeks. The city's residents were

latest report suggesting that the disease hit Europe earlier than once thought. Zhang Hui, Zhao Yusha and Zhao Juecheng Source: Global Times Published: 2020/12/10 22:50:25 Last Updated: 2020/12/10 22:41:44

¹⁹ Yvette Tan, "Chinese New Year: Clamping down on going home for the holidays".

BBC News. January 28, 2021. <https://www.bbc.com/news/world-asia-china-55791858>

²⁰ Ditto

instructed not to leave their homes, “for any reason other than medical emergencies”. This lockdown lasted until early May after no cases (zero policy) had been reported for two days in a row.²¹

This lockdown was followed in September 2022, by Beijing with its 22 million residents with enforced work-from-home orders. This resulted in most subway stations and offices being empty, as well as roads, apartment blocks, and parks being sealed off as Beijing came under China's strict Covid-19 “zero policy” protocols. In Beijing, government action was swift without an advanced official announcement. Some residents “just received notices over the weekend informing them they were no longer able to leave their homes or receive deliveries as part of the effort to drive community infections down to zero.”

“Zero” is a big word to enforce resulting in families being separated after testing positive for COVID, while essential medical treatment has been delayed due to lockdowns. Although not uniquely limited to China only, the situation was exacerbated by bureaucratic red tape, coupled with officials’ efficiency under crisis. This included reports of forcing people with negative COVID-19 tests into state quarantine and demanding keys to enter and disinfect their homes. While such acts would be considered illegal, even in China under normal conditions, the emergency protocols seem to lack any stop-gate controls.²²

The rationale for China’s strict controls on the emergence and spread of the coronavirus is somewhat palatable in consideration that the country has the highest concentration of people with a population of about 1.44 billion (2022 est.). This means that every 1% infection rate represents 14.4 million people (compared to the total population of The Netherlands with 17.1 million, and Belgium with 11.6 million). More importantly, greatly challenged in terms of geographical coverage for medical facilities infrastructure, and healthcare workforce in times of epidemic crises. An uncontrollable explosion of widespread infections would lead to high death rates. A daily surge of 7% in infections throughout China would mean over 100 infected cases per day. The numbers, and more importantly, the widespread distribution of infection cases across the nation would make it extremely prohibitive to completely manage and control.

Government management and control during the first three years of the coronavirus outbreak has only been possible due to the strict pandemic protocols coupled with the “unparalleled public obedience”, which has kept the domestic Covid-19 infection count at extremely low levels not to mention reduced breaking-point disruptions to healthcare service provisions unrelated to the pandemic. An abrupt relaxation of the current policy would risk breaking the balance between Covid-19 and non-Covid-19 healthcare needs and overstretching the underdeveloped healthcare system.²³

²¹ Shakeel Sobhan. What is China's zero-COVID policy?

Deutsche Welle (DW). May 9, 2022

<https://www.dw.com/en/what-is-chinas-zero-covid-policy/a-61736418>

²² Ditto

²³ Why is mainland China sticking with “zero-COVID” policy?

S&P Global. Market Intelligence.

<https://www.spglobal.com/marketintelligence/en/mi/research-analysis/why-mainland-china-sticking-zero-covid-policy.html>

A joint study carried out by China's Fudan University in partnership with the United State's Indiana University confirmed the rationale for the Chinese government's reluctance to abandon the Covid-19 zero policy. The joint study built a simulated scenario based on the actual Omicron outbreak in Shanghai in March 2022 which was allowed to evolve for six months without the enforcement of the Covid-19 zero policy along with any other non-pharmaceutical intervention (NPI) measures that were applied since the 2020 Wuhan outbreak. This "laissez-faire" scenario projected that the outbreak would result in 112.2 million symptomatic cases, 5.1 million hospital admissions, 2.7 million ICU admissions, and 1.6 million deaths. At the peak point of the outbreak, the demand for ICU beds would reach 15.6 times the national capacity, and in addition to the 1.6 estimated deaths, the requirement for the healthcare system would be overrun, posing serious risks to social instability not to mention political instability.²⁴

By mid-August 2022, at least 74 cities with a combined population of 313 million were under imposed lockdowns that cover entire cities, districts, or multiple neighborhoods, according to CNN's calculations.²⁵

During the Communist Party Congress in October 2022, Chinese leader Xi Jinping reiterated that there would be no wavering on the zero-Covid-19 policy despite the obviously clear negative impacts on both the social and economic stability and well-being of the Chinese as a result of this policy. During the Communist Party Congress, President Xi Jinping reconfirmed that the lockdowns, the mass testing, the health code scanning, the quarantine, and the travel restrictions would continue to be enforced for the foreseeable future. He underscored that the objective and justification for the government's zero policy continue to prioritise and ensure the maximum level of saving people's lives.²⁶

Xi Jinping had in fact also declared personal direct responsibility for leading the "war" against Covid-19, justified his zero-COVID policy to "put people above everything", and concluded that this Covid-19 zero policy was one of his significant political leadership achievements in seeking the unprecedented third term at the 20th Communist Party Congress in October 2022.²⁷

²⁴ Why is mainland China sticking with "zero-COVID" policy?

S&P Global. Market Intelligence. BLOG June 27, 2022

<https://www.spglobal.com/marketintelligence/en/mi/research-analysis/why-mainland-china-sticking-zero-covid-policy.html>

²⁵ Nectar Gan, Shawn Deng and CNN's Beijing bureau, "Chinese cities rush to lockdown in show of loyalty to Xi's 'zero-Covid' strategy". CNN. September 5, 2022

<https://edition.cnn.com/2022/09/05/china/china-covid-lockdown-74-cities-intl-hnk/index.html>

²⁶ Stephen McDonnell, "Xi Jinping speech: Zero-Covid and zero solutions".

BBC News, Beijing. October 16, 2022.

<https://www.bbc.com/news/world-asia-china-63274391>

²⁷ Yew Lun Tian and Martin Quin Pollard, "Analysis: China protests highlight Xi's COVID policy dilemma".

Reuters. November 29, 2022

<https://www.reuters.com/world/china/china-protests-highlight-xis-covid-policy-dilemma-walk-it-back-or-not-2022-11-28/>

One month after this declaration at the Communist Party Congress in October 2022, and towards the end of November 2022 there erupted a rare series of ‘strong’ public protests across China and signaled an unofficial ‘national referendum’ against Xi Jinping’s reiteration and extension of the Covid-19 zero policy. Shanghai, was the first city where protests were reported on November 26, 2022. It should be noted that no such public protests or mass demonstrations have occurred since the Tiananmen Square incident in 1989. These street protests were later joined by ‘cyber’ protests expressed on social media on the same theme as well as by posters in several universities, and included Chinese President Xi Jinping’s alma mater namely Beijing’s Tsinghua University.²⁸

The Chinese government’s response to these protests came just over a week following the start of these public demonstrations, by declaring the lifting of its most severe Covid zero policies, such as forcing people into quarantine camps. The new policy allowed Covid-19 infected people to self-isolate at home rather than in state facilities if they show mild symptoms, or are asymptomatic. Other significant positive changes declared by China's National Health Commission include:

- Lateral flow tests to replace PCR tests in most scenarios although PCRs are still needed for schools, hospitals, and nursing homes
- Lockdowns would be applied to only targeted areas – i.e. specific buildings, units, or floors as opposed to whole neighborhoods, communities, or cities being under a ‘blanket’ shut-down
- Lock-downs of “high-risk” areas would be lifted if no new cases are found for five consecutive days. In the past, several whole cities in China endured months-long lockdowns, even with only a handful of cases
- Schools can remain open with student attendance if there's no wider campus outbreak

These changes in response to growing nationwide protests indicate China’s stance in moving away from its zero-tolerance Covid-19 policy and accepting to “live with the virus” along with most of the rest of the world. At the time of making these changes, China was still confronted with its biggest wave of infections with over 30,000 cases per day. It should also be mentioned that there were “mixed” reactions to this sudden change of policy. Those with concerns about immunity deficiency and high health risks of the elderly expressed concern for the rapid “U-turn” in government policy, while the younger, healthy generation celebrated the return to social and economic freedoms and a return to normalcy.²⁹

Undoubtedly, many observers outside China considered the possibility that these public protests and demonstrations would receive similar ruthless and bloody military response and forceful containment which were applied 24 years earlier during the Tiananmen Square protests in 1989. However, these protests were met with a rare display of tolerance and a willingness to reach some level of compromise, which seems to signal some positive evolution in China’s communist autocratic rule under Xi Jinping’s presidency. There was no shooting of people or mass bloodshed.

²⁸ Sissi Cao, “Rare Protests in China Raise Hopes that Xi Jinping’s Zero-Covid Policy Will Soon End”. Observer. November 29, 2022. <https://observer.com/2022/11/china-protest-zero-covid-xi/>

²⁹ Frances Mao, “China abandons key parts of zero-Covid strategy after protests” BBC News. December 7, 2022. <https://www.bbc.com/news/world-asia-china-63855508>

The impact of mobility liberalization and reductions in mass lockdowns, quarantines, and travel restrictions was both immediate and poignant as indicated in the Graph and Table 6.1. below for confirmed cases and deaths per week from November 2022 through February 2023:

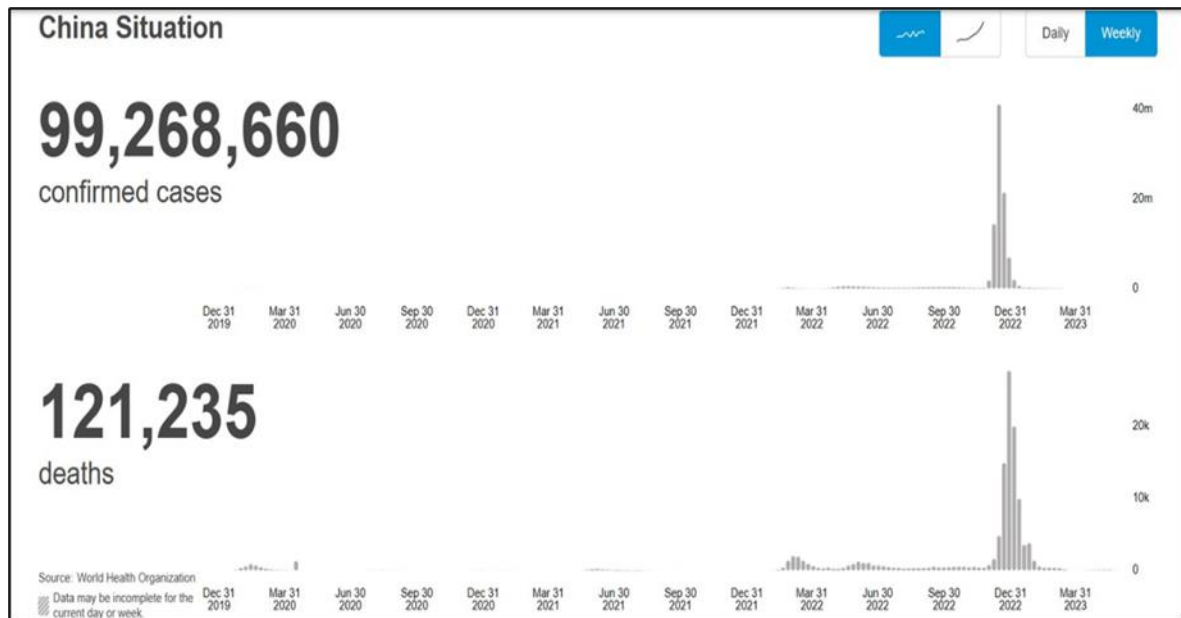


Table. 6.1. China’s surge from Nov. 2022 through Feb. 2023

| | | | CASES | | DEATHS |
|-----------------------|----|--|------------|--|--------|
| November | 28 | | 147,000 | | 359 |
| December | 5 | | 1,846,000 | | 719 |
| December | 12 | | 14,419,000 | | 1,587 |
| December | 19 | | 41,175,000 | | 4,795 |
| December | 26 | | 21,483,000 | | 14,918 |
| January ('23) | 2 | | 6,983,000 | | 27,748 |
| January ('23) | 9 | | 1,975,000 | | 20,026 |
| January ('23) | 16 | | 658,000 | | 9,959 |
| January ('23) | 23 | | 159,000 | | 3,514 |
| January ('23) | 30 | | 188,000 | | 3,795 |
| February | 6 | | 137,000 | | 1,306 |
| February | 13 | | 122,000 | | 537 |
| February | 20 | | 102,000 | | 358 |
| Source: WHO Dashboard | | | | | |

As can be seen from the above Graph and Table 6.1., the surge per week was most significant during the months of December 2022 to January 2023. In terms of infection cases, the rate did not return to the original stringent zero policy protocols (as of the end of November 2022 with 147,000 cases) until the first week of February 2023 (confirmed cases at 137,000 cases). However, it should be noted, as was assumed in most other nations infected with the normally not-serious illness or no-death threat Omicron variant, that those infected would most likely fail to report infection cases due to the ability to self-treat and practice home-care. Therefore the number of cases should likely be significantly higher than officially recorded. For death rates, the records are probably more accurate since they do have to be recorded. Nevertheless, it took longer for the death rate to return to the pre-zero policy discontinuation figure (which was 359 deaths per week as of the end of November 2022) which was achieved only in the third week of February (reduced to 358 deaths per week). This Chinese government's response to stem the surge of infections and deaths did not revert to imposing strict blanket lockdowns and prohibitions of free movement as was usually applied during the zero policy but instead adopted the limited, focused, target-oriented lock-downs, quarantines, and strict controls directly to the infected zones, outbreak clusters, and communities. The success of this government policy and approach worked well and undoubtedly, this was basically due to a high level of cooperative participation and responses by the general public, who wanted to make sure that these reduced controls would work and thereby deny any government's justification for returning to the original full Covid-19 zero policy. Therefore the success of government-limited enforcement was dependent on strict discipline and abidance by the general public. Of course, the general public response and abidance to the government's decrees were also built on the over 4,000 years of obedience to authoritarian rule. As a result, the government was able to bring the surge under control within 2 to 3 months as indicated in the above graphs.

It should be noted that the figures given 'through' the WHO Dashboard are based on official reporting and filings from the respective governments to the WHO reporting and recording system. In this respect, these figures indicate and reflect the true information that was 'reported and delivered' to the WHO which is then added to the global data stream and represents the official "reported" status of Covid-19 in member states. In this respect, it should be assumed that the WHO Dashboard fully represents the real and actual status of the Covid-19 pandemic in all nations. Obviously, the reliability of "output" can only be measured by the quality of "input".

With regard to China's Covid-19 pandemic situation, non-WHO sources, and non-government sources, seem to paint another picture that should be considered in getting a more balanced and realistic perspective, especially, following the abandonment of the 'zero policy' by the government.

The CNBC TV 18 News reported that six months after China terminated its draconian "zero policy" curbs, China was expected to experience about 40 million cases per week by the end of May and increase to about 65 million cases by the end of June 2023, due to the latest Omicron variant XBB. These predictions were made by respiratory specialist Zhong Nanchan at a biotech conference in Guangzao. These projections echoed the Bloomberg report regarding the projected weekly number of cases for May and June 2023. According to Zhong's estimations, these figures were not singular abnormal spikes, but had already been evidenced since December 2022 and into January 2023

following the ending of the strict 'zero tolerance' policy when daily estimates were 'likely' to be already around 37 million cases per day.³⁰

The situation in Beijing following the end of the "zero policy".³¹

Reuters reported on the nationwide wave of Covid-19 infections following China's abrupt U-turn on its previously strict 'zero tolerance' Covid-19 policies early in December 2022. Dr. Howard Bernstein, with more than 30 years of practice in emergency medicine, and based in Beijing, had never experienced such surges in hospitalizations related to the Covid-19 pandemic in China. An ever-increasing number of patients were arriving daily at his hospital, the privately owned Beijing United Family Hospital, with almost all being elderly and most of whom were very unwell with Covid-19 and pneumonia symptoms. The surge in December 2022 represented the highest level of infections, hospitalizations, and deaths since the original outbreak in Wuhan three years earlier. Government hospitals and crematoriums in Beijing were struggling to handle this upsurge. Bernstein told Reuters at the end of a "stressful" shift that the "hospital is just overwhelmed from top to bottom", and added that the "ICU is full," as were the emergency department, the fever clinic, and other wards.

A similar account was also given by Sonia Jutard-Bourreau, chief medical officer at the Raffles Hospital, another private hospital in Beijing. Patient numbers had shot up to five to six times their normal levels, and again, patients were mostly the elderly. This resulted in the average age of hospitalizations increasing from about 40 years to over 70 years in the space of a week. "It's always the same profile," she said. "That is most of the patients have not been vaccinated." These patients came to Raffles because local hospitals are "overwhelmed", she said. Both Jutard-Bourreau, and Bernstein have been working in China for around a decade, and both sense that the worst of this wave in Beijing wave had not arrived yet. Under this environment, most doctors were concerned about the explosion in mortality rates due to the latest and ongoing Covid-19 surge. More importantly, under this environment, it is likely that the reporting and publicizing of mortality rates have become "political".

The British-based health data firm Airfinity estimated more than 5,000 people were probably dying each day from COVID-19 in China. This estimation was a dramatic contrast to official data from Beijing on the country's current outbreak. Often, the Chinese Center for Disease Control and Prevention is silent on delivering the daily/weekly/monthly infection and mortality rates. However, for the locals, the long queues, coupled with the slow response to medical care and treatments, limited hospitalization facilities and beds, and intakes of new patients, not to mention the availability of medicines and vaccines, have already clearly indicated to them the seriousness and true situation of the Covid-19 pandemic crisis in their city.

³⁰ CHINA braces for new Covid wave with up to 65 million weekly cases. CNBC TV 18. World News. May 22, 2023 <https://www.cnbctv18.com/world/china-braces-for-new-Covid-19-wave-with-up-to-65-million-weekly-cases-16728131.htm>

³¹ Martin Quin Pollard, China's COVID cases overwhelm hospitals Reuters. December 26, 2022.

<https://www.reuters.com/world/china/the-icu-is-full-medical-staff-frontline-chinas-covid-fight-say-hospitals-are-2022-12-26/>

These situations were not limited to Beijing alone but also occurred in other parts of China. All indicated to Reuters the deluge of hospitalizations and resulting in the medical staff being stretched to the breaking point, which was further aggravated by the rapid depletion of active medical staff due to the increased Covid-19 infections amongst staff. In the city of Xian, a nurse revealed that 45 nurses out of 51 in her department along with all the staff in the emergency department have caught the Covid-19 virus in recent weeks.

Nevertheless, without any formal government announcement to end the Covid-19 zero policy, the nationwide public protests continued into the new year 2023. Eventually, the Chinese government's response became more structured and transparent by Li Qiang, who was recently elevated to the No.2 slot on the ruling Communist Party's Politburo Standing Committee, and who was also set to be named the country's new premier in March 2023. Li abruptly made the decision in early March to wind down the 'zero-policy' and activate the relaxing of controls and restrictions, citing the policy to contain the economic toll resulting from this restrictive policy.³² Despite the ensuing chaotic 'unplanned' reopening of the nation domestically by suddenly ending lockdowns, mass testing, and other restrictions, this change in policy moving away from the strict zero policy was well-received by the public demonstrators.

If nothing else, the Covid-19 pandemic had significantly impacted government leadership behaviour in responding to public protests and demonstrations. It would seem that a new phase in authoritarian rule in China might have emerged.

F. China's Cultural Impacts on Covid-19 Crisis Management.

The Chinese government's response in terms of policies, strategies, and execution was in line with its deep-rooted political culture of unbending authoritarianism. Its 4,500 years history of authoritarian rule continued under the Chinese Communist Party, as it had been under its long history of dynastic absolute rule. Enforcement of complete lockdowns or segregation was applied at all levels, from municipality, to city, provincial, and national, including travel restrictions both in and out of the country. Non-pharmaceutical initiatives such as social distancing, masking, and sanitary practices were made compulsory throughout the nation with various levels of intensity, according to the infection and fatality levels. This was fundamentally the political culture of the Chinese government.

The exercise of this authoritarian power in addressing the Covid-19 pandemic was to prevent the coronavirus from spreading nationwide. With a population of over 1.3 billion, the level of administrative management, and control required is colossal. Imagine governing a nation with about twice the total population of Europe. A high power distance government would be guided by the principle of "the end justifies the means". Therefore the options and initiatives to fight the

³² Julie Zhu, Yew Lun Tian and Engen Tham, "How China's new No.2 hastened the end of Xi's zero-COVID policy". Reuters. March 3, 2023.
<https://www.reuters.com/world/china/how-chinas-new-no2-hastened-end-xis-zero-covid-policy-2023-03-03/>

coronavirus are almost limitless and without restraints. On the other hand, given this “carte blanche” authority and power, failure would mean “losing face” which culturally is more powerful than authoritarian rule. This in fact has been the main underlying factor in President Xi Jinping’s insistence on the launch and continuity of the ‘zero tolerance’ policy. Consequently, the high power distance authority of the Chinese government is matched and made legitimate by the willingness of the general public to obey orders, instructions, and commands. Public obedience is based on the positional power and authority of the government leadership. A high power distance society means a greater willingness to follow rules collectively, creating a high level of uniformity in terms of response and reliable discipline, both of which are critical for timely and effective crisis management. The level of success in China’s strategy can be measured by the outcome derived from this cooperation and participation of her citizens. This high power distance cultural dimension is undoubtedly a key and critical factor underlying the Chinese government in its leadership role in managing and controlling the spread of the Covid-19 pandemic in the country during the past three years since the outbreak.

This political culture was matched by the social culture as reflected by the Chinese population. Consequently, the Chinese government’s directives, mandates, and actions were widely and generally readily met by the Chinese general public’s cooperative response leading to the success of the Chinese handling and management of the Covid-19 pandemic. The general public’s response was brought about by both the cultural aspects as well as general pragmatism. First, the natural response to authoritarian dictates and mandates of the ruling governments which have been the norm for thousands of years since the birth of the nation under the various absolutist dynasties and currently under the communist regime. Second, the Chinese people had several previous experiences with various forms of epidemics and pandemics to know the standard procedures and understand the rationale for government policies and strategies. Therefore isolation or segregation of communities, cities, and provinces involving social distancing, masking, and sanitary practices were already considered the norm. Thirdly, and equally important is the pragmatic acceptance by the general public that with a population of 1.3 billion, getting quick and effective medical treatment and care (when needed) was very unlikely, and therefore prevention was certainly the only option in the absence of a timely cure. Finally, the likelihood of the Chinese government developing a suitable and certifiable vaccine within a year was unlikely, and thereafter being able to inoculate the whole country within another year was even more unlikely. Therefore, the social culture of the Chinese general public is to accept and observe government directives that focus on non-pharmaceutical initiatives as the only reliable immediately actionable defense against the already speedily expanding pandemic.

Chinese government’s political culture is therefore high-powered and authoritarian-oriented with no hesitancy in executing its policies and strategies through issuing mandates and directives to the general public and expecting that they be accepted and carried out accordingly. These government actions are undertaken with the objective of doing what is considered to be in the best interest of the people, in addressing the Covid-19 pandemic and minimising the threats of infections and fatalities. Correspondingly, this authoritarian-oriented administrative style of the Chinese

government is met with tolerance and acceptance by the population as a matter of course, and without the sense of coercion or duress. Government actions are seen as taking responsibility to address and handle the pandemic threat for the safety and welfare of the people. There is an inherent respect for authority, and a willingness to accept and comply accordingly, in recognition of the real pandemic crisis and threat to life and social and economic wellbeing. This inter-action and relationship between political power culture and corresponding social power reciprocation would seem to be the foundation for effective response and outcomes in dealing with and managing the Covid-19 pandemic, as indicated in the above graph reflecting China's infections and death rates throughout the Covid-19 pandemic period. Of course, this authoritarian cultural co-existence between government and people is also pragmatic given the limited healthcare resources, both in terms of personnel and facilities, so prevention was therefore the only option available, and required discipline and active and timely participative involvement of everyone in the community to be effective. Behavioural responses to crisis management policies and strategies, and abidance to government leadership, decrees, directives, and impositions, would be the social-cultural norm. High-powered authoritarianism is not unique to China but was the mainstay of many cultures including India and Egypt about 4,500 years ago. Although India is officially declared a democracy and Egypt a semi-presidential republic, both still retain some shadow of their ancient high-powered political culture. Historically most nations in the Middle East and Asia were absolute monarchies with full authoritarian powers. Today only Brunei in Asia and Saudi Arabia and Oman in the Middle East retained this status. Again, although these kingdoms have adopted the constitutional monarchy status, many kingdoms, such as Japan and Thailand still display reverence and respect for reverent power of their royal families. Consequently, this high-powered authority has been transferred to the duly elected governments. Therefore the relationship between political culture and social culture still reflects the traditions and customs in the relationships between state and people. This relationship would play an important part in responses and outcomes to the Covid-19 pandemic among these nations.

The following references to Hofstede's works in cross-cultural dimensions, are taken from his book, *Cultures, and Organizations: Software of the Mind*, written in partnership with Gert Jan Hofstede, and Michael Minkov.³³

Interpreting Hofstede's High Power distance dimension with relevance to China, and its handling of the Covid-19 pandemic crisis.

In referring to Hofstede's cross-cultural dimensions, they would classify the Chinese government's authoritarian culture as "high powered distance", where superior power exists and is exercised, and met with duly recognized and accepted behaviour by those lower in the power hierarchical structure.

³³ Geert Hofstede, Gert Jan Hofstede, Michael Minkov, *Cultures and Organizations: Software of the Mind*, McGraw Hill Professional. 3rd. Edit. 2010, and <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>

China has an index of 80 China placing it among the high power distance nations. This cultural dimension is probably the most important and influential cultural aspect in China's battle with the growth and expansion of the Covid-19 pandemic since its outbreak in late December 2019. This hierarchy-oriented structure is reflected in the government leader, which in this case is President Xi Jinping .

Conversely, those under high power distance rule, are expected to obey, serve, and enact all commands, instructions, or directives accordingly. As previously mentioned, this subjugation to ruling power is deeply embedded in Chinese history, both under thousands of years of absolute rule dynasties, and communism thereby establishing its cultural roots for over 4,500 years. This authoritarian rule has been and remains to be, the norm in China's political culture. Consequently, the various government addicts, decrees, and impositions such as the strict "blanket" lockdowns, quarantines, and travel restrictions related to the containment and management of the Covid-19 pandemic generally go unchallenged by the general public.

As indicated previously, the culture of high power distance is evident in China and its people and has been the mainstay in achieving a high level of success in containing the coronavirus infection spread throughout the first 3 years. This has resulted in China, with the highest population number being among the lowest infection and death levels per capita. This was achieved because of the high power distance culture of obedience and conformity by the general public to government rule and unquestioned authority with regard to the imposition of the "zero tolerance" policy in addressing the Covid-19 pandemic.

Indications of 'lightening-up' on China's communist style authoritarianism

It is not possible to discuss China's authoritarian rule without referring to its control of free speech, public demonstrations, and protests. The bloody incident in Tiananmen Square in 1989 drew the line as to what would not be tolerated by the then government. The political culture would not tolerate protests and demonstrations, and the social culture traditionally conforms accordingly.

This culture of imposed political restraint on the general public is deep-rooted in China's long history, and is inter-twined with its absolute authoritarian dynastic rule since its formation and which continues to the current day under the political culture of communist ideology. China's culture of restraint is built on absolute rule of the government on the one part, and absolute obedience by the general public to such rule, on the other part.

This cultural trait became critically significant during the Covid-19 pandemic, especially since the source of the coronavirus (SARS-CoV-2) outbreak originated in China (Wuhan City). Not only that, but the timing coincided with the beginning of the Chinese Lunar Festival or New Year when hundreds of millions of Chinese would be traveling throughout the country domestically, and with the tens of millions of Chinese celebrating this festival throughout the world. The Chinese government was faced

with having to make immediate and drastic decisions to control and contain the spread of the epidemic. This epidemic was not the first of its kind with first outbreak of SARS-CoV-1, which also originated in China, in 2002. During this epidemic (2002 to 2004), around 8,098 people from 29 countries and territories were infected which resulted in at least 774 deaths worldwide.^{34 35} Lessons learned from the previous coronavirus epidemic was the potential nature of the spread through human-to-human transmissions. The oncoming Lunar Festivities would create disastrous havoc nationwide, as well as globally through tourism. China's population numbers coupled with the expanse of its geographical borders create real challenges to prevent and contain the infection surge and spread. To see in perspective, China's population of around 1,400 million was about 90% of the combined population for all of Europe, and North and South Americas.³⁶ This created the urgency to take immediate steps to close all borders both within China, as well as with the rest of the world. There would be no tolerance for any protests or demonstrations against the government's drastic and restrictive preventive control decision.

As a nation with a deep-rooted political culture of authoritarian rule, China was able to consider, plan and execute this national travel restrictions and border closures immediately without hesitation or fear of social resistance from the general public. The same generation of the general public who experienced the previous SAR-Cov-1 epidemic over 15 years earlier, understood the seriousness of the situation and were receptive to government policy and the imposition of its various decrees. This act by the government, and the nature of the response from the general public, was a typical demonstration of the 'political tolerance' culture in China, which continued throughout the Covid-19 pandemic. In fact, it was probably mainly due to China's inter-action between political culture and social culture that the Xi Jinping government was able to launch and continue to maintain the "zero policy" for three years during 2020 – 2022. This culture of political protests and demonstrations restraint allowed the Chinese government to enforce and impose its draconian policy with continuous quarantines, lockdowns, closures, and travel restrictions both within and outside the nation.

Interpreting Hofstede's Indulgence versus Restraint dimension in China and its handling of the Covid-19 pandemic crisis.

Hofstede's Indulgence versus Restraint dimension measures the extent to which society grants or restricts human freedoms and the ability to enjoy leisurely life. A high score in indulgence indicates a society that values and enjoys happiness and leisure, as well as the exercise of freedoms to achieve them. Conversely, a low score indicates a cultural behaviour of restraint imposed by either society or natural elements beyond society's control. Societies with a culture of restraint have the tendency to follows strict social norms and regulated lifestyles which control desires and emotions. With a low score of 24 in this dimension, China's political culture and the corresponding social culture would be

³⁴ "How SARS terrified the world in 2003, infecting more than 8,000 people and killing 774". Business Insider. 20 February 2020. Archived from the original on 2 March 2020. Retrieved 2 March 2020.

³⁵ CDC SARS Basics Fact Sheet. <https://www.cdc.gov/sars/about/fs-sars.html>

³⁶ Worldometer. <https://www.worldometers.info/world-population/>

considered as predominantly “restrained”. In this instance and relative to the Covid-19 pandemic, it means restrictions on freedom of speech to protest or demonstrate against government directives and mandates. The Chinese general public would follow government instructions obediently as a matter of course.

It cannot be said that the majority of public response would consider their obedience to be under duress, but a necessity given the death-threatening circumstances. This is underscored also by the recognition that healthcare systems and facilities were initially by far inadequate to the needs brought about by the pandemic. Also, most readily agreed that full community collection cooperation was critical to stem the infection spread, which means the power and authority of the government were necessary to enforce total conformity by the general public. A culture of political restraint was essential in a nation with a population of over 1.3 billion. To get a better perspective, a 1% death rate in China would be about 13 million people, exceeding the total population of Sweden, or the combined populations of Denmark and Norway.

The only break in this strong-power grip on control only effectively emerged in November 2022, with unique public protests and demonstrations throughout the nation, but mainly focused in the larger cities with high economic value to the nation. The government’s response was also unique in recognizing the rationale for these demonstrations in a more positive perspective, and alleviating many impositions accordingly which allowed more freedom of movement for the general public. On a prima facie basis, it would seem that the Covid-19 pandemic had achieved something not previously seen or experienced in China. Over time, it is not unimaginable that China’s score for this dimension could climb to a meaningful higher level than the current 24 index.

One ‘ice-breaking’, if not historical development in China’s politics during this Covid-19 pandemic emerged in November 2022 following the Communist Party Congress in the previous month. This was when the daring and extremely rare public demonstrations against government policies and actions in enforcing the “zero policy rule” occurred, beginning in Shanghai, and soon spreading out to other cities including Beijing. They were soon joined by students in various universities with protesting posters on display, not to mention ‘cyber demonstrations’ on social media across the country. Needless to say, many held their breath expecting a repeat of the Tiananmen Square bloodshed. In fact, a very unexpected and opposite reaction and response took place. Not only was the government tolerant of these demonstrations, but also responded favorably, i.e. subtly pulling back on the ‘zero tolerance policy’ and doing away with the stringent controls and lockdowns. This was carried out subtly without any fanfare or official announcements to demonstrate that the government was ‘pulling back’.

For China observers, this move, subtle as it may have been, was a significant milestone in China’s political culture adjustment or transformation to globalisation. This ‘ice-breaking’ event could very well turn out to be the beginning of a more liberal attitude to traditional authoritarian rule. The ability to demonstrate and participate in public protests could be a positive move in this direction. However, this does not mean free speech or unrestrained demonstrations are just around-the-corner. There is

still a long way to go. However, the Covid-19 protests meant that with rationale and justification, such protests and demonstrations could be tolerated.

Community collectivism is the second most important social-cultural dimension of the Chinese in combatting the Covid-19 pandemic. Community collectivism is also one of the fundamental pillars of the Chinese culture where inter-dependence and reliance on the community is a way of life. This again is not uniquely in China but is also one of the primary roots of most Asian cultures. Therefore taking preventive actions, such as social distancing and masking to protect the community against spreading the infection is considered a given responsibility for each community member. This is likened to practicing community social responsibility and to be seen as not following this practice would be considered 'shameful'. Consequently, there was real national unity, cooperation, and participation in the nationwide practice of social distancing, the wearing of masks in public, and following appropriate sanitary practices to avoid spreading the coronavirus to others in the community.

Interpreting Hofstede's Collectivist dimension with relevance to China, and its handling of the Covid-19 pandemic crisis.

China registers a high index in collectivism with a score of 80 which classifies the nation as a collectivist social culture where people think and act for the best interests of the collective or group rather than for the individual self.

Although Hofstede uses the term "collectivist or collectivism", within the framework for this perspective relating to the Covid-19 pandemic, it is probably more precise to adopt the term community collectivism. The term Collective may have limited connotation and could be interpreted to be a grouping, association, or organization of people with common goals, specific characteristics, or endeavors which are common to organisations, clubs, and associations. By adopting the term community collective, the focus is on the community as a people, based more on geographical status without any selective preference in terms of mutuality of interests or benefits. This terminology underscores the national responses to the Covid-19 pandemic. Therefore social order and behaviour leading to community collective benefits and well-being are a priority and establish the guidelines for community collective cultural behavior and values. Whatever endangers the community collective is to be avoided, since it is the cultural responsibility of everyone to ensure the well-being of the community collective. This covers all community collective circles, from family to communities, and the national.

The uniform and deep-rooted community collective cultural values respond quickly, efficiently, and effectively to government mandates and create behavioural conformity for the community/herd survival. This group would be more willing to adapt or undergo behavioural change if the end result leads to the community collective wellbeing and safety. Consequently, the Chinese government's strategies and actions in addressing the Covid-19 pandemic crisis would generally rely on the deep-rooted community collective culture to bring about the well-being of the population through unified

cooperation and participation. The essence of the “zero policy” is built around this community collective culture, while its imposition, enforcement, and abidance as the national primary policy is founded on the high power distance culture.

Interpreting Hofstede’s Pragmatic/Long-term orientation vs Normative/Short-term orientation dimension in China and to its handling of the Covid-19 pandemic crisis.

Hofstede gives China a score of 87 in this dimension indicating that it has a pragmatic/long-term orientation culture. Therefore as such, the social culture in China, would be able to adapt their behavioural patterns easily to changing conditions and environments, such as the Covid-19 pandemic. This would result in a strong propensity for resilience and perseverance in achieving necessary results. A high index in this dimension means a culture that sees life from a long-term perspective, accepting that circumstances and situations can and will change, and being willing to adapt accordingly. This is considered “pragmatic”, where flexibility and change are considered rational, and logical in response to changing situations, environments, or circumstances. This culture would have the ability for instituting appropriate behavioral change and to adapt to even uncertain or unstable circumstances. This group of pragmatic, long-term oriented cultures would quickly adapt for survival, through attitudinal and behavioral adjustments.

China, or rather the Chinese people under this dimension would have a pragmatic perspective of the Covid-19 pandemic with flexible behavioural adjustments if deemed necessary. The focus is therefore on the willingness, in principle and practice, of both the government and the general public to attitudinal and behavioural change and adaptability. This means government policies and strategies in crisis management related to the Covid-19 pandemic response to align its powers and authority to the “new normal” environment including imposing a new way of life in response to the continued spread and mutations of the coronavirus infections and transmission traits. Correspondingly, it means that the general public would also adjust their behavioural patterns and daily life routines accordingly. Consequently, this pragmatic outlook also reflects a long-term oriented cultural perspective and thereby would be more willing to accept and adapt to undergoing quarantines, community lockdowns, travel restrictions, and social distancing protocols such as wearing masks and avoiding close inter-personal interactions and connectivity.

Chapter 7

THAILAND: FIRST CASUALTY FROM CHINA: SURVIVAL AND RECOVERY THROUGH RESILIENCE

A. Birth of the nation and roots of her political culture

The Kingdom of Thailand is a constitutional monarchy following a bloodless civil revolution in 1932 by a group made up of members of the royal family, intellectual elites, and the military which ended the absolute monarchy which existed since the birth of the nation in 1238. From 1238 to 1932, a period of almost 700 years, Thailand was ruled by absolute monarchies (authoritarian rule) under four kingdoms and their respective dynasties. The year 2022 marks the 90th year of constitutional monarchy which represents 11.5% of the nation's timeline.

Modern-day Thailand evolved from and through four kingdoms with each building on and expanding the previous and with its series of dynasties, namely,

- The Sukhothai Kingdom Era – the Period of Territorial Expansion and overthrowing parts of the Khmer Empire (1238–1368)
- The Ayutthaya Kingdom Era – the Golden Era of Internationalisation through International Trade and Diplomatic Relations, Nation building and Economic Growth (1350–1767)
- The Thonburi Kingdom Era – the Era of National Reclamation and Consolidation after the sack and burning of the Ayutthaya Kingdom by the Burmese (1768–1782), and
- The Rattanakosin Kingdom Era – the current Era of National Development, Industrial and Technical Modernisation, and Globalisation (1782–present)

In 1238, the Tais under the Khmer Empire in Southeast Asia revolted and establish the Kingdom of Sukhothai, meaning the 'Dawn of Happiness', and is regarded as the foundation and beginning of the Thai nation. To identify themselves as the Tais race who are free people, as opposed to the other 'Tais' who were still under the Khmer rule, these people of the Kingdom of Sukhothai called themselves "Thais" meaning "free". Thailand means the "Land of the Free". The establishment of the Sukhothai kingdom was due to two Tai lords, Pho Khun Bang Klang Hao and Pho Khun Pha Mueang, who jointly led battles against the Khmer Empire's ruling governor of Sukhothai. The two Tai lords were addressed as "Pho" (pronounced 'paw') which means "father" in Tai, and "Khun", was a Thai title for a ruler of a fortified town and its surrounding villages. Pho Khun Bang Klang Hao became the first Tai king and founder of the first Thai dynasty in Thailand under Si Inthrahit.

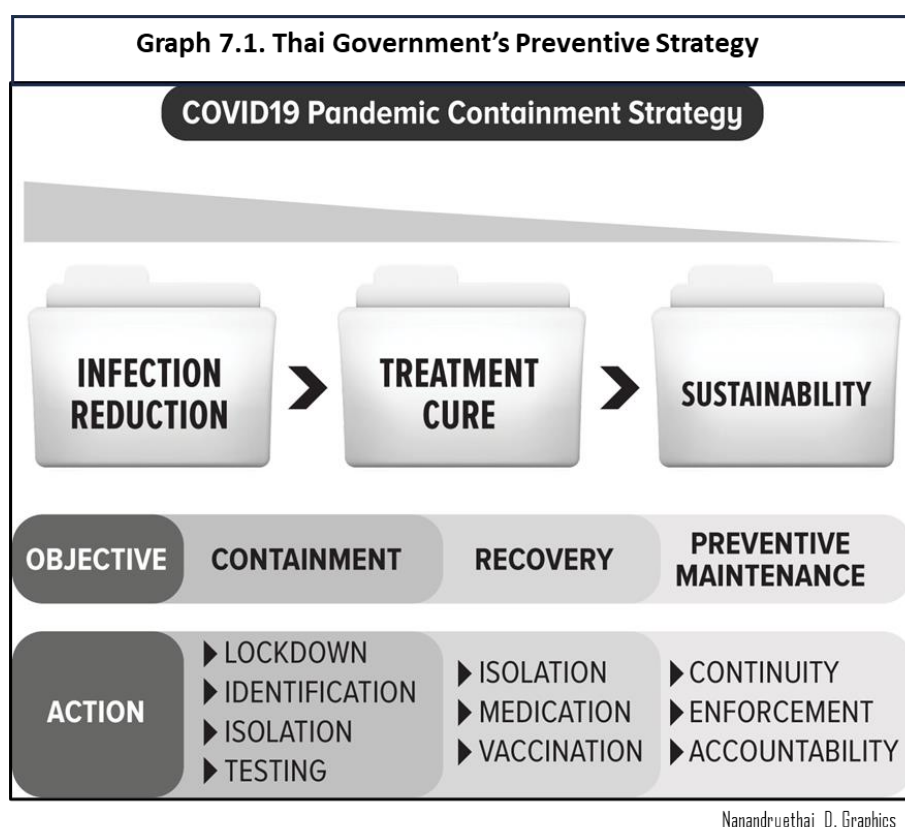
Both Pho Khun Bang Klang Hao and Pho Khun Pha Mueang established the “DNA” for both the Thai social - culture and political – culture built on the principles of freedom, and the paternal- patriarchal benevolent rule, even under absolute monarchy and authoritarian rule. Throughout the almost 800 years timeline of Thailand, this ruler-leadership culture, continues to pervade and influenced all subsequent Thai monarchs under all the subsequent dynasties and kingdoms, namely Ayuthaya, Thonburi, and Rattanakosin, the current dynasty. The fact that Thailand moved from absolute to constitutional monarchy in 1932 has not changed this ‘mandate for Thai rulers in the role of the benevolent paternal monarch’. This was demonstrated under the benevolent rule of King Bhumibol Adulyadej the Great (Rama IX) which was well recognized globally. This mandate continues under the current reign of King Maha Vajiralongkorn Bodindradebayavarangkun (Rama X).

However, although there is no expectation that prime ministers would embrace this deep-rooted cultural heritage since their rule is temporary several prime ministers have demonstrated some level of benevolent leadership for the people. Nevertheless, the Covid-19 pandemic and the repercussions on both the social and economic well-being of the Thais have created both challenges and opportunities for the display of benevolent rule and leadership for both Prime Minister General Prayuth Chan-ocha and His Majesty King Rama X. Even though King Rama X is a constitutional monarchy without political-administrative power, the role of the ‘benevolence patriarch’ remains with him.

B. Key government responses timeline to the Covid-19 outbreak

From the beginning of the Covid-19 pandemic in January until December 28, 2020, which is time-lined as the ‘first wave’ the Thai government was aggressive and proactive in its strategic responses and following the non-pharmaceutical strategy used by the Chinese government in Wuhan and throughout China. Therefore when it was announced about the SARS – Cov 2 outbreak in China the government took immediate steps to control the entry of people, and with them the virus, into the country. Thailand had had previous experience with the SARS – Cov1 during 2002 – 2003 and was putting into effect the lessons learned. The probability of importing the coronavirus from China and the neighbouring countries was high since Thailand was a popular tourist destination, especially in China. For the past 4 years before the outbreak, tourism contributed an average of about 20% of Thailand’s GDP making it one of the most important sectors of the Thai economic structure. Tourism alone impacts the full breadth and width of the Thai economy through her integrated supply-chain, from agriculture (food and beverages), industry (processed foods and drinks, souvenir products, and hospitality-related machinery, and equipment), commerce (department stores, shops, and commercial centres), to services (hotels, restaurants, and food outlets (including the “street food markets”), mass transport systems (planes, trains, and buses), banking services, hospitals, and medical centres, and tourists attraction sites, etc). Tourism may represent about 20% of Thailand’s GDP, but in terms of the social – economy, tourism impacts the largest segment of the Thai population who are all the stakeholders in the tourism sector. For the Thai government, tourism is the priority economic segment that must be protected. At the same time, tourism was also the source of the greatest threat of importing the coronavirus into the country.

In 2019, the year of the SARS – Cov-2 outbreak Thailand’s tourist entries were almost 40 million visitors. From the Thai perspective, therefore, it was not a case of “if” but more like “when” the virus would enter Thailand and most likely from Chinese tourists. For the past couple of years, Chinese tourists represented about 26% of the annual total or averaging 10.5 million tourists (about the total population of Sweden). These would most likely include visitors from Wuhan City as well as the Hubei province. Relying on her previous experience with SAR -Cov-1 and MERS, Thailand did not need to wait for any guidelines or recommendations from the World Health Organization (WHO). The Thai government’s containment strategy was therefore also focused to protect its lucrative tourism industry not only because of its high contribution to the national economy and involving many industrial, commercial and services sectors, but also because it employs the broadest spectrum of the nation’s labour force at all levels, i.e. from street food vendors to five star hotel hospitality staffs. Focus was on sustainable containment of the Covid-19 pandemic as indicated in Graph 7.1. below.



The timeline for government responses and actions during the first year of the Covid-19 pandemic (2020) was as follows:

- January 3, 2020**, the Ministry of Public Health activated the Emergency Operations Centre and instructed the authorities responsible for the Suvarnabhumi International Airport (Bangkok main airport) to establish special screening points at arrival gates to detect the newly emerged disease referred to at the time as ‘mysterious pneumonia’. Passengers with

fever were flagged, isolated, and sent to a state medical facility for quarantine and observation.

- **January 8, 2020**, the first case was detected at the Suvarnabhumi International Airport and was transferred to the Bamrasnaradura Institute of Infectious Diseases for examination and testing. A respiratory specimen was sent to the Chulalongkorn Hospital laboratory for analysis, where it was identified as a bat SARS-like coronavirus. After receiving confirmation from Wuhan University that this was the same virus circulating there, Thailand announced that the first confirmed case outside of Wuhan and China had arrived in Thailand on January 13, 2020. This was the first case of the transfer of the coronavirus outside of China. The government immediately ordered the cancellations of all flights to and from Wuhan.
- **February 4, 2020**, due to cancellations of flights to and from Wuhan, the government sent a special government charter flight, by Thai AirAsia, to bring repatriate the 138 stranded Thais in Wuhan City. This special chartered flight did not fly into the Bangkok Airport but flew straight into the navy airbase where the navy established a temporary state quarantine facility (SQF). All passengers were quarantined there for 14 days for observation, testing, and medical care.
- Following this, and given the likelihood of more similar cases for the repatriation of stranded Thais or returning from other parts of the world, several additional state quarantine facilities (SQF) were established in various military (army and navy) barracks suitable for isolation and care of infectious disease.
- The government announced compulsory quarantine for all incoming travellers, both Thais, and foreigners. For incoming tourists, the government has also allowed Alternative State Quarantine sites (ASQ), such as hotels, guest houses, and resorts which have been approved and certified by the government by meeting all the Covid-19 quarantine conditions and facilities, including isolation, healthcare, and testing facilities capability. Recently, golf courses with residential units (bungalows and flatted-types) were also included as quarantine sites.
- As the number of confirmed cases increased from 2 digits to 3 digits at the beginning of March 2020, the government declared all public facilities and businesses to close to limit social interaction and population movements.
- This was quickly followed, on March 5th with travel restrictions for all outbounds from Thailand and on March 9th. all inbounds from abroad were restricted except those with appropriate medical certificates.

- **March 11th. 2020**, about three months after the public announcement by the Chinese government of the new coronavirus outbreak, Dr. Tedros Adhanom Ghebreyesus, the WHO director-general declared Covid-19 to be a global pandemic.¹ On this day, the global coronavirus had already spread to 114 countries with 118,319 confirmed infection cases and 4,292 deaths. Of this total sum, 80,955 confirmed cases (68%) and 3,162 deaths (74%) were in China. Of these figures, Thailand had 59 confirmed cases and one death.
- **March 18, 2020**, the government announced the closure of schools and universities. Although some were approved for reopening in July, the majority remained closed and were only allowed to reopen again in August. However, they were all closed again in December after the second wave outbreak occurred in the southern Greater Bangkok area of Samut Prakan province.
- **March 26, 2020**, since the numbers continued to increase, the government needed to be proactive and somewhat autocratic in initiating emergency crisis management laws, edicts, and restrictions, such as in declaring closures of workplace establishments, schools and universities, entertainment venues, along with, curfews, isolations and lockdowns.

The Prime Minister declared a State of Emergency in Thailand which gave the government special legal powers as well as authorizing certain government agencies to enforce specific actions necessary to reduce the spreading of the coronavirus as well as launch various emergency healthcare responses to bring it under control.

The declaration and initiation of the Emergency status made such acts legal under the Constitution and in accordance with the existing Emergency Decree on Public Administration in Emergency Situation of the Buddhist Era 2548 (2005) which authorizes and empowers the government to take necessary actions for the protection and welfare of the country and her people. Key highlights of the Emergency Act are as follows (extracted as relevant to the Copvioid-19 pandemic):

Section 4 “Emergency situation” means a situation, which affects or may affect the public order of the people or endangers the security of the State the safety of the people, the normal living of the people, the protection of rights, liberties and public order or the public interest, or the aversion or remedy of damages arising from urgent and serious public calamity.

¹ <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic>

<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

Section 5. *In the event of the occurrence of an emergency situation and the Prime Minister considers that it is appropriate to use the force of administrative officials or police officers, civil officials, or military officers to jointly provide assistance, prevent, remedy, suppress, withhold the emergency situation, rehabilitation or provide assistance to the people, the Prime Minister upon the approval of the Council of Ministers is empowered to declare an emergency situation applicable to the whole Kingdom or in some area or locality as necessary for the situation..... ..The declaration of emergency situation under paragraph one shall be in force for the duration prescribed by the Prime Minister, but shall not exceed three months from the date of declaration. In the case where it is necessary to extend such a period, the Prime Minister upon the approval of the Council of Ministers shall have the power to declare the extension of duration of enforcement provided that each extension shall not exceed three months.*

Section 7. *In the case of necessity, the Council of Ministers may set up an ad hoc Special Task Force to provisionally exercise functions under this Emergency Decree until the Declaration of Emergency Situation has been annulled.*

Immediately following the announcement of the Emergency status, the public was requested to remain inside their homes and to limit all social contacts. Workers in Bangkok are requested not to travel to their hometowns in other provinces to stop the spread of the infection to their families. The National Communicable Disease Committee also asked all provincial Governors to implement screening, case finding and tracking, and non-pharmaceutical disease prevention measures at district and sub-district levels in each province. Combined with strict social distancing measures, these activities are the best tools currently available to combat the pandemic.²

- **March 27, 2020**, following the declaration and initiation of the Emergency status decree, the government established the Centre for COVID-19 Situation Administration (CCSA) as the principal central coordinating agency for the crisis management of the Covid-19 pandemic. Authority and responsibilities of the CCSA are to oversee the policy, strategy, and execution of acts for the management, control, and curtailment of the Covid-19 pandemic, which can be highlighted as follows:
- Emergency Operation Centre for Medical and Public Health Issues Relating to the Communicable Disease COVID-19,
- Operation Centre for measures on the protection and assistance of the public,
- Operation Centre for the distribution of masks and medical supplies to the public,
- Operation Centre for the control of goods, and materials

² https://www.who.int/docs/default-source/searo/thailand/2020-03-20-tha-sitrep-27-covid-19-final.pdf?sfvrsn=313ae4c_0

- Operation Centre for measures on the movements of people into and departure from the Kingdom, and the protection of Thai nationals abroad,
- Operation Centre for telecommunications and online social media,
- Operation Centre for remedying the emergency situation on security,
- Operation Centre for information on measures to remedy the communicable disease COVID-19 situation.

The Prime Minister is the top administrator of the CCSA. The administration of the CCSA includes the Permanent Secretaries³ of all the relevant Ministries, namely the Prime Minister's Office, Ministry of Interior, Ministry of Public Health, Ministry of Commerce, Ministry of Foreign Affairs, Ministry of Digital Economy, and the National Security Council, and the Ministry of Défense through the Supreme Commander of the Armed Forces. This was with the aim to maximize the utilization of existing human and material resources, as well as effectively harness the processes and procedures of all the Ministries involved.

The CCSA makes daily updates and progress reports on infections, and deaths due to Covid-19, along with all related government policies, strategies, and actions including laws, regulations, and proclamations for abidance of the people. Communications are by daily television announcements, press releases, and updates on various public websites. Official government TV announcements were also made in English for the foreign community by a representative from the Ministry of Foreign Affairs. Thailand also had several English-language TV news channels and newspapers which were the key information medium for the foreign community. The various foreign Chambers of Commerce, Associations, and magazines in Thailand also were key channels for the dissemination of relevant information on government policies, announcements, and actions.

- **April 3, 2020**, the government declared a national curfew. All residents are instructed to remain inside their homes between the hours of 10 pm and 4 am.⁴
- Since the beginning of the outbreak, various types of protective face masks were distributed freely by the government to the people. By April, about 43 million pieces of cloth masks had already been distributed. The Government requested that everyone wear a cloth mask whenever outside their home.

³ The Permanent Secretary is the highest executive civil servant officer in the Ministry.

⁴ https://www.who.int/docs/default-source/searo/thailand/2020-04-02-tha-sitrep-40-covid19-final.pdf?sfvrsn=b6f58bed_0



Deputy Prime Minister and Minister of Public Health Anutin Charnvirakul promoting the wearing of masks in public and distributes masks to passengers at the Siam Square BTS Station. (Photo source: Bangkok Post, February 7, 2020.)

(It should be noted with regards to the wearing of masks, that the WHO did not recommend the wearing of masks while in public until June 5, 2020. This was almost three months after it had declared Covid-19 to be a 'pandemic' on March 11, 2020. It was only after the global confirmed infections had reached 6,535,354 cases with 387,155 deaths (of which the Americas had 3,084,517 cases (47%) and 172,276 deaths, and Europe had 2,230,706 cases (34%) and 182,165 deaths) that the wearing of masks in public was advised by the WHO. Thailand had already taken the initiative in early February for the enforcement of wearing masks in public. This resulted in 3,102 confirmed cases and 58 deaths at the of WHO's announcement. Had Thailand delayed enforcing the wearing of masks another four months until June the figures would have been significantly different.)

- During this period, all sports events were cancelled, sports facilities closed, entertainment venues closed, schools and universities closed, and department stores and Malls closed. Exceptions were supermarkets, food stores, convenient stores, medical centres and clinics, hospitals, pharmacists, etc.
- Mass transit systems were still operating, but with social distancing, wearing of masks, and sanitization of hands strictly enforced at all stations and on board.
- The Department of Health Service Support organized about 1,040,000 Village Health Volunteers (VHVs) across the country and an additional 15,000 public health volunteers in Bangkok. VHVs conduct home visits, provide health education, deliver medicines, and make reports to public health authorities. VHVs have been provided with surgical and cloth masks,

face shields, biohazard bags, and alcohol gel for free distribution. Between March 2 and April 11, 2020, VHV's visited 11.3 million households as well as to support case finding efforts.

- **October 12, 2020**, Deputy Prime Minister Anutin Charnvirakul who was also the Minister of Public Health, signed a Letter of Intent (LoI) for the local manufacturing and supply of the University of Oxford's COVID-19 vaccine in Thailand as well as for supply throughout the ASEAN region.⁵ Under this LOI, it was agreed to establish large-scale manufacturing at Siam Bioscience's facility, a Thai registered company, with AstraZeneca technical transfer to provide vaccines at no profit during the pandemic.
- This was followed on November 27, 2020, with the signing of an advance agreement with AstraZeneca to secure supply of its Covid-19 vaccine and for local production with technology from the British-Swedish firm.⁶ The number of doses to be supplied to Thailand was not disclosed. But Prime Minister Prayut Chan-o-cha said on Thursday that the contract was for the purchase of 26 million doses, enough for 13 million people, as each person needs two shots. (Note: Subsequent agreements and commitments raised this to 61 million doses for Thailand. One-third of the 180 million doses manufacturing capacity (15 million doses/month) at Siam Bioscience has been reserved for use in Thailand, based on the country's order of 61 million doses to be delivered in full by end of 2021. Production and delivery started in June 2021 due to delays meaning that full delivery would be carried over into 2022.)



⁵ <https://pr.moph.go.th/?url=pr/detail/2/04/148434/>

⁶ Bangkok Post, 27 Nov 2020

National Vaccine Institute director Nakorn Prem Sri (left), joins Disease Control Department director-general Opas Kankawinphong (centre) and AstraZeneca Thailand president James Teak at a signing ceremony for the Covid-19 vaccine at Government House on Friday, with Prime Minister Prayut Chan-o-cha and Deputy Prime Minister and Minister of Public Health, standing behind as witnesses. (Government House photo).

During the first year of the Covid-19 pandemic, the total accumulated 2020 confirmed cases in Thailand was 6,020 which was equivalent to 86 cases per 1 million population, and a total of 60 deaths, representing 0.8 death per 1 million population. For a better perspective, compare Thailand's figures with her neighbours in the ASEAN region as indicated in Table. 7.1. below

| Table. 7.1. Cases and death figures for selected ASEAN region | | | | | |
|---|--|-------------|---------|--------------|---------|
| Country | | Total Cases | per/Mil | Total Deaths | per/Mil |
| THAILAND | | 6020 | 86 | 60 | 0.8 |
| INDONESIA | | 706837 | 2584 | 20994 | 77 |
| MALAYSIA | | 103900 | 3210 | 451 | 14 |
| THE PHILIPPINES | | 469005 | 4280 | 9067 | 83 |
| SINGAPORE | | 58519 | 10003 | 29 | 5 |
| Source: WHO Situation Report . December 27, 2020 | | | | | |

Throughout the Covid-19 pandemic, the Thai government maintained its Emergency Status responses with continued enforcement of social distancing, wearing of masks in public and frequent sanitization of hands. This was accompanied by frequent curfews, and lockdowns ranging from total provinces, to only selected cities, towns, and districts based on the level and density of infection occurrences. At some stage, inter-provincial travel was restricted and controlled. Based on the level of new cases, the country was divided into three zones by the Centre for Covid-19 Situation Administration (CCSA) with stipulations on the relevant restrictions and controls.

C. Government actions to alleviate negative socio-economic impacts (financial hand-outs)

The government's financial support hand-out programs are in two categories with the greater amount of funds allocated for the direct benefit of the general public and focusing on the middle and lower income groups, in the form of cash handouts and subsidies. There were also various stimulus packages for the small and medium business sector. This section outlines the various programs launched by the government but mainly in the form of direct to people-oriented packages (money hand-outs) as described below as follows:

i. To vitalize tourism : Tourism is the most important 'cash cow' for the Thai economy, impacting the largest population number and across multi-economic segments. Revitalising the tourism industry will create the widest spread of benefits sharing. However, instead of distributing stimulus packages to the business enterprises in this sector, the government did it the 'Thai-way' and gave cash and credit handouts directly to the people, and let them decide where to travel in Thailand. It means the

business establishments have to compete and earn the stimulus packages by attracting customers. On July 9, 2020, the government launched the “We travel together” (rao tiew duay kan) program where the government subsidized 40% of the associated tourism costs for each item consisting of, i) room accommodation (with a cap at US\$ 94.0/night and a maximum of total 5 nights. These can be split into 2-3 separate trips), ii) transportation costs (plane, train, bus with a cap at US\$ 63 per trip/person). In addition, there is a daily food subsidy with a quota of US\$. 18 per room night booking (at any participating food and drinks outlets, stalls, restaurants, etc). Key conditions are that the registered recipient must be i) a Thai national, ii) an adult over 18 years old, and iii) tourist visits must be made outside their own province and only in Thailand (i.e. Bangkokians visit Chiang Mai. Chiang Mai residents visit Phuket, etc.) The object is to encourage Thais to travel within the country and to promote tourism nationwide. The remaining 60% of the costs related to tourism travel are borne by the traveller.

During 2020 – 2021, about 5,500,000 people registered for the program, and the government set aside almost US\$ 900 million in subsidized hand-outs⁷. In addition to the number of travellers benefiting from this program, hundreds of thousands of businesses, hotels, shops, food stalls, etc who registered to be part of the local tourism supply chain⁸ benefited, along with the millions of people employed in the Thai tourism sector.

ii. To revitalize the local market economy: The government launched the “50:50 “subsidy scheme (you pay 50%: the government pays 50%) to help the local mass markets such as fresh food markets, week-end markets, street food, fast food stalls, restaurants, shops, street vendors, etc by promoting and subsidizing buyers to these mass markets. The 50:50 subsidy program covers food products (fruits, meats, vegetables, condiments, etc. either raw or cooked), drinks, and general household products and goods. Payments are made through a special government-controlled application using the QR system whereby half is paid from the person’s account and the remaining half is paid from the government’s accounts. Each person is given a quota of about US\$ 109 for use during a fixed period with a cap of US\$ 4.6/day so as to promote the widespread distribution of revenues at different outlets and over a longer period of time.

During 2020 – 2021 total registered beneficiaries under this scheme were about 31 million people or about 44% of the total Thai population,⁹ and representing about 80.5% of the Thai labour force in 2020¹⁰ .

iii. Revitalise the middle and high-end segment: To help stimulate and revitalize the middle and higher-end market the government launched a stimulus package targeting the middle and high-end income group to spend more with the program “ The more you spend the more refund you get back

⁷ Bangkok Post July 19, 2020. Bangkok Post March 23, 2021

⁸ Bangkok Post July 19, 2020

⁹ THAI PBS WORLD CHANNEL : June 14 2021

¹⁰ The World Bank data, <https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?locations=TH>

" (Ying chai Ying dai) scheme. With spending ranging from US\$ 1,400 to 2,100, one would get a 10 - 15% refund¹¹ through the scheme.

iv. Low-income financial support: In February 2021 in light of the 2nd wave of Covid-19 the government launched the "We Win" (Rao Chana) cash handout scheme targeting about 33.5 million people in the low-income group. The registered participant would receive US\$ 219 each split into 7 weekly installments of US\$ 31.2 through the Rao Chana application for tracking, recording, and operation. This sum is to be spent during the 7-week period which was later given an extension by another month for those not having fully utilized their funds. Recipients use this amount for buying food and essential goods, public transport (bus, train, underground, taxi, motorcycle taxi, and passenger van services, and rental costs. Payments are made through the QR scanning system.¹²

v. Employee Cash Pay-out: In August 2021 because of the forced partial lockdown of 29 provinces, including Bangkok, which affected part-time and pay-by-day workers, the government launched the cash hand-out scheme for each employee impacted to the sum of US\$ 78. This hand-out sum is repeatable in the event of an extension to the partial lockdown period.¹³

vi. Stimulus packages for the business sector. During 2020 – 2021 the government also launched several economic support and revitalization programs under several stimulus packages for the business sector, as described below:¹⁴

Phase One of the business stimulus package was approved by the government on March 10, 2020, with a budget of US\$ 3.03 Bil., was focused on supporting businesses in the form of financial and tax measures.

a) Financial measures such as, i) low interest loans capped at US\$ 606,060 per customer at 2% interest for a period of 2 years, ii) deferral of payment and interest reduction, and iii) credit line (at 3% for a period of 3 years) for continuing the work contract with labours.

b) Tax measures including reduction in withholding tax rates, deduction of 1.5 times interest expenses for SMEs, deduction of 3 times wage expenses for SMEs, and speedy VAT refunds for exporters of goods (15 days instead of the normal 30 days).

c) Other measures such as reducing contributions to the Social Security Fund by employers and employees, the reduction, deferment, or postponement of government agencies and state enterprises for payment of rental, government fees, service fees, or other payments by the business operators, and reductions in the electrical and water utility fees for businesses.

The Covid-19 pandemic not only created a crisis in terms of life and in terms of health, but also for the social and economic well-being of the Thais. The government had to confront and address the pandemic crisis on two fronts. First was the spread of the coronavirus disease with sickness and

¹¹ Bangkok Post May 7, 2021

¹² PR Thai Government Facebook February 5, 2021.

¹³ Bangkok Post August 3, 2021

¹⁴ Bank of Thailand Financial Policy Report, March 2020.

death, and the other was the collapse of social well-being due to the economic breakdown. In alleviating the latter and propping up the economic sustainability of the nation the government had to draw down on the national reserves as well as incur high debts to launch and finance the various economic schemes. Many of these relief and handout schemes were pioneering for the first time and untested

D. The Role of the armed forces

The military has been an essential part of Thailand's history from her birth almost 800 years ago through winning battles that laid the foundation for the establishment of the first Thai Kingdom of Sukhothai in 1238, along with every subsequent kingdoms and dynasties namely the Ayutthaya and Thonburi kingdoms and their respective dynasties up to the current Rattanakosin Kingdom and the Chakri dynasty of which the current monarch is King Maha Vajiralongkorn (Rama X). The military continues to play significant roles and functions in Thailand today.

As with most nations, in times of national or natural crisis, the armed forces (army, air force, and navy) have been an important source of emergency manpower and resources. The same is also for the case of the Covid-19 pandemic in Thailand. The Thai armed forces were asked by the government to assist in various manners of support in relation to the Covid-19 pandemic, such as

- Allocating military hospitals and health facilities in the different regions
- Building temporary emergency field hospitals in high-risk infected areas in different parts of Thailand with military manpower and resources such as beds, tents, and related equipment and facilities for healthcare and sanitation from military hospitals
- Using military planes to transport both people and materials around Thailand including those infected and needing urgent medical-care
- Setting-up emergency call centres to respond to calls for assistance from the public as well as give health advisories
- Assignment of military medical teams to assist civilian teams
- Visiting communities to distribute masks, and cleansing gels for sanitary control as well as food and necessary items during lockdowns
- In Bangkok, assisting the BMA at night time to help cleaning and sanitising public buildings and sites used by the public during the day such as train and bus stations, public toilets, streets and walkways, hospital and medical centre waiting areas, etc.

E. Policy consistency and new initiatives during the years 2021 – 2022

The Thai government continued its stringent policy regarding social distancing with a persistent emphasis on wearing masks in public, avoiding gatherings of large groups, and sanitization of hands. Even during 2021 with the initiation of vaccination roll-outs, these mandates were still enforced due to the slow and low delivery of vaccines from suppliers. Towards the latter half of 2021 when it was revealed by the vaccine developers that the initial protocols did not offer durable protection and that

subsequent additional “boosters” – within 4-5 months – would be required for all those already vaccinated the Government decided to continue with the same stringent conditions as during the non-pharmaceutical protocols launched in 2020. This policy was carried over into 2022 also.

i. Continued vigilance in controlling the Covid-19 pandemic

The government continued with the strategies launched in 2020 into 2021 focusing on treatment, tracking, and testing.

Internal travel controls were still in place and associated with the continuous monitoring and identification of high-risk infection areas in the country. For instance, on August 1, 2021, thirty provinces, representing almost half of the total for the nation, were declared high-risk red-zones. These provinces faced the highest enforcement of containment and restriction measures such as travel curbs (no inter-provincial border crossings, unless with approved reason, but tested and timeline recorded on all entry/exit roads by police), closures of Malls or department stores, or have restricted opening hours and conditions. Restaurants and various food and drinks outlets in malls were only allowed ‘take-home’ orders. Quarantines, home isolation, work from home, curfews, etc. continued. These provinces included Bangkok, as the city-province with the highest numbers of infections and deaths (although not with the highest infection rate to population ratio at this time). For the first time in recent history, Bangkokians are ‘persona non grata’ in the provinces. Cars bearing Bangkok license plates were looked at ‘suspiciously’.

BATTENING DOWN THE HATCHES

The Centre for Covid-19 Situation Administration (CCSA) yesterday announced new nationwide Covid-19 zoning.



Maximum controls with extra restrictions (29 provinces)

Bangkok, Kanchanaburi, Chon Buri, Chachoengsao, Tak, Nakhon Pathom, Nakhon Nayok, Nakhon Ratchasima, Narathiwat, Nonthaburi, Pathum Thani, Prachuap Khiri Khan, Prachin Buri, Pattani, Ayutthaya, Phetchaburi, Phetchabun, Yala, Rayong, Ratchaburi, Lop Buri, Songkhla, Sing Buri, Samut Prakan, Samut Songkhram, Samut Sakhon, Saraburi, Suphan Buri and Ang Thong.

Maximum controlled areas (37 provinces)

Kalasin, Kamphaeng Phet, Khon Kaen, Chanthaburi, Chai Nat, Chaiyaphum, Chumphon, Chiang Rai, Chiang Mai, Trang, Trat, Nakhon Si Thammarat, Nakhon Sawan, Buri Ram, Phatthalung, Phichit, Phitsanulok, Maha Sarakham, Yasothon, Ranong, Roi Et, Lampang, Lamphun, Loei, Si Sa Ket, Sakon Nakhon, Satun, Sa Kaeo, Sukhothai, Surin, Nong Khai, Nong Bua Lamphu, Uttaradit, Uthai Thani, Udon Thani, Ubon Ratchathani and Amnat Charoen

Controlled area (11 provinces)

Krabi, Nakhon Phanom, Nan, Bung Kan, Phayao, Phangnga, Phrae, Phuket, Mukdahan, Mae Hong Son and Surat Thani

WHAT YOU CAN AND CANNOT DO

Restrictions to contain the spread of Covid-19 in each zone

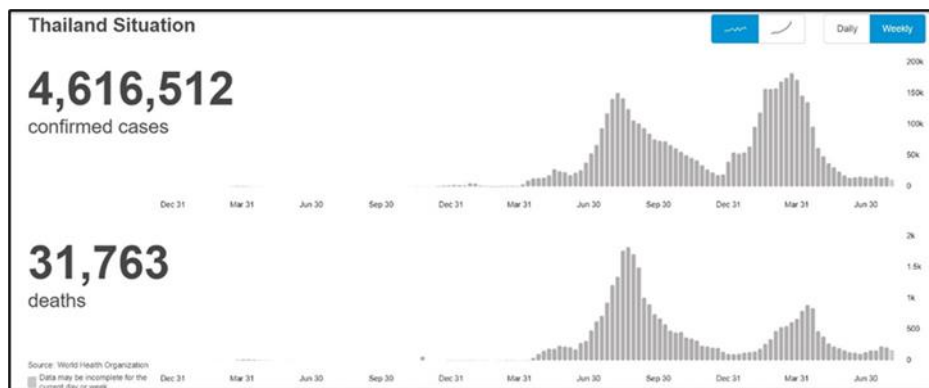
| Zone/ Activity | Travel | Activities | Restaurants | Shopping malls | Beauty parlours/ massage parlours/ beauty clinics | Educational establishments | Sports venues/ sports stadiums |
|-------------------------------------|---|---|---|--|---|--|--------------------------------|
| Maximum and strict controlled areas | Curfew 9pm-4 am / No public transportation across provinces | No public gatherings of more than 5 people | No dine-in services, take away only - open until 8 pm | Restaurants can open only for take away services - supermarkets and pharmacies can open until 8 pm | Closed | Cannot use venues for large gatherings | Closed |
| Maximum controlled areas | Establish checkpoints and screening for inter-provincial travel | No public gatherings of more than 20 people | Dine-in allowed until 11 pm, no alcohol to be served | Open for business as usual with restrictions on the number of people - no trade promotion activities | Open for business as usual | Venues can be used for teaching large groups of people, pending approval from the provincial disease control committee | Open until 9 pm |
| Controlled areas | No Travel restrictions | No public gatherings of more than 50 people | Dine-in allowed, open for business as usual | Open for business as usual, games centres and amusement parks closed | Open for business as usual | Open for teaching as usual under disease control measures determined by authorities | Open as usual |

Source: CCSA

BANGKOK POST GRAPHICS

Controls and restrictions on inbound and outbound travel continued at the beginning of the year which later relaxed for promoting and supporting the tourist industry back in Thailand being a vital economic foundation of the country. By mid- February 2021, after significant improvements in bringing down the infection level, the government began to ease some of the more stringent COVID-19 restrictions, allowing the reopening of schools in Bangkok and three other provinces that had been shut since New Year following the second wave of the coronavirus outbreak. However, the various controls, including lockdowns and isolation continued. Not only to contain the infections, but also in light of the planned reopening of tourism in the country which means both protection of the local people against imported infections as well as protecting tourists from bringing infections 'back home' to their place of origin, as this would damage the credibility of Thailand as a safe destination and disrupt Thailand's efforts to reboot her vital tourism industry.

However, despite the government's efforts as well as the widespread vaccination of the population, Thailand had 4,616,512 confirmed cases with 31,763 deaths, as reported by the WHO as of August 12, 2022. Of these figures, nearly all occurred during the 2021 – 2022 period as illustrated below



Because of the generally accepted high infectious element but low-risk in serious illness from the current Omicron variant the number of confirmed cases has been high compared to the previous year. However, continued concern has been focused on the relatively high level of deaths in Thailand, which has been abnormally high compared to the previous year also. Of particular concern is that the higher levels occurring during the availability and widespread rolling out of vaccinations, now in its 18th month in Thailand. As of mid- August 2022 about 74% of the Thai population had received complete vaccination protocols with a high number of senior citizens also having taken 3rd. and 4th. additional shots as “boosters”. During August 2022, the average daily death rate remained at 30 cases, significantly higher than the average daily mortality rates during the non-pharmaceutical period of the first year of the pandemic. The lack of definitive reliability of vaccines in preventing the spread of infections, and significant protection against serious illness has underlined the government's policy and controls to maintain high levels of social distancing protocols. The argument that most deaths were among those who have not been vaccinated may be plausible however, it should be also noted that less mortality occurred during 2020 when the whole country was not vaccinated. This would indicate the effectiveness of strict social distancing protocols, such as wearing masks and frequent sanitization of hands.

ii. Opening-up the country for tourism

Of course, the Thai government was always aware that the key, and the only viable economic option to “reboot” the economy, would be through the opening up of the country to tourism. The sooner – the better. Therefore a major pilot scheme to launch this opening-up of Thailand was the “Phuket Sandbox” project which was started on July 1st, 2021. This was followed by another popular island tourist destination, namely Koh Samui, and this project was referred to as the “Samui-Plus Sandbox”.

Terms and conditions for both were the same being based on the same principle. Key can be highlighted as follows:

- Entry into Thailand, as a visitor, tourist, returning Thai, or resident is only possible if all the health status tests, vaccinations, and previous stays conform with the terms and conditions stipulated for a certificate of entry.
- Point of foreign departure/origin (country of travel origin) must be included in the list of the approved country of origin for entry into the Kingdom.
- Must stay in an SHA (Safety and Health Administration) certified hotel and approved by the government for the duration. Minimum stay 7 nights in the first hotel, then can move but only to another SHA-certified hotel. Hotels must be planned and pro-paid booking.
- Each visitor must download a specified application for tracking during the first 14 days.
- All inbounds, foreigners, and returning Thais must stay in Phuket for 14 days, be regularly tested, and only if negative, can leave Phuket province for any other destination(s) in Thailand. Test every 6-7 days. Tests are at any hospital, with costs ranging from US\$ 78 – 125 depending on the hospital (state, private, clinic, etc.).
- Strict requirement for medical insurance coverage during the period of stay.
- International carriers with direct flights to Phuket are British Airways, Cathay Pacific, El Al, Emirates, Etihad Airways, Qatar, Singapore Airlines, and Thai International.
- On June 17, 2021, the Prime Minister made an announcement to set the goal of opening up Thailand to tourists and visitors in 120 days. Under this goal, visitors and tourists having had full doses of vaccine may enter without quarantine requirement. However, he was quick to add that this goal is subject to the continuing evaluating the dynamics of the coronavirus developments and containment.

In January 2022, Thailand announced the launch of the “1-Day Stay for Test & Go ” program for inbound tourists from 63 countries. This program was for fully vaccinated foreign travellers and returning Thais who can enter the country at any Thai international airport or approved land border without mandatory quarantine. The requirements were that they be fully vaccinated for more than 14 days before entering Thailand and must book a SHA+ Hotel for at least one night to undertake the RT PCR COVID test upon arrival and while waiting for the result. Tourists must be covered by a COVID-19 Insurance policy.

On May 1st. due to the success of the “Test & Go” program and the still very low level of imported infections due to the effective management of the controls put in place at entry points, the Thai government announced that the country was now fully open for international travellers from all countries. Inbound foreign tourism became easier as travellers no longer need to undergo test on arrival and wait for results at the hotel as previously. However, the requirements for both travellers and returning Thais to be fully vaccinated against the COVID-19 continued and would be allowed to enter Thailand without the need for quarantine. However, there is a requirement that the final dose was taken at least 14 days before entry into Thailand. On the other hand, Thai and foreign travellers

who are unvaccinated or not fully vaccinated are required to present proof of a pre-arrival negative RT-PCR test.

Since all Thai international airports are “open for business”, all airlines were encouraged to restart their flights.

In the first quarter of 2022, a total of 444,039 foreign tourists entered Thailand, according to the Tourism Authority of Thailand¹⁵. This was only about 4% compared to tourist entries for the same period prior to the Covid-19 outbreak in 2019 which was 10.79 million¹⁶. This was mainly due to the absence of tourists from China.

Due to the continued “zero tolerance” policy of its government, the tourist departures from China remain significantly lower than the pre-Covid-19 outbreak level. This also meant that the inflow of tourists from this traditionally major target group remained low and deterred the desirable take-off in this vital economic sector. Chinese tourism was mainly focused in the Asian region and Thailand remained one of the five most favourite destinations for Chinese travellers ranked fourth among the most preferred destinations following South Korea, Japan, and the US.¹⁷

To help fill this ‘gap’ Thailand is now aggressively promoting tourism from India. From July 1, 2022, Thailand has removed many of its travel restrictions and entry requirements for Indian citizens such as, not needing to show proof of Covid Insurance, and Indian citizens are again allowed to enter Thailand under the Visa on Arrival scheme with a restriction that Indian citizens can visit Thailand under this program for a maximum stay of 14 days. Indians obtaining the normal 60-day tourist visa through the Consular Office prior to departure can get the visa extended for additional 30 days.

- From July 1, 2022, a Thailand Pass application is no longer required. Citizens, including those from India, be able to enter the country one of two ways.

Vaccinated Travellers –do not need to complete any Covid tests before leaving their country. They will need to have a copy of their vaccination certificate with them. Children under 18 who are traveling with vaccinated parents do not need to complete any RT-PCR or Pro-ATK test before departing.

Unvaccinated Travellers – Before coming to Thailand, unvaccinated travellers will need to complete an RT-PCR or Professional Antigen (Pro-ATK) test through a clinic or medical professional. The test result must be issued within 72 hours before departing India. Children under 18 who are traveling with unvaccinated parents also need to complete a test.

iii. Rolling-out of Vaccinations

¹⁵ <https://www.huahintoday.com/thailand-news/tourist-arrivals-to-thailand-surge-in-2022-but-still-just-a-fraction-of-pre-covid-levels/>

¹⁶ <https://www.ttrweekly.com/site/2019/04/thailand-reports-q1-tourist-arrivals/>

¹⁷ <https://www.bangkokpost.com/thailand/general/2367618/chinese-rate-thailand-no-4-as-tourists-return>

- On February 24, 2021 the first batch of China's Sinovac of 200,000 doses was delivered to the Thai government through Deputy Prime Minister Anutin Charnvirakul, who is also the Minister of Public Health. (as of August 13, 2022, China has so far donated 50.85 million doses of Covid-19 vaccines to Thailand to help with its bid to build herd immunity.)¹⁸
- On February 28, 2021 after the receipt of China's 200,000 doses of the Sinovac vaccine, the government launched the official inoculation campaign with cabinet ministers, health, and medical officials being the first group to receive vaccinations. This batch would be distributed to the 13 high-risk provinces and will start injecting front-line health professionals and volunteers on this day.
- On May 27, 2021 the government and the Bangkok Metropolitan Authority (BMA) announced that Bangkok residents aged 18-59 years old without chronic illnesses can book their vaccination appointments starting on June 7, 2021, either by using the government's app, on the City Hall website, or to go in person to any convenience store namely 7-Eleven, Family Mart, Tops Daily, or mini Big C, and presenting their national ID card. To book an appointment, Bangkok residents who have participated in any of the government's stimulus schemes (e.g. We Travel Together, 50:50 or We Win (Rao Chana) use the 'Pao Tang' application as the main portal, can simply make their appointment using the said application.
- On June 7, 2021, Thailand launched the national vaccination campaign, which relied mainly on the AstraZeneca vaccine which is made locally under license and agreement and allocated one-third of production to Thailand and the remaining to other customers in the ASEAN region. It was already known at this time that due to delays in production, there would be shortages of supply. The Thai government had already started looking for other sources of the vaccines, i.e. from Moderna and Pfizer, both US brands, in addition to the already contracted supply of Sinovac from China.
- On July 16, 2021, due to the expected shortfall in the delivery of vaccines from AstraZeneca, the Department of Disease Control (DDC) signed a contract with Pfizer to purchase 20 million doses of their vaccines
- On July 23, 2021, the Government Pharmaceutical Organization (GPO) signed a deal with Moderna for the purchase of five million doses.
- On July 30, 2021, the US government's donation of 1.5 million doses arrived which were designated for the frontline medical personnel and expatriates living in Thailand. Further donations were announced by the US government which would bring the donation total to 2.5 million doses.
- Throughout 2021 and 2022, the government continued to promote, facilitate, and roll-out free vaccination and booster shots for the general public nationwide with AstraZeneca, Sinovac, Moderna, and Pfizer vaccines based on availability. These were administered through government hospitals, hospitals of the armed forces, public venues such as the new Bangkok Central railway station at Bang Sue, as well as numerous private sector sites offered by Malls and department stores.

¹⁸ The NATION, August 13, 2022. <https://www.nationthailand.com/in-focus/40010857>

Private hospitals also offer paid vaccinations to both clients and non-clients requiring special facilities and conveniences.

- As of August 13, 2022, a total of 74% of the Thai population had completed the initial protocol vaccinations with an additional 5% of the population still having to receive their second shot.¹⁹ These figures do not include the high number of senior citizens and some adults who had also received the 3rd. and 4th. shots as 'boosters'.

All the major department stores and malls have offered their sites and facilities to be used as vaccination centres. In Bangkok over 25 business venues such as department stores, supermarkets, hospitals, and business colleges have been screened and selected for status as official centres for vaccination by the Bangkok Metropolitan Authority (BMA) with approval from the Ministry of Public Health. All of them are in partnerships with either the BMA medical department or with private hospitals. All these vaccination centres were approved based on the ability to establish and maintain the high standards necessary for hygiene and sanitary environment, suitable utilities and facilities, and convenient access to transport networks. Also, they are all well-known venues to the general public who go there regularly during normal conditions.

¹⁹ WHO Thailand situation dashboard. <https://covid19.who.int/region/searo/country/th>



LOTUS'S



TRUE DIGITAL PARK



SIAM PARAGON



CENTRAL LARDPRAO



THAI CHAMBER OF COMMERCE UNIVERSITY



BIG C Supermarket



ASIATIQUE MALL



THE MALL BANGKAPI

iv. Development of Thai Covid-19 vaccines

The government financially supported Thailand's efforts to develop Covid-19 vaccines locally. Currently, various institutions are working on the development and testing of four Covid-19 vaccines which are planned to be ready for distribution by 2023.²⁰

Most prominent is the "Chula-Cov19" which is an mRNA vaccine being developed by Chulalongkorn University with over Baht 2.7 billion in funding from the Thai government. The third trial is scheduled for August 2023. Previous trials have met as well as exceeded the immunity levels of existing vaccines.

The Government Pharmacy Organisation is also developing the inactivated vaccine HXP-GPOVac with Baht. 434.5 million in government funding. It's currently undergoing phase 2 trials, with Phase 3 trials expected to get underway in the third quarter of 2023.

The third vaccine is the Baiya SARS-CoV-2 Vax based on a protein subunit of tobacco leaves with Baht. 1.5 billion in funding from the government. Tests are still being developed and undertaken, and if successful, would be the first plant-based vaccine in Asia.

The Covigen vaccine is the fourth which is a DNA vaccine administered by a jet injector without the use of a needle. It received Baht. 650 million government funding with phase three trials scheduled in 2023. If successful, it will be the first vaccine not administered via needle.

On approval by the Thai Food and Drugs Administration (TFDA) and supported by the Thai CDC, these vaccines would be manufactured for distribution in 2023.

F. Means and nature of government leadership communications to the public

Communication is probably the most fundamental and critical element in crisis management. Communication is not only about the channels of communication but more importantly the content of the communication so that that is relevantly informative and delivered in an easy-to-understand manner using language that is to fathom and make out by the general public. Under normal conditions, government announcements are generally formal, bureaucratic, and procedural-oriented. In times of crisis, timeliness and quick-to-understand communication are critical. This means that in addition to the communication distribution networks, the context of information should be focused on relevancy, lucidity, accuracy, and simplicity. The Thai target audience is not limited to only the educated but also to the rural population such as farmers, agricultural workers, factory workers, and localized service providers with varying levels of education who make up the larger portion of the population.

²⁰ <https://www.nationthailand.com/in-focus/40012680>. February 23, 2022. Maya Taylor, The Thaiger, February 24, 2022. <https://thethaiger.com/coronavirus/thailand-working-on-4-covid-19-vaccines-that-could-be-ready-by-2023>

The principle objective of government communication is not to just communicate but to ensure that the information is clearly understood and adopted for action by the general public. Therefore the level of success in government communication is not measured by only the spread of coverage, but equally important in the level of comprehension. In crisis management situations, communications must be in a timely manner, with full outreach to all population demographics, and most importantly, it must be understood. The information communicated must generate both a broad and in-depth understanding of the crisis situation with the primary objective of generating and motivating actionable responses to avoid the threat of infections or serious illnesses, hospitalization, and death. Crisis management communication, therefore, goes beyond just giving information and explaining the situation, importantly it should also generate motivation, and guidance, and give direction on how the general public should behave and act in order to protect themselves. In this regard, the Thai government utilised all forms of communication channels through both the traditional mass media channels as well the more popular social media platforms such as ‘facebook’, “twitter” and “Line”.²¹

The most important communication tool and channel was the daily televised reports ‘situation reports’ from the CCSA. The CCSA daily announcements are linked to all the TV stations live and in real-time so that everyone in the country can be duly informed. The CCSA’s daily situation progress reports give updates on daily infection cases, and deaths by location, such as clusters and known causes. The daily programs also give announcements and clarifications on all related government policies, strategies, and actions such as laws, regulations and actions to be launched. These announcements and the statistics are also summarised and repeated regularly throughout the day at news times accompanied by news updates, discussions, and comments by social and medical experts. These TV announcements by the CCSA are then followed by a summary of key points and issues in English for the benefit of the foreign communities and visitors in Thailand. The English language version is presented by a representative of the Ministry of Foreign Affairs (MoFA).

The Thai media platforms and channels are varied and up-to-date. Multichannel TV, via cable and satellite, is widely available. The radio market, particularly in Bangkok (there are more than 60 stations in and around the capital), but also nationwide throughout every province is fiercely competitive due to advertising and business channels.

The Thai media are relatively free in that it has no difficulty to criticise government policies, government officers, and frequently report on corruption, human rights issues, and anti-government demonstrations. Generally, but not always, reporters, on all media channels tend to exercise self-censorship regarding the religious, the monarchy, the judiciary, and other sensitive institutions. Restrictions on media along with the introduction of martial law and the army coup in May 2014. Since the general elections in 2019, such controls were lifted in accordance to the Constitution. The print media is mostly privately-owned and operated. Many newspapers also have their own TV channels for daily news programs also, such as The Nation, The Kao Sod, and the Thai Rath major daily newspapers which account for the majority of newspaper sales. Most major newspapers are also available online, such as The Bangkok Post. Thailand has 34 printed daily newspapers and 30

²¹ Centre for COVID-19 Situation Administration (CCSA): www.facebook.com/informationcovid19

newspapers online. However, television is by far the most popular medium of communication in Thailand, since it is the main source of entertainment such as movies, TV-shopping, sports, musical shows, celebrity shows, drama series, and news. In addition to these traditional communication channels, undoubtedly the most popular and widely used, as well as widespread outreach have been through the social media platforms, such as Facebook, Twitter, Line, and Messaging. The sharing of information, news, warnings, and updates related to the Covid-19 pandemic in terms of advisories, use of herbal medicines, best practices of non-pharmaceutical prevention measures, and safety practices through social media by far exceeds the circulation of press releases, newspapers, and other communication channels, with the exception of the television. Modern-day mobile applications allow people to access all media platforms anywhere in Thailand. Free Wi-Fi access in all shopping centres, malls, coffee shops, and restaurants, makes it possible for everyone to be 'online' all day long. All Thais throughout the country therefore have ample access and sources for information and updates on the Covid-19 pandemic as well as government announcements and decrees. This is more pertinent and critically important when the government offers many cash hand-out packages to the general public which require acknowledgment and registration online, not to mention details on where they can get free Covid-19 testing and walk-in vaccination shots.

The Ministry of Foreign Affairs (MoFA) also makes its own regular announcements, press releases, and updates on its website for the general public, particularly the large foreign community in Thailand consisting of businesses, retirees, and tourists. Regular briefings are also made to all the foreign embassies and consular offices in Thailand so that the information can be disseminated to their respective nationals. Similar information and details on government rules, regulations, and procedures are also sent to all the Thai embassies and consular offices worldwide to be disseminated to Thais²² and foreign locals abroad.²³

G. Support and Donations by His Majesty King Rama X

Soon after His coronation on May 4, 2019, Thailand was hit by the Covid-19 epidemic in January 2020. This has given HM King Rama X the opportunity and occasion to uphold and demonstrate His commitment to the tradition and culture of the paternalistic ruler to alleviate the social and economic turmoil and suffering, of the Thai people. Using His personal funds, as well as through Foundations under His Royal Patronage, the King carried out numerous acts and donations for the benefit and well-being of His subjects during this crisis, some of which are described below:

* **April 2020:** Their Majesties the King and Queen have graciously distributed relief supplies to members of the public who are affected by the coronavirus disease 2019 (COVID-19) situation, in the densely populated communities in Bangkok. Bags of relief supplies including face masks, common household medicines, necessities, and consumer goods that will last for two weeks were distributed through Royal Sponsored volunteers who were also involved in packing and transporting the

²² <https://www.mfa.go.th/en/content-category/5f069ee372a783584326eb24>

²³ <https://london.thaiembassy.org/en/content/no-quarantine-phuket-sandbox?cate=5d6636c215e39c3bd0006cb7>

supplies. On April 10th, more than 10 thousand bags of relief supplies were delivered to the residents of 49 communities.²⁴

Their Majesties also donated various medical equipment for hospitals (i.e. 132 ventilators) and relief supplies to various state hospitals such as the Bangkok Municipality Administration hospitals, the Royal Army Hospitals, and the Royal Police Hospitals (such as 2 million face masks, 4,000 PPEs, and 30,000 face shields for health workers).²⁵

Their Majesties granted financial assistance to allow the Siam Cement Group (SCG) to develop and distribute “Modular Screening & Swab Units” to 20 hospitals nationwide. The SCG’s “Modular Screening & Swab Units “help facilitate safe swab operation by health workers as they can isolate suspected COVID-19 cases from regular patients who must be treated separately. This will help strengthen the hospital’s capability to handle Covid-19 cases as well as reduce the risk of infections for both health workers and the general public. It is an effective way to ensure safety of doctors when they come in close contact with patients to prevent further outbreaks.²⁶

*** July 6, 2020/Jan 21, 2021:** HM the King donates 13 biosafety mobile units for use by the Ministry of Public Health to test specimens at schools, temples, and congested risk communities safely and efficiently. Each unit is manned by public health personnel and is equipped with a Class 1,000 Cleanroom facility, including equipment such as a temperature control system, air filter system, and positive pressure and volume-controlled ventilation.²⁷ On January 21, 2021, with the rise of the 2nd wave of the Covid-19 pandemic, the King added another 7 biosafety mobile units bringing the total donated to 20 units.

*** July 24, 2021:** HM the King donates US\$ 87.8 million to 29 hospitals, medical facilities and centres, prisons, and correctional facilities (due to the high infection rates in prisons during the 3rd. wave) nationwide, for purchasing medical equipment and supplies, etc.²⁸

*** August 2021:** To help fight against the critical 3rd. wave Covid-19 pandemic HM King Rama X donated the sum of US\$ 3.1 Million to build emergency facilities (i.e. field hospitals and community isolation centres/quarantine) to commemorate His Majesty’s Birthday on July 28th.; and a further donation of US\$ 2.7 million to build emergency facilities (i.e. refuge facilities in temples for the general public and to repair and/or build new crematorium due to high deaths rates, field hospitals and community isolation centres/quarantine to commemorate Her Majesty the Queen Mother’s Birthday (Queen Sirikit) on August 12th.^{29 30}

²⁴ Adam Judd -Sunday, 12 April 2020: <https://thepattayanews.com/2020/04/12/their-majesties-the-king-and-queen-of-thailand-donate-relief-supplies-to-needy-bangkok-residents/>

²⁵

²⁶ SCG NEWS CHANNEL April 24, 2020

²⁷ <https://thainews.prd.go.th/en/news/detail/TCATG200707151724852>

²⁸ Bangkok Post, July 24, 2021

²⁹ Bangkok Post August 5, 2021

³⁰ <https://asean.org/wp-content/uploads/2021/08/The-ASEAN-Special-Edition-Nov-Dev-2020.pdf>



H. Cultural impacts on the general public behavioral response to government decrees

Essentially, the success and effectiveness of the national strategy, for the management and containment of the Covid-19 pandemic, lies not solely on the policy, strategy and planning by the government, but more importantly in the level of cooperation, participation, and acceptance by the population to conform and act accordingly to government mandates and directives. Although Thailand is a Constitutional Monarchy and classified as a democratic state, this political change has only existed during the last 90 years compared to the almost 700 years of absolute monarchy under different dynasties since the nation was first established as the Sukhothai Kingdom in 1238. Although Thailand was declared a democratic Constitutional Monarchy in 1932, during the past 90 years since the declaration Thai governments have been a game of 'leap-frog' between military rule and democratic governments. Therefore the political culture is still somewhat oriented towards acknowledgment and respect for a high-powered ruling government and administrators. During Thailand's era of democratic constitutional monarchy, two cultural issues come into play, but still

with deep roots in political of about 800 years, namely the acceptance of military power rule on the one side, and civilian government rule representing legitimate power of ‘elders and seniors’ on the other. During the outbreak and government response to the Covid-19 pandemic, it should be noted that the government under Prime Minister Prayut Chan-o-cha was borne out of the military coup d’etat which removed the previous civilian government. This was a coalition government resulting from general elections, made of one military-linked party and several civilian parties, including the Democratic Party, the oldest party in Thailand, and the Pheu Thai Party, a younger but fast-moving rising star in Thai politics with growing popularity. However, this government was put into power with the support of the Upper House made of senators selected and appointed by the military coup leaders. So undoubtedly, there is some military influence in the Upper House. For what it’s worth, the Minister of Public Health (as well as deputy Prime Minister) was the Party Leader of the Pheu Thai Party, so at least that was a civilian cabinet minister. This information is made to establish a clearer picture and understanding of the inter-twining of political culture and the corresponding social culture during the Covid-19 pandemic. It also indicates and gives insights into the cultural influences and impacts on the general public’s behavioural response to government policies, strategies, and decrees. Needless to say, the measure of appropriateness and effectiveness of this cultural relationship is demonstrated and evidenced through statistics of Thailand’s infection cases and death rates as compared to her neighbours as indicated in Table 3.1. above.

i. Public response and the level of support, and acceptance of government leadership policies and acts are linked to Thai cultural roots.

The Thai government is fortunate that Thailand has a strong and deep-rooted cultural heritage where some traditions still have value and a lasting impression on the social environment of the Thais. Such cultural values such as respect for the elders (high power distance and positional authority) and a cohesive and harmonious community (collective society) are still valid and strong for most Thais. As long as the government works within these cultural values and parameters, and is guided by them in the design and planning of national strategies the likelihood of widespread and general acceptance and cooperation would be high. This was evident in the Thai government’s approach to the management and containment of the Covid-19 pandemic through its laws and decrees which included closures, curfews, and lockdowns. This was also balanced with the significant level of benevolent acts by the government to alleviate the negative aspects of the crisis through financial support, subsidies, and cash handouts to both the people directly and to the business sectors.

In addition, the Thais, both the government and the people, had previously experienced the first SARS-Cov-1 during 2003-2004, so the key elements proposed by the government as safety measures were nothing new or needed discussion or clarification. The requirements for non-pharmaceutical protection are nothing new, and previous exposure to the SARS-Cov-1 virus has proven them to be the right approach. Also, Thailand was following the lead of the Chinese (Wuhan lockdown) which had proven to be both practical and successful.

Therefore throughout this Covid-19 pandemic, right from the very beginning, the Thais have been responsive to all the government laws, proclamations, and edicts regarding travel restrictions,

curfews, lockdowns, closures, social distancing, wearing masks and frequent cleansing of hands, etc. This is founded on the culture of power distance, which means accepting the decrees of a 'higher authority' and following directives accordingly. This is further strengthened by the collective culture of the Thais where one is expected to behave accordingly for the welfare and benefit of the community. One wears a mask to not only protect oneself but also to protect others, especially the elderly. To not wear a mask would be considered 'inappropriate' behaviour, and would be frowned upon, not to mention the umbrella of shame and losing face for such 'inconsiderate' behaviour. There is no question of demonstrating individual rights and preferences. Thailand is a collective society that upholds the spirit of "one for all, and all for one." The close cooperation, abidance, and observance by the people to all government acts and declarations have been the key foundation to Thailand achieving the very high success levels in containing the coronavirus during the first year.

In fact, if the government was faulted on how it executed the crisis management plan, it would be that there was not enough use of the "stick" (enforcement) comparable to the amount of "carrot" being offered as hand-outs. In other words, many feel that the government has been too soft in the enforcement of laws and that the penalty and punishment for misconduct and non-conformity were too lax which has contributed to the rapid rise of infections and deaths during the current third wave of the coronavirus. Even though many point the finger at the 'Delta' mutation of the coronavirus, the fact remains, if you don't go out unnecessarily you won't 'get it', i.e. going to restaurants and entertainment places are not a priority activity at this time. The undercurrent of the third wave should be linked to the laxity in behaviour, both in terms of enforcement on the part of the government, and abidance and conformity by the general public. Most likely this is also due to the feeling that "we/the government can handle it as we did before!"

During the first wave – over a period of 12 months (January – December 2020) Thailand's infection rate was only 4,331 confirmed cases or 62 cases per million population. During the second wave, within a period of about 3 months (January – beginning April 2021), the infected cases grew by 24,000 cases to a total of 28,734 cases, representing 412 cases per million population. It could be said that the 'roots' of the high rise in the second wave were due to the success of the first wave, in the ability to control and contain the coronavirus through the various policies and strategies by the government. This success led to a more 'lax' attitude to the crisis, being confident that the situation was 'manageable'. Businesses, factories, and construction sites were lax regarding controls and enforcing social distancing, wearing masks, and sanitary controls, resulting in many clusters of infections ballooning in those places among the workers. Also, the general public was going out a lot socially to restaurants, entertainment venues, and public places, and using public mass transport systems, especially in Bangkok. This resulted in a very high increase in infections of almost 600,000 cases just during the four months from April to July 2021, which increased the infection number to 597,287 cases or 8,286 cases per million population (compare this to only 62 cases per million population just 7 months earlier at the end of December 2020). During the third wave, daily infection rates rose from 1,100 per day to currently 22,000/day. Beginning August 2021 the government locked down 29 provinces including Bangkok. This also included travel restrictions across provincial borders with checkpoints on all highways and enforceable quarantine for travellers.

There is no thought about challenging the government's actions, Also, this is an issue of life and death, affecting everyone, so for the sake of the common good and collectivism of the community, everyone cooperates, supports, and conforms accordingly. However, 'everyone' is a big word, and there is no such thing. There will always be some minority group who will not conform and these will be the ones creating and adding to the third wave infection rates. This is characteristic of highly infectious viruses, such as the 'delta coronavirus mutation'. For the government to effectively control this pandemic, it must also control these defaulters (many would add "with extreme prejudice" because people ARE dying as a result.) During the first 15 months of Covid-19 from January 2020 to April 2021, the 7-day average death rate ranged from 1-2 only. From April 2021 to mid-August 2021, a period of just over three months, the 7-day average reached 184 deaths (compared to the Songkran Festival period (2019), with 7-day average deaths at 55 per day. Songkran last 7 days... How long will Covid-19 last..? At 180+ deaths per day...!) Many Thais are complaining already about these high and seemingly uncontrollable death figures. Based on the various social media platforms, there are strong indications that the stability and sustainability of this government, or the Prime Minister rests on a dramatic turnaround in approach with visible demonstration of intolerance for defaulters and a decisive enforcement of all safety measures to halting this fatality trend. So in fact the voice of the people is not going against the government's decrees, but conversely for the government, i.e. the Prime Minister, to stop being soft and tolerant and calling for more aggressive enforcement of the laws with heavy punishment for defaulters.

Interpretation with reference to Hofstede's cross-cultural dimensions would classify this cultural environment as "high power distance" with contributory influence and impacts on the planning, execution, and management of the Covid-19 pandemic. Government decrees, addicts, and mandates were duly accepted unchallenged and followed accordingly by the general public. There were no widespread public protests or demonstrations with respect to enforcement of social distancing initiatives, which included wearing masks and sanitisation of hands when in public. This cannot be considered a cultural behaviour under Hofstede's cultural dimension of Indulgence versus Restraint, since logic and rationalisation would indicate that protests or demonstrations against government acts to contain the Covid-19 pandemic would not be practical. It should be noted that every outbreak of virus epidemic including the recent SARS – Cov -1 in 2002 and also originating from China has infected and impacted Thailand and its population. Therefore there was no convincing necessary for the general public to follow the "standard" preventive procedures declared by the government for the Covid-19 pandemic (SARS – Cov – 2). Those who have experienced Thai culture would know that flexibility and pragmatism are key undercurrents to Thai social culture (the Thai way.?)

ii. People participation in the fight against the Covid-19 pandemic and give moral and material support: The Culture of Collectivism.

Not only do the Thais accept and support the government's strategies, they also participate in strengthening these policies by helping those in difficulties to manage the circumstances, especially with regards to the hardships incurred. This behaviour is deep-rooted in the Thai culture, also shared by most Asians (i.e. China, Japan, South Korea, etc), in taking a collective perspective of the

community, and is shared by both the people and the business sector. Of priority is the obvious hardship regarding food since many of the low-income group work and are paid by the day. This means no work – no pay. This results in difficulty in getting food to feed the family. Those who are in the position to do so share their food publicly with those in need. This situation created the establishment of ‘food pantries’ on the streets in towns and dirt roads in rural areas for those who can, share and deposit free food and water, so those who are in need can access them.



Several restaurants, food stalls, and sponsors distribute ready-to-eat free meals on the streets.

UNSEEN THAILAND : THE CULTURE OF “NAM JAI – น้ำใจ ”



Pandemic kindness: Thais donate food to all including stranded tourists



EXPATS ACROSS THAILAND DONATE TO THAIS, MIGRANT WORKERS HURT BY VIRUS

By Asaree Thaitrakulpanich, Staff Reporter -
April 24, 2020 2:23 pm

KAOSOD ENGLISH April 24, 2020



Germans and Swiss expats give out food April 24, 2020 on Koh Samui.



Image: Frisco Poldervaart / Bangkok – Klong Toey



Volunteers at The Cove Pub in Pattaya give out food April 21.

And yes, even the monks share food donations back to the people....!

Buddhist monks receive food and alms which they share/donate to community in/around the Temple



Because of the collectivist culture in Thailand, everyone shares the responsibility for the well-being of the community. The culture of collectivism which underscores the need for everyone to follow and abide by the rules of wearing masks in public, social distancing, and washing hands is treated as a civic duty to the community. Similarly, everyone should share in what and how they can in alleviating hardships and difficulties of others less fortunate. This is both the Thai culture and in following the Buddhist path for true enlightenment. If and when Thailand is to succeed in battling and beating this Covid-19 pandemic, it will be because of the culturally-oriented behavioural response of the Thais, and not solely on the policy or strategies of the government.

This collective unity has also been significantly embraced by the business and commercial sectors in promoting government policies and contributing to people's safety and well-being. Businesses in Thailand have been an important element in Thailand's fight against the Covid-19 pandemic, by promoting and practicing the wearing of masks, taking temperature measurements, and establishing sanitary environment controls. All public

commercial buildings and facilities such as department stores, malls, commercial centres, office buildings, restaurants, food courts, supermarkets, convenience stores, trains



and train stations, buses, and bus terminals, planes and airports, etc. participate in ensuring a safe environment for the shoppers and customers. these three key elements are enforced in all venues and entrance is denied for anyone not wearing safety masks. Temperature screening and sanitation gel are provided on entry into the premises. The cleansing gel containers are also placed at the entrance and counters of all shops and booths inside the department store or mall, including all the toilettes.

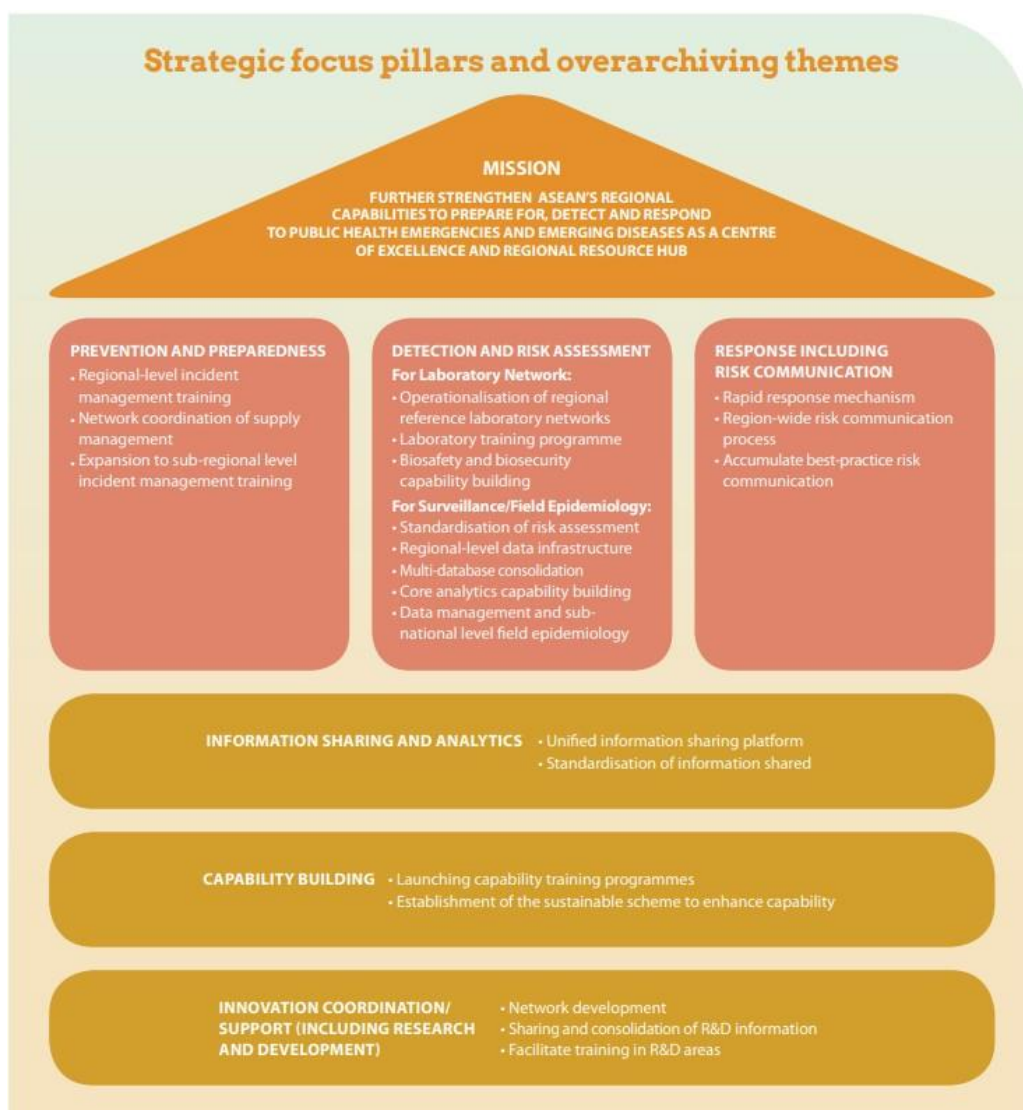
In conclusion, Thailand's community collective culture has been a significant and effective behavioural strength in confronting and managing the Covid-19 pandemic. The unity of the general public response in strictly following the social distancing initiatives has been of compelling significance to containing the spread and negative impacts of the Covid-19 pandemic in Thailand. Even in January 2024 when many nations have abandoned the practice of masking in public venues, the majority of Thais still wear masks in public. This is despite government announcement of non-enforcement of this practice, but only a voluntary basis.

Interpreting this aspect of the cultural influence on Covid-19 pandemic response would equate the Thai behavioural pattern to Hofstede's cross-cultural dimension for Individualism versus Collectivism. Rightly so, Hofstede classifies Thailand in the Collective camp. All behavioural acts by the general public both with regard to responding to government decrees, as well as self-generated community social responsibility initiatives point to a collective-oriented community lifestyle culture. This cultural dimension is certainly not unique to Thailand alone but runs throughout the Asian cultures, including China as has been discussed under China's profile.

I. ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED)

At the 37th Summit under the Chairmanship of the Socialist Republic of Vietnam in November 2020, the ASEAN Leaders announced the establishment of the ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED). ACPHEED would serve as a centre of excellence and regional hub to strengthen ASEAN's regional capabilities to prepare for, prevent, detect, and respond to public health emergencies and emerging diseases with scope and function as illustrated in the graph below.³¹

³¹ <https://asean.org/wp-content/uploads/2021/08/The-ASEAN-Special-Edition-Nov-Dev-2020.pdf>



Thailand was chosen by the ASEAN members to establish the ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED) Secretariat Office. The ACPHEED will serve as a centre of excellence to build up ASEAN's capability to prepare for, prevent, detect and respond to public health emergencies and emerging diseases. The Centre will establish and maintain close relations with stakeholders including ASEAN member states, other ASEAN organizations, partners, and relevant agencies. The ACPHEED would also complement the national health sector, national centres for disease control (CDCs), and other regional platforms relevant to ensuring public health and safety. This Centre received financial support from the Japanese government through the Japan-ASEAN Integration Fund (JAIF) and was declared open on August 26, 2022³².

Public health is one of Thailand's national strengths. The United Nations and the World Health Organization (WHO) have praised the Kingdom's public health system several times over the years

³² <https://jaif.asean.org/whats-new/asean-centre-for-public-health-emergencies-and-emerging-diseases-acpheed/>

as a model for what developing and middle-income nations can achieve. Since 2001, Thailand has had a universal health care system.

The healthcare industry and advanced medical research and development are priority industries under the government's national strategy in its pursuit of advanced development. Thailand is also a strong competitor in the global market for medical tourism.

J. Sustainability of the Covid-19 pandemic response

The Thai government will continue close monitoring and maintain a pragmatic response strategy to contain the Covid-19 pandemic into 2023. This would be based on continuing implementation of the vaccination roll-out which has not yet reached 100% of the population in terms of attaining the primary protocols of at least two shots. According to Dr. Opas Karnkawinpong, the Permanent Secretary at the Ministry of Public Health, the government will continue to focus on the three high-risk groups, namely a) the elderly and those with underlying illnesses, b) medical personnel, health workers, and others in close contact with possible Covid-19 cases, and c) village-based health volunteers. The government would acquire at least 18 million doses for these groups based on a one-per-year formula. However, the government would follow guidelines by international organizations, such as the WHO, if this dose was not considered sufficient. This is also considered likely due to all the pharmaceutical companies announcing that their vaccines would require regular "booster" shots. So far, no international health organization nor pharmaceutical company can guarantee a one-shot per year vaccine.

Dr. Opas indicated that according to the Department of Disease Control, Thailand had administered over 143 million doses in 2021 which are said to have contributed to saving at least 500,000 lives. As of November 5, 2022, about 77% of the population had completed the primary protocol of two shots with about 46% having had additional booster shots.

Chapter 8

FRANCE, THE FIRST EUROPEAN NATION INFECTED WITH COVID-19

(Charles-Amaury Quéllec, Rennes Business School, Rennes, France. Silpakorn University, Silpakorn University International College (SUIC), Bangkok, Thailand.)

“Only peril can bring the French together. One can’t impose unity out of the blue on a country that has 265 kinds of cheese.” Former President of the French Republic, General Charles de Gaulle.)

A. Introducing France and the first Covid-19 outbreak in Europe

In order to understand the impact of covid 19 on France, it seems important to know more about the country itself.

Due to its colonial history. France covers several French territories spread out over several global regions. Metropolitan France which is made up of 13 regions is located in the European region where to the north it borders the English Channel, to the east is Belgium, Luxembourg, Germany, Suisse, and Italy, to the south is the Mediterranean Sea, to the west is the Atlantic Ocean, and to the southwest is Spain and Andorra. In addition, France also has 5 overseas departments - regions (Département d’outre-mer - DOM; Région d’outre-mer - ROM), 5 overseas communities (Collectivités d’outre-mer - COM);, and 2 special territories (Collectivité sui generis).¹

As of January 1, 2020, around 67 million people lived in the French territories, of which 96.8% were in Metropolitan France (13 metropolitan regions), and the remaining 3.2% was divided among the 5 overseas regions and the overseas collectivities and territories. Therefore the French are a multi-ethnic group, with a mix of cultures due to their history and migration policies which are linked to her colonial periods and cover the major regions of the world, namely Africa, Asia, and the Americas. Only around 77% of the country is inhabited by the French, with the remaining 5% by Arabs from the North African continent, and around 4 % from other European countries². For religions, 55% of the French are Christian, even if only a minority actually participate in religious activities; 30% are not religious and around 8% are Muslim. (Statistica,2020) It is important to note that the French government is very dedicated to keeping the country as a secular state. With regards to the age group breakdowns, 36.3% of the population was less than 30 years old, with 37.1% between ages 31

¹ The European Parliament (briefing).

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/617483/IPOL_BRI\(2018\)617483_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/617483/IPOL_BRI(2018)617483_EN.pdf)

² L’Institut national d’études démographiques (Ined). <https://www.ined.fr/>. 2020

to 59, and the remaining 26.6% above 60 years old.³ This breakdown of the French age group should be significant in planning the containment of the Covid-19 pandemic since the most vulnerable age group to the infection was the over 60 years age group range.

Over the decades, France has been impacted by several changes, like suburbanization, the change from traditional manufacturing in the north to advanced technology production in the south, and changes in infrastructure (high-speed trains, motorways, airports). But most of the big cities still need some renovations.

France is the second-largest country in Europe. France is bordered by six countries: Germany, Belgium, Luxembourg, Switzerland, Italy, and Spain. France is one of the world's top six economies. According to the International Monetary Fund, France had the second-highest GDP following Germany in 2020.⁴ France is a founding member of the United Nations and is one of the members of the UN Security Council. France is a founding member of the European Union (EU), the North Atlantic Treaty Organization (NATO), and a member of both the G -7 and the G – 20. Therefore France is considered one of the largest economic powers in the world, with a tradition of mixed economy. One key success of this economy is linked to the number of French multinational companies that are in the top 100. These are helping to overcome the difficulties of the goods and services sectors in the country. When it comes to manufacturing, France diversified its activity through different sectors like telecommunication, aeronautics, armaments or electronics, which employ around 20% of the population. Agriculture is also a strength of the French as it represents almost 25% of the European production but yet less than 2% of the country's GDP. Of course, France is also known for its tourism industry being a popular tourist destination, known for its gastronomy, culture, fashion, cosmetics, and perfume industries. According to most international statistics, France is number one in terms of visitors ranging between 80 – 90 million pre-Covid-19 pandemic (higher than the total French population!). In 2019 tourism revenues represented about 8.4% of France's GDP.⁵ (However, the researcher 'guesstimates' that the contribution of tourism to the GDP is likely to be higher given the resources needed in agricultural and industrial sectors to feed 80+ million people with foods and drinks (including wines!), and the various local transportation networks both nationwide and urban. Needless to say, the travel restrictions imposed during the Covid-19 pandemic have had a serious economic, not to mention social impact on France. By 2020, unemployment had risen from 8.9 to 10.2 percent.⁶

As illustrated above France is one of the largest economic power in the world, with a tradition of a mixed economy. One key success of this economy is linked to the number of French multinational companies that are in the top 100. These are helping to overcome the difficulties of the goods and services sectors in the country.

Agriculture is also a strength of the French as it represents almost 25% of the European production but yet less than 2% of the country's GDP. When it comes to manufacturing, France diversified its

³ Insee.fr: National Institute of Statistics and Economic Studies
<https://www.insee.fr/en/statistiques/2382597?sommaire=2382613>

⁴ "World Economic Outlook (October 2020)". Imf.org. Retrieved 4 November 2020.

⁵ Statista. <https://www.statista.com/statistics/1228395/travel-and-tourism-share-of-gdp-in-the-eu-by-country/>

⁶ BNP Paribas . <https://economic-research.bnpparibas.com/html/en-US/French-labour-market-2020-review-4/6/2021,42936>

activity through different sectors like telecommunication, aeronautics, armaments, and electronics, which employ around 20% of the population. As we all know, France is also a popular tourist destination, known for its gastronomy, culture, and fashion brands. Tourism is an important element of the French economy and the fact that international travel was drastically reduced during the Covid-19 pandemic, has had a lot of negative consequences for the country's economy. This and other negative factors made France one of the most affected countries by the Covid-19 pandemic in 2020, and despite the government's reaction to counter this crisis, the unemployment rate rose from 8.9 to 10.2%.⁷

France was the first European nation to be confirmed with Covid-19. The first three confirmed cases were on January 24, 2020. All had recently arrived from China. One was a 48-year-old French citizen from China who was hospitalized in Bordeaux, and the remaining two, a couple who had returned from Wuhan, China, were admitted in Paris. A few days later, a Chinese tourist was admitted to a hospital in Paris on 28 January 2020 and succumbed to the infection on February 14, 2020, establishing him as the first COVID-19 death in France, Europe as well as outside of Asia.

However, a few months later, the date of the first case in France became controversial when an earlier case on December 27, 2019, which was previously diagnosed to be a case of pneumonia, turned out to be Covid-19 after retroactive retesting of samples in a French hospital on May 4, 2020. This meant that the first Covid-19 case was discovered in France almost a month before the officially confirmed case on January 24, 2020. The patient was Amirouche Hammar, a fishmonger who was admitted to the emergency room on December 27, 2019, and diagnosed with pneumonia. A retest of his sample on May 4, 2020 by Dr. Cohen, head of emergency medicine at Avicenne and Jean-Verdier hospitals tested positive for the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This development of the first case in France would make France the first country outside of China to be infected with Covid-19, and not Thailand, as was previously established. When contact tracing was performed, it was revealed that Amirouche Hammar had subsequently infected both his children, but not his wife, who works at a sushi stand at a supermarket with co-employees who are of Chinese origin. Since this supermarket was close to the airport, many tourists shopped there directly after arrival, bringing their suitcases also. It is surmised that the wife could have been infected either by her Chinese co-workers or by Chinese tourists who shopped there. Since the wife was not infected, it is assumed that she could be asymptomatic. These infection transmissions between the patient's family would also then be the first human-to-human transmission in France, Europe, and outside of China. However, this issue of the origin of the coronavirus is still considered inconclusive.

B. Government structure and leadership under the influence of national culture and constitution.

The French government is classified as a hybrid system between parliamentary and presidential systems. It means that the government is made of ministers who are managed by the prime minister. Since the constitution of the Fifth Republic in 1958 (which is the 15th constitution since 1789), the

⁷ BNP Paribas . <https://economic-research.bnpparibas.com/html/en-US/French-labour-market-2020-review-4/6/2021,42936>

prime minister is appointed by the president. The prime minister will suggest people to appoint as ministers and the president will either accept or reject these suggestions. The executive power is held by both the president and the government which will establish French politics. The parliament, which is made up of two houses (the National Assembly and Senate) holding the legislative power. However, it is important to underline the fact that the office of the president has the authority to counter the parliament through referenda or even dissolve the parliament if necessary.

In order to get a new law approved, the government needs to submit a proposition that will have to be approved by both houses of the parliament. However, article 49.3 of the constitution gives the right to the government to bypass the parliament, a tool that was used in 2020 and resulted in a lot of protests. This article, popularly known as "Le 49.3", was introduced in the 1958 constitution of the Fifth Republic as a mechanism that allows the executive branch to force laws through parliament without a vote.

It should be noted at this point that issues related to the French legislation, government power structure, and policies discussed here are focusing only on the French government leadership roles and actions in relation to the management and responses related to the Covid-19 pandemic only.

In March 2020, the French parliament applied the article 38 of the constitution and adopted the emergency law in order to fight the Covid-19 situation. The article 11 of the emergency law authorizes the government to take necessary legal actions to face the situation. A few days after the emergency law, the French government adapted a few corporate laws to help companies and later to give more power to the 18 French administrative regions. Another notable aspect of the urgency law is that the prime minister can use the powers under this decree to:

- -Limit people's movement (travel), right to gather (reunion), and liberty to initiate (projects).
- -Use all public goods and services to end the crisis.
- -Temporary measure to control price policies

We will discuss the details of the laws and regulations resulting from this article, in the following section.

There is another important point to discuss about the power given by the constitution to the president. In case of crisis, article 16 of the constitution would give the president the power to apply all measures required by the circumstances, which include the ability to ignore the separation of executive and legislative power. This article has not been necessary during the covid 19 crisis and the last time it was used was in 1961, but it was implemented under the 1958 constitution and inspired by a historical political crisis originating in 1940.

As we can see from article 16, French politics is not only influenced by its governmental structure, but many elements such as the history, the geographical character of the country, and the economics also impact management policies, strategies, and decision-making.

To fully understand the impact of the culture on the government, it is important to consider France's history, especially the French Revolution that laid the basis of the opposing political opinions: "left" and "right". As a consequence, France needs a strong charismatic leader in order to unify the country into making durable changes.

Regarding the current French president, Emmanuel Macron, he and his team opted for a kind of Jupiter's leadership style. The idea behind this leadership is to keep a strong authority, underlined by austere behavior and yet a good control of communication. With this kind of leader, usually, the prime minister is used as a "fuse" in case of problems (to avoid 'power-overload'?)

Another important factor that needs to be considered during the pandemic is the attachment of French people to individual liberty (article 66 of the Constitution), which is usually considered as a shield against a strong government and any abuse. This idea combined with a strong leadership and the fact the government used the Emergency law to gain power created a unique political and governmental environment during the pandemic.

C. Timeline of issuing regulations, laws, and enforcement procedures from the government leadership

France, like most nations in Europe, was not prepared for the rapid and widespread coronavirus outbreak which developed quickly into a global pandemic within less than three months. Much of its policies and strategies were based on the advice and recommendations of the ad hoc Scientific Council which again were based on guidelines from the WHO, and the European Center for Disease Control and Prevention (ECDC). Over time, a national strategy evolved which was designed on a somewhat shaky balance between protecting the health of her citizens on the one side and sustaining the national economy and businesses on the other.

President Macron announced in a solemn speech on March 12, 2020, that the nation was in a 'state of war', and set two government priorities, i) saving lives 'at all costs' by stopping the spread of the virus, and ii) saving the French economy. Accordingly, the French government leadership (the president and the prime minister) developed a four-pronged strategy to fight Covid-19. The first was to prevent the entry of the coronavirus into French territories. This consisted of enforcing strict restrictions, from China, and other nations with confirmed Covid-19 outbreaks, both in Europe and other parts of the world. This policy also included 14 days of quarantines for any inbounds into France, for both French and foreign travelers. The second was to identify, isolate, and eliminate any clusters of infections already emerging within the country. This led to strict social distancing such as avoidance of public gatherings and unnecessary social inter-connectivity to contain and compartmentalize the spread of the coronavirus. The third was to ensure the capacity and capability of the hospital system to handle the expected surge and possible 'overloading' of the healthcare resources and systems. This would be through the effective limiting or elimination where possible the occurrence and spread of infections and serious illnesses through curfews and lockdowns. To

underscore the seriousness of the situation and that government legislations and regulations were not a mere 'paper tiger', non-compliance was punishable through fines up to €450 (minimum of €135) and, for anyone exceeding four fines, six months of prison.⁸

As mentioned before, both the government and the parliament have the responsibility of initiating responses to control the Covid-19 pandemic where one is controlling the agenda of solutions and regulations while the other is studying the propositions and issuing approvals. The World Health Organization (WHO) declared Covid-19 as a global on March 11, 2020. Consequently, on March 23, 2020, the French government with approval from parliament initiated emergency law no. 2020-290 declaring a territory-wide state of public health emergency for a period of two months in response to the global Covid-19 pandemic.⁹ This measure has subsequently been extended many times due to failures to stem and control the spread and growth of infection cases and fatalities due to the Covid-19 pandemic. Under the emergency law the Scientific Council for Covid-19 was established with the objective to provide the government guidance for the creation of regulations and laws during the pandemic.

Timeline of actions and laws initiated by the French government following the outbreak of Covid-19 in China, end of December 2019 are indicated through to the end of December 2022. These are through a series of laws and regulations being enforced, followed by progressive withdrawal, and then reinforced again, to be lifted again in repeated in cycles in accordance with the waves of infections and deaths. The following gives in chronological order some of the key initiatives of the government in response to the Covid-19 pandemic.

January 14, 2020: the French Ministry of Health initiated communication channels focusing on Covid-19 with the relevant key segments in the French health industry.

January 21, 2020: the government made a public announcement highlighting the low probability of France being impacted by the Covid 19 and the fact that the French health system is well prepared for it.

January 23, 2020: Paris-Wuhan flights are suspended.

January 24, 2020: First cases of Covid-19 were confirmed in France

January 27, 2020: Setting up of the CORRUSS (Le centre opérationnel de régulation et de réponse aux urgences sanitaires et sociales: The Operational Centre for the Reception and Regulation of

⁸ Or Z, Gandré C, Durand Zaleski I, Steffen M. France's response to the Covid-19 pandemic: between a rock and a hard place. Health Econ Policy Law. 2022 Jan;17(1):14-26. doi: 10.1017/S1744133121000165. Epub 2021 Mar 5. PMID: 33662232; PMCID: PMC8007943.

⁹ Nadia Darwazeh. France: COVID-19 France: State Of Public Health Emergency. May, 1, 2020 Clyde & Co : <https://www.mondaq.com/france/litigation-contracts-and-force-majeure/926000/covid-19-france-state-of-public-health-emergency>

Health and Social Emergencies), a special center to answer urgent sanitary situations, and to provide operational responses to health emergencies impacting French national territory 24 hours a day, 7 days a week.¹⁰

January 28, 2020: LVMH (Louis Vuitton Moët Hennessy) chairman and CEO Bernard Arnault announced at a press conference on January 28, 2020, the ordering of 40 million medical masks from China to aid in France's battle against the coronavirus pandemic. The first order of 10 million masks is funded by LVMH and "is reserved for the French health service and will be available for distribution by early next week for those in need." The remaining 30 million masks would be funded by the state for distribution accordingly and would be delivered over the coming weeks. M. Bernard Arnault also announced that LVMH would be producing hand sanitizer for delivery to French hospitals, free of charge. LVMH has had a long business presence in China since 2012, and is a well-respected and acknowledged luxury brand in China where LV opened up its biggest exclusive store, the Louis Vuitton House Shanghai.

February 1st, 2020: With the exception of France, all Schengen states (25 countries) suspended issuing visas for Chinese visitors.¹¹

February 17, 2020: A key Christian event, the annual assembly of the Christian Open Door Church was held between February 17 and 24, 2020 in Mulhouse and was attended by about 2,500 people. Over 1,000 attendees were infected with Covid-19 which led to multiple infection clusters across the country, including the French overseas territories whose people also attended the event.^{12 13}

Religion is an important aspect of French culture and society, although the extent to which individuals in France are religious varies. According to a survey conducted in 2018, about 60% of the French population identifies as Christian, with the majority being Roman Catholic. However, the number of people who regularly attend religious services and actively practice their faith is much lower.

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However, despite the secular nature of French society, many people in France still hold religious beliefs and participate in religious practices. Many people also have cultural or personal connections to their religious heritage, even if they do not actively practice their faith.

¹⁰ https://solidarites-sante.gouv.fr/IMG/pdf/fiche_corruss_en.pdf

¹¹ <https://www.schengenvisainfo.com/news/confirmed-all-schengen-countries-but-france-have-suspended-visa-issuance-in-china/>.

¹² "Coronavirus : la " bombe atomique " du rassemblement évangélique de Mulhouse". Le Point. 28 March 2020.

¹³ "ENQUETE FRANCEINFO. "La majorité des personnes étaient contaminées" : de la Corse à l'outre-mer, comment le rassemblement évangélique de Mulhouse a diffusé le coronavirus dans toute la France". Franceinfo. 28 March 2020.

Overall, religion is an important part of the culture and history of France, but the extent to which it is important to individual French people varies.

February 22, 2020: French President Emmanuel Macron opened the 57th International Salon de l'Agriculture (The Paris Agriculture Fair) a major event of the year for Parisienne animal lovers and for farmers from all over France. It is a huge attraction for families who swarm the enormous expo center that is turned into a mega-farm to see animals they would never encounter in the city. Over 600,000 people were expected to attend this week-long event.¹⁴ (This would be a high-risk Covid-19 transmission exposure venue and source for spreading infections throughout Paris, and the whole country.)

The magnitude of this event is linked to the fact that agriculture has traditionally been a significant part of French culture, and the country has a long history of producing high-quality food products, including wine, cheese, and other specialty foods. Many regions of France are known for their agricultural production, and these products are an important part of the country's culinary and cultural identity. This sector has played a significant role in the culture and economy of France for centuries. It is an important industry of the French economy, contributing around 1.5% of the country's gross domestic product (GDP) and employing around 750,000 people.¹⁵

February 23, 2020: The Orsan plan is applied to prepare the French health system to respond to exceptional situations requiring hospitalizations. It is the emergency plan in response to an extraordinary accident or a disaster, a heatwave, an epidemic, or an event that becomes deadly for fragile people.

March 3, 2020: With France still facing a shortage, in spite of assurances given by both the health minister Agnès Buzyn¹⁶ and Jérôme Salomon, the French Directeur général de la Santé, during a debate at the French Senate on 26 January¹⁷, President Macron commandeered all masks produced and stored in the country for distribution to health professionals and people who had contracted the virus.¹⁸ Subsequently on March 5, 2020 French authorities confiscated four million masks from the Swedish health care company Mölnlycke, which were destined for Spain and Italy. Mölnlycke estimated that a total of "six million masks were seized by the French. All had been contracted for, including a million masks each for France, Italy and Spain. The rest were destined for Belgium, the

¹⁴ European Commission. The Salon international de l'Agriculture (SIA), Paris February 22, 2020.

¹⁵ Recensement agricole 2020, Ministère de l'Agriculture et de la Souveraineté Alimentaire, July 2022

¹⁶ "Pénurie de masques : les raisons d'un 'scandale d'État'" [Mask shortage: the reasons for the 'state scandal']. franceinter.fr. 23 March 2020.

¹⁷ "Coronavirus : " Il n'y pas de sujet de pénurie " de masques, selon le directeur général de la Santé". Public Sénat (in French). 26 February 2020.

¹⁸ "L'Etat réquisitionne les stocks de masques de protection" [French government commandeers stocks of protective masks]. L'Obs. 3 March 2020.

Netherlands, Portugal and Switzerland."¹⁹ Two weeks later, after pressure from the Swedish government, France released the masks, allowing two million of them through, with the rest remaining in France either to be used there or for re-export.²⁰

March 5, 2020: First meeting of the scientific council established by the government under the emergency law to advise on regulations and laws related to the response and the handling of the Covid-19. crisis.

The Scientific Council (Conseil Scientifique) is a French advisory body that provides scientific advice to the government on a range of issues related to science. It was created in 2016 by the French government as a way to develop the role of science in public policy and to provide a place for dialogue between the scientific community and policymakers.

The Scientific Council is composed of leading scientists, researchers, and experts from various fields, including the natural sciences, engineering, and social sciences. It is under the jurisdiction of the Ministry of Higher Education, Research, and Innovation.

First ban on gatherings of more than 5000 people in enclosed spaces.²¹ This was reduced to no more than 1,000 people on March 11, 2020.²² On March 14, 2020, this was reduced to no more than 100 people.²³

March 9, 2020: Any gathering over 1000 people is prohibited. The regulation is not well respected, people still gather outside of soccer stadiums to support their team even if the game is closed to the public.

March 11, 2020, the government named 11 prominent scientists to a committee to advise on scientific matters pertaining to the epidemic in France

March 12, 2020: President Macron announced in a solemn speech that the Nation was 'at war' and set two priorities, i) saving lives 'at all costs' by stopping the spread of the virus, and ii) saving the Nation's economy.²⁴

¹⁹ Marlowe, Lara (30 March 2020). "Coronavirus: European solidarity sidelined as French interests take priority". The Irish Times. Retrieved 10 April 2020.

²⁰ Kouimtsidis, Dimitris (3 April 2020). "France forced to return face masks it confiscated from Spain a few weeks ago after pressure from the Swedish Government". The Olive Press. Retrieved 14 April 2020.

²¹ "Décret n° 2020-191 du 4 mars 2020 relatif à l'entrée en vigueur immédiate d'un arrêté". [legifrance.gouv.fr](https://www.legifrance.gouv.fr). Legifrance.

²² "Décret n° 2020-226 du 9 mars 2020 relatif à l'entrée en vigueur immédiate d'un arrêté". [legifrance.gouv.fr](https://www.legifrance.gouv.fr). Legifrance.

²³ "Décret n° 2020-226 du 9 mars 2020 relatif à l'entrée en vigueur immédiate d'un arrêté". [legifrance.gouv.fr](https://www.legifrance.gouv.fr). Legifrance.

²⁴ Or Z, Gandré C, Durand Zaleski I, Steffen M. France's response to the Covid-19 pandemic: between a rock and a hard place. Health Econ Policy Law. 2022 Jan;17(1):14-26. doi: 10.1017/S1744133121000165. Epub 2021 Mar 5. PMID: 33662232; PMCID: PMC8007943.

French president Emmanuel Macron announced in a televised address that all schools and universities across the country would be closed.²⁵ However, Municipal elections are not cancelled and people could still go to vote accordingly.

March 14, 2020: By announcement of the prime minister the previous day, all **unnecessary public places would be closed**. "Markets and food shops, pharmacies, gas stations, banks, newspaper and tobacco stores will remain open," Philippe said. "Places of worship will remain open, but religious ceremonies and gatherings will be postponed." Philippe acknowledged that the French people find the concept of social distancing repugnant, "because we are a people that likes to gather, a joyful people, a people that likes to live together... Maybe, even more, when fear starts to spread."

Although this regulation would be respected there was obvious dissatisfaction from the entertainment and the food & and beverage sectors (cinemas, restaurants, bars, clubs, and coffee shops) whose businesses were disrupted.²⁶

March 17, 2020: Announcing that France is once again at "war", President Emmanuel Macron announced a **nationwide lockdown** that would go into effect at midday on March 17, 2020 in a solemn televised address to the nation on March 16, 2020. France is "not fighting against any army, nor against any other nation", he said. "But the enemy is there, invisible, elusive, advancing."

The day after Macron's announcement, France's Minister of Interior Christophe Castaner detailed the new lockdown measures: Anyone leaving home must have an official form noting the reason for venturing outdoors; offenders without a form would be fined €135 and around 100,000 police officers were being deployed nationwide to ensure compliance. The government's lockdown motto was a terse, "Stay home."²⁷

This announcement included the closure of schools and institutes of higher education as well as a ban on all religious gatherings except for funeral services with fewer than 20 attendees.²⁸

During the lockdown, all non-essential businesses and services were closed, and people were required to stay at home unless they had a valid reason to leave, such as going to work, buying essential goods, or seeking medical care. Public gatherings, including sporting events and religious services, were also banned.

²⁵ Jenny Hughes. Emmanuel Macron Closes All French Schools, Implores Citizens to Stay Home

March 12, 2020

<https://frenchly.us/emmanuel-macron-closes-all-french-schools-implores-citizens-to-stay-home-coronavirus/>

²⁶ Barbara Wojazer. France to close all restaurants, cafes, cinemas and clubs due to coronavirus

March 14, 2020. <https://edition.cnn.com/2020/03/14/world/france-coronavirus-measures/index.html>

²⁷ France 24. In pictures: A look back, one year after France went into lockdown March 17, 2021

<https://www.france24.com/en/france/20210317-in-pictures-a-look-back-one-year-after-france-went-into-lockdown>

²⁸ "Décret n° 2020-293 du 23 mars 2020 prescrivant les mesures générales nécessaires pour faire face à l'épidémie de covid-19 dans le cadre de l'état d'urgence sanitaire". [legifrance.gouv.fr](https://www.legifrance.gouv.fr). Legifrance.

To enforce the lockdown, the government deployed the military and set up checkpoints on major roads and at the borders to control travel. People were required to carry a signed document, known as an "attestation," with them when they left their homes, explaining the reason for their travel.

As a consequence of the government's announcement and measures declared the previous day, large numbers of Parisians were moving outside of cities before the lockdown. Train stations were crowded. This exodus was not much appreciated by the provincial French who fear that these city-dwellers would bring the coronavirus with them and accelerate as well as increase the infection spread locally.²⁹

19 March 2020: More than 600 professionals of the health industry are taking legal action against the government for "negligence" and "state lies" as it is found that the government didn't follow the procedure regarding the mask supply.

March 22, 2020: The French Parliament applied Article 38 of the constitution and adopted law No 2020-290 declaring a public health emergency to address various health and economic issues arising from the Covid-19 epidemic and including subsequent lockdowns. Under this Article, the Government may ask Parliament for authorization, for a limited period, to take measures by Ordinance that are normally the preserve of statute law. Ordinances shall be issued in the Council of Ministers, after consultation with the Conseil d'Etat. The emergency law was set for a period of two months and any extension would have to be authorized by the Parliament. The Law was enacted by President Macron on March 23, 2020, and entered into force on the same day. Article 11 of the Emergency decree authorizes the government to take necessary legal actions to address and redress the situation. During the emergency law period, the Prime Minister is allowed to take specific measures nationwide by decree (executive order) to address the current health issues, including:

- restriction of the freedom of movement;
- lockdowns;
- control of the prices of some necessary products;
- temporary closure of establishments open to the public, except those that offer essential goods and services;
- requisition of goods and services necessary to address the health disaster; and
- any measure to provide medicine and drugs necessary to eradicate the virus.³⁰

The law on the state of health emergency is approved.

²⁹ France 24. French lockdown comes into force in bid to curtail spread of deadly virus. March 17, 2020
<https://www.france24.com/en/20200317-french-lockdown-comes-into-force-in-bid-to-curtail-spread-of-deadly-virus>

³⁰ Debevoise & Plimpton. French Law in Response to the COVID-19 Epidemic. 25 March 2020
[https://www.debevoise.com/insights/publications/2020/03/french-law-in-response-to-the-covid19-epidemic#:~:text=On%2022%20March%202020%2C%20the,\(the%20%E2%80%9CLaw%E2%80%9D\).](https://www.debevoise.com/insights/publications/2020/03/french-law-in-response-to-the-covid19-epidemic#:~:text=On%2022%20March%202020%2C%20the,(the%20%E2%80%9CLaw%E2%80%9D).)

9 April 2020: The government is stressing that the World Health Organization (WHO) "does not recommend the wearing of masks in the general population" as a response for the mask shortage in France.

April 13, 2020: In a national address on Easter Monday from the Elysee Palace Macron extended France's coronavirus lockdown for another month as he apologized for his government "not being prepared enough" for the crisis. During the televised statement, he said French citizens must remain "civic, responsible and respected the rules". He said: "We have to continue our efforts; the more the rules are respected the more lives will be saved. That is why I am announcing the strict lockdown will continue until Monday May 11th."

Several mayors opposed the May 11, 2020 lifting of the lockdown, saying it was premature.

Subsequently, the national lockdowns would be lifted and reinforced several times during the Covid-19 pandemic. The second national lockdown was declared on 28 October 2020, and the third was announced by Macron on March 31, 2021. Lockdown measures remained essentially the same such as the closure of non-essential shops and stores, the suspension of school attendance, a ban on domestic travel, and a nationwide curfew from 7pm-6am.

27 April 2020: **Masks are made available to public** in stores (people) as before it was managed by the state.

May 11, 2020: End of the 1st Lockdown

Concurrent with the easing of the lockdown on May 11, 2020, the government declared wearing face masks compulsory on public transport and in secondary schools. This was already declared by Prime Minister Edouard Philippe on April 28, 2020.³¹

22 June 2020: School and universities are reopening

July 20, 2020: France has made face masks compulsory in all enclosed public spaces amid a fresh bout of Covid-19 outbreaks. Masks were already mandatory on public transport, but now they are now compulsory in all enclosed public spaces, including shops where previously owners were able to decide themselves whether customers should wear coverings or not. Anyone caught without a mask faces a fine of €135 (£123; \$154).³²

August 18, 2020: Prime Minister Jean Castex declared it mandatory to wear mask in public areas Paris, both inside and outside in certain congested areas. All pedestrians, cyclists, joggers, etc. would

³¹ BBC News. Coronavirus: France mandates masks for schools and transport. April 28, 2020
<https://www.bbc.com/news/world-europe-52459030>

³² BBC News. Coronavirus: Masks mandatory in France amid fresh outbreaks. July 20, 2020
<https://www.bbc.com/news/world-europe-53471497>

have to wear face masks in public areas in the capital from 08:00 on Friday (06:00 GMT). This new rule covers not only Paris but its inner ring of Seine-Saint-Denis, Hauts-de-Seine and Val-de-Marne.³³

September 4, 2020: A court in Lyon ruled that forcing mandatory wearing of face masks in all public spaces in Lyon and neighboring Villeurbanne constituted a "serious and illegal infringement" of citizens' liberties. A civil liberty group called "Les Essentialistes" brought the case against the authorities arguing that the decrees were disproportionate and inefficient. "We are neither for nor against the mask, but the right mask, at the right time, in the right place, we are for coherence and proportionality of actions in relation to the situation.

Health authorities have "only recommended wearing of masks in cases of gatherings with a high density of people outside". The court gave the prefecture until September 8 to amend their orders to exclude areas where conditions were not "likely to favour the spread" of Covid-19. The ruling in Lyon followed two similar court decisions a few days earlier in Strasbourg, and in Seine-Maritime.³⁴

October 14, 2020: Curfew is applied on specific areas according to the number of cases

October 30, 2020: 2nd Lockdown until 15 of December – Non-essential shops are closed – People need to carry certificate to go out – School and universities are still open.

December 15, 2020: End of the 2nd lockdown for Christmas and New year – The government is consulting McKinsey and Company for the vaccination campaign strategy (date not exact)

December 17, 2020: The French president is tested positive to COVID 19.

December 27, 2020: The **vaccination campaign is starting**.

January 7, 2021: France detected several cases of variant form of virus (British, south Africa and Brazilian) on its territory

January 29, 2021: Prohibition of entering and exiting the country. Better enforcement of regulations linked to lockdown.

February 22, 2021: Lockdown on specific areas is decided by the government for short amount of time.

³³ BBC News. France Covid-19: Paris compulsory face-mask rule comes into force. August 28, 2020.

<https://www.bbc.com/news/world-europe-53934952>

³⁴ Alice Tidey & Rafa Cereceda . COVID-19: Rights groups challenge mandatory face mask rules in France

<https://www.euronews.com/my-europe/2020/09/04/covid-19-rights-groups-challenge-mandatory-face-mask-rules-in-france> . September 4, 2020

February 26, 2021: Initiation of the third set of regional and national lockdowns due to the widespread of the Alpha variant.³⁵ On April 3, 2020 this was extended to the whole of Metropolitan France. On April 5, 2020 schools and institutes of higher education closed again.³⁶

March 31, 2021: In a televised address to the nation, president Macron imposed a third National lockdown as COVID-19 continued to surge stating "Everywhere the virus is spreading faster and faster and everywhere, hospitalizations are rising." This has put a serious strain on France's intensive care units along with hospitalizations which have already surpassed the second wave of the 2020 - 2021 winter season and are on track to surpass even the first deadly wave of spring 2020. This decision was preceded by several dozen emergency room doctors signing an open letter in the newspaper **Le Journal du Dimanche**, warning that if something is not done, hospitals would soon have to begin choosing which patients receive treatment. "We cannot remain silent without betraying our Hippocratic oath," they said.³⁷

The following Graph illustrates the correlation between president Macron's declaration of national lockdowns and the Covid-19 pandemic surges in death rates. The first and second nationwide lockdowns in France apparently did not effectively stem the rise of daily new deaths from the Covid-19 pandemic. In fact, the infection levels were significantly higher during the lockdown periods than prior to the impositions. If the objective in the timing of these national lockdowns was to reduce population mobility and social festivities and events during the ensuing spring (i.e. Easter) and winter (i.e. Christmas and New Year) seasons, it apparently didn't work. On March 17, 2020 when the first national lockdown was imposed, the accumulated deaths were 148 people³⁸. Less than two months later when the lockdown was lifted on May 11, 2020, the accumulated deaths reached 26,338 people³⁹. This means that during the 7 weeks period of the lockdown a total of 26,190 deaths occurred, or about 3,741 deaths per week. Similarly during the second national lockdown which was imposed on October 30, 2020. On that date, the accumulated number of deaths was 36,471 people⁴⁰. When the lockdown was lifted on December 15, 2020, the figure reached 57,391 deaths⁴¹, meaning that during this six weeks lockdown period, a total of 20,920 people died, or about 3,487 per week.

As previously indicated, national crisis management involves three parties, namely i) the government (administration and parliament) in terms of planning and legislation, ii) the various government agencies and departments involved in the roll-out and implementation (mainly the civil servants),

³⁵ "Décret #2021-217 du 25 février 2021 modifiant les décrets #2020-1262 du 16 octobre 2020 et #2020-1310 du 29 octobre 2020 prescrivant les mesures générales nécessaires pour faire face à l'épidémie de covid-19 dans le cadre de l'état d'urgence sanitaire"

³⁶ "Décret #2021-384 du 2 avril 2021 modifiant les décrets #2020-1262 du 16 octobre 2020 et #2020-1310 du 29 octobre 2020 prescrivant les mesures générales nécessaires pour faire face à l'épidémie de covid-19 dans le cadre de l'état d'urgence sanitaire"

³⁷ France Imposes 3rd National Lockdown As COVID-19 Again Surges. March 31, 2021

<https://www.npr.org/2021/03/31/983157525/france-imposes-3rd-national-lockdown-as-covid-19-again-surges>

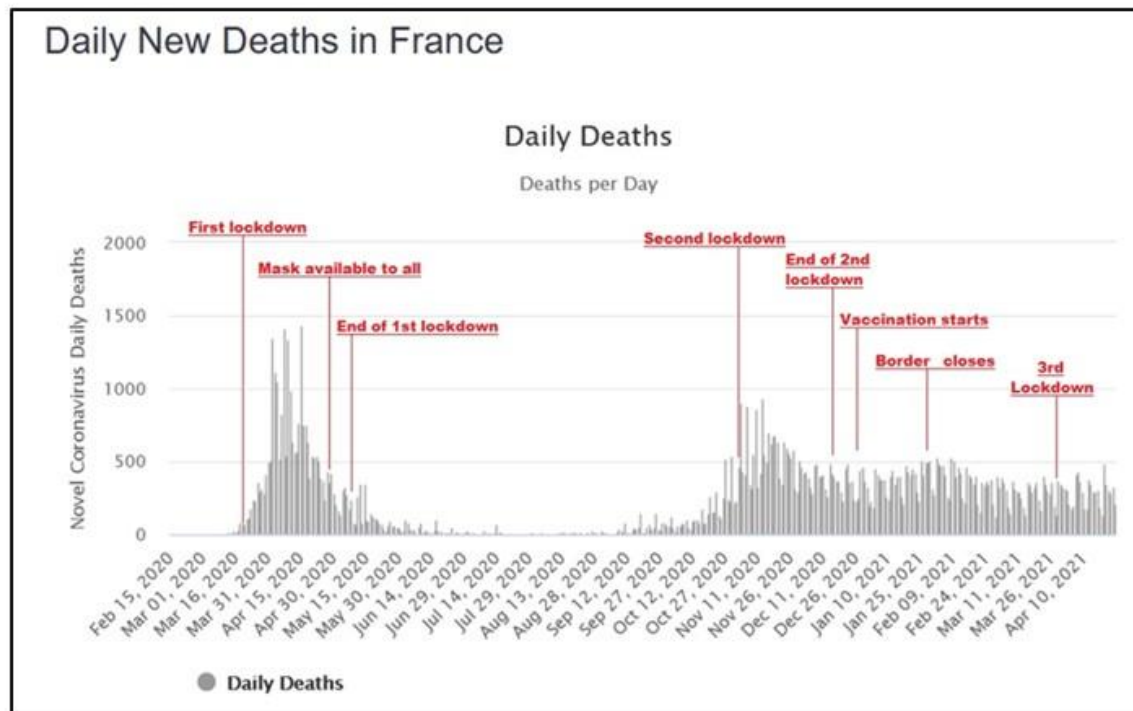
³⁸ WHO. Coronavirus disease 2019 (COVID-19). Situation Report – 57. 17 March 2020

³⁹ WHO. Coronavirus disease (COVID-19). Situation Report – 112. May 11, 2020

⁴⁰ WHO. COVID-19 Weekly Epidemiological Update. November 1, 2020

⁴¹ WHO. COVID-19 Weekly Epidemiological Update. December 13, 2020

and iii) the performance and conformity of the people. The Graph below would indicate that there were fatal weaknesses somewhere. With the death rate exploding from a mere 148 people in mid-March 2020 to 57,391 by mid-December 2020, nine months later, there would have to be significant negative factors involved.



Source: Screenshot worldometers,info

May 3, 2021: Initiation of the progressive lifting of the lockdown restrictions, including opening schools.⁴² This was followed by non-essential shops, cinemas, theatres, museums and restaurants/bars/cafes with outdoor seating allowed to re-open. Restaurants/bars/cafes are allowed to re-open.⁴³

June 20, 2021: The nightly curfew is lifted, and followed on June 24, 2021, with lifting the requirement for people to wear masks outdoors in much of the country. However, masks would still be required outdoors on public transport, in stadiums, and other crowded places.⁴⁴

⁴² "Décret #2021-541 du 1 mai 2021 modifiant les décrets #2020-1310 du 29 octobre 2020 prescrivant les mesures générales nécessaires pour faire face à l'épidémie de covid-19 dans le cadre de l'état d'urgence sanitaire"

⁴³ France 24. France 'to start easing Covid-19 travel restrictions in May'. April 24, 2021.

<https://www.france24.com/en/europe/20210421-france-to-start-easing-covid-19-travel-restrictions-in-may>

⁴⁴ France 24. France to drop mandatory mask-wearing outdoors Thursday, curfew on Sunday. June 16, 2021.

<https://www.france24.com/en/live-news/20210616-covid-19-face-masks-in-france-no-longer-obligatory-outdoors-from-thursday-curfew-to-be-lifted-sunday-french-pm>

July 13, 2021: Initiation of reinforcement of restrictions relating to the Delta and Omicron variants.⁴⁵

February 2, through May 2022: Prime Minister Jean Castex announces progressive lifting of restrictions beginning on February 2, 2022. Masks are no longer required in outdoor public spaces. Mandatory remote working abolished. Restrictions on sizes of public gatherings were removed. France will end audience capacity limits for concert halls, sporting matches, and other events, part of a gradual lifting of Covid-19 restrictions made possible by a vaccine pass that will be required for most public areas. Nightclubs reopen, ban on consumption of food and drink in public transport and indoor public spaces lifted.⁴⁶

By the end of May, the mandatory wearing of masks on public transportation was lifted but continued to be recommended.⁴⁷

June 28, 2022: A Paris court ruled on Tuesday, June 28, 2022, that the French government failed to sufficiently stock up on surgical masks at the outset of the coronavirus pandemic in 2020 and prevent the virus from spreading. In its ruling, the Paris court stated that i) “The government is at fault for failing to ensure a sufficient stock of masks to fight against a pandemic linked to a highly pathogenic respiratory agent”, and ii) the government was wrong by suggesting at the start of the COVID-19 crisis that masks don't protect people from contracting the virus. However, the court concluded that neither of the government's wrongs stated above had been the source of specific cases of infection with the virus.⁴⁸

August 1, 2022: The state of national emergency ended. The two specialized agencies, the scientific council on Covid-19 and the vaccine strategy steering committee were terminated on the same day, having been replaced on the previous day, September 30, 2021, by a new committee to monitor and anticipate health risks in France.⁴⁹

In most of the cases, all the regulations and actions taken by the government were quite well received. France is a country with a high tendency for protest, however, French people didn't really go against the government during the pandemic. A few protests appeared in October against the second lockdown and some regulations (like masks in class for kids) but not that many people joined compared to “regular French protests”. There have also been a few cases of mistrust and deception

⁴⁵ France 24. Macron to address nation amid fears of Delta variant surge in France. July 12, 2021
<https://www.france24.com/en/europe/20210712-macron-to-address-nation-amid-fears-of-a-delta-variant-surge-in-france>

⁴⁶ France 24. France announces loosening of some Covid-19 measures in February. January 20, 2022.
<https://www.france24.com/en/france/20220120-france-says-will-loosen-covid-19-measures-from-february>

⁴⁷ France 24: Covid-19: Paris court rules French govt did not stock enough masks in 2020/
<https://www.france24.com/en/europe/20220628-covid-19-paris-court-rules-french-govt-did-not-stock-enough-face-masks-in-2020>. June 28, 2022.

⁴⁸ France 24: Covid-19: Paris court rules French govt did not stock enough masks in 2020/
<https://www.france24.com/en/europe/20220628-covid-19-paris-court-rules-french-govt-did-not-stock-enough-face-masks-in-2020>. June 28, 2022.

⁴⁹ France ends Covid state of emergency, dissolves scientific council. August 1, 2022
<https://www.rfi.fr/en/france/20220801-france-ends-covid-state-of-emergency-dissolves-scientific-council>

toward some actions of the government, such as politics going to illegal restaurants (that were supposed to be closed), or bad communication on the mask (usage recommendations and stocks). But overall, the French people were quite united during this crisis.

D. Conforming to the World Health Organization (WHO) and the national Center for Disease Control and Prevention (CDC) in response initiatives.

Throughout the Covid-19 epidemic and later pandemic, France has generally followed the guidelines and advisories of the WHO and CDC in the formulation and enforcement of relevant action plans and laws. French government initiatives would be measured in terms of problems related to the issuance of laws and their enforcement, as well as measured in terms of being over-regulated, under-regulated, or appropriately regulated.

| Action suggested by the WHO and the CDC | Level of conformity |
|--|---|
| Preparing processes for epidemic impact in urban sectors | Over-regulated in main cities – according to OECD standards |
| Support and regulation for travelers at entry points during Covid 19 | Appropriately regulated – Under enforced |
| Hand hygiene practices | Appropriately regulated but late set up - enforced |
| Airport's screening | Appropriately regulated but late set up - enforced |
| Masks related advices | Appropriately regulated and enforced |
| Covid 19 Food industry | Over regulated and enforced |
| Covid 19 immunity passports | Followed WHO suggestions |
| Covid 19 and education | Appropriately regulated and enforced |
| Covid 19 and public transportation | Under regulated and under enforced |
| Covid 19 and vaccination | Appropriately regulated (and enforced ?) |

The World Health Organization (WHO) and some other entities such as the Center for Disease Control and Prevention (CDC) or the Organization for Economic Co-operation and Development (OECD) have been actively releasing guidelines and suggesting regulations for countries impacted by the COVID-19 pandemic. However, a lot of these guidelines were issued late and not always very judicious. For example, the proper use of masks in April 2020, when the French government made a public announcement mentioning that the World Health Organization (WHO) "does not recommend the wearing of masks in the general population".

While France managed to follow most of these regulations from WHO and CDC, the country also created its own scientific council dedicated to the strategy in order to adapt to the pandemic. This council was made up of anthropologists, epidemiologists, new technology specialists, sociologists, virologists... The main idea behind this council was to accommodate the regulations suggested by

the international entities mentioned before so that they matches better the current context and the specific French legislative system.

E. The nature and effectiveness of government leadership communications to the public

An important event such as the Covid 19 is attracting all the attention and energy of the media. As a result, it dilutes the information that the government is sharing with people as every entity is creating and sharing content about the pandemic. It makes it more difficult for the government to communicate as every statement will be seen, analyzed, compared, and judged by almost all the population.

Indeed, when the president of the French Republic was making a public speech on television, in 2019, it gathered around 9 million people for the new year wishes and 23 million for the “gilet jaune” social crisis. However, during the pandemic, the public statements of the French president gathered more than 30 million people on TV (more than 90% of the total audience). In a way, it shows two things: the first one, the government knows how to gather the attention of the French population; the second one, French people are expecting these statements to mean something. Indeed, the pressure applied on the government by public expectations is not a factor to underestimate.

In France, the COVID-19 pandemic has been managed in several stages, with different measures being implemented at each stage based on the severity of the situation. The government chose a specific communication around the idea of the stage. In order to understand the different announcements made by the French leadership, a clear understanding of these “stages” was necessary.

Stage 1: During this stage, the government implemented measures such as a lockdown, the closure of non-essential businesses and services, and the prohibition of public gatherings. These measures were implemented as a way to slow the spread of the virus and protect the public health system.

Stage 2: During this stage, the government implemented a curfew from 9:00 p.m. to 6:00 a.m., with some exceptions, in certain areas where the virus was spreading rapidly. Non-essential businesses and services, such as bars and theaters, were also required to close.

Stage 3: During this stage, the government implemented a nationwide curfew from 9:00 p.m. to 6:00 a.m., with some exceptions. Non-essential businesses and services were also required to close nationwide. Schools were allowed to remain open, but the use of masks was made mandatory in all enclosed public spaces.

The measures put in place during each stage were lifted or modified as the situation evolved.

| Date | Topic | Medium |
|------|-------|--------|
|------|-------|--------|

| | | |
|------------|---|---|
| 24/01/2020 | Confirmation of the first cases of COVID-19 by the health minister | Written press release |
| 12/03/2020 | Closing schools and economic measures | TV speech from the President on national channels |
| 14/03/2020 | France goes from stage 2 to stage 3 | Press conference from the prime minister |
| 16/03/2020 | News regulations and 1 st lockdown announcement | TV speech from the President on national channels |
| 21/03/2020 | The government place an order of 250 million masks | Press conference from the minister of health |
| 27/03/2020 | Lockdown is extended by 2 weeks | Press conference from the prime minister |
| 31/03/2020 | Import and production strategy in France of masks, respirators and hydroalcoholic gel | French president is visiting a mask factory |
| 13/04/2020 | Lockdown is extended for the 2 nd time | TV speech from the President on national channels |
| 07/05/2020 | Lockdown is partially ending in some regions | Press conference from the prime minister |
| 14/05/2020 | Recovery strategy for tourism sector | Press conference from the prime minister |
| 26/05/2020 | Recovery strategy for automotive industry | Press conference from the prime minister |
| 09/06/2020 | Recovery strategy for aeronautic industry | Press conference from the prime minister |
| 14/06/2020 | End of national lockdown | TV speech from the President on national channels |
| 29/06/2020 | Recovery strategy for retail | Press conference from the prime minister |
| 03/09/2020 | National recovery strategy | Press conference from the prime minister |
| 17/09/2020 | Stronger enforcement of regulation related to covid | Press conference from the health minister |
| 05/10/2020 | Paris and its near suburbs are entering the maximum level of alert | Press conference from the prime minister |

| | | |
|------------|-------------------------------|---|
| 14/10/2020 | Regional curfews | TV speech from the President on national channels |
| 15/10/2020 | Details about curfews | Press conference from the prime minister |
| 28/10/2020 | New lockdown | TV speech from the President on national channels |
| 29/10/2020 | New lockdown details | Press conference from the prime minister |
| 24/11/2020 | Coming measure (positive) | TV speech from the President on national channels |
| 03/12/2020 | Vaccination campaign schedule | Press conference from the prime minister |
| 16/12/2020 | New curfew | Written press release |
| 31/03/2021 | New restrictions | TV speech from the President on national channels |

For most of its speeches, the tone used by the French president is very institutional, patriotic and even dramatic which matches with his regular style. As mentioned before, it is important for the French to have a charismatic leader during a crisis. By looking at the table above we understand that the government is mostly using Television as a medium of communication, which makes sense as most of the French people are using it as their primary source of information.

We also see that communication is made by waves or campaigns with a lot of speeches in a short amount of time (before each spike of daily death and before each new strong regulation).

Daily New Deaths in France



Source: Screenshot worldometers, info

The government had to incorporate two objectives into its communication plan: to be legit as a crisis management leader and to look like the main actor in the recovery. Indeed, communication is one of the main challenges of handling a crisis and it needs to be considered seriously.

To achieve this, the government used a lot of health experts in their communication strategy, in order to back up their decision-making. It would have probably been a successful strategy if not for two issues:

- The first one is the overuse of experts on media, which (as said before) diluted the presence of politics on the scene, making them seem like they were not the main actors in the crisis management.
- The second point is the dissonance between scientists (experts) that would disunite the public and thus create a fracture between the government and the people.

The main example of these points is the controversy around Professor Raoult, a well renowned French specialist in infectious disease that went publicly against the government and the scientific council. Its overexposure on media brand generates doubt in people's mind toward the capacity of the government to handle the crisis.

Another strategy used by the French government was transparency: since the beginning of the pandemic the Prime minister clearly express his will to be fully transparent in their communication.

It resulted in helping the government to gain the trust of the French people and to easily answer any kind of controversy or doubt.

However, it also underlined the lack of coordination when it came to relaying information. As a result there have been a few mistakes that made people lose trust in the state to handle the COVID-19 situation.

Among these mistakes, the first one has been the “mask scandal”, when the government publicly expressed that France has a big stock of masks, enough to handle the COVID-19 situation while two months after, apologizing saying that there would not be enough stock, not even enough for all the people working in the health industry.

The politics adopted a “zig-zag communication” by playing down the impact of covid 19 on the daily lives of people and a day after strongly suggesting people be disciplined and reduced their daily actions. Something similar happened with the minister of education expressing his will to keep schools opened and the week after closing them.

Using these two tones of communication and opposing messages confused a lot of French people.

After the first year under the COVID-19, the French government adopted its communication and made better choices by communicating less but in a simple and direct way. The government also tried different methods like the use of influencers to target a new audience and raise its popularity. Among these campaigns, the main one is the use of “Macfly et Carlito” one of the most famous duo of YouTubers among the teenagers in France. The president made a bet with them and challenge them to make a song about the good practices during Covid 19. Quite an unusual action but yet very successful among the French young population.

Overall, the communication strategy and the way it was handle was very contested by the French at the beginning of the pandemic. But over time the government improved and managed to deliver clear information that raised the popularity of the French president (that was very low before the pandemic due to the “gilets jaunes” social crisis).

As mentioned as the beginning of this chapter, it is quite difficult to unit and satisfy all the population of a country that count not 265 kinds of cheese but more than a thousand.

F. Public behavioral response and implications of cultural influences

The French government like most other nations in European was not fully prepared to handle the globalized coronavirus pandemic. Therefore the French approach, similar to most of her European neighbours, was based on a combination of guidelines and advisories from the WHO and/or the ECDC, implementation of ‘trial and error’ and the ‘learning curve’ based on outcomes and practical experiences as the pandemic evolved. The evolution of the Covid-19 was both vertical in terms of spreading rapidly throughout the world, and horizontally, since the coronavirus itself was also continually mutating into different strains with different effects and outcomes. Up to now, each mutation that evolved had more serious impacts such as the Delta mutation which was much more

deadly and caused more serious illnesses than the previous strains. The Delta was followed by the Omicron which caused less serious illness and was less deadly. However, it was more contagious and much easier to infect. These trends and mutations of the coronavirus create great and often insurmountable challenges for the French government leadership.

France, like most other nations in Europe, adopted the non-pharmaceutical protocols according to the guidelines issued by the WHO and the ECDC in addressing the Covid-19 pandemic. However, since such guidelines were not issued until well into the second quarter of 2020 these protocols were 4 to 5 months after the initial guidelines issued by China in early January 2020 after its preliminary findings, evaluations, and assessments during the Wuhan City outbreak, and three months after the same information and knowledge were reconfirmed and shared during the WHO – China Joint Mission to Wuhan and other parts of China in mid February 2020 and included in its End of Mission Report accordingly. The guidelines were basically following the social distancing protocols such as wearing masks in public and crowded areas and frequent sanitary cleansing of hands that may have been infected through contact with daily objects. Prior to that France had imposed occasional stricter controls in response to high spikes in infections and deaths such as declaring curfews, quarantines, and lockdowns, including closures of high-risk crowded public venues such as schools and universities, workplaces, shopping centers, and department stores, social entertainment venues and other public areas. France had followed all these guidelines and recommendations issued by the WHO, ECDC, and its own Scientific Council, but nevertheless the high infection and death rates continued, and France remained on the Top 20 list of highest infection and death rates globally.

Consequently, during the pandemic, the French government has been making a lot of decisions that impacted the citizen of the country. The status of health emergency helped to quickly change regulations that had rhythmized the daily life of French people. Most of the major changes had been associated with public speeches from the government or from the French president.

In order to understand the French public response to the government leadership during the Covid 19 crisis, it seems important to call to mind that the pandemic has been divided into phases that followed the number of cases and deaths. During each phase, the communication and the actions undertaken by the French government have been carefully scripted and planned out. This was due to the recognized sensitivity of the French people towards their rights and liberties in accordance with the constitution. Any government decision which would impact or have an effect on the normal lives of the people had to be justifiable through legitimacy and rationalization. In other words, such government decisions and declarations have to be accepted by the people (the majority at least) as justifiable and necessary to fight the Covid-19 pandemic. This is a demonstration of political - culture, represented by an awareness of the legitimate rights and benefits of the people.

First of all we will consider the general position of French people regarding the overall management of the crisis by its leadership. Then we will focus on how the most important policies have been perceived and accepted by the population. As for French people the content matters as much as the style, we will also investigate the communication of the government and how it impacted the French. Finally, it seems quite vital to analyse the overall efficiency of the French government on controlling the pandemic.

i. Opinion on government credibility and performance

As previously stated, the French leadership was under a social crisis when the pandemic was made public. Consequently, the focus of the government was divided. Both communication and actions about the Covid 19 appeared later than expected by the French citizen. The dissatisfaction of French people toward the slow reaction of the executive power was justified by the fact that France is a centralized presidential regime that can act quickly as it is supported by a strong public administration.

As a result, mid April 2020, only 24% of the population was satisfied with the way the president Macron has dealt with the pandemic.⁵⁰ (1-IPSOS). This unpopularity can be explained by a messy and slow communication from the administration as well a mismanagement of medical supplies that lead to a mask shortage (which action has been taken a few days after this poll).

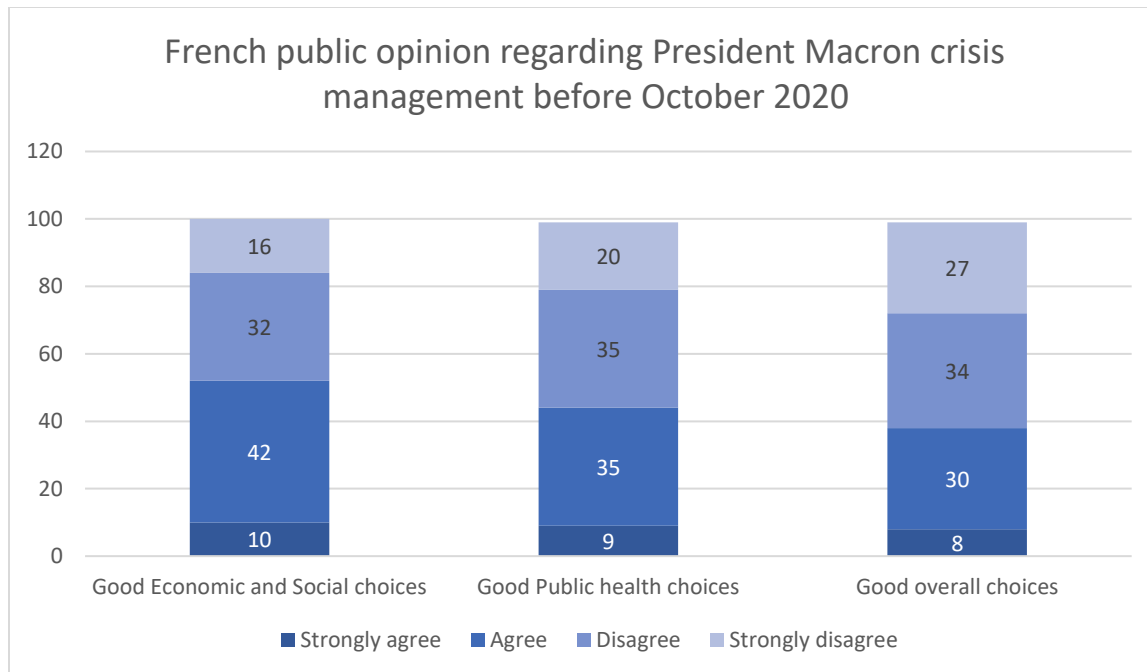
A few weeks after, around 80% of the French people interviewed⁵¹ (8-Statistica) distrust the government as they think that major pieces of information have been intentionally hidden from them.

Later on, in October, while the number of death related to the Covid 19 has been quite low for four consecutive months, a new report on the French opinion toward Macron, has been released by Elabe.⁵² (2 ELAB-BFM).

⁵⁰ <https://newseu.cgtn.com/news/2020-05-04/French-public-slams-government-over-virus-response-in-opinion-poll-Qcq9ypMdB6/index.html>

⁵¹ <https://fr.statista.com/statistiques/1109462/reaction-gouvernement-coronavirus-opinion-france/>

⁵² https://www.bfmtv.com/politique/sondage-bfmtv-pour-6-francais-sur-10-macron-n-a-pas-ete-a-la-hauteur-de-la-crise-du-covid-19_AN-202010070258.html



As we can see the public opinion is a bit more divided but the French seems to be more concerned about the public health decision more than the economic. Indeed, the government set up a lot of social and economic measures to help French people to go through the crisis (Solidarity funds, extended dealines for taxes, help for job seekers...).

Later on, in Decemeber while the president was quarantine due to being tested positive to coronavirus, a new online survey showed that its popularity and the one of the prime minister were quite low, as around 60% of the interviewedds stated they were dissatisfied with them. In between, other statistics in France, showed that 7 out of 10 people were not trusting the Macron administration to fight the pandemic as they considered the meaures taken so far were too inconsistent.⁵³ (3-lpsos)

As we can see on the following poll, one year after the beginning of the pandemic, we noticed that French people were not disatisfied with all the different actors of the society. Indeed, most of them judge that cities and companies managed quite well during the pandemic. However, when it comes to the politics, more than 60% of the population consider that more could have been done.

⁵³ <https://www.aa.com.tr/en/europe/60-french-unhappy-with-macron-survey/2082765>

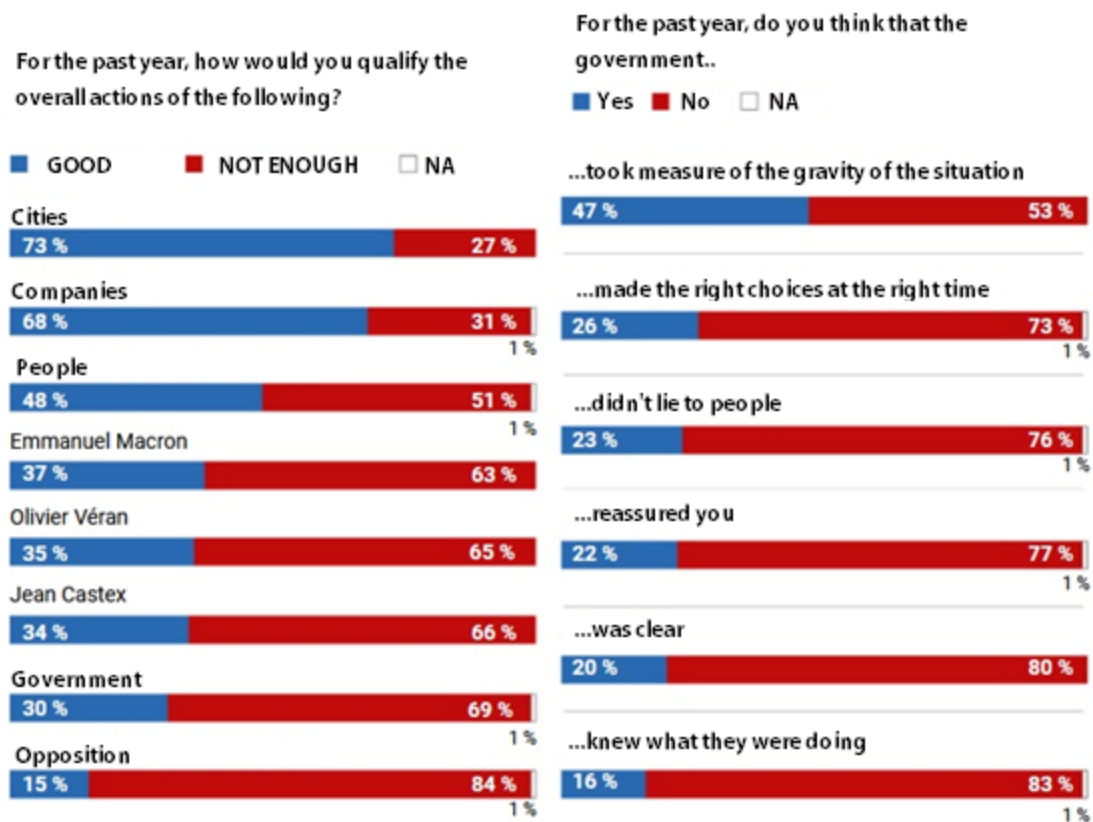


Figure 3: Le figaro" Un an de Covid-19 : les Français critiquent la gestion de l'exécutif»- Translated from French⁵⁴

The vaccination campaign started in early 2021 which could have positively impacted the opinion of French people toward the government. However, in February 2021, a new survey made by Odoxa-Backbone Consulting shows that around 73% of the French think that the government doesn't tell them the truth and 71% that it didn't take the right action at the right time.⁵⁵ (4- Odoxa-Backbone Consulting)

As the time goes on, numbers are not evolving in favor of the French administration. Indeed, after the allocation of the French president on the 31st of March 2021, only 25% of the French people are confident that the government will act efficiently against the Coronavirus. (5-Ifop).

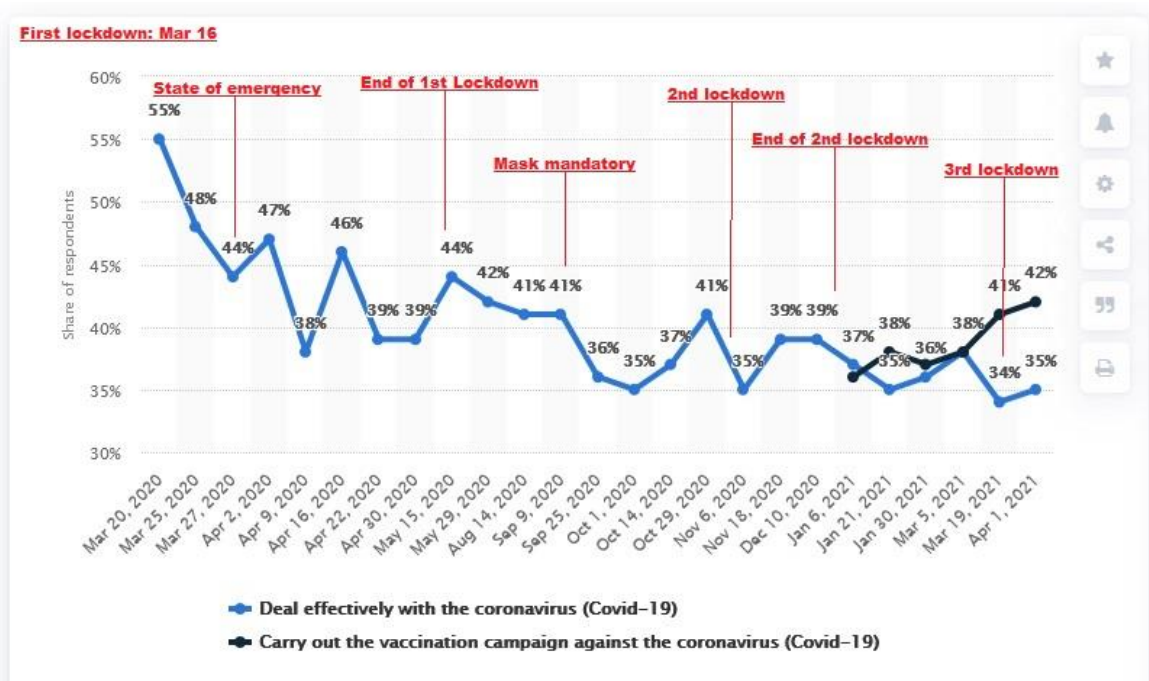
Statistics reflect the lack of confidence of French people in their government to take the right measures in time to fight against the pandemic. However, when we analyse in detail these numbers, we clearly see a difference of opinion when it comes to public health measures and economic-social actions. Indeed, while the French are unsatisfied with the overall management of the crisis from the

⁵⁴ <https://www.lefigaro.fr/politique/un-an-de-covid-19-les-francais-critiquent-la-gestion-de-l-executif-20210311>

⁵⁵ <https://www.ladepeche.fr/2021/02/04/covid-19-pres-de-60-de-francais-nont-pas-confiance-en-laction-du-gouvernement-face-a-lepidemie-9353954.php>

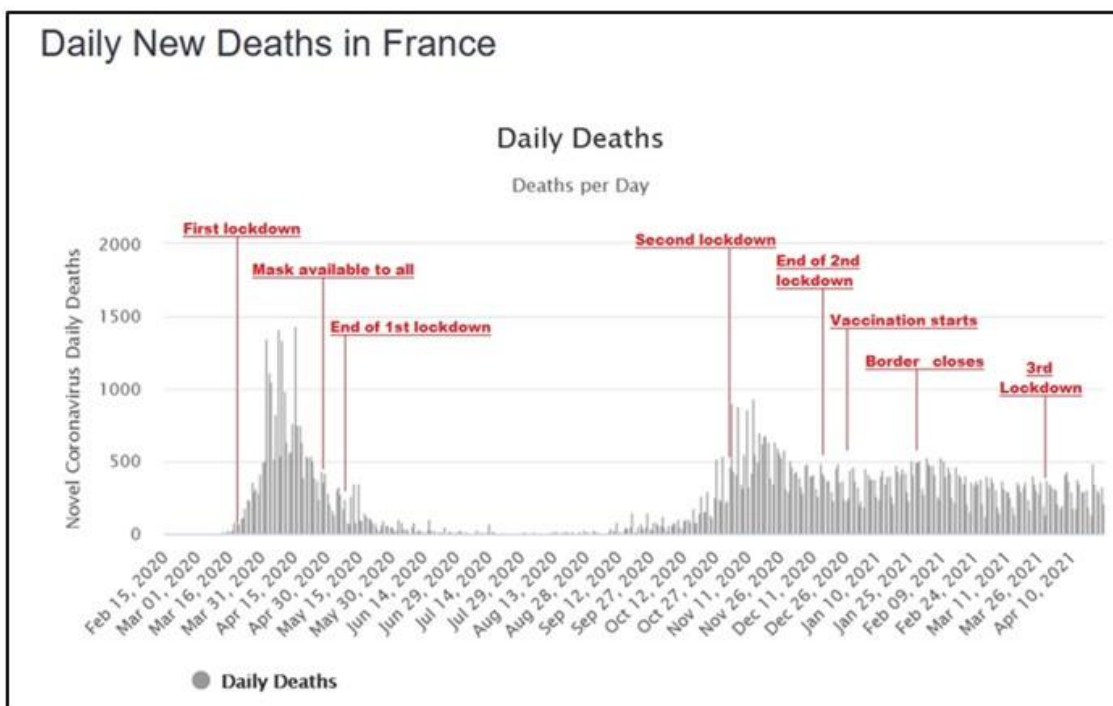
health point of view most of them are supporting the government on its economic choices both in 2020⁵⁶ (2-ELAB) and 2021.⁵⁷ (6- Ifop).

When we consider the following graph, each time the government implemented a new strong action against the crisis, we could see that French people thought it was not efficient or that it was not enough.



⁵⁶ https://www.bfmtv.com/politique/sondage-bfmtv-pour-6-francais-sur-10-macron-n-a-pas-ete-a-la-hauteur-de-la-crise-du-covid-19_AN-202010070258.html

⁵⁷ <https://www.europe1.fr/economie/covid-la-moitie-des-francais-font-confiance-au-gouvernement-pour-aider-les-entreprises-4050096>



When we compare the last graph with the one that is related to the number of daily new death in the country, a question remains: which factors did French people use to measure the efficiency of the French government to fight against the pandemic ?

ii. Public response (or absence of response) to government actions

As we understood the French sentiment toward their leaders during the pandemic, it seems interesting to associate these data with their concrete responses to it. Especially when we know that French people tend to be quite demonstrative in their dissatisfaction toward governmental actions. Therefore, we will identify French reactions to specific measures undertaken by the government during the Covid-19 crisis.

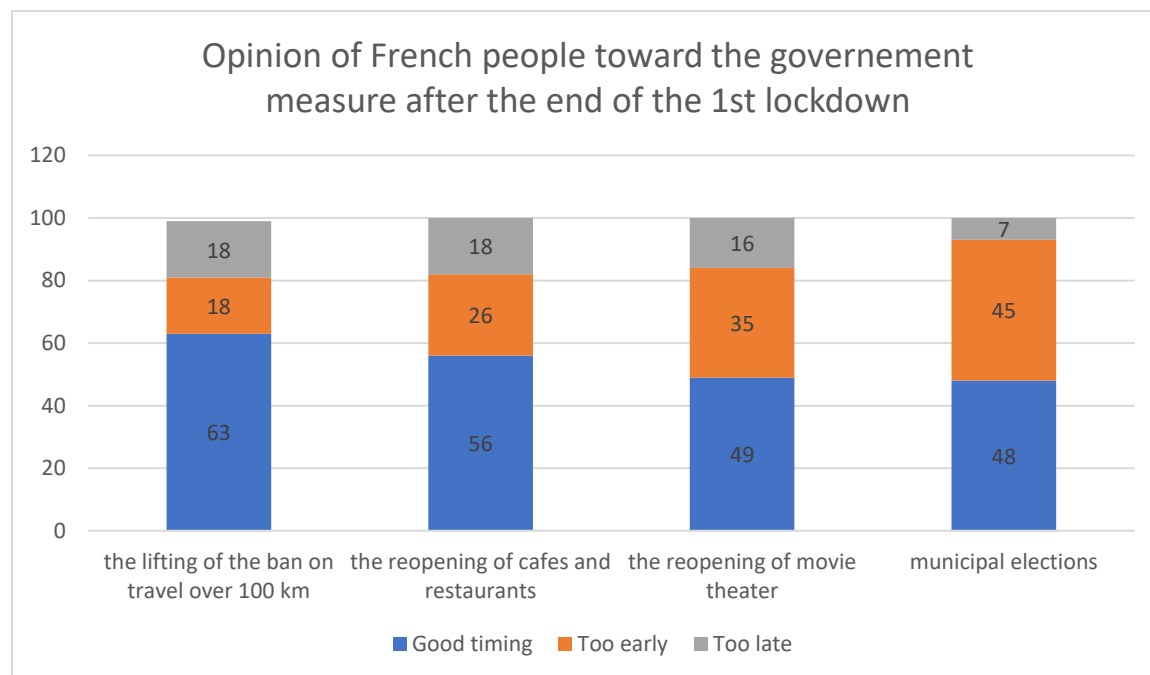
In February 2020, one of the first decisions of the government was to forbid any gathering of more than 5,000 people which impacted a few popular events such as the International agriculture tradeshow or the Paris half marathon. Most of the French people understood and easily accepted this decision but still criticized the timing of the announcement.⁵⁸ (7 – Le parisien).

The following month (March 2020) month, the president declared the first lockdown followed by announcements from the prime minister stating that all “non-essential” businesses and schools had to be closed. Along with these statements, a new set of precautionary rules was declared for the

⁵⁸ <https://www.leparisien.fr/sports/annulation-du-semi-marathon-de-paris-les-coueurs-entre-comprehension-et-colere-29-02-2020-8269905.php>

whole nation. The public response to the announcements was positive as people seemed to consider the coronavirus as a severe threat. However, a wave of panic also hit the population but it was not linked to the fear to be infected. The fear was more related to logistics.⁵⁹ (10-France -info) The deadline before the lockdown was quite short and with the closure of many shops, people had to adapt and prepare for the event very quickly. Some urgently decided to move to their relative, others gathered a lot of stock of food and amenities, while some had to adjust working schedules and kids-related activities. Everything was rushed and it put a lot of people under pressure but France quietly accepted it and tried to adapt its lifestyle as people hoped for a quick recovery.

After almost two months of lockdown, the government is putting an end to it but also decided to reinforce some of the sanitary measures to fight the Covid-19 pandemic. The announcement was welcomed by the population, especially the parents as schools were reopening.⁶⁰ (11-France info) Along with these changes, were the end of the some important restrictions which were also well received by the French citizens.⁶¹ (12- Ipsos):



It was only after the end of the 1st lockdown (May 11, 2020) that it became mandatory to wear a mask in public areas. This announcement was well received by 63 % of the population who approved the decision. (Ici-13). Those who didn't like the idea of wearing a mask in public places mostly remain

⁵⁹ <https://france3-regions.francetvinfo.fr/normandie/covid-19-un-an-apres-a-l-annonce-du-confinement-j-ai-pris-mon-chat-et-je-suis-partie-1998796.html>

⁶⁰ 11- <https://france3-regions.francetvinfo.fr/occitanie/herault/montpellier/deconfinement-reouverture-ecoles-reactions-parents-enseignants-occitanie-1821976.html>

⁶¹

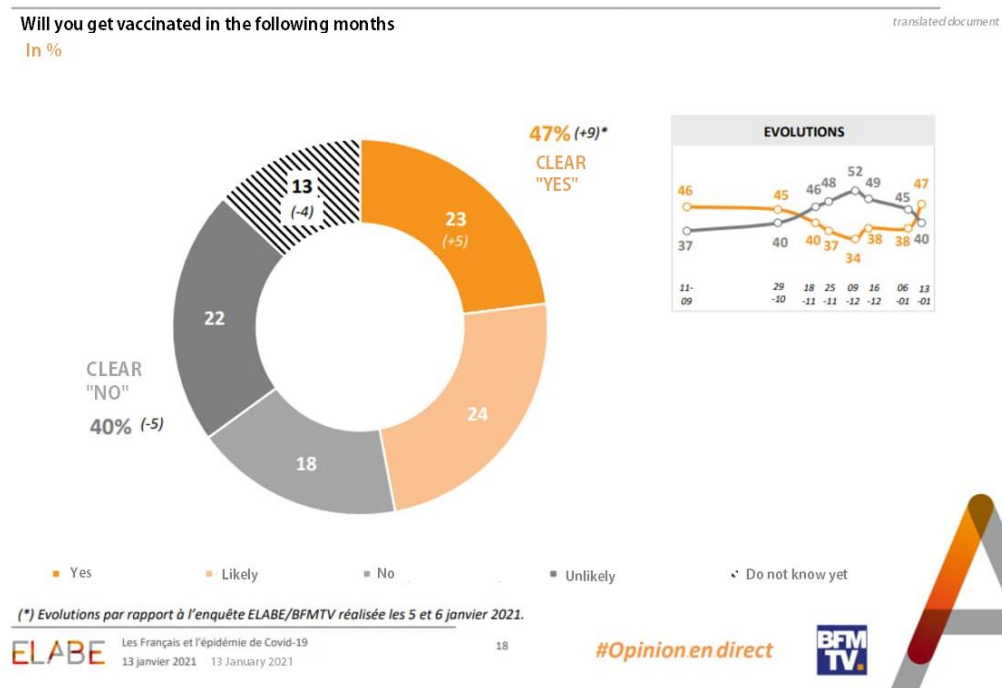
silent and followed the rules. But a few very small protests (a few hundred of people) appeared in France, inspired by larger demonstrations organized in the US, however, they didn't have much impact.

During the following three months, the government would not make any major decision on restrictions so the French people would enjoy their summer break without too many constraints.

But in mid-October 2020 a curfew was imposed and while the majority of the French population was not trusting its government, around 60% (see attached Graph) thought that this curfew was a good move from the executive power of the government.⁶²

A few days later, while the number of Covid cases was steadily raising, the government announced another nationwide lockdown once again and which was well accepted by the public with around 72% of the French citizen in favor.⁶³ (rfi 15)

At the end of this second lockdown, the vaccination campaign started. It was not made mandatory but the idea of a "vaccination passport" that would allow (or not) people to go to places like restaurants, museums, shopping malls, and high-speed trains was being discussed. When it comes to vaccination the French citizens were quite divided.⁶⁴ (bfm16).



⁶² <https://www.lefigaro.fr/sciences/sondage-les-francais-approuvent-le-couvre-feu-20201022>

⁶³ <https://www.rfi.fr/en/france/20200927-public-france-favour-new-lockdown-trust-government-dips>

⁶⁴ 16- https://www.bfmtv.com/sante/sondage-bfmtv-covid-19-47-des-francais-souhaitent-desormais-se-faire-vacciner_AN-202101130292.html

The next major move of the government was the declaration of the third nationwide lockdown at the end of March 2021, three months after the start of the vaccination campaign. By that time people got fed up with the restrictions linked to the Covid-19 pandemic and quite a few protests were organized in different cities. The root source of these demonstrations was linked to difficulties in the economic situation for a lot of business sectors and employment categories.⁶⁵ (France info 17).

The lockdown itself was not that much contested but the process and the severity of the measures were not well received. The public was more in favor of a soft lockdown.⁶⁶ (le points 18). As a results, most of the people accepted this lockdown (72%) but a part of population didn't properly follow the rules and managed to get around the controls set up by the state as a sign of exasperation.⁶⁷ (Ipsos 19)

One month after the end of its third lockdown France implemented a kind of vaccination passport called the "pass sanitaire", which was actually quite welcomed by 64% to 77% of the French residents.⁶⁸ (Ouest France 20). However, those that did not approve it, didn't stay quiet as for all the other rules set up by the government. Indeed, quite a few protests surged in the country, with gatherings of several hundreds thousand of people.⁶⁹ (france info 21).



France is known for its tendency to protest a lot and to defy the government. It is a surprise to see that during the pandemic, there has been almost no serious protest in France. Only a few gathered against the so-called "pass sanitaire" (health pass). But let's not misunderstand the French sentiment, it is not because they are not protesting that they are not contesting or criticizing the government's actions (or inactions) through demonstrations. Indeed, in France people are usually protesting for equality but in the case of the COVID-19 pandemic crisis situation, all are impacted, so there is no need to regroup. The protests have been individual and mostly appeared as isolated acts

⁶⁵ https://www.francetvinfo.fr/sante/maladie/coronavirus/pour-defendre-l-emploi-165-manifestations-malgre-lecovid-19_4284955.html

⁶⁶ https://www.lepoint.fr/sante/une-courte-majorite-de-francais-s-oppose-a-un-confinement-strict-27-01-2021-2411425_40.php

⁶⁷ https://www.lexpress.fr/actualite/societe/sante/une-acceptation-resignee-72-des-francais-prets-a-respecter-un-nouveau-confinement_2143899.html

⁶⁸ <https://www.ouest-france.fr/sante/virus/coronavirus/pass-sanitaire/covid-19-le-passe-sanitaire-reste-largement-approuve-selon-un-sondage-a38afb6a-0401-11ec-be5b-0c913f624818>

⁶⁹ https://www.francetvinfo.fr/sante/maladie/coronavirus/pass-sanitaire/covid-19-le-pass-sanitaire-reste-largement-approuve-selon-un-sondage_4746463.html

of defiance and disobedience, but for most of the cases, French people have been quite disciplined and aligned with the government's decisions and actions.

This demonstrates the political-culture of France, for both the government authority and the people. Such drastic legislations and actions as lockdowns, curfews, and closures are not normal and therefore are only possible through the enactment of the emergency decree which gives extraordinary authority and powers to the government, and the president and requires the appropriate parliamentary approvals and in accordance to the constitution. Government decisions, such as national lockdowns and closures of schools and workplaces are made with due consideration to justification and rationalization with respect to necessary crisis management of the deadly Covid-19 pandemic. The French government is also demonstrating self-management and control in the exercise of its extraordinary powers by setting timeframes for critical laws and actions, such as national lockdowns which are always declared with an indicative timeframe. These timeframes are often extended, but are based on sound and justifiable rationalization to be acceptable by the people.

Conversely, the same political-culture is demonstrated by the people who realise the extraordinary situation under such crises and are willing to forego some of their liberties and rights under the constitution for the sake and benefit of the nation. The willingness of the French citizens to adapt to the temporary stringent government decrees shows a culture of flexibility, tolerance and adaptability to situational changes. The only time when protests and demonstrations emerge is when their lives are burdened by financial constraints impacting on their well-being. This was brought about by the extended disruptions to business operations, and consequently, employment and life-supporting incomes. Therefore the political-culture of flexibility and tolerance is limited by some aspects of the economic-culture with respect to survival and well-being.

iii. Level of support, conformity, obedience, and acceptance of government leadership policies and acts

Geert Hofstede's framework for analyzing cultural values can provide insights into how cultural influences may shape the public's behavioral response to the COVID-19 pandemic in France.

According to Hofstede's framework, French culture is characterized by a high level of uncertainty avoidance, meaning that there is a strong emphasis on rules and procedures to reduce uncertainty and risk. This cultural value may lead French people to be more likely to comply with public health measures and recommendations issued by the government and other authorities in order to reduce the risk of exposure to the virus.

French culture is also relatively individualistic, meaning that people in France tend to value independence and personal responsibility. This cultural value may lead French people to be more proactive in taking steps to protect themselves and their loved ones from the virus, such as by wearing masks and practicing physical distancing.

On the other hand, French culture is also characterized by a high level of power distance, meaning that there is a clear hierarchy of power and a strong emphasis on authority and respect for authority

figures. This cultural value may lead French people to be more likely to follow the guidance and recommendations of the government and other authorities, even if they disagree with them.

Overall, cultural values can influence the public's behavioral response to the COVID-19 pandemic in France, but it is important to note that cultural values are complex and multifaceted, and individual people may be influenced by a range of other factors in addition to their cultural background.

An international study conducted by researchers from MIT, Harvard and Oxford, regrouped information on people's compliance to these rules. Here are some of the results regarding France.⁷⁰

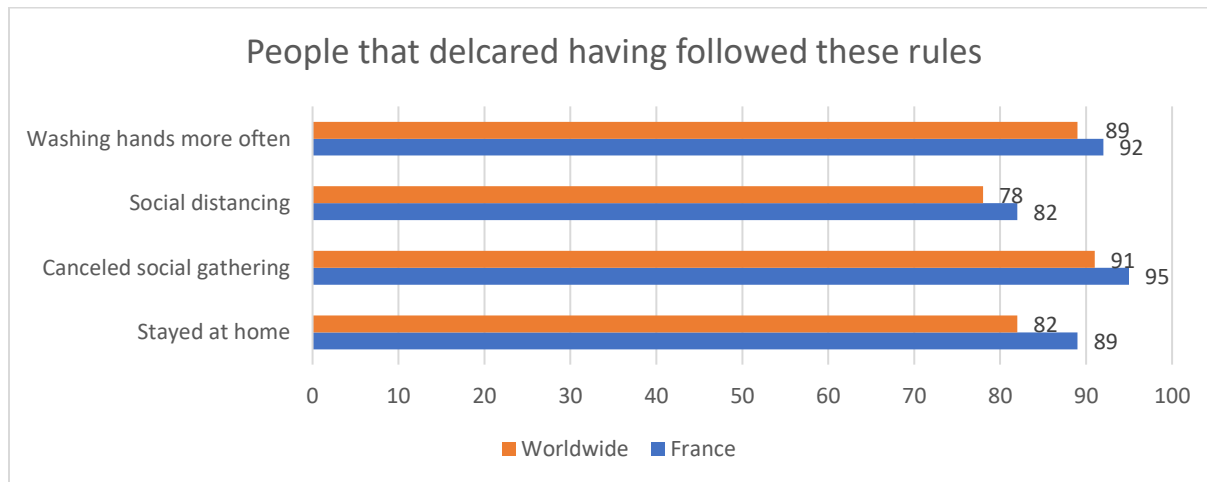


Figure 1: French people variation in self-reported COVID-19 protective behaviors (20)

At the beginning of the Covid-19 pandemic the government exhortations were well received by the French that probably understood that unity was important during these difficult times.

⁷⁰ https://www.nber.org/system/files/working_papers/w27082/w27082.pdf

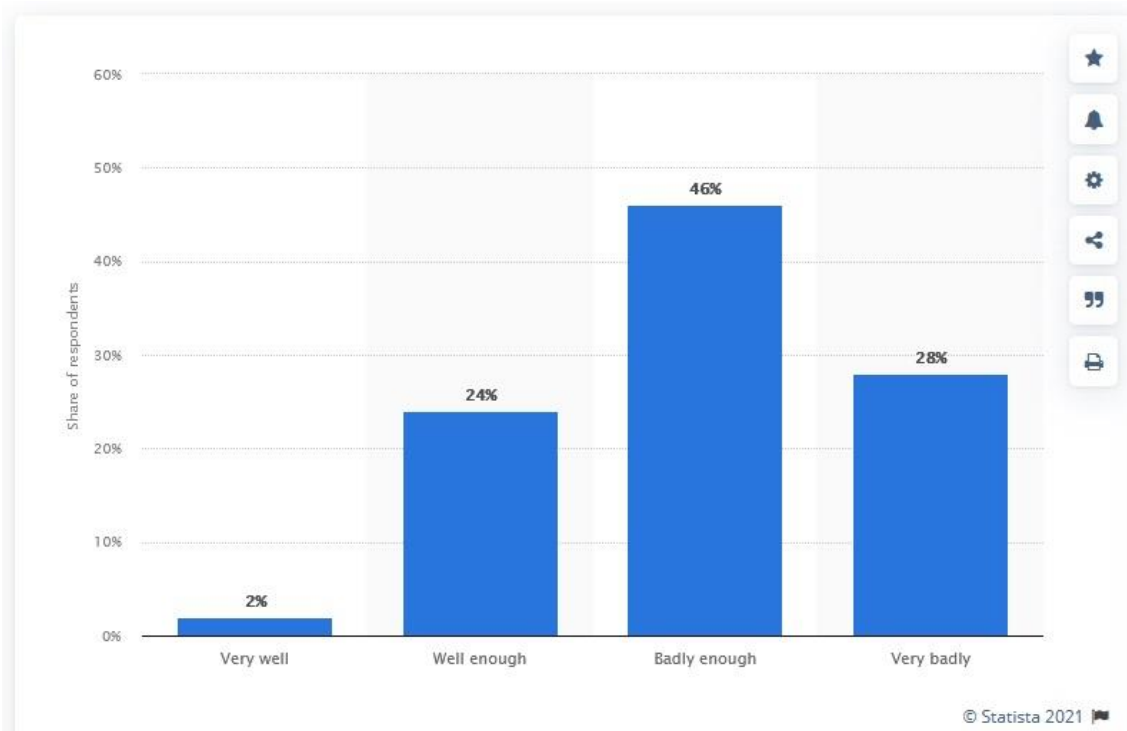


Figure 2: In your opinion, do the French respect well or badly the containment rules set up by the country's authorities? March 2020

However, at the end of the first lockdown during which they didn't really respect the containment rules, a lot of people started to reduce even more their diligence in following the regulations when it came to health precautions such as social distancing, such as avoiding social gatherings.

This can be linked to the evolution of their mental health due to the lockdown that lead to a drastic change of lifestyle, which is very important for the French citizens. Studies showed that while they reduced their physical activities, they started to drink more, smoke more, and noticed a deterioration in sleep quality.⁷¹

It is interesting to highlight that French people were aware of the possible consequences due to the lack of precaution as 78% of them would take responsibility if a second wave were to hit the country.⁷² (Ipsos 22). This can be related to several things, the main one being the fact France is considered a national culture where people are independent, flexible, and inclined to take risks.⁷³

⁷¹ Rossinot, Hélène, Romain Fantin, and Julien Venne. 2020. "Behavioral Changes During COVID-19 Confinement in France: A Web-Based Study" *International Journal of Environmental Research and Public Health* 17, no. 22: 8444. <https://doi.org/10.3390/ijerph17228444>

⁷² 22- <https://www.ipsos.com/fr-fr/barometre-covid-19-la-majorite-des-francais-approuve-le-calendrier-de-deconfinement>

⁷³ Markus, H., Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253.

However, France is also a country with a very strong “etiquette” culture which probably facilitated the adoption of new processes linked to social distancing. Indeed changing a few habits to be socially acknowledged and recognized is totally acceptable for most of the French population.⁷⁴ It could explain why French people kept being cautious about some rules related to etiquette but were less careful when it came to rules that impacted their lifestyle as indicated in Figure 3 below.

| Second wave Year 2020 | |
|------------------------|---|
| Rule | % of French people that respect the rule |
| Wearing masks | 83 % |
| Do not shake hands | 88% |
| Avoid social gathering | 86% |
| Stay home | 55% |

Figure 3: COVID-19 protective behaviors of French people during the 2nd wave ⁷⁵

At the beginning of the second lockdown, the French population started to publicly show a form of irritation against some decrees enforced by the government, one especially that illustrate quite well the importance of the cultural aspects while managing a crisis. France (as with many other countries) stated that all the non-essential shops should remain closed during the pandemic, in which was included book stores.

French people care a lot about music, literature, art... it's in their DNA and it's something that they are very proud of. So when the government closed the bookstores or the book areas in supermarkets and shopping mall, people quickly reacted. Petitions were created, online selling platforms such as Amazon were boycotted, literature contests such as the famous “prix Goncourt” were rescheduled, book stores were tempted to break the rules to still remain open. ⁷⁶

iv. French people's reaction to government leadership communication

In France, it could be said that communication is one of the pillars of French culture. It is not merely a science, but more importantly, an art. It could also be said that in France, ‘it's not what you say, but how you say it, that counts!’ Anyone who is following the Netflix series “Emily in Paris” would appreciate the value and importance of the ‘French communication’ style where the non-verbal signals, and the unstated words, have thunderous impacts on communication. This issue is particularly critical during crisis such as the Covid-19 pandemic.

It is generally accepted that the government's response to the pandemic has been met with some criticism in France.

⁷⁴ <https://datacovid.org/les-francais-sous-linfluence-des-autres-ou-comment-les-normes-sociales-impactent-notre-respect-des-gestes-barrieres/>

⁷⁵ <https://datacovid.org/le-respect-des-gestes-barrieres-face-a-lepidemie-de-covid19-une-explication-par-le-modele-des-croyances-envers-la-sante/>

⁷⁶ <https://www.ledevoir.com/lire/588942/en-france-la-fermeture-des-librairies-ne-passe-pas>

Some people may have felt that the government was not clear or consistent in its communication, or that it did not provide sufficient information about the pandemic and the measures being taken to address it. Others may have felt that the government was too slow to act, or that it did not take sufficient measures to protect the population.

Here are a few examples of criticisms that have been made of the French government's communication during the COVID-19 pandemic:

- Lack of clarity: Some people have criticized the government for not being clear or consistent in its messaging, or for providing contradictory information. For example, there have been reports of confusion around the use of masks and other protective measures, as well as conflicting statements about the effectiveness of certain treatments.

- Insufficient information: Some people have felt that the government has not provided enough information about the pandemic and the measures being taken to address it. For example, there have been complaints about a lack of transparency around the allocation of resources, such as hospital beds and ventilators.

- Slow response: Some people have criticized the government for not taking action quickly enough to address the pandemic. For example, there have been concerns about a delay in implementing lockdown measures and in rolling out vaccines.

- Lack of protection: Some people have felt that the government has not done enough to protect the population from the spread of the virus. For example, there have been complaints about a lack of personal protective equipment (PPE) for healthcare workers, and about overcrowding in hospitals and other care facilities.

It is worth noting that the COVID-19 pandemic has been a complex and rapidly evolving situation, and governments around the world have had to make difficult decisions and adapt to changing circumstances. As such, it is understandable that there may have been some challenges in communication and that not everyone may have agreed with all of the decisions that were made.

G. Comments on cultural influences on behavioral responses to the Covid-19 pandemic crisis

French history is quite important to understand its society and behavioral patterns, especially with regards to its culture, and here the focus is on the Covid-19 pandemic, and the government leadership's in crisis management. Two key cultural issues are discussed in this regard, namely, political – culture and social culture. These cultural-oriented behavioral traits of the French government and the response of the people can be associated with some cultural dimensions as discussed below. However, in times of national crisis the political and social cultures are 'inter-twined' and 'inter-dependent', since political solutions in crisis management relies on the acceptance, cooperation, and participation of the people. Conversely, the healthy well-being and sustainability of 'normal quality of lifestyle' relies on political leadership and guidance. Therefore the efficiency of political leadership through the government and the president, would lead to the effectiveness in protecting and sustaining the well-being of the French society. The past three years

have demonstrated the disruptive and fatal impact of the Covid-19 pandemic, not only to the society, but also to the national economy, which means essentially everyone.

France's political-culture relates to both government leadership actions and the corresponding responses and conformity of the people. Government leadership is built on power and authority to administrate the nation. French culture in this regard leans more towards the 'high power distance' dimension. However, this high power status is not autocratic or authoritarian rule, but is based on positional legitimacy as incorporated in France's 1958 Constitution of the Fifth Republic. This constitution governs the authority and powers of the government, as well as the civil rights and liberties of its citizens. This becomes the foundation for the relationship of 'cooperation' between the government and the people. This political – culture has played a significant role and impact in the government's initiatives in confronting and containing the Covid-19 pandemic which threatens the lives and the well-being (social and economic) of the French people. However, because of the extraordinary circumstances and crises generated by the Covid-19 pandemic, normal powers and authorities were not sufficient, and calling for extraordinary powers and authority such as common in times of war. In fact, the term "war" has often been used by president Macron to underscore the urgency or dramatic response and the critical level of the pandemic threat to the safety and well-being of the nation. Macron refers to the coronavirus as the 'invisible deadly enemy'.

The political-culture, in dealing with this extraordinary threat calls for drastic legislations and actions such as lockdowns, curfews, restricted movements, and closures of schools, businesses and entertainment venues, etc. Such authority and power are not normal and therefore would only be possible through the enactment of an emergency decree. Such emergency legislation can give extraordinary authority and powers to both the executive branch of the government, as well as to the president, but requires the appropriate parliamentary approvals and in accordance to the stipulations of the constitution. Government decisions, such as national lockdowns, curfews, quarantines and closures of schools and workplaces are declared and imposed only with due consideration to justification and rationalization with respect to necessary in crisis management. This high power distance situation would be legitimate under the constitution, and would be acceptable by the French citizens. Such was the case in the enactment of the emergency decree for the specific purpose to contain the deadly Covid-19 pandemic. In this regards, the demonstration of political – culture of French government is also demonstrated through conscientious effort of self-management and control in the exercise of its extraordinary powers such as listing and justifying the various restrictions and impositions, as well as setting indicative timeframes such as for national lockdowns and business closures. Such timeframes are often extended, but always with justifiable rationalization so as to be acceptable by the people. That is why government communication, especially by the president in announcing lockdowns or their extensions, are explanatory with justifications.

Correspondingly, in terms of political – culture, French people are generally considered to be very protective of their liberties to the point of being somewhat rebellious but yet open to the world (flexibility). To a certain extent, the French are somewhat high power distance-oriented, which means they accept the pyramid of authority and powers, but, being a Republic with a democratic constitution, such authority and power must exist within constitutional empowerment.

In this regard, the French are known for its tendency to protest a lot and to defy the government if it crosses the perceived line. It is a surprise to see that during the pandemic, with all the extraordinary laws and restrictions associated with the Covid-19 pandemic containment that there has been almost no serious protest in France. Only a few gathered against the so-called “pass sanitaire” (health pass). But let’s not misunderstand the French sentiment, it is not because they are not protesting that they are not contesting or criticizing the government’s actions (or inactions) through demonstrations. Indeed, in France people are usually protesting for equality but in the case of the COVID-19 pandemic crisis situation, all are impacted, so there is no need to protest.

In this regard, the French are also demonstrating two other cultural dimensions, namely ‘indulgence’ and ‘pragmatism’. This indulgence cultural dimension represents the French political freedoms of expression and rights to uphold and protect their liberties and rights, which the government must acknowledge and concede in accordance to the constitution. This indulgence also synergises with another cultural dimension namely “individualism”. The French are known for their individualistic and somewhat straightforward approach and attitude to situations. Many of the protests against government acts and laws have been individual and mostly appeared as isolated acts of defiance and disobedience, but for most of the cases, French people have been quite disciplined and aligned with the government’s decisions and actions. This willingness to conform to government laws and impositions could also reflect the French culture of “pragmatism”. Pragmatism because the French are willing to be flexible in their behaviours and values depending on the situation and circumstances. The Covid-19 pandemic has created many disruptions and changes to their normal lifestyles such as curfews, lockdowns, social distancing and closures of restaurants, coffeshops, schools and workplaces, etc, and the French are adapting to these lifestyle changes. Not only the adults, but also the children whose education has been both discontinuous and drastically changed from face-to-face to being ‘on-line’. Everyone had to adapt accordingly to changes in lifestyles. Last, but not the least, is the French strong aversion to uncertainty. Since the Covid-19 is still an “unknown” element, with no definitive protection or cure. Even the vaccines are considered by many as being unreliable and not delivering on expectations, resulting in a growing number of anti-vaxxers . Consequently the French citizens are looking to the government, and its team of experts, to lead and guide the way safely through the Covid-19 pandemic. This uncertainty avoidance cultural dimension has played an important role in influencing the French citizens to follow the government’s initiatives including accepting the many laws and restrictions.

Consequently the French citizens also demonstrate their political – culture in responding, accepting and conforming to the various government crisis management initiatives including declarations of extraordinary restrictions and limiting certain liberties as they realise the justification and rationale in the face of the crisis situation facing the nation. Under such crises the French are willing to forego some of their liberties and rights under the constitution for the sake and benefit of the nation. Also, such extraordinary powers are considered acceptable during emergencies and national crises under special decrees which are covered under the constitution. The willingness of the French citizens to accept the temporary stringent government decrees shows a culture that accepts high power distance within set parameters. The support for government stringent controls such as lockdowns

and travel restrictions, and even to the point of complaining when the government was acting 'too little, too late' demonstrates both a culture of flexibility, tolerance and adaptability to situational changes, but also uncertainly avoidance. The only time when the French showed some resistance in the form of protests and demonstrations was when president Macron imposed the third national lockdown end of March 2021. By this time, many businesses and people were becoming overburdened by financial stress and constraints which impact on their well-being. Frequent and extended disruptions to business operations, and consequently negative impacts on employment created critical strains on life-supporting incomes.

On the whole, a significant majority of the French people followed government policies and restrictions, even though they may not all agree to them. However, the minority that did not conform were significant enough to create the 'rolling-stone' effect to keep France among the top 20 nations with the highest death rates per one million population.⁷⁷

As previously mentioned, and demonstrated by their actions, the French are culturally flexible and pragmatic with willingness to adjust to changing circumstances. As an example of the situational culture concept, the French are willing to make certain adjustments which diverst from their normal cultural traits and values in national emergencies and crisis as experienced under the Covid-19 pandemic. Their normally strict enforcement of their rights and liberties were relaxed during the crisis period by the willingness to accept and obey certain limitations and government authoritarian controls such as lockdowns, closures of social venues and travel restrictions. Also, the generally individualistic values in lifestyles were adapted to more collective values of community protection and well-being, such as wearing masks in public and sanitary practices.

However, despite these cultural adjustments and compromise, France still ranked among the Top 20 nations with highest deathrates. This is basically due to nature and characteristics of the Covid-19 in that being a highly infectious disease, it's either 'all or nothind' if the disease is to be effectively contained. In other words, its takes only a small number of non-conformists to initiate and perpetuate a rolling-stone as well as the domino effected in spreading the viruous throughout the community. The fact is, the coronavirus is not democractic or playing 'fair' but is very authoritarian and demanding in enforcing its own terms. Therefore based on the law of 'dimishing returns', France's ability to contain the Covid-19 pandemic will only occur after there is a significant decline in the non-conforming portion of the population to reduce the dom,ino effect. This then becomes the core of France's defense, and is embedded in its behavioral culture and values.

⁷⁷ <https://ourworldindata.org/covid-deaths>

Chapter 9

ITALY: THE HIGHEST GLOBAL INFECTION AND DEATH RATE PER CAPITA DURING THE FIRST WAVE (2020)

DR. ALESSIO PANZA MD. MPH. DTM&H. Formerly Cooperation, and Coordinator of the European Union HIV and Adolescent Reproductive Health programs in South East Asia; and currently lecturer at Chulalongkorn University, College of Public Health Sciences, Health Systems Development, Bangkok, Thailand, Marina Cavallari, M.A. (Applied Linguistics), Lucerne, Switzerland, and Sukhavichai Dhanasundara.

A. The Outbreak and the First Wave

Italy was the second European nation to import the coronavirus through two Chinese tourists who entered Italy on January 31, 2020, and tested positive while visiting Rome. One week later a male Italian returning to Italy from Wuhan City, China, also tested positive, making him the third confirmed case in Italy. By the beginning of March, the virus had spread to all regions of Italy¹. As of March 31, 2020,² Italy had the highest Covid-19 related death rate in Europe followed by the United Kingdom, Spain, and France. In terms of confirmed Covid-19 cases, Italy came second only to the United States as indicated below (as of March 31, 2020)³. In terms of Covid-19 associated deaths, Italy had the highest rate in Europe at 43%, which also represented 32% of the global total in terms of per 1 million population as indicated in the Table. 9.1.⁴

¹ "Coronavirus. Colpite tutte le regioni. La Protezione civile: ecco i numeri aggiornati". *Avvenire* (in Italian). 5 March 2020. Retrieved 19 March 2020.

² WHO Situation Report, March 31, 2020.

³ WHO Situation Report, March 31, 2020.

⁴ Excluding San Marino, the smallest country with a land area of just over 61 km² (24 sq mi), and a population of 33,562.

| Table. 9.1. Deaths per 1 million population (as of March 31, 2020) | | | |
|--|-------------------|---------------|-----------------------|
| | <u>Infections</u> | <u>Deaths</u> | <u>Italy's Deaths</u> |
| United States | 140,640 | 2,398 | |
| Italy | 101,739 | 11,591 | |
| China | 82,545 | 3,314 | |
| Europe | 423,946 | 26,694 | (43%) |
| Global | 750,890 | 36,405 | (32%) |

For a better perspective of the Italian Covid-19 figures compared to the other nations as indicated in the above Table, it is necessary to relate them to the population figures as of 2020⁵. In 2020, the estimated population of the United States was 331 million, which was more than 5 times the population of Italy which was 60.46 million, and yet Italy's death rate was about 5 times that of the United States. The population of China was 1,439 million, or over 23 times the size of Italy, and yet Italy's death rate was more than 3 times the rate of China. At the regional level, Europe's population of about 448 million was over 7 times that of Italy, and yet Italy's death rate was almost half (43%) of the total sum for all of Europe. The global population in 2020 was estimated at 7,794 million and Italy's death rate was almost one-third (32%) of the global total.

While on the issue of Italy's population, statistics from Statista in 2019, estimated that over 23% were in the 65+ age group thus ranking it the third oldest population in the world after Japan and Monaco⁶. In relation to this, a Chinese study based on data on infections and deaths from the coronavirus from December 2019 to February 2020 indicated that the elderly are at the most risk with the highest mortality-to-infection ratio ranging from 8% (for ages 70 – 79 years) to about 15% for ages above 80 years.⁷ This would make Italy, based on its population age group structure, highly vulnerable to both infections and mortality rates. Dr. Kate Tulenko a physician and CEO of Corvus Health explains that older “ people don't have as strong an immune system so they are more vulnerable to infectious disease. They're also more likely to have conditions such as heart disease, lung disease, diabetes or kidney disease, which weaken their body's ability to fight infectious disease.”⁸ It is therefore likely that the high percentage of the elderly population contributes to the high infection and mortality rates in Italy during this first wave, and is likely to continue to have an impact throughout all subsequent ‘waves’.

⁵ PopulationPyramid.net

<https://www.populationpyramid.net/population-size-per-country/2020/>

Eurostat. News release. 111/2020 - 10 July 2020 <https://ec.europa.eu/eurostat/documents/2995521/11081093/3-10072020-AP-EN.pdf/d2f799bf-4412-05cc-a357-7b49b93615f1>

⁶ <https://www.statista.com/statistics/790014/share-of-the-population-in-italy-by-age-group/>

⁷ Niall McCarthy, Forbes. February 18, 2020.

<https://www.forbes.com/sites/niallmccarthy/2020/02/18/new-chinese-study-finds-that-the-elderly-are-most-at-risk-from-the-coronavirus-infographic/?sh=50624c377593>

⁸ Kate Whiting, Senior Writer. World Economic Forum. March 12, 2020.

<https://www.weforum.org/agenda/2020/03/coronavirus-covid-19-elderly-older-people-health-risk/>

This was a key factor in selecting Italy as a target nation for profiling its Covid-19 crisis management and outcomes.

B. The Political aspects

To better understand the nature of responses and outcomes, it would be necessary to take into consideration the other key factors including the Italian government's initiatives and actions in the handling of the pandemic spread such as the political, economic, and social aspects.

i. Government structure and political environment

Italy has been a democratic republic since June 2nd. 1946, after a popular referendum, decided to abolish the monarchy. The government of Italy is conducted through a parliamentary republic with a multi-party system under a constitution that was promulgated on January 1st. 1948. The Constitution established a three-way division of power: legislative, executive, and judicial.

Legislative power is vested primarily in the two houses of Parliament with the main function to make laws and regulations, and secondarily in the Council of Ministers, which can introduce bills and holds the majority in both houses. The legislative power is shared with the Regions at three levels, namely a) exclusively by the regions, b) concurring both the region and state, and c) exclusively by the state (e.g. relating to large-scale, infrastructure projects). There is a President who is head of state however the executive power is exercised through the State government and represented by the Council of the Ministers, which is presided over by the President of the Council, namely the Prime Minister (Presidente del Consiglio). Laws and other political decisions are executed by the ministers. Part of the executive power is devolved to the Regions and local governments namely the provinces or metropolitan cities and municipalities (see the following section on distribution of authority and powers). The State and regional governments sometimes exercise legislative power by presenting bills to the parliament or exercising concurring powers through the State government to pass emergency decree-laws such as in a pandemic, (however such decrees must be approved by the parliament within 60 days). The judiciary is independent of the legislative and executive branches. It is headed by the High Council of the Judiciary, a body presided over by the President, as the head of state, though this position is separate from all branches. The judicial power is exercised through the several layers of Courts and their judges. They are responsible for implementing the laws passed by the parliament. Judges in Italy are not elected. They are chosen based on internal commissions and exam results and they serve for life. Judicial power is not devolved to the regions.

The Italian political arena is built on small and medium-sized parties, making it almost impossible to have a one or even a two-party majority government. The Italian government is usually a coalition of at least 3 to 4 parties, commonly with each having different and often competing agendas and objectives while in government. This results in continually changing affiliations and arising conflicts of interest or power struggles that have led to the collapse of many governments before the completion of the full term in office. During the 70 years between 1945 – 2015, Italy had 69

governments, averaging one every 1.11 years⁹. This characteristic of short-lived coalition governments continues into the current Italian political environment. Since the start of the Covid-19 pandemic in Italy in January 2020, there have been 2 governments, one under Giuseppe Conte and the other under Mario Draghi, who eventually resigned in July 2022.

The Economist Intelligence Unit rated Italy as a "flawed democracy" in 2019 and this category continues to date¹⁰. Its definition of "flawed democracy" refers to nations where despite the fair and free elections and basic civil liberties being honoured, there are significant faults in other democratic aspects, such as underdeveloped political culture, low levels of participation in politics, and the functioning of governance such as media freedom infringement and minor suppression of political opposition and critics. This could be related to Italy's rather complicated political structure which necessitates multi-party coalition governments and could have impacted the ability of the Italian governments (under Conte and Draghi) during the pandemic to launch effective and sustainable crisis management policies. This apparently unstable and fluid political environment during the Covid-19 pandemic in a multi-party coalition government may have been a significant factor contributing to Italy's crisis management and resulting in the highest infection and death rates in Europe and most of the world. The official statistics from the WHO are self-explanatory. Nevertheless, although there is no doubt that multi-party coalition governments may be weak and lose effectiveness due to political party politics this cannot be absolutely conclusive to be the logical cause for failures of governments. Most democratic governments are made up of multi-party coalitions and all are confronted with the same pandemic. The difference in outcomes is related to the different political cultures of each nation.

Conversely, it is also not all single or two-party coalitions that guarantee better crisis management outcomes. Consider the structure of the governments in the United Kingdom, the United States, and the Russian Federation which is dominated by a fundamentally single-party structure. The governments of those nations cannot be said to have been more successful than Italy in dealing with the Covid-19 pandemic. The WHO Covid-19 pandemic situation dashboard as of May 3, 2023, reported global deaths at 6,921,614¹¹ as indicated in Table. 9.2. as follows,

| Table. 9.2. Death rates as of May 3, 2023 (Global 6,921,614) | | | | |
|---|--------------------|--|------------|----------|
| | PER 100 POPULATION | | CUMULATIVE | %/GLOBAL |
| | | | | |
| U.S.A. | 339.6 | | 1,124,063 | 16.20% |
| U.K. | 330.1 | | 398,366 | 5.70% |
| ITALY | 318.1 | | 189,738 | 2.70% |
| RUSSIA | 273.0 | | 224,106 | 3.20% |

⁹ Governi nelle Legislature" (in Italian). Governo Italiano Presidenza del Consiglio dei Ministri. 9 November 2015. Retrieved 27 April 2022.

¹⁰ <https://statisticstimes.com/ranking/democracy-index.php>

¹¹ WHO Covid Dashboard

As can be seen from the above table, both the United States and the United Kingdom experienced worse pandemic outcomes with higher deaths per 100 population than Italy. This would indicate that the multi-party coalition government structure is not the infallible cause of weakness in the Covid-19 pandemic crisis management, but rather the character and make-up of the political party element of the coalition. In the case of Italy, since the establishment of the Republic 75 years ago, history has recorded a high degree of fragmentation and instability in the make-up of the political system and structure, leading to often short-lived coalition governments. This fact cannot be ignored in the evaluation and determination of the country's leadership during a national crisis. Perhaps Italy's political structure fragmentation could be added to the list of issues that classified Italy as a "flawed democracy" under the Economist Intelligence Unit rating.

ii. Government distribution of authority and powers¹²

Under the Constitution (1948), Italy has a 'unitary' parliamentary structure that governs under the principle of local autonomy and decentralization. Decentralization is established under Article 114 stating that the Italian Republic is made up of the State, Regions, Metropolitan Cities, Provinces, and Municipalities. Decentralization starts below the State level and is divided into three tiers, namely the regions, provinces, and metropolitan cities, and the municipalities at the bottom. All these levels are autonomous entities with their own statutes, powers, and functions which are established and prescribed in the Constitution.¹³ This division of administrative powers and responsibility plays a pivotal role in Italy's Covid-19 pandemic crisis management policies, strategies, and execution as they align the powers of the State with the various levels of local governments. With regards to the Covid-19 crisis management aspect, the multi-layered distribution of authority and power at the different levels of local administration is more likely to be more problematic to control and coordinate cohesively than the multi-party coalition structure. Essentially, the powers and authorizations of government in Italy can be exercised both jointly and severally.

Article 123 of the said Constitution refers to the Regional statute being equivalent to a regional constitution, that establishes the fundamental functioning organization and form of government. This includes each Region having exclusive legislative power concerning any matters identified under this Article as well as those not specifically attributed to the State as covered under Article 117 of the Constitution. This is an example of the exercise of power 'severally' at the regional level. Article 117 also establishes the exclusive legislative power of the State such as foreign policy, national defense, and security, public order and security, fiscal policy, administration of justice, etc. This is an example of the exercise of power 'severally' at the State level. However, within this Article 117, there also are several concurrent legislation (joint exercise of power) to which the State

¹² European Committee of Regions. Division of Powers : Italy
<https://portal.cor.europa.eu/divisionpowers/Pages/Italy-Introduction.aspx>

¹³ THE CONSTITUTION OF THE ITALIAN REPUBLIC, 1948 (as Amended June 12, 2003). (Official Gazette Dec. 27, 1947, no. 298). <https://constitutionnet.org/sites/default/files/Italy.Constitution.pdf>

shall only set ‘fundamental principles’ for the Regions to conform to or execute, but the manner of execution is for the sole decision and discretion of the region. Of relevance are legislations related to the execution of crisis management in terms of “protection of health” with regard to the Covid-19 pandemic. In matters of concurrent legislation (joint exercise of powers), the legislative power belongs to the Regions except for the determination of fundamental principles (direction of national policies) is reserved for the legislation of the State.¹⁴ This means that with regard to the crisis management of the Covid-19 pandemic, there is a unitary policy from the central State in terms of principles and guidelines which is then decentralized through localization of planning and implementation at the Regional level, to the provincial and metropolitan cities, and the municipalities.

In fact, following the Council of Minister’s declaration of the State of Emergency on January 31, 2020, the government adopted the first Decree-Law 6/2020 to address the COVID-19 pandemic on February 23, 2020, declaring that the management of measures to contain the virus may be adopted through the Decree of the President of the Council of Ministers (DPCM). This Decree-Law 6/2020 represented a turning point in the management of the Covid-19 crisis by shifting executive power to Giuseppe Conte, the incumbent Prime Minister.¹⁵ Since then, Prime Minister Conte has been duly empowered to supervise regional government law-making and manage the containment of the spread of the virus across the country with more autonomy. Accordingly, the DPCM imposed restrictions on the freedom of movement and banned any form of assembly in 11 municipalities of two Northern regions (Lombardy and Veneto).¹⁶

Needless to say, this multi-tiered distribution of powers coupled with the concurrence of certain legislative and executive powers can create ambiguity as to who has superior responsibility and power over what on certain specific issues. In this case, both the State and the regions can submit their case to the Constitutional Court for a ruling and in fact, there have been several cases of legislative conflicts with regard to the crisis management of the Covid-19 pandemic.

The first legislative conflict between the State and in this case the region of Valle d’Aosta relates to the exercise of powers with regard to pandemic crisis management response. The Valle d’Aosta Region had issued a law for the reopening of bars, restaurants, and ski resorts as it felt it was entitled to manage the Covid-19 emergency in its territory, de facto enabling the local government to set a range of measures that differed from the ones proclaimed by the State. The State government felt that the region had overstepped its legitimate powers with the issuance of this law claiming that the State had exclusive competence over matters of international preventive treatment in accordance with Article 117 of the Constitution. The State lodged an action with the Constitutional Court for ruling to reject and overturn this regional law accordingly, as well as

¹⁴ Ditto

¹⁵ Cavino, M. (2020), “Covid-19, Una prima lettura dei provvedimenti adottati dal governo”, *Federalismi.it*, Vol. 19 No. 1, pp. 1-9.

¹⁶ Rullo, L. (2021), “The COVID-19 pandemic crisis and the personalization of the government in Italy”, *International Journal of Public Leadership*, Vol. 17 No. 2, pp. 196-207. <https://doi.org/10.1108/IJPL-08-2020-0083>
<https://www.emerald.com/insight/content/doi/10.1108/IJPL-08-2020-0083/full/html>

claiming the principle of loyal cooperation. In its consideration and ruling, the Constitutional Court acknowledged that the Covid-19 pandemic is a global health issue and therefore its management falls within the context of international preventive treatments. As such, this matter falls within the State's exclusive competence. Consequently, the Constitutional Court declared the regional law adopted by Valle d'Aosta unconstitutional¹⁷. This was the first Italian Constitutional ruling concerning the Covid-19 pandemic. To underscore the importance of the issue with regard to the exercise of legislative power, the Constitutional Court also decided to immediately suspend the said Regional law by Valle d'Aosta during the court's deliberations and before the verdict. The Constitutional Court's rationale for this action is based on the belief that allowing the Regional law to be activated, could create irredeemable damage to the public perception of unitary epidemic management at the State level, not to mention that the possible premature reopening of bars, restaurants, and ski resorts would result in serious and irreparable damage to people's health, through the rapid and uncontrollable spread of the coronavirus leading to serious illness and deaths. It would seem that the State's position and powers concur with the already established Decree of the President of the Council of Ministers (DPCM) under the Decree-Law 6/2020 of February 23, 2020.

Another legislative conflict is partly linked to the subsidiarity principle and in relation to the Covid-19 crisis in Bergamo province, in the Lombardy Region. This did not relate to the 'overstepping' of authority as in the case of Valle d'Aosta, but possibly the 'under stepping' of authority because seemingly there was a significant delay in the decision to lockdown the municipalities of Alzano and Nembro, in the Bergamo Province during Italy's worst Covid-19 crisis. This delay in declaring a lockdown had a catastrophic effect on the spread of infections and heavy mortality rates among the local population which eventually spread throughout the Lombardy region and throughout Italy later on. The issue was whether the State or the Region had exclusive competence over the declaration of lockdown. The Lombardy Regional government claimed that this responsibility and power in the declaration of lockdowns rested solely within the State government's competency, and not at the Regional level. Since this Covid-19 pandemic in Lombardy Region is the same as in the Valle d'Aosta Region, is it possible that the State's claim of exclusive power over international preventive treatment is also the same? What about invoking the principle of loyal cooperation also? This issue is currently an ongoing investigation by prosecutors of the court in Bergamo province.¹⁸ It would be interesting to see if the Constitution Court's ruling regarding the exclusivity of State competency and power over international preventive treatment is consistent for the whole of Italy or just for the Valle d'Aosta Region. Also, if the Decree of the President of the Council of Ministers (DPCM) under the Decree-Law 6/2020 of February 23, 2020, is still valid. Whatever the outcome, and irrespective of where the authorization and empowerment lie, the "cost of

¹⁷ Micol Pignatario.: <https://lexatlas-c19.org/the-italian-constitutional-court-steps-in-and/> March 17, 2021

¹⁸ The Irish Times. Italian PM questioned by prosecutors over lockdown in two Lombardy towns <https://www.irishtimes.com/news/world/europe/italian-pm-questioned-by-prosecutors-over-lockdown-in-two-lombardy-towns-1.4277487>

indecision”, or delayed decision by 15 days, in terms of national crisis management, was very expensive for the people in the municipalities of Alzano and Nembro, in the Bergamo Province.

No doubt the possibility of further conflicts between the State and the Regions with respect to the ambiguity of legislative power in undertaking crisis management initiatives still exists. This would probably have some impact on the efficiency and effectiveness of efforts to alleviate the Covid-19 pandemic in Italy.

iii. State of Emergency decree and decree of the President of the Council of Ministers (DPCM)

Immediately following the first cases of COVID-19 in two Chinese tourists in Rome the Italian Council of Ministers declared a State of Emergency in Italy on January 31, 2020, along with the appointment of Angelo Borrelli, as Special Commissioner for the COVID-19 emergency.¹⁹ All flights between Italy and China were banned establishing Italy as the first European nation to take this travel restriction measure.²⁰ Also a special budget of \$5.5 million for implementing the necessary precautionary measures²¹.

However, this State of Emergency can be regarded as somewhat ambiguous, since Italy's Constitution does not have any explicit provisions regarding emergencies unrelated to wars or terrorist attacks, such as related to health or epidemics. The only viable reference is in Article 77 of the Constitution which refers to “other” types of emergencies whereby the government can adopt emergency decrees, which have the force of law and are in accordance with Legislative Decree 1/2018, and issued by the President of the Republic, and published in the Official Journal of the Italian Republic.²²

The State government's acts and directives with respect to the Covid-19 pandemic containment and control have been mostly under the Decree of the President of the Council of Ministers (DPCM), starting with the Decree-Law 6/2020 on 'Urgent measures on containment and management of the epidemiological emergency from COVID-19' issued on February 23, 2020. During the crisis period from January to March 2020, the DPCM Decree-Law No. 6 of February 23, February 2020 was followed by successive DPCM decrees as "Further provisions implementing Decree-Law No. 6 of February 23, 2020, on urgent measures for the containment and management of the epidemiological emergency by COVID-19" issued on February 25, 2020, March 1, 2020, March 4, 2020, March 8, 2020, March 9, 2020, and March 12, 2020. These were reflected in the Timeline of State government directives and actions as demonstrated in the following.

¹⁹ Coronavirus, Angelo Borrelli commissario straordinario: potrà anche requisire gli hotel. Fanpage. Retrieved 30 January 2021. (Angelo Borrelli extraordinary commissioner for Coronavirus alarm: he will also be able to requisition hotels)

²⁰ "Italy suspends all China flights as coronavirus cases confirmed in Rome". THELOCAL. 31 January 2020. Retrieved 26 February 2020.

²¹ VOA. https://www.voanews.com/a/science-health_coronavirus-outbreak_italy-stops-planes-and-china-over-coronavirus/6183514.html

²² Arianna Vidaschi. Italy and COVID-19: A Call for an “Italian Emergency Constitution”? May 12, 2020. <https://www.justsecurity.org/70081/italy-and-covid-19-a-call-for-an-italian-emergency-constitution/>

iv. Timeline of government responses and actions during the first wave

January 31, 2020: The first cases of COVID-19 in Italy were two Chinese tourists in Rome who tested positive. This development, and given the declaration of an 'International Public Health Emergency' by the WHO, the Italian Council of Ministers declared a State of Emergency in Italy for a period of six months. A budget of \$5.5 million was established for implementing the necessary precautionary measures²³.

On the same day, the Italian Council of Ministers appointed Angelo Borrelli, head of Civil Protection, as Special Commissioner for the COVID-19 emergency, which also includes the power to requisition hotels²⁴ (for quarantine venues).

On the same day, the government also suspended all flights between Italy and China. According to Prime Minister Giuseppe Conte Italy was the first EU country to take this kind of precautionary measure.²⁵

February 6, 2020: An Italian man evacuated from Wuhan tested positive for COVID-19, becoming the third case in Italy.²⁶

February 21, 2020: The first cases of human-to-human transfer in Italy when residents have been detected with COVID-19 in a hospital near Milan and a small town in Veneto.²⁷

On the same day, the government announced the first partial lockdown related to Covid-19 in Italy by imposing a limited quarantine of 10 municipalities in Northern Italy affecting more than 50,000 people. This included interventions such as stay-at-home, curfews, quarantines, and blocking roads in and out of the lockdown area. The quarantined "red zone" (zona rosa) was enforced by police and Carabinieri²⁸, and police cars blocked roads into and out of the quarantined area and erected barriers.²⁹ By February 27, it was reported that 400 policemen were enforcing it with 35 checkpoints.³⁰ Public gatherings as well as schools, and workplaces were prohibited³¹. Train

²³ VOA. https://www.voanews.com/a/science-health_coronavirus-outbreak_italy-stops-planes-and-china-over-coronavirus/6183514.html

²⁴ Coronavirus, Angelo Borrelli commissario straordinario: potrà anche requisire gli hotel. Fanpage. Retrieved 30 January 2021. (Angelo Borrelli extraordinary commissioner for Coronavirus alarm: he will also be able to requisition hotels)

²⁵ "Italy suspends all China flights as coronavirus cases confirmed in Rome". THELOCAL. 31 January 2020. Retrieved 26 February 2020.

²⁶ Yeung, Jessie; Renton, Adam; George, Steve (6 February 2020). "February 6 coronavirus news". CNN.

²⁷ <https://journals.sagepub.com/doi/full/10.1177/2516602620936037>

²⁸ La Stampa (in Italian). 23 February 2020. Retrieved 8 March 2020.

²⁹ Lowen, Mark (25 February 2020). "Lockdown in northern Italy as virus fears soar". BBC News. Retrieved 8 March 2020.

³⁰ https://en.wikipedia.org/wiki/COVID-19_lockdowns_in_Italy#cite_ref-11

³¹ Johnson, Miles; Davide, Ghiglione (28 February 2020). "Italy under lockdown: 'My town is shocked and scared'". Financial Times. Retrieved 8 March 2020.

services were not available at any red zone stations.³² This also included Social distancing protocols including social activities restrictions and enforced wearing of masks.

February 23, 2020: Pursuant to the Council of Ministers' declaration of the State of Emergency on January 31, the government adopted the first Decree-Law 6/2020 to address the COVID-19 pandemic. The Decree-Law 6/2020 was issued in consideration of the information and feedback from the ministers and regional presidents to declare that the management of measures to contain the virus may be adopted through the Decree of the President of the Council of Ministers (DPCM). This Decree-Law 6/2020 on 'Urgent measures on containment and management of the epidemiological emergency from COVID-19', represented a turning point in the management of the Covid-19 crisis because of a radical shift in power toward the prime minister.³³

Since then, Prime Minister Conte has been duly empowered to supervise regional government law-making and manage the containment of the spread of the virus across the country with more autonomy. Accordingly, the DPCM imposed restrictions on the freedom of movement and banned any form of assembly in 11 municipalities of two Northern regions (Lombardy and Veneto).³⁴

Many decrees and directives issued by the government (State) during this Timeline of government initiatives were under the special powers established by both the Decree on the State of Emergency (January 31, 2020), and the DPCM under the Decree-Law 6/2020 of February 23, 2020.

March 2020: About 7,000 people in the province of Bergamo in the Lombardy region tested positive for COVID-19, and more than 1,000 people died making Bergamo the most hard-hit province in all of Italy during the pandemic for this period. Prior to this date, on February 19th, there was a soccer match between Bergamo club Atalanta B.C. and Spanish club Valencia at the San Siro in Milan. In less than a week later, infected cases started to emerge in Bergamo. The infection also spread to Valencia in Spain.³⁵ Around 40,000 – 45,000 are from Lombardy but most are Bergamaschi. Bergamo is a small city near Milan with a population of about 120,000.

Many criticised the government authorities for being slow to recognise the seriousness and death-threatening scale of the crisis and subsequently not imposing swift restrictions to stem the virus' spread, including banning gatherings. When the first cases emerged in the province on February 23 there was a delay of two weeks before the authorities decided to lock down the entire Lombardy region (March 8th), a measure that was extended one day later to the whole of Italy (March 9th). A group calling themselves the "Noi Denunceremo" (We Will Denounce), led by Luca Fusco (whose

³² Cighetti, Roberto (26 February 2020). "What Happens When Your Town Gets Put on Coronavirus Lockdown". Vice News. Retrieved 8 March 2020.

³³ Cavino, M. (2020), "Covid-19, Una prima lettura dei provvedimenti adottati dal governo", Federalismi.it, Vol. 19 No. 1, pp. 1-9.

³⁴ Rullo, L. (2021), "The COVID-19 pandemic crisis and the personalization of the government in Italy", International Journal of Public Leadership, Vol. 17 No. 2, pp. 196-207. <https://doi.org/10.1108/IJPL-08-2020-0083>
<https://www.emerald.com/insight/content/doi/10.1108/IJPL-08-2020-0083/full/html>

³⁵ Tales Azzoni and Andrew Dampf. Game Zero: Spread of virus linked to Champions League match Associated Press. March 25, 2020.

father also died during this period), has already filed more than 250 complaints with prosecutors over the way authorities handled the Covid crisis. A judicial inquiry is underway. "The people of Bergamo felt abandoned. In acting sooner, the authorities could have saved thousands of lives," said Luca Fusco, who also claimed that nobody wanted to shut down a region that is the engine of Italy's economy.³⁶

March 8, 2020: All the universities were closed³⁷. The region of Lombardy together with 14 additional northern and central provinces in Piedmont, Emilia-Romagna, Veneto, and Marche, was put under lockdown.³⁸

March 9, 2020: Prime Minister Conte declared the first national lockdown for the whole of Italy, enforcing travel restrictions and a ban on public gatherings. This included closing all stores except essential services and shutting down all municipal borders, with uniformed police and armed soldiers setting up checkpoints around the country³⁹. All sporting events were cancelled.⁴⁰ Accordingly, the Italian Ministry of Health posted on its website that the decree effective until at least April 3 limits the movement of individuals in the whole Italian national territory unless strictly motivated (in written form) by reasons of work or health. Schools, museums, cinemas, theatres, and any other social, recreational, or cultural center must stay closed. Any gathering in public spaces is forbidden, including sporting events and funerals. Most shops must stay closed. Those selling essentials, such as supermarkets or pharmacies, need to ensure a distance of at least 1 meter between customers.⁴¹

The lockdown and the measures imposed were widely approved by the public but were also described as the highest suppression of constitutional rights in the history of the republic.⁴² However, under Article 16 of the Constitution travel restrictions may be imposed by law for reasons of health or security.⁴³ Italy was the first country to enact a COVID-19 lockdown nationwide.⁴⁴

³⁶ <https://www.france24.com/en/europe/20210318-a-year-on-italy-s-bergamo-still-traumatised-by-onslaught-of-covid-19>

³⁷ Mara Sanfelici. The Italian Response to the COVID-19 Crisis: Lessons Learned and Future Direction in Social Development Volume 2 Issue 2, June 2020. <https://journals.sagepub.com/doi/full/10.1177/2516602620936037>

³⁸ "Northern Italy quarantines 16 million people". BBC News. 8 March 2020. Retrieved 8 March 2020

³⁹ website of the Italian Ministry of Foreign Affairs and International Cooperation. https://www.esteri.it/mae/resource/doc/2020/03/faq_rev1_11marzo.eng.pdf

⁴⁰ "All of Italy facing coronavirus lockdown". BBC News. 9 March 2020. Retrieved 9 March 2020.

⁴¹ Italian Ministry of Health Covid-19, in Gazzetta ufficiale il Decreto #lorestoacasa. March 10, 2020.]

⁴² "Un uomo solo è al comando dell'Italia, e nessuno ha niente da ridire". Linkiesta (in Italian). 24 March 2020. Retrieved 4 March 2020.

⁴³ "The Italian Constitution". The official website of the Presidency of the Italian Republic.

⁴⁴ "A year on from Europe's first lockdown, Italy mulls new restrictions". euronews. 9 March 2021. Retrieved 7 October 2021.

March 11, 2020: On the day that the WHO declared COVID-19 to be a global pandemic, there were 118,000 confirmed reported cases and over 4,000 fatalities in 114 countries around the world. Of this figure, 12,462 confirmed cases and 827 deaths were in Italy.⁴⁵

March 17, 2020: The Council of Ministers approved the Decree-Law 18/2020, called “Cura Italia,” which authorized the expenditure of 25 billion Euros and introduced extraordinary welfare policies to help workers, families, and companies by empowering wage guarantee funds and parental leaves. (Rullo, 2021)⁴⁶

March 21, 2020: Prime Minister Conte announced further restrictions within the nationwide lockdown with a general ceasing of non-essential production, industries, and business activities. (Rullo, 2021)⁴⁷

March 22, 2020: With the exception of some situations all industrial or commercial production activities were stopped under a new decree. The government also banned the movement or relocation of people from one municipality to another. Again, exceptions were made only for extreme urgency, health reasons, and justified work requirements.⁴⁸

March 23, 2020: A new DPCM banned any travel from one municipality to another. (Rullo, 2021)⁴⁹

April 26, 2020: In a press conference Prime Minister Giuseppe Conte officially announced the phases of ‘opening’ Italy. Starting on May 4th, certain businesses will be allowed to open again, specifically in manufacturing and industries such as the textile and fashion industry, automotive industry, the oil industry as well as construction and wholesale commerce. These businesses will be allowed to carry out preparatory activities toward re-opening starting from April 27th.⁵⁰

May 18, 2020: Italian Prime Minister Giuseppe Conte announced that shops, bars and restaurants are due to reopen. People will no longer need to justify travel within their own region. They will be able to socialize freely. The ban on travel between regions and abroad will stay until after Italy's Republic Day holiday on June 2nd, to restrict mass travel during the country's long holiday weekend. All travel curbs will be lifted from June 3 and people from European Union countries will be able to enter without going into quarantine.⁵¹

⁴⁵ Ministry of Health . (2020b). Covid-19: i casi in Italia alle ore 18 del 11 Marzo (Covid-19: the cases in Italy at 18:00 in March 18).

http://www.salute.gov.it/portale/news/p3_2_1_1_1.jsp?lingua=italiano&menu=notizie&p=dalministero&id=4204

⁴⁶ Rullo, L. (2021), "The COVID-19 pandemic crisis and the personalization of the government in Italy", International Journal of Public Leadership, Vol. 17 No. 2, pp. 196-207. <https://doi.org/10.1108/IJPL-08-2020-0083>

<https://www.emerald.com/insight/content/doi/10.1108/IJPL-08-2020-0083/full/html>

⁴⁷ Ditto

⁴⁸ Mara Sanfelici. <https://journals.sagepub.com/doi/full/10.1177/2516602620936037>

⁴⁹ Ditto

⁵⁰ Irene Dominioni. Italy Towards End Of Full Lockdown. Forbes. April 27, 2020

<https://www.forbes.com/sites/irenedominioni/2020/04/27/italy-towards-end-of-full-lockdown/?sh=1fc714c07921>

⁵¹ DW News. May 16, 2020. Coronavirus latest: Italy outlines loosening of lockdown

<https://www.dw.com/en/coronavirus-latest-italy-outlines-loosening-of-lockdown/a-53460404>

June 2020: During the first week most businesses were reopened, including manufacturing and construction sectors, bars, hairdressers and barber shops, retail activities like clothing stores, book stores, as well as public transport. Borders among regions were also reopened.⁵²

August 17, 2020: Mandatory wearing of masks in public from 6:00 pm to 6:am.

October 23, 2020: Since the start of the COVID-19 outbreak in Italy, the first demonstrations and riots erupted in Naples when the President of the Campania region, said that he was considering imposing a total lockdown to prevent further spread of the virus. Campania had recorded huge spikes in infections.⁵³ They would not be the last.

- October 27, 2020: Turin, Milan, Rome, Genoa, Palermo and Trieste.^{54 55 56}
- April 13, 2021: Rome riots⁵⁷
- October 15, 2021: Anti-Green Pass and Anti-vaccination riots in Genoa and Trieste⁵⁸

December 27, 2020: Italy rolled-out its covid-19 vaccination program on December 27, 2020. The first group to be vaccinated was a team of health workers at Rome's Spallanzani Hospital for infectious diseases with nurse Claudia Alivernini being the first injected, followed by doctor Maria Rosaria Capobianchi, and social health worker Omar Altobelli. All were injected with the Pfizer-BioNTech coronavirus vaccine. "The vaccine is free for all but not mandatory" - stated Italy's emergency coronavirus commissioner Domenico Arcuri who also attended at the Spallanzani .⁵⁹

The sequence of vaccination would be a) doctors and health care workers, b) residents in care homes, c) elderlies aged over 80, d) those aged 60-79, e) those suffering from at least one chronic disease, f) key workers – teachers, police, and prison wardens, and g) the general population.⁶⁰

August 6, 2021: The government launched the "certificazione verde," or green pass, for entering certain public venues such as museums or galleries, entertainment, and sports venues, theme parks, spas, and eating indoors. This was later extended to include domestic flights, train travel between regions as well as sea travel on September 1, 2021. The green pass indicates that the holder has been vaccinated, has tested negative within the past 48 hours, or has recovered from the virus within the past six months.⁶¹

⁵² Ilaria Petracca. The Italian Government's decree-laws providing measures to tackle the Covid-19 crisis. 27/09/2020. <https://www.iota-tax.org/news/the-italian-governments-decree-laws-providing-measures-to-tackle-the-covid-19-crisis>

⁵³ Chiara Fiorillo. Riots erupt at Naples lockdown protest as coronavirus surges to record levels in Italy. 24 Oct 2020. Mirror. <https://www.mirror.co.uk/news/world-news/riots-erupt-naples-lockdown-protest-22898101>

⁵⁴ <https://abcnews.go.com/International/wireStory/protests-italy-virus-crackdown-turn-violent-73843842>

⁵⁵ <https://edition.cnn.com/2020/10/27/europe/italy-coronavirus-protests-intl/index.html>

⁵⁶ <https://www.bbc.com/news/world-europe-54701042>

⁵⁷ <https://www.express.co.uk/news/world/1422600/Rome-news-riot-Italy-latest-police-coronavirus-lockdown-protest>

⁵⁸ <https://nypost.com/2021/10/15/protests-erupt-in-italy-over-covid-19-mandates/>

⁵⁹ Wanted in Rome. (Italy's News in English). December 27, 2020.

<https://www.wantedinrome.com/news/vaccine-day-italy-begins-vaccinating-against-covid-19.html>

⁶⁰ The Local. 'Light at the end of the tunnel': Italy approves plan to begin Covid vaccinations in January <https://www.thelocal.it/20201216/light-at-the-end-of-the-tunnel-italy-approves-plan-to-begin-covid-vaccinations-in-january/>

⁶¹ Sarah Dean and Nicolo Ruotolo. CNN. September 16, 2021

October 15, 2021: The government declared a new decree making it obligatory for all workers, both the public and private sectors, to show proof of vaccination, a negative test, or recent recovery from infection (COVID-19 health pass - green pass).⁶²

This has been a major cause for the continuing demonstrations and riots across Italy. They have also been joined by the “anti-vaxxers” groups.

The key players in the policy, strategy, planning, and execution of Italy’s response to the Covid-19 pandemic are the WHO, the Ministry of Health, the National Health Institute (NHI), the Technical and Scientific Committee (TSC), and the Department of Civic Protection. The Department of Civil Protection is an operative branch of the Presidency of the Council of Ministers with the fundamental role of gathering and coordinating the national resources necessary to ensure assistance to the population in case of emergency. The Department of Civil Protection is a highly regarded and reputable organization, with much previous experience in dealing with national disasters such as earthquakes. Department of Civil Protection was charged with the management of the Covid-19 pandemic emergency interventions.⁶³

From the beginning of the outbreak, the Italian government’s policies and strategies have followed the WHO lead on key response issues. This included both delaying the declaration of a pandemic in Italy until the global announcement by the WHO on March 11, 2020, and underlining the relevance of testing and tracing for tracking the progression of the pandemic until mid-April 2020. Of significance also, was the delay in issuing directives regarding masking to prevent transmission due to the WHO’s rather ambiguous position regarding this issue. Consequently, for almost three months after the outbreak, until the end of February 2020, the NHI and the TSC as national advisory bodies played a major role in normalizing the risks involved with regard to Covid-19. Both had issued advisories regarding transmission-monitoring guidelines and the use of masks by citizens that, in hindsight, have proven to be potentially dangerously misleading. When the outbreak eventually exploded after 20 February, both the NHI and the TSC assumed very precautionary roles and were advocating strongly for government policies to incrementally lock down the country. While it was widely acknowledged that these two agencies were the real experts during this pandemic crisis it also became clear that many of their suggestions and advice were ignored on the issue of when and how to reopen the country.⁶⁴

Of significance is the Italian government’s applying the WHO’s eight key strategic pillars in the response strategy to the COVID-19 pandemic which was enumerated in its February 2020

<https://edition.cnn.com/2021/09/16/europe/italy-covid-19-green-pass-intl/index.html>

⁶² Italy makes COVID-19 ‘green pass’ mandatory for all workers. September 17, 2021

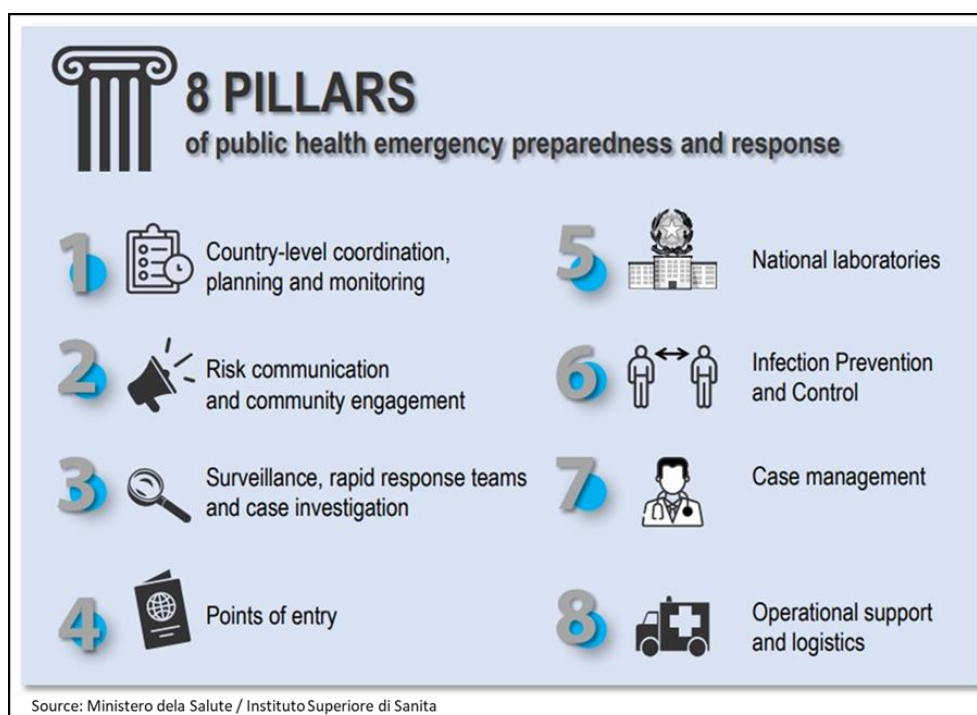
<https://www.aljazeera.com/news/2021/9/17/italy-makes-covid-health-pass-mandatory-for-all-workers>

⁶³ Giliberto Capano, (2020) Policy design and state capacity in the COVID-19 emergency in Italy: if you are not prepared for the (un)expected, you can be only what you already are. Policy and Society, 39:3, 326-344, September 2020. DOI: 10.1080/14494035.2020.1783790. <https://doi.org/10.1080/14494035.2020.1783790>

⁶⁴ Giliberto Capano. Policy design and state capacity in the COVID-19 emergency in Italy: if you are not prepared for the (un)expected, you can be only what you already are Pages 326-344

Full version. Jun 25, 2020. <https://www.tandfonline.com/doi/full/10.1080/14494035.2020.1783790>

publication entitled “COVID-19 strategic preparedness and response plan operational planning guidelines to support country preparedness and response” (SPRP)⁶⁵. These are illustrated below:



As described in the section above, the coordination and synchronization of policies, strategies, and execution related to the Covid-19 pandemic were problematic at times due to conflicts or misalignments between the State and the Regional governments. This was especially with regard to the ownership of authority and powers related to local planning and execution. Cases of conflicts between the State and the Regions have been filed with both the local and the Constitution courts for arbitration. The seriousness of such conflicts includes the case related to the ownership of authority and powers in Bergamo province, in the Lombardi Region.

C. The Economic aspects

As with the section on the political aspects, this section on the economic aspects is limited to the impacts of the Covid-19 pandemic and crisis management strategies by the government.

i. Economic structure and GDP

⁶⁵ ISS, Istituto Superiore di Sanità (2020). Prevention and response to COVID-19: evolution of strategy and planning in the transition phase for the autumn-winter season.
https://www.iss.it/documents/5430402/0/COVID+19+_strategy_ISS_MoH+%281%29.pdf/f0d91693-c7ce-880b-e554-643c049ea0f3?t=1604675600974

Italy is an open economy and is one of the six founding members of the European Economic Community (EEC) in 1957 and which eventually evolved into the European Union (EU) in 1993 and currently has 27 members. Italy is the fourth largest economy in Europe and the eighth largest in the world.⁶⁶ Italy is also a member of the G-20 nations and its economic strength is built on being one of the main exporting nations in the world. In 2021, Italy's total merchandise exports reached about \$ 601 billion which was an increase of about 20% compared to 2020. Of total exports, about 47.61% of key export markets were within the European region, followed by the United States with 9.53% and China at 3.06% representing a combined total of 60,2% as indicated below⁶⁷

Italy's exports in 2021 by country

Top export destinations of commodities from Italy in 2021:

- Germany with a share of 13% (78 billion US\$)
- France with a share of 10.2% (61 billion US\$)
- USA with a share of 9.53% (57 billion US\$)
- Switzerland with a share of 5.35% (32 billion US\$)
- Spain with a share of 4.98% (30 billion US\$)
- United Kingdom with a share of 4.49% (27 billion US\$)
- Belgium with a share of 3.48% (20 billion US\$)
- Poland with a share of 3.15% (18.9 billion US\$)
- China with a share of 3.06% (18.4 billion US\$)
- Netherlands with a share of 2.96% (17.8 billion US\$)

Source: TrendEconomy. <https://trendeconomy.com/data/h2/Italy/TOTAL>

Since all these export markets were undergoing trade and industry disruptions caused by the Covid-19 pandemic which forced shutdowns, and lockdowns, Italy's global business and economic supply chain was severely disrupted. As a result, Italy's GDP suffered drastically following the outbreak end of December 2019 and throughout 2020. It was therefore critical of Italy, that she not only should beat the Covid-19 pandemic disruptions to her economy, but also the same for all her export trading partners. The sustainability of their economies was essential to reboot Italy's economy also. Conversely, the failure of these export market nations to reboot their economies by their ability to effectively address and contain the Covid-19 pandemic would also have drastic effects on Italy's economy.

Based on the World Bank, World Economic data, Italy's pre-Covid-19 gross domestic product (GDP) in 2019 amounted to about US\$2,011,302 trillion with a GDP per capita of around US\$33,674 based on current market prices. During the first year of the Covid-19 pandemic (2020) Italy's GDP declined by 5.7% to US\$1,896,755 trillion (2020) with the GDP per capita reduced to around US\$31,911. Italy's GDP recovered in 2021 to US\$2,107,702 trillion with a growth rate of 11% and

⁶⁶ Statista . (2020a). Key indicators of Italy's economy. <https://www.statista.com/topics/5964/key-indicators-of-italy-s-economy/>

⁶⁷ Source: TrendEconomy. <https://trendeconomy.com/data/h2/Italy/TOTAL>

raising the GDP per capita to around US\$35,601, which was, in fact, higher than the pre-Covid-19 pandemic level of US\$ 33,674 by 5.7 percent. There was a slight decline in Italy's GDP in 2022 to US\$ 2,103,888, with a GDP per capita of US\$35,593 as illustrated in the Table. 9.3. below.⁶⁸

| Table. 9.3. Italy's GDP during 2019 to 2022 | | | | |
|---|-------------|-------------|-------------|-------------|
| Economic Indicators: Italy | 2019 | 2020 | 2021 | 2022 |
| Current GDP (Billions, US\$) | 2,011 | 1,897 | 2,108 | 2,104 |
| Current GDP per Capita (US\$) | 33,674 | 31,911 | 35,657 | 35,593 |
| Real GDP (US\$ Billions, 2010) | 1,918 | 1,745 | 1,862 | 1,859 |
| Real GDP per Capita (US\$, 2010) | 32,114 | 29,354 | 31,506 | 31,449 |
| Real GDP PPP (Billions, 2017) | 2,553 | 2,322 | 2,478 | 2,557 |
| Real GDP per Capita PPP (int\$ 2017) | 42,160 | 38,404 | 41,056 | 42,435 |
| GDP Annual Growth Rate (%) | 0.5 | -9.0 | 6.7 | 3.2 |
| Source: World Bank, World Economics Notes: Current Market Prices | | | | |

<https://www.worlddeconomics.com/GrossDomesticProduct/Current-GDP/Italy.aspx>

Needless to say, with over 60% of its GDP depending on exports, the rise and decline in Italy's GDP are linked to its export performance. As with all nations around the world, it should be noted that Italy also has substantial economic wealth inequality with regard to the GDP per capita among her different regions, especially between the northern and central regions compared to the southern regions. For example, the Italian 2020 average GDP per capita was €27,800 but in the northern regions this was €33,600, in the central regions €31,500, and in the southern regions was only €18,300, about 54% of the northern regions.⁶⁹ In consideration of Italy's political and multi-level decentralization of administrative power and the relevance of the disparity of wealth among the different regions is significant with regard to the level of response options available based on resources to battle and contain the spread of the Covid-19 pandemic. Nevertheless, economic wealth or strength does not guarantee or ensure better protection or containment of the Covid-19 pandemic. In fact, the four northern regions (out of the total 20 Regions), namely Lombardy, Emilia-Romagna, Veneto, and Piedmont with a population of about 23.6 million representing about 39.6% of the Italian population⁷⁰ but accounting for about 48.2% of Italy's GDP were in fact the

⁶⁸ <https://www.worlddeconomics.com/GrossDomesticProduct/Current-GDP/Italy.aspx>

⁶⁹ Italian National Institute of Statistics (ISTAT) <https://www.istat.it/it/archivio/265014> DOWNLOAD TAVOLE, Tav.1

⁷⁰ https://www.istat.it/it/files//2021/02/Popolazione_Infografica_ENG.pdf

worst affected regions by the Covid-19 pandemic with 56% of Italy's total deaths⁷¹. As of September 12, 2022, the Lombardy region alone accounting for 16.8% of the Italian population, and about 22% of the nation's GDP⁷² had the highest Covid-19 death rate in the country at 24 percent.⁷³ This would also indicate that in addition to regional economic wealth, the effectiveness of regional governments' policies and strategies in addressing and containing the Covid-19 pandemic also depends significantly on efficient administrative execution, coupled with the credibility, cooperation, and participation of the general population as relevant key factors. This trend was again reflected in the WHO Dashboard for Italy during the first week of May 2023 with total registered confirmed infections cases at about 25.8 million and deaths at 189.8 thousand.⁷⁴ Again, the same four economically wealthy northern regions of Lombardy, Emilia-Romagna, Veneto, and Piedmont combined represented 41.6% of the confirmed infections and 50.5% of deaths for the whole of Italy.⁷⁵

As previously indicated, merchandising export is the key foundation of Italy's GDP. However, this again relies on its processing and manufacturing goods, which are undertaken by primarily small and medium-sized firms which include micro- businesses, which are many family-owned. This segment of the Italian economy is therefore an important foundation and makeup of the Italian economy and represents about 45% of the total employment structure compared to the EU average of about 30 percent.⁷⁶ Consequently, this segment of the economy (micro-business) would be highly sensitive to any disruptions to their business due to the economy as a result of the Covid-19 pandemic such as lockdowns, curfews, closures, and other social distancing controls which limits social interactions or operations in the business sector. Frequent and extended disruptions to operations such as man, or in carrying out business in department stores, malls, or markets would be catastrophic to the micro-businesses since they depend on self-sufficiency and self-generated incomes, and business sustainability. Resistance to government stringent controls with regard to carrying out business or business operations would be high, and as a result, the risk for the spread of infections and deaths in this sector would also be high. Unlike the larger corporations with substantial financial reserves, stronger resilience to economic changes, and benefits from the economics of scale, the micro-family business is more sensitive to economic recessions and lives more or less on a 'month-to-month basis. Therefore extended disruptions to consumers' freedom of movement in relation to economic activities and exercising purchasing power along with other segments of the country's economic supply chain would inevitably have a significant negative impact on this segment. Most importantly, this segment's significant portion of the national labour force means business disruptions and failures in the micro-firms would affect a large portion of the population that is integrated into and dependent on Italy's supply chain. In addition to creating

⁷¹ https://www.istat.it/it/files//2021/02/Popolazione_Infografica_ENG.pdf

⁷² <https://www.4motors.eu/regions/lombardy>

⁷³ <https://www.statista.com/statistics/1099389/coronavirus-deaths-by-region-in-italy/>

⁷⁴ WHO coronavirus (Covid-19) Dashboard. Italy. <https://covid19.who.int/region/euro/country/it>

⁷⁵ ZOHO Covuid-19 Dashboard. <https://www.zoho.com/covid/italy/>

⁷⁶ OECD Trento Centre for Local Development . (2020). Italian regional SME policy responses. <https://www.oecd.org/cfe/leed/COVID-19-Italian-regions-SME-policy-responses.pdf>

disruptive waves throughout the Italian economy, this would also affect the social well-being of the people.

The globalisation of Covid-19 along with the ensuing negative economic repercussions worldwide, including in Italy, on entering 2020 solely contributed to the worsening of both the economic as well as social well-being in Italy. This drastic economic situation in Italy further adds to the already growing public debt which has been developing since the economic crash and crisis in 2008 and amounting to 134.8% of Italy's GDP in 2019⁷⁷, which by 2020, further increased to 155.8% of GDP⁷⁸. The growing debt burden created serious constraints on government public spending, not only on the implementation of expansionary fiscal reforms but also in alleviating the already rapid economic deterioration as well as urgent and unbudgeted social needs arising from the rapid and expansive spread of the Covid-19 infections.

On March 9, 2020, Italy was one of the earliest European nations to place the whole country under lockdown due to the Covid-19 pandemic and which continued through to the end of May, 2020. During the first quarter, Italy's 2020 GDP declined by 5.4% and by 12.4% in the second quarter ((Vismara 2022)).⁷⁹ At year-end, Italy's 2020 GDP had declined by 8.9 percent. The GDP contraction was mainly related to a decrease in domestic demand, in particular in private consumption, which fell by 10.7 % in volume, as well as a slump in investment.⁸⁰ The Italian National Institute of Statistics (ISTAT) Report for March 2020 also indicated that the value of retail sales for large-scale distributors had declined by 9.3% and for small retailers by 28.2% compared to the previous year (March 2019). The significantly larger negative impact on the SMEs indicated their sensitivity to economic abnormalities, such as those created by the Covid-19 pandemic which resulted in the national lockdown measures from March 2020 to May 2020. This total national lockdown led to the suspension of economic activities for approximately 2.1 million enterprises and affected over 7.1 million employers, who were the household revenue earners. During the second quarter of 2020, the national industrial production index decreased by 17.5%, with production falling to an all-time low. Another study published by the leading Italian merchant bank, Mediobanca, indicated that the industrial sectors experiencing the highest negative impact during this lockdown period were airline manufacturing (-22.1%), energy (-15.9%), fashion (-14.1%), and automotive (-9.1%). (Vismara 2022). Mediobanca also estimated that the whole industrial sector would be negatively impacted by the Covid-19 pandemic by about 11 percent in 2020.⁸¹ Another important sector in Italy's GDP is the tourism sector, which was about 10.6% of the GDP in 2019, but was badly hit by the Covid-19 pandemic in 2020 reducing this sector to 6.1.percent. This sector improved in 2021 to 9.1% of the

⁷⁷ STATISTA. <https://www.statista.com/statistics/1203805/estimated-government-debt-to-gdp-in-italy/>

⁷⁸ ISTAT (Italian National Institute of Statistics). Annual Report 2021. The State of the Nation

https://www.istat.it/it/files//2021/09/Annual-Report-2021_Summary_EN.pdf

⁷⁹ Fabrizio Vismara. Reflections on COVID-19 – Views from Italy

The National Law Review. September 20, 2022. Volume XII, Number 263

<https://www.natlawreview.com/article/reflections-covid-19-views-italy>

⁸⁰ ISTAT. Annual Report 2021. The State of the Nation.

https://www.istat.it/it/files//2021/09/Annual-Report-2021_Summary_EN.pdf

⁸¹ https://www.ansa.it/english/news/2020/11/03/covid-to-hit-industry-by-11-in-2020-mediobanca_334af8f5-82a7-4687-a739-435b7e9f9136.html

GDP but was still below the pre-Covid-19 2019 figure.⁸² According to the Agenzia Nazionale del Turismo (ENIT), beginning in February 2020 international tourists have decreased by 58%, and domestic travelers by 31%, with an estimated economic loss in this sector of about Euro 24.6 billion. (Vismara. 2022)

As a major global economy, and having a large portion of its GDP dependent on exports and tourism, Italy's economy was, and continues to be, sensitive to the global business environment. Shifts and declines in the global supply chains, of which Italy is an integral part, does inevitably also impact Italy's economy. Italy's major economic partners mostly nations within the European region have been hit hard by the Covid-19 pandemic, such as Germany, the United Kingdom, France, Switzerland, Spain, Belgium, The Netherlands, etc. It is clear that any negative economic impacts on these European nations, and Italy's export markets, would inevitably also affect Italy's economy. Negative economic impacts due to the Covid-19 pandemic were also evidenced among Italy's non-European region economic partners such as the United States and China. Declining economies and weakened purchasing also had a negative impact on Italy. The globalization of the Covid-19 pandemic is also reflected through the interlinking and inter-dependence of global economies.

The combination of both weak purchasing power in these export market nations, as well as Italy's own disruptive global manufacturing/supplier role brought about by the Covid-19 pandemic lockdowns, would inevitably have a negative impact on her GDP through reduced economic activity and revenue earnings. Therefore, in terms of economic recovery and turn-around, Italy may still have many challenges and hurdles to overcome, both within the country and externally in the global marketplace. Most importantly with respect to the socio-economic aspects, and specifically related to the about 45% of the employment (revenue earning) population in the micro-family business, due to limited treasury resources, common to most nations (some more than others!) the Italian government would need to prioritize and establish a hierarchical order for allocating its scarce resources for offering financial support resources. The sustainability in the opening -up its economy is vital but dependent on the global marketplace, supply chains, and build-up of purchasing power in the global marketplace. Italy's GDP has demonstrated resilience with notable recovery in 2021 and 2022. The outlook for Italy's 2023 GDP performance would seem to be on a positive trend. This scenario would be under the presumption of Covid-19 becoming endemic sometime in 2023. In the meanwhile Italy would need to continue practicing the minimum requirements for 'safe' social distancing behaviours as well as utilising what pharmaceutical medication is available other than vaccination. This is to reduce business operations on the micro-scale, and disruptions to the supply-chain on the macro-scale of her economy due to sickness associated with the Covid-19 pandemic.

ii. Government economic support and relief programs

Undoubtedly, the cost of financial support to sustain the Italian economy, almost from the outbreak, by the Italian government is linked to the extended period of Covid-19 pandemic in Italy.

⁸² STATISTA. <https://www.statista.com/statistics/628849/tourism-total-contribution-to-gdp-italy-share/>

The Italian government had initiated several economic support and relief measures to support Italian companies, to ensure their survival during this pandemic which has forced the execution of emergency decrees such as closures, lockdowns, and quarantines; as well as helping them to relaunch their businesses and thereby boot the economy, when the global economy reopens. The Italian government's economic support and relief programs started with its emergency decree law No. 18 dated March 17, 2020, referred to as the "Cura Italia Decree". This launched the first set of measures aimed at supporting businesses, families, and individuals during the Covid-19 pandemic situation.⁸³ Highlights of this decree are summarized as follows:

Financial support to businesses

- *Article 49.* Financial aids are provided for small and medium-sized businesses (such as gratuitous guarantees for loans.)
- *Articles 50-53.* Other banking and financial facilities
- *Article 56.* Suspension of re-payments of loans and financial leases for small and medium size businesses
- *Article 54.* Suspension of re-payment terms for first residence loans (self-employed workers and professionals)

Extension of tax payments and tax credits

Articles 60, 62, and 68. Several specific extensions of terms for tax payments, are aimed at supporting individuals, families, and businesses in the economic crisis caused by the Covid-19 pandemic.

Article 65. Under specific conditions, a tax credit that is equal to 60% of the March 2020 lease fees paid for leased shops.

Employee support and benefits

Article. 19. Admission to CIGO (Cassa Integrazione Guadagni Ordinaria - Ordinary Wages Supplement Fund) and "assegno ordinario" (another wages supplement fund "for COVID-19 emergency)

Article. 23. Special Children Leave for self-employed individuals

- *Article. 26.* Quarantine period as sick leave
- *Article. 33.* Extension of the terms for application for unemployment indemnities
- *Article. 46.* No Employment Termination
- *Article. 47.* No employment termination for parents of disabled individuals
- *Article. 63.* Extraordinary bonus for employees continuing working on premises

⁸³ Paola Parma Sforza. Palmer Studio Legale. March 19, 2020

<https://palmer-legal.com/the-italian-government-emergency-decree-d-l-n-18-of-march-17-2020-the-first-extraordinary-measures-aimed-at-supporting-businesses-families-and-individuals-in-the-pandemic-situation/>

- *Article. 64.* Tax credit for workplace sanitization costs

The “Cure Italy” decree was soon followed by the subsequent, “Liquidity” decree, and the ‘Relaunch’ decree. The ‘Liquidity’ Decree harmonized with the “Cure Italy” decree to ensure that businesses had access to more financing and the necessary liquidity.. This financial relief program was estimated at over € 750 billion. The ‘Relaunch’ Decree also harmonized with the “Cure Italy” and the ‘Liquidity’ decrees by extending the wage supplement scheme, and continuing measures to strengthen liquidity, as well as additional financial support and relief in terms of taxation, providing non-refundable grants, ways to strengthen capital and achieve recapitalization. A budget of over € 16 billion was allocated for this program. Financial support and relief include the following⁸⁴:

Taxation cancellation and credit,

This included the cancellation of payment of the 2019 IRAP (regional income tax) balance and the first advance IRAP payment for 2020 (approximately € 4 billion was set aside for this purpose).

A 60% tax credit for expenses incurred in 2020 to sanitize surroundings and equipment, as well as to purchase personal protective equipment for workers and users at the workplace.

A 60% tax credit for any expenses incurred in 2020 for the work needed to ensure compliance with health requirements and the measures to contain the spread of the COVID-19 virus.

A tax credit equal to 60% of monthly rent payments for non-residential properties for the months of March, April, and May and based on applicable conditions. Hotels will be entitled to this tax credit regardless of the turnover recorded in the previous tax period.

Non-refundable grants

- Non-refundable grants are made available for businesses and operations that are self-employed with an annual turnover of up to € 5 million and which had recorded at least a 33% drop in revenues in April 2020 compared with April 2019. This non-refundable grant applies a weighted percentage to the difference shortfall between the turnover/remuneration amount in April 2020 and April 2019 ranging from a high of 20% for revenues/remuneration ranging up to € 400 thousand, 15% for those with revenues/remuneration of between € 400 thousand and € 1 million and 10% for those with revenues/remuneration of between € 1 million and € 5 million.
- A € 500 million budget was also set aside to provide non-refundable grants to those working in the tourism industry.
- Another € 600 million was set aside to support catering businesses whose turnover between March and June 2020 was less than three-quarters of the turnover recorded

⁸⁴ Italian Ministry of Economics and Finance. Support for businesses and the economy. December 30, 2020. <https://www.mef.gov.it/en/covid-19/Support-for-businesses-and-the-economy-00001/>

during the same period in 2019. In this regard, the non-refundable grant would be offered for the purchase of Italian agricultural products, food, and wine.

Subsidizing SME energy costs

- Around € 600 million was allocated to reduce the fixed amounts in energy bills and electricity costs for small and medium-sized enterprises using low voltage. This was set for a three-month period starting in May 2020.

These three economic support and financial relief decrees were the key initiatives of the Italian government during the critical first year of the Covid-19 pandemic in 2020. The year 2020 saw many disruptions to the business sector brought about by lockdowns, curfews, quarantines, and work stoppages which drastically impacted the economy on the macro-scale, and had deep-rooted repercussions on the business sectors at the micro-scale. Needless to say, while the economic aspects were impacted by the political decisions, the economic impacts and outcomes had a drastic and dramatic impact on the social stability and well-being of the general population. Therefore the timeliness and effectiveness of the economic support and relief initiatives and implementation were not only important to keep the economy afloat but also had an impact on the well-being of the Italian people.

This was a time of key challenges for the Italian governments, (Conte and Draghi) and would remain so as long as the Covid-19 endemic continues to be elusive. There is a 'light' at the end of the tunnel but it looks like the tunnel is getting longer....

D. The integration of political - culture and social - cultural aspects.

This section discusses the Italian social aspects specifically with respect to the impacts caused by the Covid-19 pandemic situation. As with the inter-relationship between the political-culture and economic-cultural, so also does this inter-twining of behavioral patterns also extend to impact on the social-culture. As with the political-culture aspect, Italy's social-culture elements cannot be separated from the deep-rooted cultural dimensions, which are founded on her national traditions, customs, values, and beliefs. Consequently, Italy's social-cultural aspects will influence and have an impact on the nature and level of the Italian public response to the government's State of Emergency crisis management initiatives, decrees, and laws in terms of accepting, conforming, cooperating, participating, or abidance.

i. Response to government crisis management leadership

As already indicated in the previous section, the Italian governmental structure is highly decentralized in most issues, giving the different regions a relatively high level of autonomy in managing localized affairs of administration. However, with regard to the Covid-19 pandemic, and given the declaration of a State of Emergency in this regard, there has been significant ambiguity as to who controls what with regard to the declaration of lockdowns, curfews, and quarantines.

Several cases have been filed with both the Constitutional and Regional courts to seek arbitration where the legitimate power and authority lie. Since each region, along with metropolitan cities provinces, and municipalities, all have its own constitutions, there have been conflicts and discrepancies in measures taken to tackle the Covid-19 pandemic at each level. This has resulted in the various regions having very different outcomes in terms of cases, hospitalizations, and deaths. These outcomes are closely associated with the behavioral patterns and traits of the respective population within these regions, although it is not possible to ignore that the efficiency and effectiveness of regional government leadership could also have significant impacts.

The political structure and associated constitutional powers have established the level of 'empowerment' of the Italian government, as well as the rights and privileges of the people. The political culture is therefore guided accordingly both during normal conditions and during the legitimate declaration of emergencies, along with the associated extra-ordinary exercise of government administrative powers.

In a study by Sjölander-Lindqvist et al., (2020)⁸⁵, there was a differentiation of general public response to government decrees between the Northern and Southern regions of Italy. The general public's cultural behavioural attitude would tend to Northern regions to skirt or side-step State government directives as an act of resistance, and refusal to be subjugated to a higher authority and resulting in lower compliance with orders given. This tendency would seem to indicate that the Northern region was more independent and self-determining. Comparatively, it would also indicate that the Southern region was more cooperative and responsive to government decrees with less resistance. Correspondingly, this would also suggest that the Southern region was more dependent on government leadership and guidance in protecting itself against the Covid-19 pandemic.

The different behavioural responses reflecting the respective political and social cultural attitudes 'seems' to be indicated in the number of confirmed cases and deaths in the Northern regions. As of September 27, 2022, the total confirmed cases in Italy were about 22.40 million of which the Northern regions' share was 12.22 million or 54.5%. At the same time, total deaths were about 177,000 of which 115,666 or about 65% were in the Northern regions.⁸⁶ By May 6, 2023, the total confirmed cases in Italy reached about 25.81 million (479,349 per million pop.) with deaths at 189,904 (3,527 per million pop.). As previously mentioned, the key four economically wealthy northern regions of Lombardy, Emilia-Romagna, Veneto, and Piedmont combined represented 41.6% of the confirmed infections and 50.5% of deaths recorded for the whole of Italy.⁸⁷ The significance of these figures is in the fact that these four Northern regions represent only about 44.23% of the total Italian population (59.11 million, 2021). The disproportionately high number of deaths in relation to the share of the population would suggest that the Northern regions responded differently to government directives therefore resulting in different outcomes. At the end of March 2020, following the Bergamo crisis, the total number of national confirmed cases was

⁸⁵ Sjölander-Lindqvist A, Larsson S, Fava N, Gillberg N, Marciàno C and Cinque S (2020) Communicating About COVID-19 in Four European Countries: Similarities and Differences in National Discourses in Germany, Italy, Spain, and Sweden. *Front. Commun.* 5:593325. doi: 10.3389/fcomm.2020.593325

⁸⁶ Source: Our world in data.

⁸⁷ ZOHO: Italy (Covid-19) Dashboard. <https://www.zoho.com/covid/italy/>

101,739 with 11,591 deaths.⁸⁸ By September 2022 these national figures increased to about 22.40 million cases and around 177,000 deaths. Since 99.5% of confirmed cases and 93% of deaths occurred after the Bergamo crisis these figures should not really be linked to that event.

The indicated differences in cultural-based responses to government crisis management leadership between the Northern and Southern regions with respect to emergency decrees and mandates reflects several other cultural dimensions such as self-determination and exercise of people's empowerment under the constitution. Culturally, in terms of behavioural tendencies, there is a close relationship and synergy between the exercise of authority, submission or resistance to authority, and self-determination. Differences have been indicated between the Northern region's trend towards self-determination to the Southern region's more accommodating stance. A deeper research and analysis of the cultural roots between the communities of the northern and southern regions may give more insights and rationale regarding the cause for this differentiation. Of course the statistical outcome for infection cases and deaths are based on the totality of data for the whole of Italy.

In interpreting these cultural behaviours in association with Hofstede's cross-cultural dimensions, three dimensions are evidenced. Italy's High/Low Power Distance index was indicated as 50, with Individualism versus Collectivism at an index of 53, with Indulgence versus Restraint at an index of 30. Hofstede's indexing of Italy under these three cross-cultural dimensions would seem to be "at par" with actual behavioural traits by the Italian general public in response to the Covid-19 pandemic crisis. An index of 50 – 55 means the cultural traits could swing both ways. The average national index of 50 would appropriately reflect slight swings either way for the High/Low Power Distance and Individualism versus Collectivism dimensions, as indicated by the differences between the behaviours of Northern and Southern regions. Similarly an index of 30 for Indulgence versus Restraint would indicate a greater tendency towards restraint, which within the context of the Covid-19 pandemic crisis responses means a greater tendency to follow government policies and mandates with limited opposition and resistance. Although there was evidence of resistance in the Northern region the sum response for the nation indicated the majority of the people to follow government decrees and directives. The drastic events of Bergamo was never repeated.

In this regard, and with respect to crisis management of the Covid-19 pandemic, Italians would have a greater tendency to obey and follow directives by their government with limited and rare displays of protest and non-conformity. Despite being a democratic nation, the Italian culture of restraint would generally be less demanding in the enforcement of their constitutional rights and freedoms, in favour of doing what is pragmatic, and adaptable to the environment and 'abnormal' situations. Hofstede's cultural dimensions for Italy indicate that Italy's low score of restraint is coupled with its high scores for pragmatism, and uncertainty avoidance. The synergy of these three dimensions combined would direct Italy's society as a national culture in response to the Covid-19 pandemic toward "doing the right thing", even if it means sacrificing temporarily the exercise of their Constitutional rights.

⁸⁸ WHO Situation Report, March 321, 2020.

Consequently, the theme of the state of war against the Covid-19 pandemic adopted and became the undercurrent of government communications to advocate for national unity in national crisis management. This is reflected in the background of storytelling and terms used by the Italian central government and the regions. According to Sjölander-Lindqvist et al. (2020) virtues of responsibility, pride, nationhood, and a sense of community became the undercurrent of communications which underscored the sense of national unity and collectiveness. It also demonstrates how a traditionally individualistic culture can adopt a collective behavioural outlook in times of emergency for the well-being of the nation. The various protocols of social distancing, wearing of masks, as well as curfews, lockdowns, and quarantines, are all related to the collective well-being.

The success of this strategy by the government was measured by the success in motivating the 'majority' of Italy's society, to acknowledgment and accept the importance and practicality of adopting certain crisis management solutions, and embracing a pragmatic response in accepting abnormal and extraordinary government directives such as curfews, lockdowns, social distancing, and wearing masks in public. In fact, there were incidences of certain groups of Italians taking matters into their own hands, as public civil responsibility, to promote and enforce such 'new normal' protocols in their society with respect to social distancing and even wearing masks in public.

E. Means and forms of Government Communications to the General Public

Government communications regarding the Covid-19 pandemic in the form of decrees, laws, directives, and advisories, were in the form of announcements or declarations, press conferences, and press releases, which were channelled through TV, radio, newspapers, as well as online and social media such as Facebook. However, as we all know, there are two key elements in crisis communications. First, the source of communication, along with the original context and intent. Second, the delivery of communication through mass media channels and platforms. With the exception of live coverage of government announcements such as on TV or radio, the second element would be through a third party that has control over how the communication would be 'packaged' or 'interpreted' for the general public. The Media such as journalists have control over what and how the information is presented which ranges from 'correct and transparent' to 'fake news' on the vertical line, and from 'under-stating' to 'sensationalism' on the horizontal line. Therefore both the government and the media jointly, play important roles as 'influencers' to the general public regarding healthy and safety behaviours with regard to the covid-19 pandemic.

Examples are given by Sergio Splendore, a senior lecturer at the Università degli Studi di Milano, noting that at the beginning of the outbreak, news from China were "muted and fragmentary and failed to alert people to the serious danger represented by virus". Then when the infections reached Italy, the media burst into sensationalism that characterised much of the initial coverage. "The screaming and apocalyptic way in which the media covered the pandemic at the beginning was lazy, unthinking, and sensationalised. The most positive aspect of the coverage was the

attempt to place expert knowledge (that of doctors, scientists, and data analysts) center-stage – even if this did give rise to some conflicts.”⁸⁹

Arianna Ciccone, co-founder of the Perugia International Journalism Festival comments, comments, “I’ve seen very well done and useful pieces of work, as well as others that unfortunately weren’t so good.” “Mostly we improvised, moving from a very alarmist kind of coverage to a more reassuring one in the space of a few days. This confused people and probably weakened messages that should have been conveyed forcefully, such as those related to personal conduct”. Ciccone says the role of social media – in both their positive and negative aspects – should not be underestimated. “They can be used to disseminate both useful information and also, unfortunately, fake news and manipulation.”⁹⁰

Nevertheless, it would not be realistic to place all the blame for misinformation on mass media reporting and editorials. There have been cases where misinformation originates from the source also, in terms of ambiguity, political expediency, social prejudices, and misunderstanding. Typical examples are the conflicting and inconsistent stances regarding the necessity of wearing masks in public. While China and most Asian nations with prior experience in coronavirus outbreaks in the past (SARS, MERS, and Hong Kong Flu) have adopted masking as the first line of defense since December 2019 for the Chinese, and most Asians beginning in January 2020, the western nations, including Europe, have “pooh-poohed” the wearing of masks until about 8-9 months later. Italy didn’t declare a mandate for wearing masks until August 17, 2020, and even then it was mild if not somewhat lacklustre with enforcement between 6:00 pm and 6:00 am.⁹¹ In other words, the mandatory wearing of masks in public when most people are at home and sleeping. Masking is required for those socializing at night in restaurants, bars, and public gatherings. However, if attending those same venues between 6:00 am and 6:00 pm, i.e. same restaurants, bars, and public places, plus crowded bus stations and buses, train stations and trains, and airports and planes, workplaces such as offices and factories require no masking. It is therefore not so surprising that the Western nations in The Americas and European regions had the highest infections, hospitalization, and death rates, throughout the Covid-19 pandemic (from the beginning as an epidemic, through the pandemic and ending as endemic).

With regard to government communications style, some very interesting observations and assessments were made on the characteristics, tone, and delivery of government communications by Capano (2020) and Sjölander-Lindqvist et al. (2020). According to Capano (2020) despite the importance of timing and context when announcing interventions to fight the aggravating Covid-19 pandemic, such critically important government communications were not always given in a timely

⁸⁹ Philip Di Salvo & Antonio Nucci. Italy: Coronavirus and the media. European Journalism Observatory (EJO). April 6, 2020.

<https://en.ejo.ch/ethics-quality/italy-coronavirus-and-the-media>

⁹⁰ Philip Di Salvo & Antonio Nucci. Italy: Coronavirus and the media. European Journalism Observatory (EJO). April 6, 2020.

<https://en.ejo.ch/ethics-quality/italy-coronavirus-and-the-media>

⁹¹ Ted Regencia, Arwa Ibrahim and Mersiha Gadzo. Aljazeera. August 16, 2020

<https://www.aljazeera.com/news/2020/8/16/italy-orders-mask-wearing-at-night-live-coronavirus-updates>

fashion to allow for appropriate comprehension, acceptance, and preparation, by both the implementing authorities and agencies and the general public. Many vitally important government communications were characterized by procrastination in announcing unfavourable or unpopular policies to the general public withholding until only a few hours before the relevant new regulations came into force. This was probably to limit the time and opportunity for any dissenting public, or even opposition parties, to organize popular demonstrations or riots. Obviously, the major source of objection would come from economic interests which would strongly oppose any form of disruption to business such as curfews and lockdowns. These government communications were also influenced by "low state capacities and complex decision-making and implementation procedures, and a context complicated by structural political games and inter-institutional conflicts."⁹²

According to Sjölander-Lindqvist et al. (2020) "the communication by the heads of state and heads of government hinges on the tenet of how the individual citizen is assigned a significant role and is deemed a carrier of responsibility for preventing further spread of the virus." In advocating for the general public to follow government directives as expressed through communications, emphasis is on the virtues of responsibility, pride, nationhood, and a sense of the 'collective' community. The community is both the source of the problem as well as the solution with respect to the COVID-19 pandemic. The Italian government's communications underscore the importance of the community perspective and outlook which builds on individual collectiveness for the common good and the idea of solidarity. Government communications at the different levels from the State to the municipalities echo the same messages regarding wearing masks, healthy sanitization (such as washing hands), and social distancing (being with family and friends) and in public places and gatherings (mass transit systems, social venues, and events).⁹³

The population's responses to the government communications, decrees, and laws, during the early phase of the Covid-19 outbreak in Italy, may have been somewhat mediocre, even after the discovery of the first cases in Rome. However, there was a 'rude awakening' when the outbreak hit home in Bergamo province with hospitalizations and deaths exploding to become the epicenter of the worst COVID-19 outbreak in the world by March 2020. Since then, the Italian public response to the non-pharmaceutical protocols advocated from the beginning by the Chinese has been strictly followed through the numerous decrees from the government regarding social distancing, wearing masks, and sanitization of hands. The Italian public has been continually responsive to government decrees along these lines, including quarantines, curfews, lockdowns, and business closures during the first wave of Covid-19 in 2020.

In the face of a national crisis, with the inevitable multiple deaths at the end of the line (as demonstrated in Bergamo province) Italians were rather forced by circumstances to trust the

⁹² Capano, Giliberto (2020) DOI: 10.1080/14494035.2020.1783790

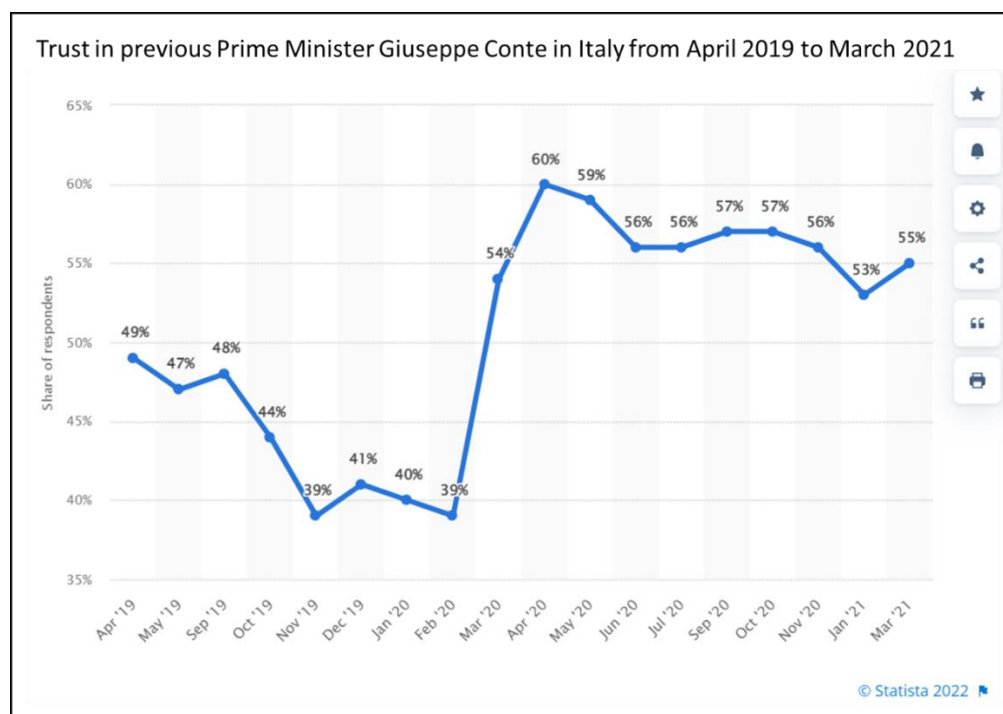
<https://doi.org/10.1080/14494035.2020.1783790>

<https://www.tandfonline.com/doi/pdf/10.1080/14494035.2020.1783790>

⁹³ Sjölander-Lindqvist A, Larsson S, Fava N, Gillberg N, Marcianò C and Cinque S (2020) Communicating About COVID-19 in Four European Countries: Similarities and Differences in National Discourses in Germany, Italy, Spain, and Sweden. *Front. Commun.* 5:593325. doi: 10.3389/fcomm.2020.593325

government leadership with regard to crisis management. Party politics and partisan loyalties became secondary with the opinions and trust of the Italian people strictly tied to both the credibility of information disseminated publicly as well as the crisis management initiatives by the authorities. The numerous emergency decrees issued by the government demonstrated drastic solutions involving highly (undemocratic) restrictive measures, such as curfews, lockdowns, and quarantines. These government directives severely tested the trust of the Italian people which was critical to generate the required crisis management and control response in a timely manner. At the end of the day, crisis management effectiveness relied on the Italian people to trust the government, and relevant implementing institutions, and accept to follow these necessary measures. In this context, the role of information sources, inclusive of credible scientific references and backing was fundamental, since they strongly influence public opinion.⁹⁴

Government leadership was expected to make the 'right call' putting the people in front, not the party. Apparently, Prime Minister Conte made the right calls in managing this crisis as illustrated by the level of trust pre- and post-Covid-19 pandemic illustrated below.⁹⁵



⁹⁴ Falcone, Rino, and Alessandro Sapienza. 2020. "How COVID-19 Changed the Information Needs of Italian Citizens" *International Journal of Environmental Research and Public Health* 17, no. 19: 6988. <https://doi.org/10.3390/ijerph17196988>

⁹⁵ <https://www.statista.com/statistics/977223/support-for-prime-minister-conte-in-italy/>, accessed at 07/08/2020).

However, this did not mean there was no opposition to government decrees and directives. Due to rising economic pressures, especially on small and medium enterprises, which are mostly family businesses, there was a growing undercurrent of resistance to lockdowns and curfews.

Eventually, on October 23, 2020, when the president of the Campania Region declared the need for a further lockdown which would have a significant impact on business that the first demonstrations and protests occurred in Italy, specifically in Naples in the Campania Region. This was soon followed by other demonstrations and riots in other cities including Rome.

This was further aggravated on August 6, 2021, when the government launched the "certificazione verde," or green pass, for entering certain public venues such as museums or galleries, entertainment, and sports venues, theme parks, spas, and eating indoors. Obviously, this decree had a significant impact on the SME and family businesses in the food, drinks, and entertainment sectors. Resistance to government decrees grew in numbers as well as spread nationwide. This resistance also had growing support from the 'anti-vaxxers'. Needless to say, communications from the government and responses from the population were at a crossroads. The outcome was a continuing increase in the number of serious hospitalizations and deaths. At the end of March 2020, Italy ranked highest in the world with 11,591 deaths, and by the year-end, Italy's deaths reached 73,604, showing an increase of 6.3 times within 9 months even though its ranking declined to 8th. place. By the end of December 2021, Italy's death rate almost doubled to 137,247 with the ranking declining to 11th. place, and by September 13th. the death figures increased to 176,242, and Italy's ranking rose to 8th. place again. It is interesting to note that the highest number of deaths occurred during the vaccination period which started beginning 2021.⁹⁶

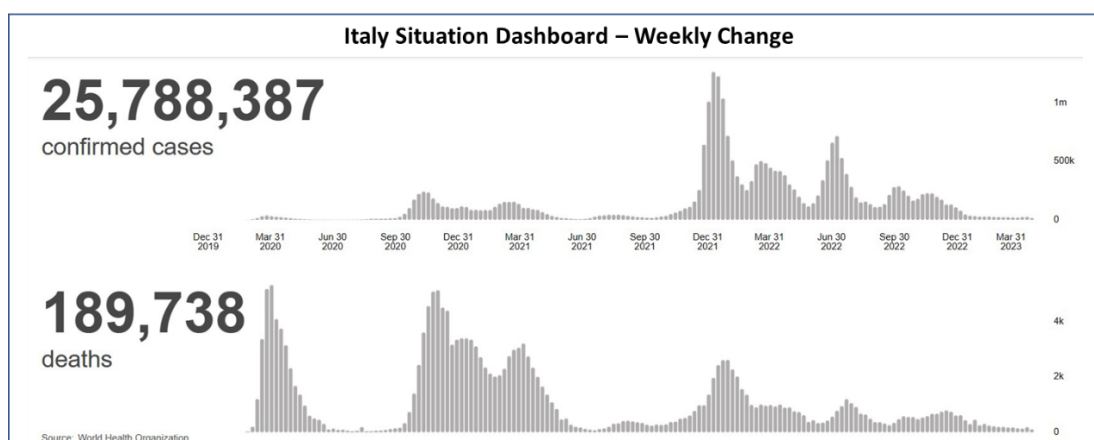
It would seem from the statistical outcomes that government communications, were not able to achieve a sustainable effective population response. Conversely, it would also appear that the population's behavioural response either did not trust the government's competence in crisis management or had other values and priorities which were not focused on healthy wellness (such as economic survival). Despite these differences in beliefs and values, there was one constant. Namely the Covid-19 pandemic was the stimulus for causing either untimely or extraordinary deaths during this period, irrespective of political, economic, or social-cultural foundations. Communication is the key link between the government, the people, and the Covid-19 threat.

F. Italy Covid-19 pandemic situation report

The Covid-19 pandemic status in Italy, based on WHO situation reports⁹⁷ for the period from January 3, 2020, to May 23, 2023, totaled 25,788,387 confirmed cases with 189,738 deaths as indicated in the Graph below. Most compelling improvements were Italy's coronavirus pandemic outcomes indicated dramatic improvements in Italy's 'battle' with the coronavirus pandemic on both issues.

⁹⁶ www.worldmeters.info/coronavirus

⁹⁷ <https://covid19.who.int/region/euro/country/it>



From the end of December 2022 onwards, Italy's figures declined significantly with the most compelling decrease in death rates as a proportion to the infection levels. This was significantly evident when comparing the period March 2020 to March 2021, with the period from March 2021 to March 2023. This would indicate a greater level of cohesion and coordination between government strategy and popular response. This trend in Italy's decline in confirmed infections and deaths is most likely due to four elements. First, it is well known that although the Omicron variant is highly contagious, at the same time has a low risk of serious illness, and therefore would generally not lead to either hospitalisation or deaths. Second, consequently, those infected would only require self-administrated treatment which includes easily accessible 'over-the-counter' medication along with homestay for a few days. The tendency, therefore, is for those infected not to bother visiting hospitals for treatment and would include a general reluctance to make the effort or go to the trouble of reporting their illness to the relevant authorities for the record. The result would be that statistics for confirmed infections would not reflect the recurrent real number of infection cases. Third, due to the declining credibility of the reliability of vaccinations, and in particular in additional booster doses, resulting in significant declines in the administration of vaccinations, more and more people are turning to the more reliable non-pharmaceutical protocol of maintaining social distancing, including wearing of masks in public or crowded paces. Also to be noted is that although on a prima facie basis the total number of confirmed cases in Italy as of May 2023 was 25, 788,38, which would be equivalent to about 43% of Italy's total population (approximately 60.2 million people), in actuality, due to the fact that a significant number of people have been infected 2-3 times, especially during the Omicron period since 2022, the real percentage of people infected by the Covid-19 would most likely be significantly less. However, the more important and indicative measure of Italy's handling of the Covid-19 pandemic would be in the death rate, which, as previously mentioned, has been demonstrating significant declines during the three periods from March 2020 to March 2021, March 2021 to March 2022, and from March 2022 to March 2023.

G. Follow-up on the Italian State and Regional governments' handling of the 2020 Covid-19 crisis.

The events and outcomes from the deadly Covid-19 epidemic with epicenter in Bergamo city, Lombardy Region have been covered above. What followed was a series of lawsuits and Commissions of enquiries against the Conte government's handling of the crisis at the State level and the Regional government at Lombardy level. The following are the outcomes of the Lombardy Covid-19 Commission of Inquiry. Although the outcomes did not please the families and relatives of Covid-19 victims, these are 'lessons learned' in terms of identifying the 'weakest links, and relevant issues' in health-related crisis management responses and management. One of the key 'take-outs' from these lawsuits is the need for delineation of a broader circle of accountability in both the State and Regional governments.

i. Lombardy Covid-19 Commission of Inquiry.⁹⁸

On April 13, 2022 the Lombardy Regional Council, with 43 votes (majority government) in favour and 21 against (opposition) approved the report of the Lombardy Commission of Inquiry, which after one and half years, 40 sessions, and the hearing of 66 subjects, acquitted the Region *"The Lombardy Region has worked actively, tirelessly and with every means at its disposal to counter the explosion of an unknown and unexpected event"*. The Region itself had to deal with a *"lack of scientific information and operational indications from the State"* which *"caused a serious delay in the activation of the organizational machine"*. *"Nevertheless, the Region has spared no effort and, in some cases, has anticipated national provisions with the sole aim of offering all citizens - without exception - the care they need"*

But the Commission members from the opposition minority parties disagreed⁹⁹: "The lack of thousands of documents, culpably not provided, did not allow them to fully answer the question of truth and justice that came from the people". However, the members of the opposition acknowledged that all the critical elements of the health system that regional policy can and must address have emerged from the report and are as follows:

1. The "resistance of politicians to believe in the seriousness of the facts"
2. "In Lombardy, some internal structural problems to health management already existed before the pandemic: Covid-19 has only emphasized them".
3. "The negative choice not to involve the opposition either regarding knowledge of the data or regarding the choices to be made".
4. The evident problems in regional healthcare, especially at first contact (GPs), preventive and promotive care levels,
5. The problems in the line of command of early months,

⁹⁸ [quotidianosanita.it](https://www.quotidianosanita.it/). April 13, 2022

https://www.quotidianosanita.it/lombardia/articolo.php?articolo_id=104017

⁹⁹ [quotidianosanita.it](https://www.quotidianosanita.it/). April 13, 2022

https://www.quotidianosanita.it/lombardia/articolo.php?articolo_id=104017

6. The Lombardy Region, was unprepared and unable to manage an event of this magnitude, has become completely paralyzed. due to technical, logistical, and decision-making shortcomings,

7. “The attitude of the centre-right politicians has never changed, “They did everything right and would do everything the same again”, therefore the Commission of Inquiry was of no use since the Lombardy Region government had learned nothing and sticks to their reformed regional healthcare system that is "for those who can (afford it)", transforming health into a business, favouring private profits and dismantling local healthcare".

ii. Lawsuit at the State level.¹⁰⁰

The Italian State government under the then Prime Minister Giuseppe Conte along with the then Minister for Health, Roberto Speranza, and 17 other people were under investigation by prosecutors in Bergamo city, for manslaughter and mishandling the 2020 Bergamo city Covid-19 epidemic.

An Italian court on Wednesday, June 7th. 2023 dropped a case against both Conte and Speranza. The verdict was issued by three judges of the ministerial court in the northern city of Brescia. Justifying their rulings on the key issues raised by the prosecutors from Bergamo were as follows:

On the issue of delays and omissions, the court ruled that these were issues related to the “administrative managers” and could not be blamed on the Health Minister.

On the issue that former Prime Minister Conte should have locked down the badly affected small towns around Bergamo earlier in the outbreak, the court said Conte followed the official Scientific Committee which did not think it was necessary at the time.

The court ruled that "It was therefore a political decision not subject to judicial scrutiny."

Relatives of The Association of COVID victims were both exasperated and outraged, declaring the court’s ruling "a slap in the face for us and for the whole of Italy".

The remaining 17 suspects are still waiting to hear whether the Bergamo Public Prosecutor's Office would continue and put them on trial or whether to drop the case .

H. Study links severe COVID-19 to the Neanderthal genetic haplotype

The 20 October 2023. iScience, published study analysed data collected in the wealthy Bergamo Province which was the Covid-19 European and Italian epicentre in spring 2020. Within this province, however, few areas only had among the highest, global Covid-19 mortality. In one of such areas, in March 2020 mortality increased 850% compared to February 2020. In the whole province, mortality was 575% higher compared to the previous five years. Covid-19 inter-individual variation of clinical manifestations and outcomes (cured, long-Covid-19, death) were highly unpredictable in

¹⁰⁰ Italian court drops COVID case against former PM Conte

Reuters. June 7, 2023

<https://www.reuters.com/article/health-coronavirus-italy-investigation-idUSL8N37Z46F>

Bergamo as they were in the rest of the world. Puzzlingly, however, many people in the Province, did not get sick, despite taking care, at home and without a face mask, of severely ill Covid-19 patients. The high variability in infection susceptibility and outcomes was linked to the patient's genetics, in the first genome-wide association study (GWAS) involving patients with Covid-19 and respiratory failure. The Bergamo study¹⁰¹ shed more light on this high variability and the patients' genetics. The study, after controlling for confounding factors (age, being male, suffering from concomitant diseases), interviewed about 1200 participants (400 with severe disease, 400 with mild disease, and 400 non-infected) and investigated their genetic profiles. All 1,200 participants were similar for: 1. ancestry, 2. geographical origin (therefore similar in human behaviors, social, economic, and cultural interactions, for environmental weather, temperature, pollution ...), and 3. high exposure to the same original virus SARS-CoV-2 (before virus variants emerged, and vaccines became available), therefore, controlling these three confounding factors as well.

The study results showed that the severity and outcome of the disease were associated with chromosome 3p at the region(locus)21.31 The association was stronger and stronger in patients with more and more severe disease. Three out of six of the top markers (genes) in the region, are from the haplotype (a set of DNA variants in a single chromosome inherited as a set together) of Neanderthal. The haplotype has been inherited (introgressed) about 50,000 years ago from Neanderthals ('Homo Neanderthalensis' who, before their extinction, interbreed with our 'Homo Sapiens' ancestors). Seven percent of Italians have this haplotype, compared to about 2% in Eurasians¹⁰². In particular, those carrying the Neanderthal haplotype have more than double the chance to suffer severe (life threatening pneumonia) Covid-19, three times more chance to need intensive care therapy, and even higher chance to need mechanical ventilation than those without this haplotype¹⁰³. The chromosome 3 haplotype makes the immune system to respond too aggressively (cytokine storm or cytokine-associated toxicity) to infection and may end up killing the patient together with the virus. This highly controlled, scientifically well-designed, and exceptionally well-located study, therefore, showed that (in the absence of other causes, see above confounding factors) most patients suffered severe Covid-19 and/or died due to a genetic predisposition/contribution. Governance (the focus of this book) is one of the confounding factors in our efforts towards understanding the dynamic of the Covid-19 pandemic. This study suggests that good or poor governance had no relevance for the many Bergamo citizens carrying the Neanderthal haplotype. They suffered severely and died more than those not carrying the haplotype, even if all of them were equally subject to the same quality of provincial governance. In

¹⁰¹ Matteo Breno, Marina Noris, Nadia Rubis, et al *A GWAS in the pandemic epicenter highlights the severe COVID-19 risk locus introgressed by Neanderthals* iScience Volume 26, Issue 10, 20 October 2023, 107629 <https://www.sciencedirect.com/journal/iscience/vol/26/issue/10>

¹⁰² McArthur, E., Rinker, D.C. & Capra, J.A. *Quantifying the contribution of Neanderthal introgression to the heritability of complex traits*. Nat Commun **12**, 4481 (2021). <https://doi.org/10.1038/s41467-021-24582-y>

¹⁰³ Lombardy Region online. *Covid, studio Istituto Negri: più grave in chi ha gene Neanderthal* <https://www.lombardianotizie.online/covid-neanderthal/>

other words, it suggests that genetics is important and relevant for understanding the distribution and effects of the Covid-19 virus.

Chapter 10

DENMARK: LEADERSHIP AND CULTURE

DR. CAMILLA SLØK, Associate Professor, PhD., Th.M. Cand.Theol., Copenhagen Business School, Copenhagen, Denmark, and Sukhavichai Dhanasundara (cross-cultural issues).

A. Government leadership, policies, and actions

Denmark's governance framework is a constitutional monarchy. The legal and cultural fundament for Danish democracy is written in the Constitutional Act of Denmark (Danish: Grundloven) which was founded in 1849. The Constitutional Act establishes the rights and duties of individual citizens, such as freedom of speech, freedom of religion, and compulsory military service.¹ The Constitutional Act is the most important book on legislation in Denmark, and all other laws must comply with it. This rule has called upon conflict with regard to the legislation of the EU.² Still, the collaboration between Danish law and EU legislation is well functioning.

The Danish Constitutional Act divides power into three independent branches 1) the Danish Parliament is the legislative power, enacting the laws of the country, 2) the Government is the executive power, ensuring that laws are implemented, and 3) the courts of law are the judicial power, pronouncing judgments in disputes between citizens and between the authorities and citizens. The division of power is based on the attempt to prevent the abuse of power. In Denmark which is quite successful. Denmark is low on corruption,³ and the level of trust in authorities is very high.⁴ The trust is seen by researchers as a result of a belief in the care of the so-called welfare society as well as no cheating with taxes is taking place. This is also due to a free press in which journalists and media are considered important and doing their duty as critical observers of people in power.

B. Issuing regulations, laws, and enforcement procedures from the government leadership

¹ <https://www.thedanishparliament.dk/en/democracy/the-constitutional-act-of-denmark>

² <https://www.cambridge.org/core/journals/european-constitutional-law-review/article/abs/from-maastricht-to-edinburgh-the-danish-solution/7D343077921140B6CD3BC76673DC1782>

³ <https://www.transparency.org/en/countries/denmark>

⁴ <https://ps.au.dk/en/current/allnews/news/artikel/trust-may-explain-the-good-state-of-danish-economy-and-the-countrys-successful-welfare-society>

The Danish government and Prime Minister Mette Frederiksen have used 1) lockdown and 2) prohibition of gatherings as their primary tool.

Denmark was among the first European countries to introduce lockdown measures, starting on 13 March 2020.⁵ It is important to emphasize that the lockdown was a lockdown of Denmark's public sector, not a lockdown of private enterprises. The Federation of Danish Industry (FDI) was very upset about the coining of the lockdown since industry continued as before under the lockdown of the public institutions.⁶

However, the employers were asked when possible to allow their employees to work from home (WFH). Pharmacies and food retailers have been open all through the Covid-19 pandemic.⁷ The focus from the Danish authorities was to close secondary education institutions, universities, libraries, indoor cultural institutions, and similar places, initially for two weeks from 13 March 2020. Starting on 16 March, all primary schools, daycares, and similar places were also closed for two weeks. Various online-technologies were used,⁸ however, there have been some critiques, both in the beginning^{9 10} and by January 2021, regarding the pupils and students receiving too few lessons.

The municipalities limited daycare for children where the parents could not stay home and take care of them. There has been some debate among staff in kindergartens whether the kindergartens should be closed.¹¹ The union of pedagogues has intensely argued that the working environment for their members was very bad. Further, they have argued that they want vaccines before others.¹²

Also, because of the vulnerability of the elderly to COVID-19, it was strongly recommended that grandparents should not take care of their grandchildren.¹³ This was inspired by the many casualties in Italy and Spain where elderly people being around their grandchildren died.¹⁴

⁵ Hansen, Thomas Stærmose. "Danmark lukker ned: Her er regeringens nye tiltag". TV 2 (in Danish). Retrieved 11 March 2020).

⁶ <https://www.danskindustri.dk/di-business/arkiv/nyheder/2020/3/udenlandske-medier-tegner-forkert-billede-af-coronaramt-dansk-industri/>

⁷ "Til dig, der er privat ansat". Official website by the Danish authorities (site hosted by Danish police) (in Danish). Archived from the original on 12 March 2020. Retrieved 11 March 2020

⁸ Jørgensen, Anna Sol (12 March 2020). "Gymnasier og folkeskoler gør undervisningen digital: 'Det er ikke nogen badebillet'". DR (in Danish)

⁹ <https://www.folkeskolen.dk/1730205/laerere-paa-bornholm-faar-kritik-for-deres-hjemme-arbejdsindsats-beror-paa-en-misforstaaelse>

¹⁰ <https://www.altinget.dk/boern/artikel/efter-ny-kritik-minister-laegger-op-til-opgoer-med-undervisningen-for-anbragte>

¹¹ <https://bupl.dk/artikel/corona-lukning-1612/>

¹² <https://sn.dk/Koege/Paedagoger-med-opraab-Vi-skal-laengere-frem-i-vaccine-koeen/artikel/1398617>

¹³ "Til dig, der har børn i skole eller dagstilbud". Official website by the Danish authorities (site hosted by Danish police) (in Danish). Archived from the original on 12 March 2020.

¹⁴ <https://www.reuters.com/article/us-health-coronavirus-italy-grandparents/coronavirus-toll-on-italys-elderly-strains-nonni-safety-net-idUSKBN2330MU>

The number of people in hospitals with COVID-19 fell from late March 2020, with the number of cases in need of intensive care and ventilator units (also at the peak in late March¹⁵) being well below available resources.¹⁶

On April 6, 2020 Prime Minister Mette Frederiksen announced what she called the "first phase" of the reopening of Denmark¹⁷, declaring that nurseries and kindergartens would be opened again on April 15th as would primary schools for pupils in years 1–6 (Danish: 0.-5. klasse), and that the final exams for pupils in year 10 (Danish: 9. klasse), the last year of the primary school, were canceled. She also announced that restaurants, cafés, and hairdressers were to remain closed until 10 May, and larger gatherings will be prohibited until September.¹⁸

On April 10, 2020 the Danish Health Authority announced its updated guideline to warn that the risk of asymptomatic people transmitting the coronavirus infection was "significant". According to a report in the Danish newspaper Berlingske, there has long been a consensus among experts to confirm this, even before the announcement of the Danish Health Authority.¹⁹ This guideline was critical in 'plugging' a significant transmission channel through health workers in retirement homes since they continued working (and possibly transmitting the infection) after having had contact with sick persons.²⁰

On May 12, 2020 Prime Minister Mette Frederiksen announced a new offensive testing strategy, which aims to "strengthen the contact tracing". The national testing strategy is based on three essential elements: testing, tracing, and isolation.²¹ In consideration of the 10 April announcement regarding the risk of asymptomatic transmissions the new testing strategy takes a more aggressive approach with broader testing of both symptomatic and asymptomatic individuals.²²

¹⁵ "Følg smittespredningen globalt, regionalt og lokalt" (in Danish). Danish Health Authority (Sundhedsstyrelsen). Archived from the original on 20 March 2020. Retrieved 8 August 2020.

¹⁶ "Håndtering af COVID-19: Prognose og kapacitet i Danmark for intensiv terapi". Sundhedsstyrelsen (Danish Health Authority) (in Danish). 22 February 2020. Archived from the original on 12 April 2020. Retrieved 6 April 2020.

¹⁷ "Mette Frederiksen: De mindste børn kan begynde i skole og daginstitutioner næste uge". Altinget.dk. 6 April 2020. Archived from the original on 6 April 2020. Retrieved 6 April 2020.

¹⁸ "Mette Frederiksen: De mindste børn kan begynde i skole og daginstitutioner næste uge". Altinget.dk. 6 April 2020. Archived from the original on 6 April 2020. Retrieved 6 April 2020.

¹⁹ "Sundhedsstyrelsen ændrer anbefalinger om coronasmitte". Berlingske. 10 April 2020. Archived from the original on 10 April 2020. Retrieved 10 April 2020.

²⁰ "Kraftig ekspertkritik: Hvorfor går personalet på plejehjem stadig på arbejde efter tæt kontakt til smittede?". Politiken (in Danish). 4 April 2020. Archived from the original on 6 April 2020. Retrieved 10 April 2020.

²¹ "Offensiv national teststrategi sikrer tryk genåbning af Danmark". Justitsministeriet. Archived from the original on 16 May 2020. Retrieved 14 May 2020.

²² "Teststrategi og smitteopsporing | Coronavirus/COVID-19 i Danmark". Politi (in Danish). Archived from the original on 13 May 2020. Retrieved 14 May 2020.

By mid-August 2020, wearing masks/face shields was declared mandatory in public transport.²³ This mandate was expanded to include most public places by the end of October.²⁴

On November 4, 2020 one of the most controversial laws to be passed by the Danish government and significantly affecting one of its main economic sectors was the announcement for the nationwide culling of all minks in mink farms, based on reports that a mutated Covid-19 was being passed from mink to humans via mink farms.²⁵ Denmark has over 200 mink farms making it the largest breeding source in the world. An estimated 15 million minks were said to have been culled as a result.²⁶

On November 5, 2020 as a result of the high risk from infections through mink farms, a new lockdown and movement restrictions would be implemented in seven municipalities of Northern Jutland beginning 6 November.²⁷

A week before Christmas Day 2020, the government issued a nationwide declaration for the closure of bars and restaurants, schools, sporting facilities, cultural centers, malls, and shops to be closed by December 24, 2020. Exceptions are for food shops and pharmacies.²⁸

On December 27, 2020, Denmark leads the EU in vaccinations against the novel coronavirus. Prime Minister Mette Frederiksen declared her government's policy to be "that the moment the vaccines touch Danish soil is the moment they have to be used." As of 14 January 2021, 129,170 people in Denmark had received their first jab with priority directed at nursing homes, care centers, frontline healthcare workers, and those in risk groups.²⁹

(By the end of April 2022, about 4.8 million citizens have been vaccinated representing about 82% of the population, with more than 3.6 million people receiving a booster shot, according to the National Board of Health.³⁰)

²³ "Her er de nye krav om mundbind i den kollektive transport". DR (in Danish). 15 August 2020. Retrieved 20 February 2022.

²⁴ "Brostrøm forsvarer nye krav om mundbind: 'Så er det heller ikke værre'". DR (in Danish). 26 October 2020. Retrieved 20 February 2022.

²⁵ Grove Krause, Tyra. "Mutationer i minkvirus" (in Danish). Statens Serum Institut. Archived from the original on 7 January 2021. Retrieved 6 November 2020.

²⁶ Sophie Kevany, Tom Levitt and Tom Carstensen, Denmark's Covid mass mink cull had no legal justification, says report. The Guardian. 30 June 2022.

<https://www.theguardian.com/environment/2022/jun/30/denmarks-covid-mass-mink-cull-no-legal-justification-report>

²⁷ Barrett, Michael (5 November 2020). "How serious is Denmark's mink coronavirus mutation and outbreak?". The Local Denmark. The Local DK. Archived from the original on 17 November 2020. Retrieved 6 November 2020.

²⁸ Denmark shuts up shop over Christmas to combat rising Covid-19 cases
France 24. 16 December 2020.

<https://www.france24.com/en/europe/20201216-denmark-shuts-shops-over-christmas-to-combat-rising-covid-19-cases>

²⁹ Why Denmark is leading EU in roll-out of Covid-19 vaccine
AFP - news@thelocal.dk. 15 Jan, 2021

<https://www.thelocal.dk/20210115/why-denmark-is-leading-eu-in-roll-out-of-covid-19-vaccine>

³⁰ Holly Ellyatt, Denmark becomes the first country to halt its Covid vaccination program

C. Acts and activities launched/undertaken by the government leadership.

i. Mask wearing: Dates. mandatory starting from 22. August 2020 ³¹

ii. Lockdown of restaurants: Starting on 18 March at 10:00 AM, a number of further restrictions were activated: it became illegal to assemble more than ten people in public, all shopping centres and stores with close contact such as hairdressers and nightclubs must be closed, restaurants can only serve take-away, and other businesses must ensure that there is enough space between customers.³² On 23 March, The Prime Minister announced that the above lockdown measures would be extended for a further 2 weeks, until 13 April.³³

iii. Prohibition against gatherings. Varying between 500, 100, 50, 10, and 5 people. From 19. March 2020 the restrictions on the number of people allowed to assemble went from a recommendation to fines of [DKK1500](#).³⁴

iv. Prohibition of non-Danish persons to travel into Denmark without a so-called "anerkendelsesværdigt formål", meaning a very good reason. A very good reason is to be married to a Dane; being in a long-term relationship with a Dane; having a child or a parent which lives in Denmark.³⁵ Before Covid-19, it was possible to apply for a visa through another Schengen-country. With the Covid-19 this rule was suspended. It is only possible to apply for a visa to Denmark through the Danish foreign ministry.³⁶

v. Establishing for a new government agency.³⁷ The agency was organized under the Ministry of Justice. The Ministry of Justice said that experience in dealing with COVID-19 in Denmark shows that there is a need for a consistent and transverse coordination and support of government efforts, for example, to ensure the supply of socially critical infrastructure.^{38 39} The implementation of the new offensive test strategy, the detection of infection, and better possibilities for self-isolation require a massive support from, among other things, the use of the test-system, security of supply, and practical operation. In order to strengthen more permanently the overall regulatory effort, this new government agency was established.⁴⁰ The agency has been criticized for not fulfilling its goals.

CNBC News. April 28 2022.

<https://www.cnbcm.com/2022/04/28/denmark-the-first-country-to-halt-its-covid-vaccination-program.html>

³¹ (<https://www.danes.dk/de-oftest-stillede-sporgsmaal-om-corona-situationen-i-danmark/>)

³² "Få overblikket over de nye corona-tiltag: Se, hvad du ikke må fra i dag klokken 10". dr.dk. 19 March 2020. Archived from the original on 19 March 2020. Retrieved 19 March 2020.

³³ Corona-hit Denmark extends lockdown until April 13

Reuters. March 23, 2020

<https://www.reuters.com/article/health-coronavirus-denmark-idUSC7N2AL00A>

³⁴ "Få overblikket over de nye corona-tiltag: Se, hvad du ikke må fra i dag klokken 10". dr.dk. 19 March 2020.

³⁵ <https://www.danes.dk/indrejse-i-danmark-for-udlandsdanskere-og-aegtefaeller/> and, <https://um.dk/da/rejse-og-ophold/rejse-til-udlandet/coronavirus/>

³⁶ <https://um.dk/da/rejse-og-ophold/visum--og-opholdsregler-i-danmark/>

³⁷ "Ny styrelse rustet os til fremtidens epidemier". KL (in Danish). Retrieved 14 May 2020.

³⁸ Print, Af Mads Outzen og Emma Qvirin Holst. 12 May 2020.

³⁹ "Se pressemødet: Regeringen opretter ny styrelse til kampen mod coronavirus". Altinget. Retrieved 14 May 2020.

⁴⁰ (Ny teststrategi: Nu vil regeringen opspore og teste smittedes kontakter". DR (in Danish). Retrieved 14 May 2020

vi. Quick test: In late March, authorities acknowledged that the strategy of mitigation had partially worked, but had been less successful than the mass testing in China and South Korea.⁴¹ Efforts were increased for immediate testing (at [Novo Nordisk](#))⁴², and local rapid testing for individuals.⁴³

By 27th January 2021, the number of tests was 13.015.234, meaning every Dane had been tested more than 2 times (population 5.7 million inhabitants).

A tool that has NOT been used is the compulsory quarantine of people coming from abroad (Thailand has organized this very well). The lack of clarity in quarantine had met quite some critique from the public.

D. Public behavioral response

The Danes are an interesting mixture of on the one side being very explicit in their views on things, which is regarded a necessary part of democracy. Danes love to discuss and debate. On the other side, Danes are very compliant and almost obedient. Danes fundamentally have trust in authorities and believe that authorities do their best to make things work for the better.⁴⁴ Danes high trust in authorities have actually raised under Covid-19.⁴⁵ A small group of Danes has kept being negative towards the whole covid-19 situation. However, this group is perceived as being under bad influence from fake news on the social medias.

Public response to government leadership edicts, decrees, and laws

In the beginning, there was quite some critique that the authorities, i.e. politicians and health authorities, did not act faster with regard to restrictions.

Two laws have been made, i.e. the law on epidemics. The first law is from 4. April 2020 and it emphasizes that the Minister of Health is allowed in collaboration with the Health authorities (Sundhedsstyrelsen) to limit people to be 10 or less persons gathered: (4. I § 6: Regler efter 1. pkt. om forbud mod, at ti eller færre personer befinder sig på samme sted, kan alene fastsættes på baggrund af rådgivning fra sundhedsmyndighederne og kun, hvis de foreliggende oplysninger tilsiger, at forbuddet er nødvendigt for at forebygge eller inddæmme alvorlig smittespredning, og at et mindre indgribende forbud ikke er tilstrækkeligt.)

Also, the Minister of Health is only allowed to forbid citizens to stay at a particular place if the police consider that this particular place is at risk of becoming an epi-center for the dissemination of a dangerous virus. The reason for these distributions of power is to avoid any one party, e.g. a Minister

⁴¹ (Outzen, Mads 27 March 2020). "Live: Sundhedsstyrelsen og WHO holder pressemøde om håndteringen af coronavirus i Danmark". [Altinget.dk](#).

⁴² (Mølsted, Henning (28 March 2020). "Statens Serum Institut (SSI) solves essential COVID-19 testing deficiency problem". [en.ssi.dk](#). Statens Serum Institut. Archived from the original on 29 March 2020)

⁴³ "Devices for rapid diagnosis of coronavirus under development". Technology Org. 26 March 2020. Archived from the original on 29 March 2020.

⁴⁴ <https://www.thelocal.dk/20200401/opinion-denmarks-world-beating-trust-is-helping-fight-coronaviruss>

⁴⁵ (<https://www.information.dk/indland/2020/06/ny-tryghedsmaaling-danskernes-tillid-politikerne-markant-stoerre-coronakrisen>).

or an Authority in and by itself can decide everything.⁴⁶ The collaborative nature is emphasized also in the law of 1. October 2020.⁴⁷

E. Cultural implications-based crisis management

Denmark is a long-established constitutional monarchy where the monarch's role is fundamentally ceremonial and the real power of government is essentially through the well-established parliamentary democracy. Denmark has long been recognized and accepted as a nation with optimized or full democracy, a category limited to only around 25 nations. The Global State of Democracy (GSoD) launched under the International Institute for Democracy and Electoral Assistance (IDEA) ranked Denmark second (after Sweden) for 2022 based on its four categories of the Global Stage of Democracy framework, namely representation, rights, rule of law, and participation.⁴⁸ The Economist Intelligence Unit (EIU), applying different criteria for ranking placed Denmark 6th place, also as a 'full democracy'.

Consequently, Denmark has a very mature democratic political-culture which is combined with an egalitarian social-culture which some say goes back to the Viking era. These two cultural traits are intertwined, and integrated to form the foundation for Denmark's political and social culture in today's global society. Under the full democratic status, Government empowerment is controlled by the constitution which is enforced by parliamentary rule. Within the same framework, which underscores the political culture of the country, the rights of the people are ensured, and guaranteed by the government in practice and observance. The Danes are very demanding and protective of their individual rights, therefore acceptance and abidance to government decrees and actions in relation to Covid-19 are not decided or influenced as a group or collective, but individually. The general public's response to mandates and laws related to social distancing and masking is based on individual acceptance which is carried out 'collectively', based on a common rationalisation of what should be done appropriately and intelligently. This is different from collectivism where decisions are made together ' as a group'. In individual 'collective' action, decisions are made individually but accumulatively this becomes collective action.

This is evident in the concept of 'societal trust' that has become a fundamental platform for most social interactions among the Danes. With regard to Denmark's crisis management of the Covid-19 pandemic, this societal trust has been a fundamental factor that is extended to Danish institutions including the government, police, judiciary, and health services accordingly. Conversely, those people are expected to act in the best interest of society, for which they are accountable.^{49 50 51} This

⁴⁶ <https://www.retsinformation.dk/eli/lta/2020/359>

⁴⁷ <https://www.retsinformation.dk/eli/lta/2020/1444>

⁴⁸ International IDEA Global State of Democracy (GSoD). <https://www.idea.int/democracytracker/country/denmark>

⁴⁹ Trust: A cornerstone of Danish culture.

Denmark.dk. Last updated 4 April 2023. <https://denmark.dk/people-and-culture/trust#>:

⁵⁰ Svendsen, G. L. H., Svendsen, G. T., & Graeff, P. (2012). Explaining the Emergence of Social Trust: Denmark and Germany. *Historical Social Research / Historische Sozialforschung*, 37(3 (141)), 351–367.

<http://www.jstor.org/stable/41636612>

⁵¹ Adam Behsudi, Denmark's Social Trust in Action

issue of reliable trust in the government and its actions through the various governmental institutions is a recognizable strength in Denmark's battle to contain Covid-19 pandemic.

Immediately following the WHO's declaration of Covid-19 as a global pandemic on March 11, 2021, Denmark's government leadership was among the first nations in Europe to respond on the following day. On March 12, 2020, the Danish Prime Minister declared a state of emergency and announced the shutting down of the country to be totally effective within 48 hours. The initial focus was on schools, daycare centers, and all public employees. The emergency decree was based on applying the already existing Epidemic Act (1915), with changes considered pertinent to the Covid-19 pandemic crisis management initiative. These changes and amendments were considered and approved on the same day and included a temporary reduction to relevant fundamental human rights and instruments in the Constitution. The most important element in the amended Epidemic Act was transferring the formerly decentralised authority of the regional Epidemic Commissions to the Health Minister. This means the transfer of power to initiate forceful isolation, forceful admission to hospital, and forceful treatment, as well as the power to cordon off an area and prohibit certain types of large events, which were formerly under the jurisdiction of the regional The Epidemic Commissions to the centralized government through the Health Minister. Consequently, the Health Minister can apply this authority to limit the freedom of assembly through a Ministerial Order. This order prohibits assembly of more than 10 people both indoors and outdoors, both at home and in public spaces (however, with exceptions being made for political meetings/protests, supermarkets, places of work, etc.).⁵²

These actions were carried out days before other European countries. This decision and the speed at which it was launched could only be achieved with a high level of trust and credibility between the government and the general public.

According to a Voxmeter opinion poll for the Danish news agency Ritzau published on April 3, 2020, 86.3% of respondents believed "the government has done the right thing", with 80% saying that they trust the government's decisions in the way it has handled the pandemic. This sentiment also had positive outcome for the Danish Prime Minister whose approval rating jumped to 79% (on April 2, 2020) compared to the 39% rating prior to the crisis.⁵³

A subsequent survey carried out in 2021 and published in August 2023 continued to reflect the consistency of high level of trust in the Danish government's handling of the Covid-19 pandemic. Results indicated that "approximately, 61% of the Danish respondents expressed moderately large or very large trust in the government's handling of the pandemic, with the low trusters at 11

IMF News. February 2, 2022.

<https://www.imf.org/en/News/Articles/2022/02/01/cf-denmark-social-trust-in-action>

⁵² Janne Rothmar Herrmann, How Denmark's Epidemic Act Was Amended to Respond to COVID-19

Harvard Law. The Petrie-Flom Center. May 26, 2020

<https://blog.petrieflom.law.harvard.edu/2020/05/26/denmark-global-responses-covid19/>

⁵³ Cécile Marin, International Affairs Manager à Sciences Po

Europe Versus Coronavirus - Putting the Danish Model to the Test

Institut Montagne . Expressions. 12/05/2020

<https://www.institutmontaigne.org/en/expressions/europe-versus-coronavirus-putting-danish-model-test>

percent. The survey also indicated that 83% of the Danish respondents had a higher trust in the public health authority's handling of the pandemic with the proportion of low trusters at 5 percent.⁵⁴

This trust for the government, and its institutions was put to the ultimate test when in November 2020, the Danish government ordered the cull of the nation's entire farmed mink herd when scientists found a mutated strain of the SARS-CoV-2 in some of the animals. Consequently, about 17 million mink were culled and mink farms were shut down. Denmark was the largest breeder and exporter of mink, followed by China. The November mandate was challenged on grounds of legitimacy but was resolved the following month by an act of parliament, making it legal. This mandate by the government was carried out. Consequently a whole industry was wiped out, and the tax payers had to pay compensations to the sum of about US\$2.7 billion.

The political and corresponding social culture in Denmark during the Covid-19 pandemic crisis was such that Denmark was among the first nations in Europe to take defensive action to protect against the spread of the coronavirus in the country, and the first European nation to scrap most of the Covid-19 related restrictions and mandates on February 1, 2022. This behavioural culture was built on the mutuality of trust and respect for each party, the government, and the general public, to accept doing the 'right thing' to contain the Covid-19 pandemic.

References and interpretations associated with Hofstede's cross-cultural dimensions are made to get insights and study the cultural implications of Denmark's crisis management of the Covid-19 pandemic. Implications in this context are indications of the likelihood (from possible to most likely) of the cultural influences on Denmark's government leadership approach and initiatives along with the general public's corresponding behavioural responses, which had positive impacts on the level of infection levels and death rate outcomes.

Two distinctive cultural dimensions for Denmark are the High/Low power distance indexed at 18, and the Indulgence versus Restraint indexed at 70. The power distance dimension index of 18 is significantly 'low' indicating that governments have to 'toe the line' in the exercise of authority and power and remain within the boundaries stipulated by the constitution and legitimate power. Policies and acts by the government in response to handling the Covid-19 pandemic must be legitimate and justifiable. The acceptance and response of the general public must be taken into consideration in planning any strategies or acts. Within this same context is the relationship to the indulgence and restraint dimension which, in the political context, refers to the rights and freedoms of the people, which also includes the right to object and protest in accordance with constitutional rights. These dimensions can be said to be the foundations for mutuality of trust and respect between government and the people in planning and executing Covid-19 pandemic crisis management strategies. The issue of the people accepting government mandate to cull all the minks in the country indicates the level of trust that existed.

⁵⁴ Kalleose, T., Kirk, J.W., Karlsson, E. et al. Political trust in the handling of the COVID-19 pandemic: a survey in Denmark and Sweden. BMC Global Public Health 1, 12 (2023). <https://doi.org/10.1186/s44263-023-00009-2>

Hofstede's indexing of the cross-cultural dimensions for High/Low Power distance and Indulgence versus Restraint would seem to reflect the sentiments of Danish culture under the Covid-19 pandemic environment. This Low Power Distance coupled with the Indulgence cultural dimensions was clearly evident in Denmark's quick and decisive response at the beginning of the Covid-19 pandemic crisis. The Danish people are neither daunted nor feel intimidated by the government. The overall political and social-cultural attitude was one of balanced empowerment and mutual respect, with the expectation for rational behaviour from both parties to 'do the right thing' legitimately. Government leadership in the exercise of power and authority is always conscious of the constitutionalised democratic rights and empowerment of the people.

Hofstede's cultural dimension of Individualism versus Collectivism gave Denmark an index of 74 indicating a highly individualistic culture in the society. This reflects that Denmark is generally a people with high self-determination with full exercise of individual rights and privileges. With respect to the government's decrees, mandates, and initiatives to battle and stem the Covid-19 pandemic in the country, the level of acceptance, cooperation, and conformity would result from self-determination to participate based on satisfactorily informed considerations. This cultural dimension is linked to the general populace's trust in government decisions and actions and is represented by the 'collective' decisions of individual considerations

However, abnormal situations call for abnormal responses and adjustments. Since this was a real national crisis that seriously impacted the social values and lifestyles, not to mention the negative economic impacts, both on the micro and macro levels, the Danish government under Mette launched the campaign to motivate the Danes to adjust cultural behavioral norms to consider the "community collective" perspective to promote national unity in battling the Covid-19 pandemic. Right from the beginning and following the WHO's global Covid-19 pandemic declaration by imposing various closures and public movement restrictions Prime Minister Mette Frederiksen had to urge Danes to practice samfundssind (roughly, community-mindedness) acknowledging that such restrictions would create change to normal lifestyles. This was an appeal to forgo the customary individualist attitude for a more community-oriented collective attitude.⁵⁵ Note that Mette was challenged to alter the cultural behaviours which would give prominence to what Hofstede refers as "collectivist culture" in which Denmark had an indexed of only 26. It is notable that this theme of calling for national unity to confront the Covid-19 pandemic and comparing it to war was also expressed by the respective governments of France, the United Kingdom, and Canada.

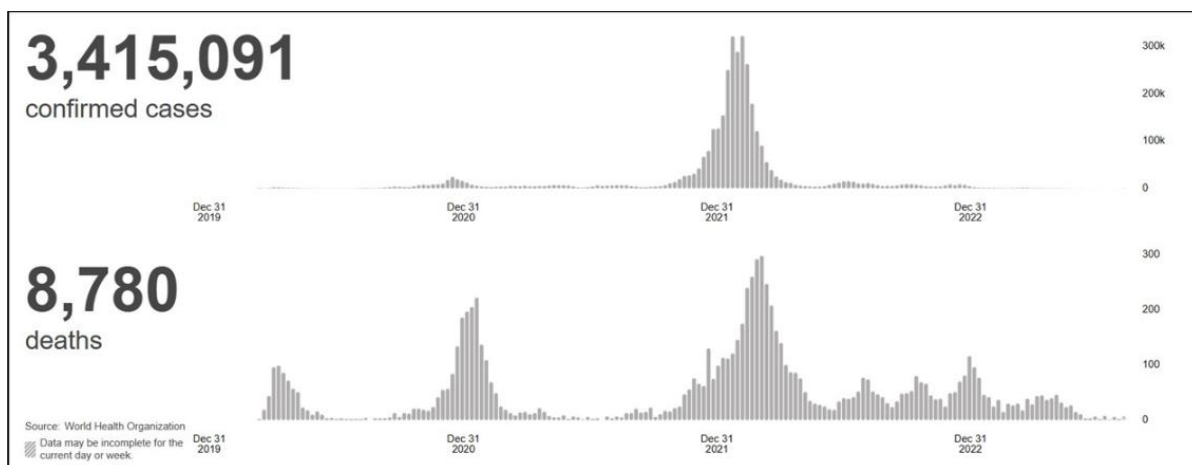
FYI⁵⁶, the first documented use of the term samfundssind was in the 1936, when the then Prime Minister Thorvald Stauning used the term to call for solidarity at the outbreak of World War II in

⁵⁵ Hansen, Thomas Stærmose (11 March 2020). "Danmark lukker ned: Her er regeringens nye tiltag". TV 2 (in Danish). Archived from the original on 12 April 2020. Retrieved 11 March 2020.

⁵⁶ For your information

Europe.⁵⁷ This theme of calling for national unity to confront the Covid-19 pandemic and comparing it to war was expressed in France, the United Kingdom, and Canada.

The political – social culture of the Danes resulted in its government declaring two national lockdowns with the first from March 12 to April 15, 2020, and followed by the second lockdown from December 25, 2020, to April 1, 2021. This partnership between the government and the general public seems to have been successful in stemming the growth and widespread of the Covid-19 infection cases, except for the spike from November 2021 to March 2022, but this was not the case for death rates. The spikes in death rates continued to remain high as well as reoccurring more frequently during 2022 and 2023 despite the launching of vaccinations since the beginning of 2021, as indicated in the Graph from WHO below⁵⁸.



According to WHO's situation report for Denmark, from January 3, 2020 to August 16, 2023, there have been 3,415,091 confirmed cases, with 8,780 deaths related to Covid-19. The drop and maintenance of consistently low levels of infection rates, in 2022 and into 2023 could be due to the rise and predominance of the Omicron variant which has a very low risk of serious illness. Subsequently, those infected would carry out 'self-treatment and cure' with the availability of over-the-counter medication. Therefore in most cases, there would be negligible reporting for official records, since there were no serious illnesses or hospitalization, incurred. However, Covid-19-related deaths would be duly reported for official records. Consequently, the death rates were much more visible and volatile showing frequent waves throughout the Covid-19 pandemic period. 2020 saw two waves in death levels with the first from March to May, and the second from October through to April 2021. The third wave was in the same year with the highest recorded death rates occurring from November 2021 through to May 2022. There continued to be smaller, but still

⁵⁷ Johanson, Mark. "'Samfundssind': How a long-forgotten word rallied a nation". BBC. Archived from the original on 20 February 2021. Retrieved 5 February 2021.

⁵⁸ WHO. <https://covid19.who.int/region/euro/country/dk>

significant spikes in deaths throughout the remaining 2022, and into 2023. However, it is also significantly probable that these high death rates were not solely due to Covid-19 but rather caused by association with Covid-19 infection. This would mean that the elderly with the normal age-related mix of illnesses would be a high-risk segment of the population with regards to infection by Covid-19, even with the milder Omicron variant. Consequently, those in contact with this high-risk group would need to strictly and continually adapt to social distancing behavioural culture, even if it means changing lifestyles and losing certain freedoms, and rights. This is of course the textbook solution. In real life, it's a question of cultural attitude and behaviour.

The WHO Situation Report for Denmark as illustrated by the Graph indicates the statistical outcomes. There are probably many reasons, causes, and influences. However, cultural influences and implications due to values, practices, and norms cannot be ignored and are likely to be a significant factor. This is due to the fact that Denmark enjoys a long history of stable democratic-oriented political-culture which is reflected and deep-rooted in its social-culture, which also includes efficient free and subsidized welfare systems, and education, all of which point to a nation of people with intelligence, resources, and capability to confront and handle the Covid-19 pandemic crisis effectively. Consequently, the 'variable card' would probably be culturally-induced behavioural traits and attitudes which could contribute to the occurrence of these repeated waves or spikes in death rates.

While the government leadership was successful in generating population acceptance and cooperation during the first years of the Covid-19 pandemic, any subsequent significant decline in the partnership would invariably have an impact on the outcomes. This means that if there was a breakdown in the synergy between political-culture and social-culture this could impact the outcomes, such as increasing or reoccurring death rate spikes. As previously indicated, the state of emergency and the execution of the amended Epidemic Act were considered critical to the effectiveness of the crisis management effort to contain the Covid-19 pandemic. Among other key elements, was the need for the Danes to adapt to the 'new normal' pandemic environment by adapting certain cultural values and behavioural patterns which are contrary to normal circumstances, including diminished freedoms and rights under the Constitution.

Chapter 11

SWEDEN: BETWEEN THE PANDEMIC AND AN INCAPACITATED STATE

DR. JAAKKO TURUNEN PhD (Pol.Sci), Senior Lecturer, Social Work, School of Social Sciences, Södertörn University, Stockholm, Sweden.

The Swedish covid-19 strategy stands out among its peers. The lack of lockdowns, the official recommendation not to wear masks as well as the relatively high rate of deaths, especially among the elderly, have spurred a debate: why did Sweden react so differently to other countries? Whilst recognising the differences, the Swedish government has consistently downplayed them, arguing that their strategy is essentially the same, just that the means to carry it out are different. In this chapter, I will look at the intersections of the organisational context, that is the structure of public administration and decision making structures, the ideas about Covid-19, and cultural factors in order to understand how - and perhaps even why - the strategy evolved as it did. The main story that is being developed in the chapter concerns the fact that the structural prerequisites for dealing with Covid-19 in Sweden were appalling, and the strategy to deal with the virus had, at the same time, cover up the lack of crisis preparedness in the country. In other words, whatever the failures in the medical and public health side of the Covid strategy, the real success of the strategy should be measured in terms of its ability to maintain an image of a state administration somewhat in charge of the country.

A. Structure and culture of government leadership

Sweden is a constitutional monarchy based on four Constitutional Acts one concerning the government, one the succession on the throne, one freedom of the press, and one the freedom of

speech. The constitutional act regulating the government is called the Instrument of Government and it stipulates that Sweden is a democracy with a freedom of opinion and universal suffrage, and these are exercised through representative and parliamentary government and local self-government and rule of law. Even if the monarch is the Head of State, in practice the Prime Minister is the acting head of the state. The Parliament (Riksdag) is the legislative organ, the government is accountable to the parliament and the judicial system is independent and oversees the compliance of the executive with law.

The contemporary administrative system has incrementally evolved from a history of Sweden being a Great Power in Europe, a history of peace, and arguably a long tradition of democratic and horizontal view on state power. After the King Gustav I Vasa's successful Swedish War of Liberation from 1521 to 1523 against the Danish King, Sweden has not been occupied by a foreign country. During the 17th century, Sweden was considered a Great European power and it waged successful wars in continental Europe occupying territories that today belong to contemporary Poland, Germany, Estonia and Latvia. The last war Sweden was involved with on its own territory was over Norway between Sweden and Denmark in 1814. Sweden stayed neutral during the First and Second World Wars building a strong state identity on neutrality, which first now with the NATO application in 2022 has become under reconsideration. Arguably, successes in national history have contributed to the general view that there is "a Swedish way" to do things, and often this is preferable to other ways. In domestic politics, some sort of parliamentary representation through four estates – nobility, clergy, burghers, and farmers – has been present since 15th century. The fact that farmers were also represented has served as a historical precedent for later democratic and "flat" view on power in Swedish politics

The state administration is divided between central, regional, and local administration. The Government Offices (Regeringskansliet) comprises of the Prime Minister's Office, individual ministries, and the Office for Administrative Affairs. With the exception of the Ministry of Foreign Affairs, the government ministries are comparatively very small, employing only a few hundred people at most¹ and consequently much of the actual administrative work is delegated to

¹ Larsson och Bäck (2011). *Governing and Governance in Sweden*, Lund: Studentlitteratur.

independent state agencies (statlig myndighet), such as the Public Health Agency (Folkhälsomyndighet, FHM) that has been in charge of designing the Swedish Covid-19 strategy, or the Swedish Civil Contingencies Agency (MSB) in charge of coordinating crisis policy, including the one on Covid-19, or the Board of Health and Welfare (Socialstyrelsen) in charge of overseeing the country's health care system, operatively carried out by the Regions. Together the government payroll includes about 4600 people², but the people employed in Sweden's over 360 state agencies is over 260 000.³

The most distinctive feature of the Swedish public administration concerns the state agencies. State agencies are to a large extent autonomous of the government. Political intervention into the operations of a state agency is limited and in practice avoided. The Swedish word for ministerial control, "ministerstyre", has a strong negative connotation in Sweden. Legally, only the government as a whole, not individual ministers, can interfere in the affairs of state agencies, but in the case of state agencies being public authorities, which is common, even that is not allowed leaving the annual "guidelines" giving the broad development goals and legislative means the only possibilities for political steering. Although more or less autonomous state agencies are a feature of most democratic states,⁴ the Swedish case is particular as they precede the common New Public Management or network governance reforms and can justifiably be seen as a historical cornerstone of the Swedish state dating back to the 18th century.⁵ The standard argument in favour of independent state agencies is that they strike a balance between the paradox of a modern state to be both effective and democratic.⁶ As expert organisations, they provide contemporary governance with politically impartial knowledge of complex political issues. Their autonomy is also politically handy, as it delegates public pressure from politicians to autonomous expert agencies. Being expert

² Regeringskansliet, <https://www.regeringen.se/regeringskansliet/regeringskansliets-anstallda/>

³ Statskontoret, <https://www.statskontoret.se/var-verksamhet/forvaltningspolitikens-utveckling/arliga-uppfoljningar/de-som-arbetar-i-myndigheterna/>

⁴ Rosanvall, Pierre (2011). *Democratic Legitimacy. Impartiality, Reflexivity, Proximity*. Princeton: Princeton University Press.

⁵ Jacobsson Bengt, Pierre, Jon and Sundström, Göran (2015). *Governing the Embedded State. The Organizational Dimension of Governance*, Oxford: OUP

⁶ Ibid.

organisations, state agencies can also face identitarian political disputes from a non-identitarian footing much easier than politically charged ministries.

There is also an important distinction between the staff employed by the state agencies and the ministries: the state agencies employ substance or policy experts whilst the ministries employ policy generalists. From this follows the double task of the state agencies, which is both to implement policies, but also to actively contribute with new policy initiatives in their field. Yet, the state agencies rarely get their hands dirty in the actual implementation of what they initiate, instead their role is to give advice, recommendations, and to coordinate what especially regional and municipal actors do.

Regional administration is divided between regions and municipalities. There are 21 regions and 290 municipalities in Sweden in 2023. Together, regions and municipalities employ over 1 million people in Sweden⁷. Regions and municipalities are responsible for a wide range of public services such as health care, prevention of contagious disease and public transportation (region), elderly care, primary care and schooling (municipality). Regions and municipalities enjoy extensive self-government increasing possibilities for local residents to influence how regional and municipal affairs are run through local politics but also creating tensions between the central government and regional administration - something that was pointed out over and over again during the Corona pandemic.

Already during the pandemic, the government appointed a special Corona Commission to review the Swedish policy. The Corona Commission pointed out two main challenges. The first concerns the difficulties in coordination the actions between the central government, regions and municipalities resulting in general slowness of response.⁸ The general slowness was also due to the lack of sufficient resources and crisis preparedness as well as the division of labour between regions (hospital care) and municipalities (elderly care). The second challenge has been the relationship between political decision (the government) and expertise knowledge (state agencies, FHM above all) making the government too dependent on FHM. The gradual unfolding of the Covid-19 strategy reflects the attempts to bridge together these two cleavages.

⁷ Sveriges Kommuner och Regioner, <https://skr.se/tjanster/kommunerochregioner/faktakommunerochregioner.432.html>

⁸ SOU 2021:89, Delbetänkande 2 - Sverige under pandemin, Vol 1.

B. The Reception of Corona Crisis

Although it may have seemed that there was little awareness of the corona virus in Sweden that is not in fact the whole picture. Already on February 1, 2020, the Swedish government, on the recommendation of FHM, in an extraordinary Saturday sitting, classified the new corona virus, soon to be named as Covid-19, as a danger to public and a threat to society (allmänfarlig och samhällsfarlig sjukdom) giving health care system the formal powers to summon individuals to medical care.⁹ This was one day after the first Swedish citizen contracted the virus, and a day after the WHO called the virus of public health emergency of international concern. The first Swedish patient was, consequently, kept in isolation in a hospital in central part of Sweden. The first confirmed case in Sweden was related to travel to Wuhan. There were 11 other Swedish nationals in Wuhan and the government decided to evacuate them.¹⁰ But even before that, already in January 2020, a special group was formed inside FHM to monitor the situation, and in early February a cross-sectoral crisis management group was established under FHM, but it drained the resources and was disbanded already in March, 2020.

Given this swift engagement of the government and FHM it is puzzling that the spread of the virus was not presented as a public threat. On the contrary, Anders Tegnell, the state epidemiologist and one of the architects of the Swedish corona strategy at FHM likened the virus to seasonal influenza¹¹ and even demanded in an email dated April 5, 2020, that the WHO correct information concerning the asymptomatic transmission of the virus as one German research article claimed.¹² The fact that no general lockdown was ever issued in Sweden has readily been interpreted as a strategy of “herd immunity”.¹³ By herd immunity it is referred to the pandemic strategy that enough infected people

⁹ DN 1 Feb, 2020, Regeringen klassar nya coronaviruset som samhällsfarlig sjukdom, <https://www.dn.se/nyheter/varlden/fler-an-11000-smittade-av-viruset/>

¹⁰ Expressen 31 Jan, 2020, Första bekräftade fallet av coronaviruset i Sverige, <https://www.expressen.se/nyheter/kina-isoleras-fa-blir-friska-fran-coronavirus-1/>

¹¹ Aftonbladet 1 Feb 2020, Corona kan slå ut vanliga influensan, <https://www.aftonbladet.se/nyheter/a/7jd72Mb/corona-kan-sla-ut-vanliga-influensan>

¹² Sciencemag Oct 6th, 2020, ‘It’s been so, so surreal.’ Critics of Sweden’s lax pandemic politics face fierce backlash, <https://www.sciencemag.org/news/2020/10/it-s-been-so-so-surreal-critics-sweden-s-lax-pandemic-policies-face-fierce-backlash>

¹³ Andersson, Staffan and Aylott, Nicholas (2020), Sweden and Coronavirus: Unexceptional Exceptionalism, 9

would develop immunity in society, thus the immune “herd” then effectively also prevents the virus from transmitting and providing protection to those who are not immune. Yet, the actual strategy that unfolded is best characterised as small incremental steps conditioned by evolving practice¹⁴ and restricted public communication focusing on standard non-medical epidemic measures: wash the hands, keep the distance, and isolate with symptoms. There was strong scepticism that any medical solution, i.e. effective anti-viral medicine or vaccine would be available in the immediate future’.

What kind of problem was the corona virus in spring 2020 for the Swedish authorities? Despite Tegnell’s public comparison of Covid-19 with a seasonal influenza the actual practice in Sweden looks very different: Covid-19 was declared as a public threat already on February 1, 2020, and on February 24th. the Swedish government allocated 40 million Swedish crowns (4 million Euro) to WHO’s crisis organisation, and on February 27th, the government called in the crisis management council for an extraordinary coronavirus meeting in order to have “good level of preparedness”.¹⁵ By the end of February, there were two confirmed Covid-19 infections in Sweden. The medical knowledge of the severity of Covid-19 was clearly informing the government and FHM in their, more “behind-the-scenes” actions, whilst a very different picture was conveyed in public communication. So the question is not what kind of problem Covid-19 virus was for the FHM, but how it could face the Covid-19 as a danger to public and a threat to society (allmänfarlig och samhällsfarlig sjukdom) with the means at its disposal. In the FHM’s registry of diseases that need to be reported are four types of influenza, but with the exception of influenza A subtype H5N1 none of them is classified as dangerous to public or dangerous to society (FHM, anmälningspliktiga)¹⁶. In the registry, only Covid-19, Ebola, smallpox, and SARS were classified at the highest level of severity, dangerous to society. The

MDPI Social Sciences 9, 232, 1-18; Claeson, Mariam and Hanson, Stefan (2021), COVID-19 and the Swedish Enigma, *The Lancet*, 397: 10; Lindström, Martin (2020), The COVID-19 Pandemic and the Swedish Strategy: Epidemiology and Postmodernism, *SSM - Population Health*, 11(2020), [https://doi.org/10.1016/j.ssmph.2020.100643\(20\)10271](https://doi.org/10.1016/j.ssmph.2020.100643(20)10271), pp. 259–261, DOI:[https://doi.org/10.1016/S0140-6736\(20\)32750-1](https://doi.org/10.1016/S0140-6736(20)32750-1); Bjorklund, Kelly (2020). The Inside Story of How Sweden Botched Its Coronavirus Response, *Foreign Policy*, Dec 22, 2020

¹⁴ Pierre, Jon (2020), Nudges against pandemics: Sweden’s COVID-19 containment strategy in perspective, *Policy and Society*, 39(3): 478-493; Ludvigsson, Jonas F. (2020), The First Eight Months of Sweden’s COVID-19 Strategy and the Key Actions and Actors that Were Involved, *Acta Paediatrica*, 109: 2459–2471.

¹⁵ DN 27 Feb, 2020, Regeringskansliet kallar in krishanteringsrådet, <https://www.dn.se/nyheter/sverige/regeringen-kallar-in-krishanteringsradet/>

¹⁶ FHM, Anmälningspliktiga sjukdomar, <https://www.folkhalsomyndigheten.se/smittskydd-beredskap/overvakning-och-rapportering/anmalningspliktiga-sjukdomar/>

mismatch between the medical classification of Covid-19 by the FHM and the public measures taken with voluntary advice and active hindrance to more stringent public measures such the use of personal protective equipment (PPE), point towards the problem not being the virus itself, but the absence of the means to deal with something that severe.

C. Measures implemented to mitigate or suppress the virus, non-pharmaceutical methods to deal with epidemics.

The Swedish strategy from a more epidemiological point of view has had eight goals.¹⁷ Two of them were directly connected to the pandemic, to mitigate the transmission of the virus and to protect vulnerable groups. The six remaining goals drew on Swedish crisis management policy. Below, I will discuss the first two goals in more detail and later present the general view of crisis management in Sweden.

The goal in the Covid strategy concerns the overall aim, which was not the (total) suppression but (only) mitigation of the virus in society (see Baldwin 2020 for the discussion of three different global patterns – laissez-faire, mitigation, and suppression – of Covid-19 strategies).¹⁸ Mitigation aimed to “flatten the curve” to ease the burden on the health care system. The goal was never the total eradication of the virus as in the suppression strategy. Most measures taken related to mitigating the *effects* of the virus on the health care system, which was considered most critical social institution in the crisis management strategy.

To mitigate the effects on the health care system, the first move came in fact from the Foreign Office. Already on January 26th, the Foreign Offices advised against non-necessary travel to Hubei Province in China. This was well before any clear Swedish strategy was in place. However, in March 2020, when the situation became more acute in Sweden, it was again the Foreign Office that first acted to mitigate the transmission of the virus in Sweden. On March 6th, 2020, the Foreign Office advised against unnecessary travel to Northern Italy and parts of South Korea, four days later the advice was extended to cover whole Italy, and a day later Tirol in Austria, and on March 14th the Foreign Office

¹⁷ Ludvigsson, Jonas (2020).

¹⁸ Baldwin, Peter (2021), *Fighting the First Wave. Why the Corona Virus Was Tackled so Differently across the Globe*, Cambridge: Cambridge UP.

advised against all unnecessary foreign travel. The practical effect of this “advice” was that a standard travel insurance would no longer be valid for those areas. This general advice not to travel was in place until summer, when popular holiday destinations by the Mediterranean Sea were exempted from the rule: on June 30th, the travel advice for 10 popular holiday destinations was lifted including countries such as Portugal, Spain, Italy, Greece, and Belgium. In July, Poland, Germany, and Andorra were exempted from the travel advice, but Switzerland was put back on the list of countries one should not travel to. In August, 2020, Bulgaria, Romania and the Netherlands were exempted, and in September also Finland and Slovakia were exempted. From autumn 2020 onwards, the general policy has been to allow for travel inside the EU, but limit any travel from third countries to selected few with a low rate of infection.

In a complementary move, the Government decided to limit the entry of foreigners to Sweden. On March 17th, a general ban on entry to Sweden was implemented for all non-necessary travel from outside the EU and EES countries. This ban was in effect – with some exemptions – until April 1st, 2022.

Parallel to cutting cross-border contacts, the government on the FHM’s recommendation moved to implement social distancing inside Sweden. On March 11th, 2020, the Government decreed that all public gatherings of 500 or more people be banned. This decree was based on existing piece of legislation concerning public order.¹⁹ The number of people attending a public event was later cut to 50 (March 27, 2020), then raised to 300 (October 22, 2020) and cut to eight (November 16, 2020). The effects of limiting public gatherings was enforced by limiting the sale of alcoholic beverages in restaurants and bars. From November 20th on, the government implemented a ban on selling alcoholic beverages in restaurants and bars after 10 pm, and as of December 24th, this ban became effective already after 8 pm, and as of March 1st, 2021, all restaurants and bars were ordered to close by 8.30 pm. On January 8th, 2021, the parliament passed a temporary Pandemic Law²⁰ granting the government more possibilities to regulate private businesses. The law was initially valid until the end

¹⁹ Regeringen 11 Mar, 2020, Förordning om förbud mot att hålla allmänna sammankomster och offentliga tillställningar, <https://www.regeringen.se/artiklar/2020/03/forordning-om-forbud-mot-att-halla-allmannasammankomster-och-offentliga-tillställningar/>

²⁰ Lag (2021:4) om särskilda begränsningar för att förhindra spridning av sjukdomen covid-19. The law was in force from January 10th, 2021 until April 1st, 2022.

of September 2021, but then extended to January 2022, and then again to 31st March 2022, when it was discontinued. The law allowed the government to close down businesses such as shopping centres or regulate opening hours – enabling, for instance the closing of bars and restaurants at 8.30 pm instead of regulating the sales of alcoholic beverages or the number of people in shops as well as in public spaces like parks.

The FHM also issued recommendations concerning working and commuting in order to put social distancing in practice. On March 17th, 2020, FHM issued a recommendation to work from home whenever possible, and on March 19th, 2020, it advised against all domestic travel.²¹ On March 17th, FHM issued a recommendation that education of all children above 17, and of university students, be changed to distance tuition, and a week later, on 24th March it was decided that national school examinations be cancelled. On March 19th, 2020, the quarantine day for qualifying for sick leave reimbursement was lifted making it possible to receive sick leave benefit from the first day of absence onwards. Similarly, the period when no medical certificate for sick leave is required was extended from seven days to 21 days. The FHM's recommendations did not carry the force of a law or decree, and compliance with them was assumed and some workplaces implemented their own control mechanism to encourage distance working. Social distancing regulated on the basis of decrees on public order and law on alcohol sales, by contrast, were legally binding.

The measures taken to handle the pandemic focused on enabling social distancing, but not really hindering the virus in other ways. FHM even advised against using face masks as they would give a false sense of security as well as contradict with the standard argument that Covid-19 is not an airborne virus. What makes this position interesting in terms of public decision making, is that the motivation for this advice is that the “scientific support for the effects of the face masks is ‘extremely weak’”²², yet the same FHM also acknowledged that Covid-19 is a new virus, so any evidence with regard to it is still limited. In other words, the actions of the FHM were motivated by the lack of information as much as they were motivated by the presence of information.

²¹ SVT <https://www.svt.se/nyheter/inrikes/folkhalsomyndigheten-undvik-att-resa-inom-sverige>

²² Omni 8 May, 2020, Tegnell: Extremt svagt underlag för munskydd, <https://omni.se/tegnell-extremt-svagt-underlag-for-munskydd/a/op2lwW>

The second goal specific to the pandemic was to protect risk groups including the elderly. To do so, first a recommendation not to visit elderly care homes was issued on March 10th, 2020, and a total ban on March 30th; private care homes stopped visits already on March 10th. On March 16th, it was recommended that people over 70 should avoid contact with other people. Also staff with symptoms were encouraged to stay at home. Even here, the main strategy was based on maintaining distance, and, as late as April 11th, FHM still insisted that “basic hygiene” [basal hygien]²³ is sufficient for employees in elderly care.²⁴

Any measures to actively hinder the virus from transmitting by e.g. personal protective equipment, were slow to emerge and wrought with political controversy and administrative unscrupulousness. The above recommendation on “basic hygiene” was in fact a response to an earlier trade union initiated and Swedish Work Environment Authority (AV) supported service closure (skyddsombudsstopp). On April 7th, 2020, the trade union Kommunala representing workers in social care levied a service closure on an elderly care home in Stockholm because of the lack of face mask as a mandatory personal protective equipment. The service closure was supported by Swedish Work Environment Authority and became interpreted as a general guideline concerning all “patient close” care work.²⁵ In practice, this service closure meant total closure of any work until the employer supplies all staff in close contact with the patients with necessary personal protective equipment. AV’s decision was quickly challenged by the employer organisation, Swedish Municipalities and Regions (SKR) and taken to the Stockholm Administrative Court. SKR also called a secret meeting with AV, and with the government’s approval persuaded the AV to withdraw the ruling.²⁶ Consequently, the AV’s decision was limited just to the case Serafen elderly care home in Stockholm and thereby brought in line with FHM recommendations. The sequence of events shows that the government and

²³ SOSFS 2015:10, Basal hygien i vård och omsorg, Socialstyrelsen

²⁴ Skydd mot smitta inom vård och omsorg, <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/april/skydd-mot-smitta-inom-var-d-och-omsorg/>

²⁵ SVT April 9th, 2020, Skyddsstopp infördes på äldreboende efter tvist om munskydd, <https://www.svt.se/21-nyheter/lokalt/stockholm/skyddsstopp-infor-des-pa-al-dreboende-efter-tvist-om-munskydd>

²⁶ SVT 4th May, 2020, Förvaltningsrättens dom om Serafen-ärendet: Upphäver Arbetsmiljöverkets förbud, <https://www.svt.se/nyheter/inrikes/domstolens-besked-om-munskydden-pa-serafen>; SVT 22nd May, 2020, SVT’s granskning striden om munskydden, <https://www.svtplay.se/klipp/26870929/svts-granskning-striden-om-munskydden?id=8opod96>; SVT 27th May 2020, Bakslag för Arbetsmiljöverket – nekas prövning av munskydds-domen, <https://www.svt.se/nyheter/lokalt/stockholm/kammarratten-avslar-overklagan-om-munskydd>

employer organisations were able to affect and even force an independent state agency like the Swedish Work Environment Authority to withdraw its ruling. It further revealed that FHM's recommendation was weightier than AV's contrary ruling. Later, also the Stockholm Administrative Court rules in favour of SKR based on the difficulty of legally defining what "patient close" (patientnära) work means, calling into question even the independence of courts in Sweden under the pandemic.

However, soon after the Serafen affair, the FHM started revising its policy and evidence on face masks. On May 7th, FHM published new information arguing for negligible evidence of face masks' capacity to prevent transmission the virus, but acknowledging that "it can be thought that some support exist that face masks or visor may have some protective effect" but they should be used on "as a last addition to other and more profound measures, which are clearly documented to have good effect in mitigating the transmission of the virus."²⁷ According to AV, on June 25th, 2020, the FHM also changed its recommendation concerning face masks for care personal in elderly care. The new recommendation now read that a face mask should be always worn under visor – exactly in line with Kommunala's and AV's first rulings from April 2020. Finally, on January 7, 2021, the FHM issued a recommendation to wear a face mask on public transport in line with the WHO's guidelines. Over the year also the purpose of the face mask changed: for a long time, the argument against the face mask was that there is no, or very weak, evidence that it would protect the bearer; towards the end of 2020, FHM slowly acknowledged that it could help protect others. Yet, it took months before the population accepted that they should wear masks to protect others' safety: in December 2020, only 18% Sweden wore a face mask indoors in public places "always, often or from time to time"; by May 2021 this figure has reached 48%. At the same time, the answer "never" declined from 69% in December 2020 to 28% in May 2021.²⁸

Face masks in Sweden evoked many passions and came to symbolise more than a piece of protective equipment. For the first, there was the question about transmission of the virus. A recommendation

²⁷ FHM May 7th, 2020, Grundläggande hygienrutiner viktigast för att skydda äldre inom omsorgen <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/maj/grundlaggande-hygienrutinerviktigast-for-att-skydda-aldre-inom-omsorgen/>; see also Omni, May 7th, 2020, FHM: "Risk att munskydd kan ge falsk trygghet", <https://omni.se/fhm-risk-att-munskydd-kan-ge-falsk-trygghet/a/LA7e9R>.

²⁸ NOVUS, May 14th, 2021, Novus Coronastatus, <https://novus.se/novus-coronastatus/s>

to wear a face mask would signal the potentiality of an airborne transmission, something FHM had denied. Recommending masks, or even accepting their benefits, would call into question the claim that asymptomatic individuals do not transmit the virus – as all individuals with symptoms should stay at home, or that Swedish people are not willing to follow voluntary recommendations, all of which have been cited as central elements of the Swedish strategy. FHM also motivated their recommendations – or the absence thereof – concerning face masks that it was a question of material equality in society as not everyone can afford for one.²⁹ The same argument was also used by the Minister for Health and Social Affairs Lena Hallengren who argued against any public recommendation to wear face masks as that would sacrifice the principles of equality.³⁰ The idea that an expert state agency would be outside politics seems not to be the case: material equality is hardly a virological criterion, but has more to do with public health and what kind of politics is beneficial to better public health.

For the second, downplaying the importance of face masks was essential for the state, because the absence of sufficient PPE, epitomised in the face masks, would expose the poor crisis preparedness in Sweden. According to SVT's investigative programme, the reason why AV was persuaded to change its previous ruling concerning PPE was that the ruling, if it became a general rule, would lead to too many service closures in the country due to the general lack of available PPE.³¹ This would set in motion a chain reaction of failing public services.

Both cases discussed here – the FHM's concern for equality and the Swedish Work Environment Authority's withdrawal from pushing PPE requirements show how expert agencies are not independent from political and economic considerations.

The remaining six goals did not focus on the pandemic as such but drew on the Swedish resilience policy designed for any crisis situation. By resilience policy I here refer to the policy designed to help the country deal with different civic contingencies such as the pandemic – or the European refugee

²⁹ SvD, Nov 22nd, 2020, Tove Lifvendahl: Låt inte jämlikheten skörda fler liv, <https://www.svd.se/a/39172P/lat-inte-jamlikheten-skorda-fler-liv>

³⁰ Expressen, Nov 20th, 2020, Hallengren: "Åtgärder är visst en fråga om jämlikhet", <https://www.expressen.se/tv/nyheter/coronaviruset/hallengren-atgarder-ar-visst-en-fraga-om-jamlikhet/>

³¹ Uppdrag granskning: Spelet om munskydden (2020), <https://www.svtplay.se/video/8opDvv9/uppdrag-granskning/avsnitt-10>.

crisis in autumn 2015, or the great forest fires in Sweden in 2018 when fire fighters from neighbouring countries were brought over to fight the forest fires. Resilience policy as a crisis management policy often promotes broad networks, horizontal management of crisis and the importance of local initiative as well as civil society's engagement.³² The Swedish resilience policy is characterised by the principles of responsibility, similarity, and proximity. The principle of responsibility entails that the agencies should have the same responsibilities during normal times as under crisis situations. The principle of similarity means that the agencies should continue their normal operations as long as possible also during the crisis. The principle of proximity means that the actors closest to the crisis are responsible for the crisis. In practice this means that local resources are primarily used for crisis management, and that they are backed up by the central government if need be.

The third general goal of the covid-19 strategy was to keep the other effects of Covid-19 to the minimum. This meant, for instance, that schools and gyms were kept open as they contribute to public health positively. The fourth goal was to prevent the collapse of the health care system, partly achieved by implementing social distance, but partly also by involving the state in reallocating scarce medical resources between the regions, whose responsibility the health care is. The fifth goal was to keep society functioning as normally as possible, that is trying to shield those parts of society not directly affected by Covid-19 off from pandemic measures. The sixth goal was to fight any "infodemic", virally spreading information that contains much false information, by providing public information on Covid-19 through official websites and regular press meetings, initially daily press meetings. The seventh goal was to explain the reasons behind any measures taken so as to enable citizens to take informed decisions how best to behave responsibly. The last goal emphasised the right timing of the right measures and was a common motive in initiating or postponing certain measures such as testing.

³² Koppenjan, Joop, and Klijn Erik-Hans. (2004), *Managing Uncertainties in Networks: A Network Approach to Problem Solving and Decision Making*, London: Routledge; Baez Ullberg, Susann, and Becker Per (eds) (2016), *Katastrofriskreducering. Perspektiv, praktik, potential*, Lund: Studentlitteratur; Turunen, Jaakko and Weinryb, Noomi (2020), Organizing service delivery on social media platforms? Loosely organized networks, co-optation, and the welfare state, *Public Management Review*, 22(6): 857-876.

All six above goals can be inferred back to the principles of resilience policy. For instance, the decision not to close schools partly derives from the perceived need – and importance – of schooling for the youth in terms of learning but also as psychological well-being. The same goes with the policy to keep gyms open and allow youth sports to continue. These principles give a partial explanation why Sweden was hesitant to limit travel inside the country or across its borders as well as the openly hostile attitude to face-masks citing the lack of scientific evidence for their preventive effects and arguing that masks only provided “a false sense of safety”³³ that in practice could lead to diminished social distancing and thereby to increased transmission. But they also give light to otherwise puzzling or outright illegal (and unethical) decisions such as that the elderly in care homes who contracted covid-19 would not be taken to hospital for treatment, but taken care in the elderly care homes and very often given only palliative care. One reason for the decision was not to overburden the hospital sector. The elderly care homes, on the other hand are under the municipalities and thus not tasked for providing medical care, just care home services. The elderly care homes thereby lacked the resources and competence, for instance, to administer extra oxygen or other intravenous treatment such as extra fluid and nutrition, leaving the palliative care as the only available “medical” option. The resilience policy, together with the larger decentralised administrative system relying heavily on autonomous state agencies meant that overall coordination of crisis management was plagued by internal conflicts over responsibilities and a lagging information flow.

The strategy also reflects the medical description of the virus the FHM communicated in public. From the beginning of the pandemic, the FHM downplayed the severity of corona virus likening it to normal seasonal influenza (SVT, March 19, 2020³⁴) and argued for its inevitable transmission in society. As Tegnell put it in an interview with the *Nature*, the virus cannot be eradicated in society, so measures to suppress it like lockdowns are not feasible in the long run.³⁵ As suppression was deemed impossible, mitigation of the transmission became epidemiologically the most desired policy. It was

³³ FHM May 7th, 2020, Grundläggande hygienrutiner viktigast för att skydda äldre inom omsorgen <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/maj/grundlaggande-hygienrutinerviktigast-for-att-skydda-aldre-inom-omsorgen/>; see also Omni, May 7th, 2020, FHM: “Risk att munskydd kan ge falsk trygghet”, <https://omni.se/fhm-risk-att-munskydd-kan-ge-falsk-trygghet/a/LA7e9R>.

³⁴ SVT March 19th, 2020, Virusexpert: Som en svår influensasäsong, <https://www.svt.se/nyheter/inte-varre-31-an-en-svar-influensasasong>

³⁵ *Nature*, April 21st, 2020, “Closing border is ridiculous”: the epidemiologist behind Sweden’s controversial coronavirus strategy, <https://www.nature.com/articles/d41586-020-01098-x>

also argued that asymptomatic transmission, if it exists at all, is negligible in the way the virus transmits in society.³⁶ Finally, it was argued that children do not transmit the virus, or if they do, at such a low rate that it has negligible effects. It was only in December 2020, that asymptomatic children, whose parents had confirmed Covid-19 should stay home from school.³⁷ Finally, on April 15th, 2021, the FHM changes its policy and recommends that children in contact with Covid-19 positive people should be tested³⁸ undermining two long-held pillars of Swedish corona strategy, namely that asymptomatic infection is not a significant factor in the overall pandemic transmission and that children do not spread the virus to the extent that has social implications.

The way in which FHM presented its aetiological analysis in public evolved dramatically from the initial comparison of Covid-19 as a seasonal influenza to recognising asymptomatic transmission and children as socially significant causes for transmission of Covid-19. Yet, already on February 1st, 2020, the virus, later to be known as Covid-19, was classified as a threat to public health and society – comparable to Ebola, smallpox and SARS. It seems that one central aspect of the Swedish corona strategy has been – in addition to those eight discussed above – to contain public concern by playing down the severity of the virus. Many news media have noted that during the early months of the pandemic, there was serious deficit of PPE, Covid-tests, and other medical equipment necessary for dealing with such a pandemic. Official public communication emphasised aspects of preparedness and non-severity of the virus in order to prevent public panic. The Minister of Health and Welfare, Lena Hallengren went public in February 2020 arguing that Sweden’s preparedness is good;³⁹ the Board of Health and Welfare echoed her saying that “Sweden has a good health care preparedness” and public “should not be in fear.”⁴⁰ The government also argued that there are PPE in the whole country for 1400 hospital days, which is “sufficient to handle the situation”. 1400 as a number may

³⁶ GP Feb 2nd, 2020, Regeringen klassar det nya viruset som samhällsfara, p.11; SVT Apr 15th, 2020, Virologen Lena Einhorn och Anders Tegnell möttes i debatt, <https://www.svt.se/nyheter/inrikes/virologidoktorn-folkhalsomyndighetens-strategi-ar-farlig>

³⁷ Krisinformation Dec, 1st, 2020, Symtomfria barn bör stanna hemma om någon i familjen har Covid-19, 34 <https://www.krisinformation.se/nyheter/2020/december/symtomfria-barn-bor-stanna-hemma-om-nagon-i-familjen-har-covid-19>

³⁸ FHM 15 Apr, 2021, Smittspridningen i skolan återspeglar ökningen av covid-19 i samhället, <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2021/april/smittspridningen-i-skolan-aterspeglar-okningen-av-covid-19-i-samhallet/>

³⁹ SVT 24th Feb, 2020, Regeringen rustar för coronaviruset, <https://www.svt.se/nyheter/inrikes/presstraff-om-coronaviruset-med-who-och-socialminister-lena-hallengren>

⁴⁰ DN, 25 Feb, 2020, Regeringen: Vi har en bra beredskap, p. 6-7.

sound “sufficient”, but simple mathematics shows the opposite: 1400 suffices for 140 hospital places for ten days in a country of 10 million. FHM’s strategy to downplay the severity of the virus in public has been criticised by many medical professionals and virologist;⁴¹ but that had little impact on the public communication on the virus the FHM has carried out.

It was also often argued that the Swedish strategy is based on Swedish values. *Aftonbladet* – the most selling and social democratic daily in Sweden – explains that the Swedish strategy is based on recommendations because the “Swedish people can think for themselves... We can simply do the right thing.”, which is here understood to follow the recommendations.⁴² Similar opinion was put forward in September 2020 by Johan Giesecke, the former state epidemiologist and current advisor to the FHM, talking to the Irish Special Parliamentary Committee on Covid-19 Responses. Recommendations are needed to protect the vulnerable, but also, in Giesecke’s words so that “there should be a controlled spread among the under 60s and allow a tolerable spread of the virus in the over-60s.”⁴³ Tegnell also points out that the law on communicable diseases is based on voluntary measures, hence recommendations instead of orders are more appropriate in Sweden. Tegnell describes the Swedish strategy as “nudging”, of continuous incremental adjustment in how people should behave to mitigate the transmission of the virus. In a Finnish documentary on Swedish corona strategy from October 2020, Tegnell argues against lockdowns on the basis that they inflict society severely and do not solve the problem, just postpone it.⁴⁴ His conviction was that it was impossible to “win against the virus”, but perhaps it would be possible to “deal with it”. For him, the Swedish strategy was a long-term solution to deal with the virus.

Altogether, the social measures to mitigate the virus evolved incrementally and were heavily conditioned by the initial lack of material resources, by difficulties caused by the horizontal and autonomous governance system and by the absence of suitable legal framework that would enable

⁴¹ Expressen 3 March, 2020, Experternas stenhårda kritik mot Folkhälsomyndigheten, p. 8-9; DN 14 Apr 2020, DN debatt. “Folkhälsomyndigheten har misslyckats - nu måste politikerna gripa in”, <https://www.dn.se/debatt/folkhalsomyndigheten-har-misslyckats-nu-maste-politikerna-gripa-in/>;

⁴² Aftonbladet 29 March, 2020, Anders Tegnells budskap är att vi kan tänka själva, <https://www.aftonbladet.se/ledare/a/50qmd6/anders-tegnells-budskap-ar-att-vi-kan-tank-sjalva>

⁴³ The Irish Times, Sept 23rd, 2020, Health experts have insufficient information to establish where people get Covid-19, committee hears, <https://www.irishtimes.com/news/health/health-experts-have-insufficientinformation-to-establish-where-people-get-covid-19-committee-hears-1.4362340>

⁴⁴ YLE, 11 Jan, 2021, Korona Ruotsissa, <https://areena.yle.fi/1-50654859#autoplay=true>

transparent political and strategic intervention. One of the main criticism the Swedish policy received concerns precisely its sluggish and laxed implementation in the early phases of the pandemic as well as unwillingness to face the fact that despite existing crisis plans, coordination and cooperation between different actors did not turn out as wished. Consequently, the message to the public became one of downplaying the severity of the virus, whilst organising daily press meetings on it.

D. Vaccination policy and the pharmaceutical solution

In Sweden, herd immunity was for a long time considered as a more likely alternative to a vaccine. In late February 2020, Tegnell argued that developing a vaccine against Covid-19 “would take years”.⁴⁵ In early March, Tegnell restated that it is very unlikely that a vaccine would be developed during 2020.⁴⁶ On April 16th, 2020, Tegnell said that there is enough evidence to draw a conclusion that Sweden has reached the half way of the big first wave of the pandemic and therefore also “quite close to herd immunity” and modellers have picked up the signs of herd immunity in Stockholm area.⁴⁷ Yet, from late March, 2020, onwards, other voices in the Swedish public discussion became to emphasise both the importance of building herd immunity with vaccine instead of through infection and that a vaccine could also be developed faster than before.⁴⁸ Still in May, Johan Giesecke argued that “natural” immunity, i.e. through infection, is better, “more complete”, than through vaccine.⁴⁹ Tegnell in the same piece of news held that natural immunity would be achieved first in Sweden, but recognised the importance of building herd immunity on the combination of immunity through infection and through vaccine.

The possibility for a medical solution to the pandemic did not direct the Swedish corona strategy when it was designed. Instead, the big contours of the policy were based on non-medical measures designed to last for a long time and informed with a rather mild view on the severity of Covid-19.

⁴⁵ TT 26 Feb, 2020, Folkhälsomyndigheten: Smittan kan pågå till hösten.

⁴⁶ DN 16 May, 2020, Anders Tegnell: Sannolikt inget vaccin i år, <https://www.dn.se/nyheter/sverige/anders-tegnell-sannolikt-inget-vaccin-i-ar/>

⁴⁷ FHM, 16 April, 2020, Pressträff om covid-19 (coronavirus) 16 april 2020, https://www.youtube.com/watch?v=o_pjvWJFzdA&t=2293s

⁴⁸ DN, 21 Mar, 2020, Före detta statsepidemiologen: Bara vaccin kan stoppa smittan, p. 14-15.

⁴⁹ Aftonbladet, 9 May, 2020, “Ordentligt sjuka får bästa immuniteten” Agnes Wold: Ju kraftigare infektion – desto bättre skydd mot covid-19, p. 6-7.

Yet, despite the public communication from FHM signalling that no vaccine would be immediate, the government took forward a vaccination strategy already on May 20th, 2020, consisting of three parts: the government's international cooperation (to acquire the vaccine), the creation of a post for national vaccination coordinator and a national vaccination plan.⁵⁰ Sweden has a long history of successful more or less compulsory vaccination policy. Smallpox vaccine was compulsory until 1976; thereafter an extensive, voluntary but proactive vaccination programme was designed including vaccination against 11 illnesses with the latest addition of HPV. Against this proactive policy of vaccination, the hesitancy to communicate on Covid-19 vaccine again indicates a duality between the public message and the medical practice behind the scenes.

International cooperation with the WHO and EU was to secure "a just global distribution" of vaccines. On June 16th, 2020, the government appointed Richard Bergström as the national vaccine coordinator arguing that a speedy implementation of mass vaccination is essential for society.⁵¹ The government tasked FHM to draft a concrete vaccination plan,⁵² which was published on December 4th, 2020. In autumn 2020, it became clear first that no herd immunity was achieved in Sweden, and that a vaccine would be available by the end of the year. Opinion polls showed a steady increase of willingness to take the vaccine: in August 2020, only 36 percent were positive about the vaccine, but by the end of the year, over 70 percent were positive.⁵³ By spring 2021, over 90 percent were definitely or probably going to take the vaccine.⁵⁴ Given the positive popular attitude towards the vaccine, the main challenges for the vaccination rollout concentrated on logistics and setting up the order of priority.

⁵⁰ Regeringens strategi för vaccin mot covid-19, <https://www.regeringen.se/pressmeddelanden/2020/05/regeringens-strategi-for-vaccin-mot-covid-19/>

⁵¹ Regeringen, 16 June, 2020, Richard Bergström ny vaccinsamordnare, <https://www.regeringen.se/pressmeddelanden/2020/06/richard-bergstrom-ny-vaccinsamordnare/>

⁵² Nationell plan för vaccination mot covid-19, <https://www.folkhalsomyndigheten.se/contentassets/f8703f0a29cc408fb788b60f87289e5b/nationell-plan-vaccination-covid-19.pdf>

⁵³ SVT, 30 Dec, 2020, Ny tydlig ökning - fler vill ta vaccin mot covid-19, <https://www.svt.se/nyheter/inrikes/ny-dramatisk-okning-fler-vill-vaccinera-sig-mot-covid-19>

⁵⁴ FHM, Mar 2021, Undersökning om acceptans för vaccination mot covid-19 - Resultat mars 2021, <https://www.folkhalsomyndigheten.se/smittskydd-beredskap/utbrott/aktuella-utbrott/covid-19/statistik-och-analyser/acceptans-for-vaccination-mot-covid-19/resultat-mars-2021/>

According to the vaccination plan, all residents in Sweden will receive the vaccine free of charge. Initially, the vaccine is not directed to children under 15 years of age excluding some children with a critical medical condition. In September 2021, all children from 12 years of age were included in the vaccination policy. The vaccination plan in Sweden went out to first give a vaccine to risk groups in three stages. In the first risk group were individuals living in elderly care homes, the staff working with the elderly, and other health care staff coming into contact with the elderly and their close family members. In the second risk group were individuals over 65 and individuals with certain medical conditions. In the third risk group were individuals between 60 and 64 and individuals with an increased risk such as pregnancy or cognitive challenges to follow recommendation. The fourth group included the general population – in decreasing age cohorts.

The implementation of vaccination in Sweden followed the initial advice from WHO, that is to give both doses during the set time interval. However, during the spring the time interval between the doses has been increased in order to speed up the rate of first vaccine dose to mitigate the effects of the delta variant.

Logistically the main challenge was caused by the failure of AstraZeneca, Pfizer/BioNTech and Moderna to deliver as many doses as they promised in a timely manner. In addition, AstraZeneca's vaccine was later diagnosed to cause a rare case of blood clot and its use was first discontinued and later limited to people over 65 only. This required a replanning and postponement of the vaccination targets. Much of the problems in the rollout were caused by factors at the EU level, including the slower procedures of approving the vaccines as well as the slower pace in signing the contracts with the vaccine companies.

The decision on vaccination order was taken by the government on the FHM's recommendation. Already in August 2020, it was established that the priority order will provide protection to those with the highest risk of become seriously ill of Covid-19.⁵⁵ On December 4th, 2020, the final plan was published.⁵⁶ Its foundational argument was that higher age increases the risk for serious Covid-19

⁵⁵ FHM S2020/04550/FS, Aug 31, 2020, Nationell plan för vaccination mot covid-19. Om 52 regeringensuppdraget, <https://www.folkhalsomyndigheten.se/globalassets/smittskydd-sjukdomar/sjukdomar/coronavirus/filer/dnr-s202004550fs-delvis-nationell-plan-vaccination-covid-19-2020-08-31.pdf>

⁵⁶ FHM Dec 4, 2020, Nationell plan för vaccination mot covid-19, del 1, <https://> 53

infection. From this follows the national vaccination priority policy. First, people in elderly care homes and those receiving elderly care at home are most vulnerable. Second, care personnel who come into contact with the elderly should be vaccinated to diminish the risk for the elderly. Family members in immediate contact with the elderly should also be vaccinated to protect the elderly. These groups form the first phase of prioritising. In the second phase, the following groups are included: the elderly over 70 years of age not included in the first phase, persons over 18 years of age with a disability that makes them particularly vulnerable to Covid-19, and other health care staff working in “close contact” with patients. The third phase includes other people in risk groups. The fourth phase includes other people over 18 years in decreasing age cohorts. The priority order was established on the basis of individual risk of becoming seriously ill and focusing on the most vulnerable in society. Such an individualist view focusing on direct protection instead of total indirect effects also contradicts with the earlier aims of building herd immunity through vaccination,⁵⁷ as well as with the aim of “flattening the curve”, i.e. mitigating the spread of the virus in society. Should the government pursue its policy of mitigation systematically, individuals who are most likely to get infected – however severely – should be prioritised. The adopted vaccination strategy signals a change from more systemic strategy towards a more individualistic approach, bringing the Swedish strategy yet again an inch closer to WHO’s general guidelines concerning Covid-19 and prioritisation in vaccination policy.⁵⁸ According to Russell and Greenwood (2021), the Swedish vaccination priority order is designed to cut the numbers of deaths rather than cutting or limiting transmission in society. By autumn 2020, the issue of a high death rate of Covid-19 patients in Sweden as well as the media coverage internationally had become public concerns more than the pandemic itself.

Similar hedging in whether to fully align with the WHO or to do so only under growing external pressure is further reflected in the case of the third dose as well as with children. The general recommendation of the third dose to all between 18 and 65 was issued on November 24th, 2021, following the same order of priority as with the first and second doses, and for children between 12

www.folkhalsomyndigheten.se/contentassets/f8703f0a29cc408fb788b60f87289e5b/nationell-planvaccination-covid-19.pdf

⁵⁷ Russell, Fiona and Greenwood, Brian (2021). Who Should be Prioritised for COVID-19 Vaccination?, *Human Vaccines & Immunotherapeutics*, 17 (5): 1317-1321.

⁵⁸ Warren, George and Lofstedt, Ragnar (2022). Risk communication and Covid-19 in Europe: lessons for future public health crisis, *Journal of Risk Research*, 25 (10): 1161-1175.

and 16, the vaccine was allowed only in October 2021.⁵⁹ In late December 2021, FHM also recommended vaccination for children from 5 to 11 in risk groups. The hesitation in Sweden is grounded in the consideration that young children generally do not get seriously ill and hence the benefits of the vaccine to the individual are smaller than for adults. The fact that no concrete risks are mentioned in the public communication again signals the strategy of dealing with the medical solution to the pandemic on an individual level. As Tegnell put it, the benefits to the individual must beat eventually risks,⁶⁰ and the vaccination of children should not be done to protect society at large.⁶¹

There are many potential reasons as to why FHM was initially sceptical of the vaccine as the solution for Covid-19. First, whilst Sweden has a long and successful record of administering vaccines to produce immunity in society, ten years earlier in 2009 with the outbreak of the swine-flu, Sweden embarked on a mass vaccination applying a new vaccine approved via EMA's fast track procedures meaning among other things that the vaccine was not sufficiently tested among the children. As a result, about 60 percent of the total population was vaccinated and among them around 700 cases of narcolepsy among the children has been claimed to result from the vaccine. The cause of narcolepsy is now identified as resulting from a booster substance used in the swine-flu vaccine. The swine-flu mass vaccination was of its own kind in speed and scope putting lots of hope in a vaccine not previously used at the mass level.⁶² Journalist and author of *Flocken* [Herd] (2012) Johan Anderberg, believes this experience of having rushed to mass vaccination has been one central reason for the FHM being so hesitant to medical solutions to the Covid-19 pandemic.⁶³ Researchers Giritli Nygren and Olofsson, concur by pointing out the absence of concerted efforts to use state

⁵⁹ FHM, 16 Sept, 2021, Allmän vaccination mot covid-19 från 12 år, <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2021/september/allman-vaccination-mot-covid-19-fran-12-ar/> 55

⁶⁰ DN, 4 Nov, 2021, Tegnell utesluter inte vaccination för yngre barn, <https://www.dn.se/sverige/tegnell-utesluter-inte-vaccination-for-yngre-barn/> 56

⁶¹ DN, 11 Dec, 2021, Beslut om covidvaccin till yngre barn splittrar experter, <https://www.dn.se/sverige/beslut-om-covidvaccin-till-yngre-barn-splittrar-expert/> 57

⁶² Lundgren, Britta and Holmberg, Martin (2017) Pandemic flus and vaccination policies in Sweden, Christine Holmberg, Stuart Blume and Paul Greenough (eds), *The Politics of Vaccination. A Global History*, Manchester: Manchester University Press, pp. 260-287.

⁶³ Anderberg, Johan (2021), *Flocken. Berättelsen om hur Sverige valde väg under pandemin*, Stockholm: 59 Albert Bonniers Förlag.

power to deal proactively with Covid-19, which stands in a stark contrast to earlier epidemics such as the swine-flu in 2009.⁶⁴

Second, Swedish pandemic contingency planning draws a distinction between protecting the individuals and protecting the critical infrastructure, that is the system. The early reactions of the FHM, as well as of the Board of Health and Welfare were mainly targeting the system, and thus using the vaccines to protect the vulnerable individuals at the expense of society at large could be seen as a reaction to growing concern over individual lives as well as a natural evolution of the strategy once the system had been secured.

Third, although there still is a relative high trust in public authorities in Sweden – and vaccinations too are viewed positively by the large majority – the mishap with the swine-flu vaccinations did bring about an element of wariness.⁶⁵ This has been manifested in the press meetings during the Covid-19 pandemic, where the media has regularly questioned the arguments and decisions of the FHM. Part of the official hesitancy towards the vaccines can also be seen as “playing safe” against public expectations and the growing distrust of the government’s and FHM’s strategy.⁶⁶ A comparison between twelve countries revealed that Sweden scored lowest in vaccine approval during summer 2020 casting some doubt to the general belief in high approval of vaccines in the country.⁶⁷

Fourth, the swine-flu vaccinations were largely motivated by appeals to solidarity, i.e. one should take the vaccine to protect those who cannot take it.⁶⁸ Similar reasoning during the Covid-19 has been almost absent. Instead, measures that have been taken, including the vaccine, have mainly been motivated by the individual protection they could provide. Similarly, non-medical means such as wearing the face mask has been discouraged on the grounds that it does not provide personal protection.

⁶⁴ Giritli Nygren, Katarina and Olofsson, Anna (2020) Managing the Covid-19 pandemic through individual responsibility: the consequences of a world risk society and enhanced ethopolitics, *Journal of Risk Research*, 23:7-8, 1031-1035, DOI: 10.1080/13669877.2020.1756382

⁶⁵ Lundgren and Holmberg (2017).

⁶⁶ Warren, George W. And Lofstedt, Ragnar (2022), COVID-19 Vaccine Rollout Risk Communication Strategies in Europe: a Rapid Response, *Journal of Risk Research*, 24:3-4, 369-379.

⁶⁷ Kerr JR, Schneider CR, Recchia G, et al. (2021), Correlates of intended COVID-19 vaccine acceptance across time and countries: results from a series of cross- sectional surveys, *BMJ Open*, 2021;11:e048025, doi:10.1136/bmjopen-2020-048025

⁶⁸ Lundgren and Holmberg (2017).

The absence of evidence as the reason for non-action that we had seen with regard to recommending the use of face masks has also been at play with the vaccination of children: in the absence of evidence pointing towards their effectiveness, it was decided that nothing should be done. The broad inclusion of different disabilities among those given priority in vaccination talks on behalf of the general preference of delegating responsibility for the pandemic management to individuals. Among the prioritised groups in Sweden are, for instance, people who have difficulties in following public ordinances.⁶⁹

In contrast to the social measures that were motivated as individual responsibility for collective good, the vaccination has been perceived more in terms of individual benefit. Such a position is susceptible to free riding, i.e. to thinking that one does not need to take the shot if everyone else takes it. Indeed, in a comparative study on vaccine hesitancy it was revealed that Sweden had the lowest vaccine approval rate of all surveyed countries. The study further revealed over a ten-percentage point gap – among the highest in the study – between the willingness to take the vaccine self (63,4% in April 2020) and recommending it to vulnerable family members (73,7% in April 2020).⁷⁰ Since April 2020, the willingness to take the vaccine has slowly increased in Sweden. One conclusion the authors draw is that the worry about the Covid-19 was one key variable explaining willingness to take the vaccine in Sweden. It could be argued then that the general downplaying of the severity of Covid-19 by the FHM has been one factor explaining the initially low approval of the vaccine in Sweden. Interestingly, the study did not find trust in government or general social trust – neither in Sweden nor in other countries – as a significant variable explaining vaccine acceptance. Further, the study finds increasing effects of politicisation of vaccine approval in the US and later also in the UK indicating the potentially growing importance of political mobilisation around the vaccine also in other countries. The final note to make from this study is that it puts Swedes' willingness to take the shot in a different light than the domestic opinion polls by FHM quoted above.

E. Opening-up policy

⁶⁹ De Picker, Livia et al. (2021), Severe Mental Illness and European COVID-19 Vaccination Strategies, *Lancet Psychiatry*, May 2021, 8 (5): 356-359.

⁷⁰ Kerr, Schneider, Recchia et al. (2021).

The overall strategy in Sweden emphasised expert advice, individual responsibility, equality, and normal functioning of society. The logic behind was the early conviction that Covid-19 as a pandemic will take years to disappear, so the measures are designed to be lived with for a long time. These principles, however, are ultimately contradictory. Expert advice has consistently shunned any intersectional inequalities in society: advice such as social distance and distance work are essentially class issues, individual responsibility – as free-rider problem with vaccination points out – has not performed in practice as universally as in theory, equality and especially equal access to society has meant that often the lowest common denominator was applied: using face masks was not recommended because not everyone could afford one and hence restrictions on culture have remained, vaccination pass was not implemented as not everyone could be vaccinated, and finally keeping the society open in practice meant that culture industry carried the greatest burden whilst other businesses benefited from the absence of lockdowns. I will discuss two issues in more detail below. The first concerns the use of vaccination passport in society, and the second the continuation of recommendations versus compulsory public health measures to bring the pandemic to manageable levels for the whole society to “open up”.

The idea behind the vaccination passport – a proof of receiving vaccination(s) against Covid-19 – is that societal restrictions to ensure public health should be tailored to differential individual likelihood to cause risks. Therefore, vaccinated citizens should be able to enjoy greater freedom as they pose a smaller societal risk than non-vaccinated. As such, the idea is not that controversial: there are generally accepted age limits to buy alcohol or tobacco, or to drive a car. Yet, the fact that the vaccines are of limited supply, it takes time to vaccinate the population, and evidence shows that vaccine uptake varies according to socio-economic or religious lines has introduced the question of discrimination. The Omicron mutation that initially was taken to be more resistant to the vaccine (before it was found to be more lenient) also questioned the foundational argument of vaccine passports, that of reduced risk of vaccinated people.⁷¹

In Sweden, the vaccination passport – currently proof of two shots – was first issued in summer 2021 together with the EU-wide requirement to enable easier travel. Whilst Sweden has issued citizens

⁷¹ Hall, Mark and Studdert, David (2021), “Vaccination Passport” Certification – Policy and Ethical 64 Considerations, *The New England Journal of Medicine*, 385;11, e32, DOI: 10.1056/NEJMp210428

with vaccination passports, it has not applied them as an entry requirement for international travellers. Instead, entry requirements have been primarily regulated on the basis of country of residence through visa policies. The first social use of vaccination passport in Sweden took effect on December 1st, 2021, for inside events over 100 participants. The arguments for a broader use of vaccine passport were motivated in reference to public health. Arguments against the vaccination passports referred to individuals' right to free movement, and any limitations to individuals' rights as "populism".⁷² The dominant view so far has been that vaccination passports would inevitably lead to discrimination and therefore their use should be limited. This view has also halted the more nuanced discussion between "mandatory" like work or education and "voluntary" such as restaurants, or the effects of requiring vaccination passports. For instance, the culture sector has argued that public health restrictions effectively deny them the right to work, and consequently, vaccine passports would enable culture sector to resume work. The extent to which vaccination passports can be used to regulate social activities is limited by the extensive right of individual movement, which is guaranteed by the Swedish constitution. Similarly, much of the regulation of restaurants has been carried out under the law on right to sell alcohol, which does not give grounds to introduce restrictions based on individuals' vaccination status. The pandemic law enabled broader competences, but its application was largely left to local actors resulting in varied usage of the competences provided in the law.

The last peak of Covid-19 infections in Sweden occurred in December 2021 – January 2022. As the peak started to ebb by early February, the government together with the FHM began to prepare the citizens for calling the pandemic to an end. On February 9th, 2022, most Covid-19 restrictions were discontinued. In the first phase, restrictions concerning physical events, meetings and restaurants were stopped; in the second phase restrictions to international travel were taken back. The main motivation from the Swedish government was "stability of the situation" as well as the observation that Omicron, despite its aggressive transmission, did not cause severe illness.⁷³ As of April 1st, 2022,

⁷² DN, 18 Dec, 2021, Vaccinpassen splittrar partierna: "När drar vi bort plåstret?", <https://www.dn.se/65-sverige/vaccinpassen-splittrar-partierna-nar-drar-vi-bort-plastret/>

⁷³ Regeringen, 03 Feb 2022, Merparten av restriktioner mot covid-19 tas bort den 9 februari 2022, <https://www.regeringen.se/pressmeddelanden/2022/02/merparten-av-restriktionerna-mot-covid-19-tas-bort-den-9-februari-2022/>

Covid-19 no longer classified as danger to public and a threat to society (allmänfarlig och samhällsfarlig), but disease that only has to be reported to public health authorities. The recommendation concerning vaccination against Covid-19 was in place even after April 1st, 2022. Increasingly, Covid-19 was seen as an illness that affects certain vulnerable groups seriously, but something the majority in society does not need to consider in their daily business. The news that Omicron was spreading more aggressively in Sweden in late April, 2022, were shadowed by the war in Ukraine, indicating how the society moved from one crisis to another. Universities returned to on-campus teaching in autumn 2022.

F. Public debate on the strategy

In international press, the Swedish government's response to Covid-19 pandemic has evoked strong opinions. For *Time* it was "a disaster"⁷⁴ due to the failure to implement early and effective measures to protect the population resulting in higher than necessary numbers of casualties. *The Guardian* describes it as "light touch, anti-lockdown".⁷⁵ The official response from Sweden has long been that such judgements are passed too early.⁷⁶ The longer the pandemic has continued, the more confident the critics have grown. In December 2020, even the Swedish King said that the strategy has been a failure.⁷⁷ Much of the criticism focuses on two connected aspects. The first is the non-implementation of a lockdown or legally binding restrictions and the other concerns the allegations of an undercover strategy to pursue herd immunity by exposing a sufficiently large number of the population to the virus. Both claims are, in fact, rebutted by the government that often likens the Swedish strategy to that of other countries' and that it is based on scientific knowledge.⁷⁸ There is also some research supporting the view that international media has reproached the Swedish strategy unfairly.⁷⁹ The official response from Sweden, though, has emphasised that the bottom line

⁷⁴ Time, Oct 14, 2020, The Swedish COVID-19 Response Is a Disaster. It Shouldn't Be a Model for the Rest 67 of the World, <https://time.com/5899432/sweden-coronavirus-disaster/>

⁷⁵ The Guardian, 12 Nov, 2020, Swedish Surge in Covid cases dashes immunity hopes, [https:// www.theguardian.com/world/2020/nov/12/covid-infections-in-sweden-surge-dashing-hopes-of-herdimmunity](https://www.theguardian.com/world/2020/nov/12/covid-infections-in-sweden-surge-dashing-hopes-of-herdimmunity)

⁷⁶ The Guardian, 27 Apr, 2020, Don't judge Sweden's light touch on Covid-19 yet, says minister, [https:// www.theguardian.com/world/2020/apr/27/dont-judge-swedens-light-touch-on-covid-19-yet-says-minister](https://www.theguardian.com/world/2020/apr/27/dont-judge-swedens-light-touch-on-covid-19-yet-says-minister)

⁷⁷ BBC 17 Dec 2020, Coronavirus: Swedish King Karl Gustaf says coronavirus approach 'has failed', <https://www.bbc.com/news/world-europe-55347021>

⁷⁸ S2020/06390, Minister Lena Hallengren's response to a written question 2019/20:1963, 26 Aug, 2020, https://www.riksdagen.se/sv/dokument-lagar/dokument/svar-pa-skriftlig-fraga/flockimmunitet_H7121963

⁷⁹ Irwin, Rachel Elisabeth (2020), Misinformation and de-contextualisation: International Media Reporting 72

of the Swedish strategy is no different from that of any other country and that the strategy reflects Swedish cultural values. These international concerns were reflected in the Swedish public discussion.

Existing research on popular responses to corona strategies can broadly be seen as focusing on three questions. The first concerns the public right to know what the real intentions behind the strategy are. Swedish corona strategy has been informed by an outspoken hesitancy to rush into conclusions or embark on any political action against the disease in the absence of clear scientific evidence to support such actions. The growing awareness of the differences between the Swedish strategy and information motivating it and that of other countries' has led to growing demands for a more responsive attitude from the FHM. Newspapers such as *Dagens Nyheter* attacked heavily the FHM's position of inaction, especially in March 2020, when after the winter holidays many people who had been on holiday in Italy continued to work and go to schools. The FHM's recommendation was that asymptomatic individual could continue their lives as always, and only those having been to China, Hong Kong, Iran or Northern Italy and with symptoms should contact the health care for testing. As many researchers and investigative journalists have pointed out, the public message from the FHM and the private email correspondence obtained with the help of publicity of information act point towards different stories. The public message has been one of mitigation, of flattening the curve, but no herd immunity, the emphasis on scientific evidence in grounding any public restrictions, and the claim that the virus is not airborne nor asymptomatic transmission likely. Both the government and FHM have underlined that the Swedish strategy is essentially the same as in any other country, just that it is adjusted to conditions of high trust among the society towards the state institutions. On the government website, we could read that, "the main goal with the government's work is to slow down the pace of the spread of the virus, that is to flatten the curve so that not very many would be ill at the same time."⁸⁰ The formulation, however, was changed without any public communication to "The main goal with the government's work is to limit the transmission of the virus in society" to

on sweden and COVID-19, *Globalization and Health*, 16, article number 62, 1-12, <https://doi.org/10.1186/s12992-020-00588-x>

⁸⁰ Regeringen, 7 Apr, 2020, Strategi med anledning av det nya coronaviruset, <https://www.regeringen.se/regeringens-politik/regeringens-arbete-med-coronapandemin/strategi-med-anledning-av-det-nyacoronaviruset/>

avoid interpretations that some sort of herd immunity was an unspoken aim of the strategy. The change was first noted by a Swedish journalist Emanuel Karlsten in February 2021.⁸¹ Furthermore, the private email correspondence from the FHM point towards a deliberate choice of pursuing herd immunity.⁸² In May 2021, the text on the strategy on the government website was returned to its original formulation after a public row and written question about it in the parliament.

Another topic that concerns the public's right to know the aims of the strategy concern the role of the available material resources. Whilst there were some criticisms about the lack of sufficient crisis preparedness, the concrete lack of PPE or available intensive care units has not been explicitly connected to the public communication of the corona strategy. The argument this chapter has pursued has tried to explain the contradiction between the medical recognition of the severity of the virus and the "slack" public comparison between covid-19 and seasonal influenza and related downplaying of severity of the pandemic as a strategy to manage the situation in the absence of sufficient resources. The lack of resources was not a public motivation for the strategy, but has figured heavily in the "behind the scenes" rulings, such as that concerning the Swedish Work Environment Authority's withdrawal of the demand on service closure as well as in the FHM's explicitly political, rather than epidemiological, initial reasoning in ruling out the use of face masks or denial of asymptomatic transmission. In all these cases, as the material resources improved, FHM reversed its recommendations in line with WHO's position it originally contradicted.

The second topic concerns the supporters and opponents of the Swedish strategy and questions of nationalism and state security and how, if at all, this has some (party) political connotations. In the media sphere, liberal newspapers such as *Dagens Nyheter* or slightly more conservative *Svenska Dagbladet* have been rather critical of Sweden's exceptionalism in the choice of the public health strategy, but also in criticising the delegation of power to expert agencies that nevertheless in practice need to take political decisions. The absence of political leadership has been seen even as a

⁸¹ Emanuel Karlsten, 1 Feb, 2021, Regeringen ändrade i dokument om coronastrategi – mening om kontrollerad spridning försvann, <https://emanuelkarlsten.se/regeringen-andrar-i-dokument-omcoronastrategi-raderar-mening-om-kontrollerad-spridning>

⁸² Emanuel Karlsten Aug 12th, 2020, Tegnell-mejlen: Så fick flockimmuniteten fäste hos Folkhälsomyndigheten, <https://emanuelkarlsten.se/tegnell-mejlen-sa-fick-flockimmuniteten-faste-hosfolkhalsomyndigheten>; Anderson and Aylott 2020; Lindström 2020; Baldwin, Peter (2021).

threat to democracy.⁸³ However, newspapers more on the social democratic and left position have been fairly content with the existing strategy. Furthermore, the public radio (SR) and television (SVT) have emerged more like government mouthpieces than sources of independent journalism. That said, a closer look at the content reveals plurality of views, investigative journalism as well as staunch support for the FHM in otherwise more critical newspapers.

Yet, talking at a more general level, conformism in the public sphere has led to a situation, where the liberal press takes the most critical stance to the existing strategy, and the leftist press supports the lenient course. Put together, many commentators feel that the spectrum for critical debate on the corona strategy is narrow in Sweden and strong voices are suppressed at times with questionable means. For instance, on April 14th, 2020, 22 researchers' open letter was published in *Dagens Nyheter*. They criticised the FHM and called for stronger political crisis management. Their argument was ridiculed on a basis of – arguably a silly lapsus – in the text. *Expressen* called the researchers “a shame for Sweden.”⁸⁴ Similarly, in February 2021, Swedish public radio calls a closed Facebook group, Media Watchdogs Sweden (Mewas) that includes researchers, opinion leaders, and activists and that critically discusses the corona strategy, “an information war” to inflict Swedish interests abroad and “a danger to democracy”.⁸⁵ SR points out that the group has succeeded in spreading its message to *Time*, *Science*, and *Washington Post*.

Criticism in the public sphere against the FHM's corona strategy from other epidemiologist, virologist and medical doctors was in fact heavy in spring 2020, but it was limited to a selected number of critical specialists who, however, got sufficient publicity to make their point heard. Among the rank and file, the Swedish strategy continued to enjoy support: trust in the FHM was strong throughout spring and summer 2020. At the end of March, in an opinion poll 75% of population expressed trust in the FHM and still in June 2020 it was 66% only to soar to 50% in January 2021. Trust in government was consistently lower, but even that reached figures over 60% for the period March–June 2020, to decline to below 30% in January 2021.

⁸³ Anderson and Aylott (2020).

⁸⁴ Expressen 15 APR 2020, Coronahaveristerna är skam för Sverige, <https://www.expressen.se/kultur/victor-malm/coronahaveristerna-ar-en-skam-for-sverige/>

⁸⁵ SR, 9 Feb 2021, Dold Facebookgrupp försöker påverka svenska intressen utomlands, <https://sverigesradio.se/artikel/dold-facebookgrupp-forsoker-paverka-svenska-intressen-utomlands>

During the spring 2020, a new word emerged in Swedish language: public health nationalism (folkhälsonationalism) or public health patriotism (folkhälsopatriotism), which is defined as conviction that one own country's measures against Covid-19 are the best.⁸⁶ A Finnish political scientists Jari Ehrnrooth opined in spring 2020 that Sweden is on its way to totalitarian democracy, where the posited collective good takes the precedence over saving life.⁸⁷ Another Finnish observed argued that Sweden – the only honest country in this respect – implemented a utilitarian approach but also was able politically to legitimate it with the help of a history of “an old no-nonsense eugenic social democracy” and a consensus based society where the citizens appreciate the lack of top-down steering.⁸⁸ A *Dagens Nyheter* columnist put it bluntly that as everyone is bound to die, one should put more focus on the quality of life than the quantity of life. She clarifies: “it is not obvious that an elder person prefers one last year of life in isolation from family against half a year of wet grandchild kisses, children's laughter and doughy-sticky juice glasses.”⁸⁹ A Norwegian professor Sigurd Bergmann put it that rather than being a totalitarian democracy, Sweden is more like a totalitarian demokratur, where the majority aligned with the state agencies trump the minorities.⁹⁰ For Bergmann, the sin of the Swedish strategy was that it did not take into account contradicting opinion, it did not adjust its course, it paid little if any attention to minorities. Instead, throughout the pandemic, Sweden's ethnic minorities have been publicly accused of being the source of the ills of the strategy because of their living habits (absence of social distancing in multigenerational households), insufficient language skills (to understand recommendations) – an accusation raised in the news programme Aktuellt on December 3rd, 2020 – and insufficient skills to follow the rules of basic hygiene in care work voiced by the FHM advisor Johan Giesecke in British TV programme on April 17th, 2020.⁹¹

⁸⁶ Språk tidning, 25 May, 2020, Veckans nyord: folkhälsonationalism,

<https://spraktidningen.se/sprakbloggen/veckans-nyord-folkhalsonationalism/>

⁸⁷ YLE, 16 June 2020, Jari Ehrnroothin kolumni: Miksi Ruotsi epäonnistui ja alistui koronalle?

⁸⁸ Häyry, M. (2021). The COVID-19 Pandemic: Healthcare Crisis Leadership as Ethics Communication, *Cambridge Quarterly of Healthcare Ethics* (2021), 30, 42-50.

⁸⁹ DN, 16 May, 2020, Hanne Kjoller: Ingen undkommer döden – därför bör vi fokusera på livet, <https://www.dn.se/ledare/hanne-kjoller-ingen-undkommer-doden-darfor-bor-vi-fokusera-pa-livet/>

⁹⁰ Bergmann, Sigurd (2020), Viruspolitik i en totalitär demokratur, *Dagens Arena*, 13 Dec 2020, <https://www.dagensarena.se/essa/viruspolitik-en-totalitar-demokratur/>

⁹¹ Lockdown TV, 17 April, 2020, <https://www.youtube.com/watch?v=bfn2JWifLCY>

As a response to the high death toll due to Covid-19 especially in elderly care homes, the government called a Corona Commission on June 30th, 2020, to review the strategy. An interim report was published in December, 2020, leveraging serious criticism, especially with regard to the strategy concerning the vulnerable groups as well as numerous structural shortcomings in the care system such as the lack of sufficient resources, lack of personal protective equipment as well as the lack of legal means to steer the country during the crisis (SOU 2020:80). At the structural level, the Commission pointed out that in a such a fragmented system as Sweden's the assumption of reliable information flow from bottom-up is a naive supposition. Similarly, the roles of responsibility do not follow those of capacity of implementation. Municipalities are responsible for providing the elderly care, but the regions are supposed to supply the municipal elderly care with medical competence. The Commission also pointed out that private care providers have interest in cost-efficiency and four out of 10 staff in elderly care lack any relevant education. This is possible despite all the regulations as they are employed on an hourly contract. The structural aspects do not create clear lines of responsibility and enable different agencies to blame one another. At the level of the state agencies, the Commission says that both Socialstyrelsen and the FHM were unacceptably slow to recognise the needs of the elderly care, and equally slow to act upon them. Finally, at the level of individual decisions, the Commission points out that rules such as the one in Stockholm stipulating that in case of contracting Covid-19, the patients in elderly care homes should be given palliative treatment instead of taken to hospitals in order to avoid overcrowding as contradicting patients' right to health care. In many cases, the decision on palliative treatment was even taken without any doctor seeing the patient and in some cases after a telephone consultation. Such rules the Commission deemed wrong and unacceptable.

The Corona Commission's report is the first more detailed evaluation of the corona strategy. The more the pandemic progressed, the more critical expert voices appeared in Sweden and whilst in 2020 public criticism of the FHM would lead to condemnation or ridicule, it became more acceptable to voice different opinions in 2021 and 2022, and some researchers positive of the strategy even convey that they have now become silenced.

One result of such "public health nationalism" has been a growing gap between how Swedish strategy and state was perceived by people relying primarily on Swedish-language media and those

reading foreign-language media. The strength of this public health nationalism is manifest in the fact that the pandemic or the strategy to handle it or any criticism voiced by the Corona Commission never became topic of a broader political debate, nor did they receive any attention during the 2022 election campaign. The delegation of crises to expert agencies and thereby keeping politics out of crisis management is one stated aim in the Swedish crises management system. And it did work well. The problem is that the work of the Corona Commission may well go wasted and the changes in the health care, elderly care, or primary care as well as in the crisis management system recommended by the Commission may not be implemented.

The third topic that received attention in Sweden concerns how well the population actually changed their behaviour based on the expert agencies' recommendations during the pandemic. As noted above, the FHM enjoyed great popular trust until the breakout of the third wave in early 2021. On June 23rd, 2020, the FHM published results of showing that "the great majority" follow their recommendations. Still in January 2021, they said that 80 to 90 percent follow the recommendations.⁹² Research, however, shows a different picture. An opinion poll from May 2020 asking whether people have changed their behaviour (not necessarily fully complied with recommendations) showed that only about 70% had changed their behaviour – and the trend was already declining.⁹³ Novus long-term opinion poll shows that maintaining social distance declined steadily until the beginning of the second wave in October-November 2020, when it became a norm again. However, comparison is difficult, as Novus ask about keeping 1 meter's distance; whilst the actual recommendation varied from 1,5 to 2 meters depending on the place. Why Novus set social distance to 1 meter remains unclear. A Stockholm School of Economics working paper also shows, on the basis of data collected from mobile phone operators and grocery stores, that whilst the recommendations did have an effect, it came not immediately but with about one week's delay. By far the most effective recommendation has been that of distance work, and the number commuters in central Stockholm were reduced by as much as 75% in April 2020.⁹⁴ According to government

⁹² DN, 16 Jan, 2021, Tegnell: Givetvis vill vi att politiker följer rekommendationerna, p. 16.

⁹³ GP, 11 May, 2020, Färre svenska följer myndigheternas coronaråd, <https://www.gp.se/nyheter/sverige/farre-svenskar-foljer-myndigheternas-coronarad-1.27848345>

⁹⁴ Wetter, Erik, Rosengren, Sara and Törn, Fredrik (2020), Private Sector Data for Understanding Public Behaviour in Crisis: The Case of COVID-19 in Sweden, *SSE Working Paper Series in business Administration*, No. 2020:1, https://swoba.hhs.se/hastma/paper/hastma2020_001.1.pdf

information, based on the analysis from one mobile phone operator, travel inside Sweden was reduced by 20% in March 2020, but already in May, when the recommendation was changed to allow travel within 2 hours from home, the figures went up again.⁹⁵ Travel decreased again starting from mid-October 2020 according to mobile data analysis.⁹⁶ Yet, these figures tell little about the actual social distancing: travel is defined as 50 minutes continuous movement. Similarly, the Statistics Sweden (SCB) reported that restaurant sales were on average 30% below the previous year's figures from April to December 2020.

However, although there is evidence that the recommendations did have an impact on public behaviour, many statistics from Sweden conceal as much as they reveal. Swedish corona reporting has relied on its own standards in many questions – just consider Novum's definition of social distance as 1 meter! Most countries in the world report the percentage of vaccine doses of the whole population (e.g. Our World in Data), in Sweden the national statistics rely on percentage those over 18 years of age (FHM 2021, vaccine) – and figures are commonly compared without clarification.⁹⁷ Reporting on deaths caused by Covid-19 is known to vary from country to country – in Sweden only the laboratory confirmed cases are reported as deaths of Covid-19 (FHM 2021, deaths). Nowhere is to be found the figures that would unambiguously show that between 80 to 90 percent follow the recommendations; 1 meter's distance is hardly a distance at all. Finally, even the common Nordic comparisons have fallen out of fashion in Sweden: in summer 2020, Tegnell argued that Sweden should be compared to Belgium, the Netherlands or Great Britain rather than to its Nordic neighbours. The reason is that Sweden – Tegnell now points out – had a much more rapid start of the pandemic than the other Nordic countries.⁹⁸ In November 2020, OECD published *Health at a Glance: Europe 2020* report⁹⁹ that showed that Sweden is at the bottom of European countries

⁹⁵ Regeringen, <https://www.government.se/articles/2020/06/social-distancing-and-markedly-reduced-travel-in-sweden/>

⁹⁶ Telia: Svenskarnas resande, <https://www.telia.se/privat/aktuellt/hemma-i-folkstatet/covid-19-mobilitetsanalys>

⁹⁷ See for instance, DN, 12 June 2021, Norge sist i vaccinering, <https://www.dn.se/varlden/norge-sist-i-norden-med-vaccineringen/>. This is a typical piece that does not take into account the fact that FHM reports different statistic to ECDC than other countries.

⁹⁸ SVT, 31 July, 2020, Tegnell: Det blir felaktigt att jämföra oss med Norge, <https://www.svt.se/nyheter/inrikes/anders-tegnell-om-de-senaste-sex-manaderna>

⁹⁹ OECD, *Health at a Glance: Europe 2020*, https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2020_82129230-en

managing Covid-19. In Tegnell's view, the report "lacked context".¹⁰⁰ There is mounting evidence that statistics are drafted and presented to convey a picture that the strategy works even if the material facts do not always support such a view; anomalies are explained away.

The public debate on Sweden's corona strategy has revealed many contradictory arguments as well as obvious white washing of statistics. Yet, changing views are also an indication of learning from the past. However, the problem here has been that Swedish corona strategy has not really "learnt" from past mistakes, it has adjusted to changing conditions, especially to the gradual improvement of available resources to deal with the pandemic.

G. Cultural values, the corona strategy and crisis management

Basing the strategy on recommendations brings along the individual responsibility as a necessary companion. Individual responsibility is also a central companion in understanding some of the more concrete instances that have received attention. During the beginning of the pandemic, the FHM did not recommend self-quarantine to people returning from holidays in early March 2020 when corona-virus was already heavily affecting Italy and the Alpine skiing resorts. The logic was that asymptomatic people would not transmit and those with symptoms would behave responsibly. Individual responsibility is connected to individual liability. Before December 2020, only those individuals who had symptoms should isolate, but family members not. This reflected the conviction that freedom is tied to the individual and curtailing one's freedom on the basis of others' action is not considered acceptable. In a way, the Swedish society is composed on autonomous individuals and the state is used to addressing individuals not, for instance, families or households in its legislation.¹⁰¹ This cultural underpinning is reflected in the law on communicable disease, which is based on voluntary measures.¹⁰² When a more collective quarantine was recommended, it was formulated so that family members should "avoid contact" with others. So in a way, even when battling a pandemic with a clear pattern of spreading in clusters, most measures in the Swedish strategy focused on individuals rather than groups.

¹⁰⁰ Expressen, 22 Nov, 2020, Sverige pekas ut: Sämst på corona, <https://www.expressen.se/nyheter/rapport-sverige-samst-pa-coronahanteringen/>

¹⁰¹ Berggren, Henrik and Trägårdh, Lars (2015), *År svensken människa?*, Stockholm: Nordsteds.

¹⁰² Ludvigsson, Jonas (2020).

Another striking feature of the Swedish strategy concerns the relationship between the corona strategy, science, and politics. The FHM in multiple occasions argued that their strategy is based on scientific evidence whilst other countries' is based on "political decision."¹⁰³ The juxtaposition between "political" and "scientific" was used to motivate inaction from the side of FHM. In a sense, much of the Swedish corona strategy in its early phases was based on the conviction that the corona virus is like any other seasonal influenza, that suppressing it is impossible, that certain exposure to the virus makes the society at large stronger and any measures to intervene bring along collateral damage far surpassing the benefits achieved. All this, despite the clear scientific knowledge that no one knew much about the corona virus in spring 2020. The absence of lockdowns and the non-recommendation of face masks were motivated by lack of evidence. The lack of scientific evidence as such did not work as a scientific argument, but it worked in juxtaposition to posited "political decisions" in other countries: in this constellation, face masks and lockdowns acquired the figure of political decision encroaching on individual freedom and at worst overthrowing science as a basis of steering society. Moreover, as opinion polls showed, the population at large was content with the strategy that did not impose many restrictions on individuals. Lindström (2020) draws parallels between the corona strategy and Sweden's performance in World Value Survey, namely extreme position on individualism combined with widespread postmaterialist values giving preference to individual feelings.¹⁰⁴

Most early measures implemented concerned more a hypothetical panic in society than actual measures to counter the virus. Going back to Häyry's somewhat provocative characterisation of Sweden as "an old no-nonsense eugenic social democracy" we may need to alter it a bit. Swedish strategy did not actively interfere to steer, but it let the pandemic do its work. In this way it is better characterised as a *laissez-faire* society: let the virus sort out the fittest. This position in literature is connected also to the prevalence of economic interests as those that ultimately call the shots in a libertarian-authoritarian accumulation regime.¹⁰⁵ And economic interests certainly have been

¹⁰³ YLE, 25 Mar, 2020, Miksi Ruotsi pitää peruskoulun ja ravintolat auki, vaikka maan koronatilanne pahenee? Näin viranomaiset perustelevat Ruotsin linjaa Ylälle, <https://yle.fi/a/3-11275007>

¹⁰⁴ Lindström, Martin (2020).

¹⁰⁵ Bourgeron, Théo (2022), 'Let the virus spread'. A doctrine of pandemic management for the libertarian-authoritarian capital accumulation regime, *Organization*, 29(3): 401-413.

primary in for instance SKR's decision to interfere in the decision taken by the Swedish Work Environment Authority concerning PPE in the elderly care, just to mention one example. The Corona Commission arrives at slightly different but related interpretation that Swedish corona strategy in relation to economic support had implemented so called precautionary principle, i.e. supplied sufficient resources in the beginning and adjusted or downgraded measures afterwards. However, when it came to mitigating the transmission of the virus, inactivity and lack of initiative have prevailed: decision-makers have avoided making decisions arguing that scientific evidence to support action is missing ignoring the fact that no scientific support existed for inaction either.¹⁰⁶

The Swedish strategy was wrought with paradoxes. It said one thing, but often implied another. The argument I have presented here is that much of the way the strategy unfolded is due to the limitations put on the strategy by the fragmented public administration and the need to take into account the appalling state or crisis preparedness. Standard theories of public administration during crisis situations often view fragmented public administration as more efficient than hierarchically coordinated. Yet, this argument relies on a shared understanding of the problem at hand. The fragmentation and the crisis management principles in place in Sweden created a situation in which independent state agencies defined their own problems without taking into consideration of the bigger picture. From this angle, it is logical that the FHM argues that the strategy was right, but the elderly care homes failed. The FHM never had a task of thinking about the status of the elderly care homes; it was charged only with a task of finding a strategy to deal with corona virus. Secondly, the fragmentation of the public administration and the segmentarisation of the problem descriptions further led to a situation in which the strategy turned "inwards" to save the face of the system. From a practical point of view, following the Swedish Work Environment Authority's decisions that face masks should be mandatory in elderly care homes would have led to disastrous situation of multiple service closures declared throughout the country. From this angle, the decision not to recommend face masks, or for SKR to interfere to the decision of another state agency was possibly right, but the motivation was not that of corona, but that of the legitimacy of the system and the absence of resources. A public administrative system whose legitimacy relies on interests other than those of

¹⁰⁶ SOU 2022:10, *Sverige under pandemin*.

the public good should not claim the label of being democratic. Observes from Sweden's neighbouring countries pointed this out: the corona strategy showed that the purpose of the system was that of the maintenance of the system itself rather than that of providing public goods or attuning to public problems such as the pandemic. This could also explain the swiftly changing information concerning what the actual situation in Sweden is (e.g. concerning crisis preparedness) as well as the Swedish "standard" for statistic that yielded comparative advantages by fingering scales (e.g. talking about the percentage of vaccination among the adult population instead of total population) as well as the constantly changing scapegoat: the poorly informed immigrants, those with low education, the regions, the private care providers and finally the private business. This could explain – to the public – why a strategy that scientifically was correct nevertheless failed to deliver the best results.

This systemic "self-sufficiency" and the resulting expanding sphere of individual responsibility is matched with the state promoted individualism. Berggren and Trägårdh argue that Swedish state individualism promotes bonds between individuals that are not based on dependency but positive and contingent active choice. During the Covid-19 pandemic individual active choice contributed to the health care patriotism that confirmed the uniformly shared cultural image of an autonomous Swede, who is non-dependent and rationally thinking, i.e. able to follow recommendations. This image was conditional upon the strategy to work well. When its shortcoming became all the more apparent, the system was unable to acknowledge mistakes – that would have stripped it of legitimacy – so a reason for the failures had to be found from outside the system whilst the system incrementally nudged itself towards new policies. The public for a moment was content with such a solution, but increasingly during the 2021 and 2022 the often so flattering Swedish exceptionalism had begun to appear to the lay eye as exceptionally poor performance of key actors.

In 2023 Tegnell published a book on his leadership of corona policy in Sweden. He acknowledged that Swedes are not particularly good at following recommendations.¹⁰⁷ This brings the last foundational conviction of the Swedish corona policy to its end.

¹⁰⁷ DN, 26 Oct, 2023, Anders Tegnell: Svenskar är inte speciellt bra på att följa regler.

The argument I have pursued here can succinctly be put that due to certain material and organisational constraints, the Swedish corona strategy primarily focused more on managing the public – and preventing panic – than seriously mitigating the transmission of Covid-19. Yet, the public communication claimed that the strategy targeted the virus, based on the available scientific evidence. What we know, though, is that the public was presented scientific evidence that did not fully concur with the available evidence for the Swedish experts.

The available material and organisational constraints can further be broken down to the absence of sufficient medical capacity in terms of available resources and the horizontal organisation of state administration. The latter aspect has been explored for instance by Borraz and Jacobsson describing the Swedish strategy as tightening loose couplings.¹⁰⁸ Loose couplings in this context refers to horizontal organisation where organisation or agencies are able to contribute to the public sphere with their own specific knowledge, logic and interest. Tight coupling attempts to restrict information and impose a more uniform regime of knowledge. Argument in favour of loose couplings is that this allows organisations to produce information that better reflects their environment. In an ideal case, in crisis, loose couplings can become tighter and draw on the shared pool of information. Borraz and Jacobsson claim this is what happened in Sweden, where FHM became the nave of information about the crisis as well as the source of recommendations. They write that the FHM “decided to exploit existing forms of knowledge and relationships, judging the situation too uncertain to wander into unknown territories... But in this exploitation, novel elements were constantly introduced leading to ‘exploration with exploitation’.”¹⁰⁹

The argument pursued here largely concurs with this argument, but provides a caveat. The Swedish model relies on a world view that thinks in terms of knowable risks rather than unknowns. The more complex the international system and societies become, the more there are unknowns. Donald Rumsfeld once described the world as being composed of known knowns, known unknowns and unknown unknowns. This yields to four different domains of knowledge: things we know and understand, things we know but do not understand, things we understand (once we see) but are

¹⁰⁸ Borraz, Olivier and Jacobsson, Bengt (2023), Organizing Expertise During a Crisis. France and Sweden in the Fight Against Covid-19, *Journal of Organizational Sociology*, 1(1): 73-107.

¹⁰⁹ Borraz and Jacobsson (2023), p. 80.

unaware of (at the present), and things we neither know nor are aware of nor understand, but need to deal with.¹¹⁰ Sticking to the known and avoiding tramping into the uncharted territory not only describes the Swedish political system, but also the dominant values that apprehend the environment through an idea of a system. By system I refer to prevalent idea that everything can be controlled, that everything yields to rational planning, that no exception is neither necessary nor desirable – it would only uncover the imperfections in the system.

¹¹⁰ Rumsfeld, Donald (2011). *Known and Unknown. A Memoir*, New York: Sentinel.

ABBREVIATIONS

FHM: Public Health Agency (Folkhälsomyndighet)

AV: Swedish Work Environment Authority (Arbetsmiljöverket)

DN: Dagens Nyheter (a nationwide daily)

SvD: Svenska dagbladet (a nationwide daily)

SKR: Swedish Municipalities and Regions (Sveriges kommuner och regioner)

PPE: Personal protective equipment

SVT: Sweden's television (Sveriges television - a Swedish public broadcast company)

GP: Göteborgs post (a daily based in Gothenburg)

YLE: Finnish Broadcasting Company (Yleisradio - a Finnish public broadcast company)

WHO: World Health Organisation

Chapter 12

IMPRESSIONS AND COMMENTS FROM THE COUNTRY PROFILE RESEARCHERS

The following presents the personal impressions, and comments from the contributors of country case studies and profiles giving their feelings, impacts, expectations, or aims in their research of this Covid-19 pandemic topic. Most important are their findings, assessments, and ‘lessons learned’ emerging during their research.

CHARLES-AMAURY QUELLEC: COVID-19 PANDEMIC COUNTRY PROFILE: FRANCE

Rennes School of Business, South East Asia Area Manager, Rennes, France
Former lecturer, Silpakorn University International College, Bangkok, Thailand

The Covid-19 pandemic impacted the whole world but, in the end, everyone experienced these difficult times in their own way. From the constant change of feelings that most of us felt to the evolution of our lifestyle, these years definitively challenged a lot of people. The COVID-19 pandemic has been a unique event that has affected all humanity, but every country, government, and community has experienced the disease under different circumstances.

As an individual, I have strongly felt the impact of the pandemic on my everyday life, from the constant changes in restrictions and rules but also to the emotional pressure and anxiety related to the physical impact of the virus. However, as a researcher, I was interested in exploring the broader impact of the pandemic on society, especially how different governments and cultures have responded to the crisis.

During these years of the pandemic, we could think that we were in this all together, finally united against a greater “enemy”. After all, we were all facing the same challenges and working towards the same objective. While it is true in a sense, I believe that it is important to recognize the diversity of responses that were developed across different countries and cultures. This is why I was deeply

motivated to be part of a common research effort to explore how different nations managed the pandemic, and, how France responded to this global external threat.

As a French citizen, I was naturally curious about how my own country responded to the pandemic. France has a long history of dealing with public health crises, but it had been some time since the country had to face a stress test of this magnitude. I was curious to know and to try to understand how the French government would approach this new challenge, what measures would be put in place to limit the spread of the virus, and how efficient these measures would be. But most of all, on which factors would these decisions be made?

It also helped me to have a better understanding of my compatriots. Indeed, sometimes drastic events bring back the true nature of people and maybe their sincerest reactions. Not only as a nation but also as individuals. I guess the analytical part that linked French culture to France's citizen response to the crisis was the most surprising one.

Even though I believed I knew and understood my country and my compatriots, this study made me realize that even in these difficult times, people are not as united as I thought. In terms of ideas but also in terms of actions and behaviors.

As a result, I was really looking forward to discovering how strong would be the cultural impact of other nations on crisis management.

I really believe that studying how French people managed the Covid-19 crisis can bring some insight into handling such an event in the future. Indeed, while there were some good practices that were adopted early on, they also made a lot of mistakes we can learn from. Especially if we consider that a few neighboring countries share similar values and cultures.

By examining how other countries have managed the pandemic, we can identify commonalities and differences in approaches, and assess the effectiveness of different strategies, which made this study very interesting.

Another aspect that made this research attractive is that it was created for us, and by us, I mean humans at all levels, states but also individuals because this study has been made so that it can be easily understood by all. It is a factor that I cared about and made this project enjoyable to work on.

Because in the end, the most difficult part of coping with such an event is probably the lack of experience and the uncertainty that it brings.

In summary, while the Covid-19 pandemic has impacted the whole world in similar ways, it is important to recognize the diversity of experiences and responses that exist across different countries and cultures. As a researcher, I am interested in exploring how different governments and communities have responded to the crisis, with a particular focus on understanding the French response to the pandemic. But also, to learn as a human being, how other people on the other side of the globe managed to get through these difficult times.

Through this research, I gained insights into how different countries might approach similar crises in the future, and how to develop best practices for responding to public health emergencies.

DR. ALESSIO PANZA (M.D.), MPH. DTM&H.: COVID-19 PANDEMIC COUNTRY PROFILE: ITALY

('Bergamasque Italian')

Dr. Alessio Panza MD. MPH. DTM&H. Formerly Coordinator of governmental Tanzania – Italy Health Cooperation, and Coordinator of the European Union HIV and Adolescent Reproductive Health programs in South East Asia; and currently lecturer at Chulalongkorn University, College of Public Health Sciences, Health Systems Development, Bangkok, Thailand.

Writing my personal history with Covid-19 is actually about writing two stories. The first one on Covid-19 in my daily life in Bangkok and the second one, an emotional one, on Covid-19 in my Italian home town.

In Bangkok, in early January 2020, I bought an air ticket for my Italian annual holiday departure from Bangkok on 21 May 2020. On the 13th of January 2020, a few days after buying my ticket, Thailand reported a Wuhan resident travelling to Bangkok as the first world case of COVID-19 detected outside China. Talking about that case to a medical doctor colleague, I said, *'we are going to have a second SARS (the first one was in 2003), we will be in trouble for a few months, contain it and then will go to Italy in September instead of May'*. The colleague totally disagree, *"this is not a second SARS. China hides its official epidemiological data, but Chinese social media talk of several thousands of pneumonia cases in Wuhan"*. He was right but, at that moment, I didn't change my mind.

For work reasons and from Bangkok, I had followed the 2003 severe acute respiratory syndrome (SARS), caused by a coronavirus, firstly reported in Asia in February 2003 which, over a few months, spread to more than twenty countries in North America, South America, Europe, but mostly in Asia. Health workers and their contacts were particularly affected, before SARS was contained 5 months later in early July 2003.

I was convinced that the 2020 Wuhan pneumonia would have been a repetition of the 2003 SARS.

I was expecting China at first lying about its epidemiological data, then sacking some ministers and mayors for underreporting data, then sharing real data, reporting super-spreading events and collaborating with the World Health Organization (WHO).

I was expecting Hong Kong, for its special status, to be the most reliable source of information and, as it did in 2003 SARS, reporting the cases equivalent to those at the Metropole Hotel that passed the infection to hundreds of HK residents and finally to Toronto, Canada. Hong Kong, research teams would find again some wild animals sold in southern China food market infected with coronaviruses related genetically to the SARS-CoV-2

I was expecting WHO to declare the '2020' SARS "a worldwide health threat", warning of its spreading by international air travel, recommending airport exit screening of passengers from affected areas and temperature checking, issuing travel advisories (and governments such as The Philippines and Ontario bickering to be removed from the advisory). I was expecting WHO using all its human and technical resources and networks with scientific world institutions to identify the 2020

pathogen (as it did in 2003 when a Singapore laboratory identified a coronavirus in Singaporean patients).

I didn't expect the repetition of the WHO Hanoi hero, the Italian Dr Carlo Urbani, who while taking swabs to send to top world laboratories and alerting the WHO Regional office contracted SARS from an American businessman admitted in a Hanoi Hospital, and died of SARS in Bangkok Hospital a few weeks later. WHO heroes are once in a life time event.

I was expecting Ministries of Health and Governments to put in place, diagnostic, treatment and control measures, installing thermal scanners, closing all levels of schools, closing and mass cleaning wholesale food markets that had clusters cases, suspending nonessential services in hospitals, mandating staff to wear protective equipment, forbidding visits to hospital patients, quarantining cases and their contacts at airport arrival, warning their citizens not to travel to affected areas. Even taking special measures as the 2003 Thai government request of entire planeloads of visitors from high risk countries to be quarantined for 14 days if anyone aboard was found with symptoms of SARS or the UK putting on 10-day quarantine 150 boarding-school pupils returning from Asia or the USA University of California at Berkeley refusing to accept summer students from Asian countries affected by SARS.

I was expecting most citizens adhering to their Ministries of Health recommendations and a few others not adhering such as the Chinese guy who discharged himself from a Bangkok hospital to fly back to Beijing and infecting the passenger sitting next to him, an International Labor Organization officer, who later died in Beijing.

I was expecting the Media to give intense, widespread interest to the cases, sometimes helping sometime hindering the spread of correct information and so causing more fear and social disruption.

I was expecting official declarations from Ministers of Health of ASEAN + China, Japan, and South Korea making joint statement, urging their head of government to provide adequate resources to respond effectively to the '2020' SARS as they did for the 2003 SARS. Finally, after five months, the same ministers to declare their countries free of the '2020' SARS as also did Canada and Taiwan in 2003.

In the first five months of Covid-19, everything happened as I expected from the 2003 SARS experience, everything except for a 'detail' after five months 2003 SARS was under control, Covid-19 was, instead, spreading world as wild-fire. When in five months SARS was controlled, the deaths were some hundreds and the infections a few thousands. In five months the Covid-19 deaths were 479,113, the infections 9,296,202, and the travel restriction 68,721 (in about 200 countries, territories, and areas) (<https://reliefweb.int/report/world/covid-19-disease-response-situation-report-21-20-26-june-2020>)

What made me so wrong with my prevision on the duration of Covid-19? I was assuming that the risk of contracting Covid-19 was limited to close contacts of cases showing symptoms as in SARS. In reality, instead, Covid-19 was contracted by close contacts of cases showing NO SYMPTOMS.

Waiting for the lifting of the Thai restrictions on international travelers my planned September 2020 Italian holidays materialized instead in June 2022 (luckily the airliner turned my ticket into a coupon to be used at any date of my choice)

I was wrong not only in forecasting the end of the Covid-19 pandemic, but also on the measures the governments would have taken (many more and unprecedented compared to the ones for 2003 SARS). Covid-19 pandemic became then an extremely interesting learning experience on how to do things a new way both clinically for the patients and in public health for the communities. Fast learning as well, new clinical and public health discoveries were coming in by the weeks, sometimes by the days.

I was learning from the curve of the epidemic in Thailand and the effectiveness of its measures compared to those of other countries, particularly Italy.

For the epidemic curve, after an initial spike, Thailand went 102 days (May to) September without any local transmission of COVID-19 while Italy (and most of the world) had thousands of new daily cases. On January 31 Thailand had the first non-imported COVID-19 case, followed by spikes related to superspreading events (indoor Thai boxing, gatherings at downtown bars).

For the effectiveness of its measures, Thailand, immediately after knowing of the atypical pneumonia in Wuhan, started to screen passengers from China for symptoms of acute respiratory infection. Before the first imported case was detected on January 13, the Thai government started a nationwide public campaign to prevent what was later called COVID-19: handwashing, mask wearing and physical distancing. By end March 60 out of 77 provinces had cases and the response was quick and comprehensive: isolation/treatment of confirmed cases, contact tracing, quarantine in facilities not in cases' homes, laboratory for RT-PCR COVID-19 diagnosis, hospital beds increased, and medical supplies and personal protective equipment provided.

Among the measures some were special, 12 March the day after WHO declaration of the pandemic, Thailand constituted the Centre for COVID-19 Situation Administration (CCSA), and under the Prime Minister. The CCSA stopped International and domestic flights, discouraged travel across provinces, closed non-essential businesses such as department stores, gyms, barbershops, markets, bars, restaurants, public parks, and boxing stadiums (some economic measures were instituted to support tourism related activities) and closure of all educational institutions (that was hard on me as a lecturer) fortunately schools reopened in early July. Other special measures 26 March state of emergency, 3 April curfew: 10 pm-4 am (that was a feat: dinner with friends then risking to walk home for kilometers because no taxi on the road close to 10 pm!),

Village Health Volunteers (VHV) monitored the health of multiple families, educating their community, distributing masks and hand sanitizer, and reporting suspected case of COVID-19. VHV

had an easier job people than their counterparts in Europe, USA etc. in Thailand no disruption and fighting caused by No mask, No vax, No lockdown protesters

Department stores were allowed to reopen since they complied with preventive recommendations. Restrictions in movement within Thailand were lifted but borders remained closed to most travel. the few travelers entering the country had to quarantine in a state-monitored facilities for 14 days and I was stuck in Thailand until quarantine was lifted in June 2022.

My second personal Covid-19 story is related to Italy where, as in Thailand, the first identified Covid-19 cases were in a Wuhan couple visiting Italy (23 Jan 2020).

It took days before I realized what was going on in Italy. I had a tenant who didn't pay the rent, so I emailed my real estate agent to recover it. He called me back in shock, *'Here we are closing everything, even churches, we lock ourselves in our homes. How can I get the tenant to pay your delayed rent? You don't understand we have an apocalypse here'*. That was my wakeup call. An apocalypse was taking place in my home town. I was living in Thailand, an opposite world with few, mainly, imported cases because everybody was following the public health recommendations.

After the wakeup call, I started following the Covid-19 situation in Italy. On 21 February 2020, the first Italian (and European) cases were identified near Milan and near Padua. Days later followed an explosion of infections and deaths in the Milan region (Lombardy) where I was born and I live with my family when I go to Italy. Lombardy had 10,022 deaths by August 2020 (China in the same month reported 3,342 cases). It didn't experience so many deaths in a few months' time since World War Two. That was, particularly true in my home province Bergamo. Italy has the oldest population in the world after Japan, so elderly above 80 were dying in dozens daily. In the village of Nembro, where I did my 6 to 8 grades, the daily deaths were so many that the parish priest decided to toll the bell three times a day only, and not for each single death. My professor of mathematics and the chaplain of my school were among the dead.

In Bergamo town the corps were accumulating beyond hospitals' morgue capacity. Crematoria couldn't keep up with the demand for cremations. One night, the national army came in with trucks to take the corpses to crematoria in nearby towns.

Hospital staff and GP were falling sick and dying, including one classmate of mine, who was the GP of my aunt and cousins. Health workers over burdened by countless hours of work, with no chance to see their families, burnt out. Hotels and catholic church offered them free rooms just to take a shower and sleeping a few hours. Protective equipment, including face masks, had to be imported from abroad and never enough in the first days of the pandemic. Some evenings I ended up crying after reading the news.

The regional government waited days before imposing social containment. Lombardy region is the richest and most productive of all Italian regions, alone producing 22 % of the whole Italian GDP. The regional government was later accused of valuing economic activity more than social containment.

So many other sad events happened in the following weeks, the sadness of my Italian Covid-19 story overtook the calm and reassuring context of the successful Thai Covid-19 story.

M.A. (Applied Linguistics), Lucerne, Switzerland.

Different countries. Different political systems. Different cultures. Different media. Looking at various nations and how they handled the COVID-19 pandemic means to ask numerous questions: How did particular countries approach the COVID-19 pandemic? How can we turn respective national approaches into valid international learning opportunities? What lessons can we learn from such an event? How should one proceed in case of another pandemic?

An overview of takeaways from the COVID-19 pandemic that can influence how we respond to upcoming public health emergencies and help us develop policies and tactics that will make the world more resilient, equitable, and well-prepared.

Global Connectivity: The pandemic has highlighted just how interconnected everything is. A virus that first appeared in one region of the earth quickly spread around the globe. This has effects on how we think about cooperation and global health – and how the decision to foster collaboration might influence the future outcome of a pandemic.

Necessity for Preparedness: In the face of newly developing infectious diseases, the pandemic underlined the vital necessity for preparedness. To respond to pandemics promptly and effectively, governments, healthcare systems, and international organizations must develop sound plans and allocate adequate resources to ensure an effective response.

Public Health Communication: When in doubt, try to use traditional media as well as information provided from the WHO as sources of information and make an educated decision based on these materials. The COVID-19 pandemic highlighted the problems with disinformation and has shown, that algorithms that create social media newsfeeds may, lead to misinformation.

Public health measures: Mask use, social seclusion, and hand hygiene are examples of non-pharmaceutical interventions that can be very successful in preventing the transmission of infectious diseases. These precautions are likely to be crucial instruments in upcoming pandemics.

Remote Work and Digital Transformation: The pandemic accelerated the adoption of digital technologies and remote work across a variety of industries. This has consequences for how work will be done in the future and emphasized the importance of digital infrastructure.

Awareness of Mental Health: The pandemic has had a negative impact on mental health, underscoring the significance of mental health services and education.

Open Source and Data Sharing: Scientists and institutions around the world were essentially forced to collaborate by the outbreak. Our understanding of the virus has advanced thanks to the open sharing of data and conclusions.

Healthcare Innovation: The pandemic sparked advancements in diagnostics, telemedicine, and healthcare delivery. The healthcare sector has been significantly impacted by these technologies. They should be further fostered to improve the status quo.

All in all, it can be said that during the COVID-19 pandemic, people and communities have shown tremendous resilience and adaptability. People developed innovative strategies for maintaining relationships, helping one another, and adjusting to difficult situations.

The COVID-19 pandemic has also displayed cross-national issues in the fields of sociology, economy, politics, communication, and psychology. Through a short exploration of these fields, we can gain a deeper understanding of the challenges we have faced as a society and the potential transformative opportunities that they have. This, not only at a national level, but internationally.

Sociology: COVID-19 has exposed the fault lines within societies and exposed long-standing disparities that have afflicted different communities worldwide. The pandemic has had an uneven impact on marginalized groups like older people, people with low incomes, and members of racial and ethnic minorities. As governments implemented lockdowns and social segregation policies, vulnerable communities particularly struggled with rising unemployment, inadequate medical care, and constrained educational opportunities. Challenges concerning social justice and the function of public policy in resolving systemic inequalities have further increased.

Economy: The economic fallout of COVID-19 has been staggering, with businesses having been forced to close, supply chains disrupted, and millions of jobs lost worldwide. Even the most affluent countries struggled to avert the global economic crisis, highlighting how vulnerable our interconnected global economy is. The recession has primarily affected small businesses and workers in industries with comparatively low pay including hospitality, tourism, and retail - further propelling poverty and inequality. The pandemic has accelerated the trend to remote work and digitalization, and has also sparked innovation and adaptation. This time has highlighted the value of resilience, adaptability, and diversification in economic systems, laying the foundation for potential future transformations.

Politics: The COVID-19 pandemic has put governments and political systems to the test, challenging their ability to respond effectively to a rapidly evolving crisis. Different nations have applied various strategies to manage the pandemic - exposing strengths and flaws of governance system. Worldwide civil liberty discussions have been sparked by the pandemic, with conflicts developing between individual freedom and communal well-being. Public health policies have become the focus of ideological disagreements due to political polarization. The need for open, fact-based decision-making and the value of international cooperation in addressing global difficulties have both been brought to light by this crisis.

Communication: The COVID-19 pandemic has significantly changed communication channels, with a move toward virtual platforms and digital interaction. Remote work, online learning, and telehealth services have all become more popular. Although physical isolation has helped us to find ways to stay connected, the digital divide has been made clear, depriving many people of access to opportunities and basic resources. The abundance of false information and conspiracy theories about the virus has

highlighted the significance of critical media literacy and responsible information transmission. We have learned from the pandemic how important it is to communicate clearly during emergencies and the value of having trustworthy information sources.

Psychology: The COVID-19 pandemic has taken a toll on mental health, with increased rates of anxiety, depression, and social isolation across nations. The disruption of daily routines, fear of illness, and the loss of loved ones have created a collective sense of grief and trauma. At the same time, communities came together to support one another – fostering compassion, and solidarity. The realization of the need of mental health support systems and normalization of to question the of seeking professional psychological help are important developments. The pandemic has also sparked conversations around existential questions, such as our relationship with mortality, the meaning of life, and our collective responsibility towards one another.

Based on the consideration of these topics within this short personal reflection, it can be concluded that COVID-19 has impacted multiple spheres of society, leaving a permanent mark on the world's population. An analysis of country-specific differences in how the pandemic was dealt with, helped me gain an understanding and realization that while individual approaches exist, global issues and problems need to be addressed on a society-wide basis. The challenges we have faced during this crisis led also to transformative change. As we move forward, it is crucial to address the systemic inequalities that have been exposed, foster resilience in our economic systems, promote evidence-based decision-making in politics, enhance digital inclusivity, and to prioritize mental health and well-being. The lessons learned from this global pandemic can serve as catalysts for building a more just, equitable, and resilient future for all – on a global level.

When I read in the news of the virus in China, I thought instantly: This will be spread to Denmark as well. On the day before Denmark was closed down 11th March 2020 (<https://www.ssi.dk/aktuelt/nyheder/2022/da-covid-19-ramte-verden-og-danmark-se-tidslinjen-her>) I held my birthday party. For the party old family members were invited as well. Two of my friends had been abroad in Paris and Chicago. This means they had attended flights and I thought there was a risk of contracting the virus during the flight, bringing it to my birthday party and putting the elderly family members at risk. I therefore asked the two friends not to attend my party anyway. They thought I was overreacting. I brought disinfecting spray and soap for all to use when entering the ballroom of the party. When our Prime Minister closed down the schools the day after, my friends and family started to see differently on the virus. As I see it, it was a shock for most people who had not experienced any large-scale events before. For the people who were born under or in the aftermath of 2nd World War, and the war in Vietnam, the possibility of such events was present in their consciousness. But anyone born from 1980 and forward was having a mental shock about the fact that life is so fragile. Interestingly, there was not much public debate for the first two years on whether this was the right strategy. Though Sweden is our neighboring country, the Danes complied to the rules of restrictions, testing, etc. Because of our democratic culture, which includes the great collaboration between the health sector and the parliament, it seems to me as if the handling of the restrictions made sense to both the citizens, the public institutions, and the private enterprises. Also, the fact that the parliament offered compensation to the enterprises that lost money due to the lockdown is a sign of the collaborative and supportive spirit of the Danish society. No one should suffer or be left on their own under the crisis. Still, however, quite a lot of small entrepreneurs and restaurant owners went bankrupt under the lockdown.

As I understand from my connections among politicians and the health care sector that for a possible new pandemic in the future, Denmark will follow the strategy of Sweden, i.e., not to lock schools and the educational sector down. The mental and psychologically costs of isolation have been deep on particularly youth. I am not sure that the costs of isolation for youth and elderly people override the efforts done to prevent COVID-19. However, as the famous Danish philosopher, Søren Kierkegaard (1813-1855) said: "Life is lived forwards, but understood backwards".

Senior Lecturer, Social Work, School of Social Sciences, Södertörn University, Stockholm, Sweden.

I was asked to contribute to this research project by colleague of mine. I thought: why not – I already spent much time reading the news from Sweden, Finland, the UK and Poland. I moved to Sweden over a decade ago, but my phones primary news app is still the Finnish public broadcast company's, my next pick would *The Guardian* (there is no pay wall!), after that I would surf to the Swedish daily *Dagens Nyheter* or the Polish equivalent *Gazeta Wyborcza*. This position of being in between different news regimes made be critical of any of them, but also gave a possibility to compare the policies implemented in different countries, the official motivations behind them and the how the media comments on them. Yet, it was the Swedish policy that affected my life most. Most striking feature of the Swedish strategy was the confusion around scientific evidence and its possible usage in policy. On the one hand, the strategy claimed to follow scientific evidence and implement measures that have proved effect. On the other hand, science did not know the Covid-19 virus. In many other countries, this led to caution and exploration of new possibilities, but in Sweden it was a official motive of lifting hands up and doing nothing.

Being a university lecturer, my work went smoothly online. I could sleep a bit longer in the morning, and then I would open Zoom. If I did not finish my coffee, I could still sip it as the lecture began. I had it rather comfortable, but I realized that as soon as I stepped out of the door, I became wary. I did follow the recommendations, more diligently than was actually recommended. And it did not take long until I realized that all this was rather easy for me, but much of Swedish society could not afford the same comfort: commuter traffic, service sector, teachers in schools, let alone health care sector. They had to commute to work. One of the first decisions the public transport company in Stockholm took in the wake of the recommendation to work from home was to cut the number of busses and underground trains. The argument was that they must cut costs because of the reduced number of passengers. The result was overcrowded busses and underground trains. The next came the recommendation of *not* using masks – because not everyone can afford for one, that is, out of consideration for equality, or in this case equal exposure to covid-19. Just that many *did not* commute to work, but some did.

My view of Swedish corona strategy as a perfect square unable and unwilling to take into account any difference in society began to crystalise. At the same time, I could see how in neighbouring countries politicians tried to figure out different solutions that could work in an imperfect situation. In Finland, the capital region was sealed off from the rest of the country by declaring a state of exception. Naturally some policies implemented during the state of exception later turned out be unconstitutional, but then the government acknowledged its mistake and backed. But they were trying. In Sweden, the mood of was the opposite: everything is under control, this is nothing. I did not fall for the arguments that we “Swedish people can think for themselves... We can simply do the right thing”. In that sense I was absolutely not a Swede!

As I started writing the chapter on Sweden, I dug into the news archives a bit deeper. What was most striking was to realise that the policy was not naïve, perhaps, but behind the scenes the epidemiological information about Covid-19 was recognized, the medical staff knew its severity, but the public communication did not reflect this. One standard question in policy analysis is what is the problem the policy is addressing. And very often the problem is not covered by explicit aims of the policy. I began to see the Swedish strategy as having to do a bit with the virus, but a lot more with the material and legislative impossibility of doing *anything* about it: there were no reserves of medical equipment, hand disinfectant ran out in the country during the first weeks of March 2020, medical rubber gloves were not available, there was no legislation to enable any state of exception outside war situation and there was no possibility for the politicians to interfere into the operation of the autonomous state agencies. I felt that political decisions were urgently needed, but the politicians said they await expert advice and the experts said they have no mandate to do politics, they only advise the government.

Having grown up in Scandinavia, I have not been exposed to many major crises of the world – until Covid-19 hit. Yet, Finland takes pride of being “crisis prepared”. The crisis was obviously expected from the east. Living under posited threat gave rise to a mentality of thinking about alternatives and worst scenarios and what if -questions. I saw very little of that in Sweden in spring 2020 or afterwards. Nor did I see much adaptability in the system itself. What I observed, was the system establishing a reality of its own and sticking to it and everything – or everyone – falling outside of world view posited by the system was left without consideration. That would only have imperfed the system. My concern was that this system was not even primarily put up to deal with Covid-19 but cover up the absence of the means to deal with the virus so that societal panic would be avoided. This hypothesis obtained more evidence as the crisis prolonged, and as each aetiological and social assumption declared with firm conviction in spring 2020 was gradually changed. This concerned first whether Covid-19 is airborne and hence face masks would hinder its transmission, whether there is asymptomatic transmission or not and hence quarantine should be extended to family members and other in close contact and finally whether recommendations to encourage social distancing suffice. What made me sad – and partly motivated taking part in this research – was the anger that the authorities were unwilling to admit the failures of crisis preparedness and instead distorted the image of the pandemic. Distorted? Yes, they did know about the severity, they did classify the virus among the most dangerous contagious diseases together with Ebola, smallpox and SARS.

Writing these lines, I find it amusing to be drawn into the language of “system”, that there is a system in Sweden and that system should be perfected (if it is not perfect already). Individual in Sweden is highly valued. In World Value Survey, Sweden scores highest in terms of valuing individuality. Yet, ask any foreigner in Sweden, they most likely would question the liberty of this individual. Instead, the individual being in Sweden is very regulated and normatively sanctioned being. There is a specific way of being an individual. And the corona strategy was largely designed to account for this kind of individual and neglect other individuals in society.

SUKHAVICHAI DHANASUNDARA : COVID-19 PANDEMIC COUNTRY PROFILE: CHINA and
COVID-19 PANDEMIC COUNTRY PROFILE: THAILAND

To be honest, my first reaction upon hearing about the new SARS virus outbreak in China was something like, “Bloody hell.... not again!”. Thailand has a long history of catching deadly viruses from China from the Asian Flu in 1958, to the Hong Kong Flu in 1968, to the SARS (SARS-Cov-1) in 2002, and now SARS-Cov-2 in 2020. Everybody, literally EVERYBODY knew it would come to Thailand, and certainly sooner, rather than later. By the end of 2019, Thailand was one of the highest tourist destinations in the world with around 40,000,000 visitors of which by far, the largest nation was China with about 12,000,000 visitors. It was therefore no surprise to learn that Thailand was the first nation outside of China to ‘import’ the coronavirus. The coronavirus outbreak was declared by the Chinese around mid-December 2019 in Wuhan, Hubei province, and it reached Thailand three weeks later in January 2020, by tourists from that area.

Having almost the same experiences as the Chinese with regard to the earlier virus outbreaks, Thailand was quick to follow the Chinese protocols of social distancing which highlighted the need to wear protective masks. Fortunately, Thailand has an active industry in medical supplies including masks so availability was not a problem. The Royal Thai Government accelerated the policy of wearing masking through free distribution to the general public in all public places. For Thais, wearing sanitary masks during sickness or virus epidemics is as common as eating ‘pad Thai’, one of the most popular dishes in the country. Consequently, there was no need for the government to issue mandates or directives in this regard. People just adopted these initiatives naturally. Such practice continues to be a culturally-induced behavioural pattern and has done marvels in keeping Thailand among the low ratings in infections and deaths.

Communications with information, updates, and statistics were frequent and regular from both the responsible government agencies coupled with active and up-to-date reports from the mass media agencies on TV, newspapers, and radio, as well as on various social media and digital platforms. The combined and timely flow of information, especially the daily statistics, sourced from the WHO’s situation reports eventually attracted my attention. Like most Thais, I followed up on the daily statistics expecting it to ‘go away’ like the SARS outbreak 18 years earlier. However, by the time the WHO officially declared Covid-19 to be a global pandemic in mid-March 2020, it was very obvious that the statistics were rising both rapidly in numbers (vertical growth) as well as globally (horizontal spread). Most remarkable was the fact that the highest levels of infections and deaths were concentrated in the European and The Americas regions representing 78% and 81% respectively. Of these figures, the highest levels were predominately centered on the Western European and North American nations. Again, I found this fact to be remarkable, believing in the principle of ‘survival of the fittest’. These European and American nations are considered generally to be world leaders in political stability, economic power, social maturity, and technical advancement. What would bring about this scenario? By the third quarter (2020), it had become evident that this was not a temporary ‘spike’ but was more permanent and well-established. Thais are often associated with ‘cats’ (the

Siamese cat) and therefore the proverb ‘curiosity killed the cat’¹ is probably also logical in this case. So I researched (Googled) the history of virus infections in Western Europe and North America.

Imagine the surprise in learning that both these Western regions of Europe and particularly North America had in fact experienced the worst virus-oriented flu pandemic of the century during 1918 – 1919 at the end of the First World War with death rates said to range between 20 to 50 million people. This was referred to as the ‘Spanish Flu’, not because it originated there like the coronavirus in China, but because they were the first to declare the outbreak publicly. For the record, Spain was not the source of the outbreak. The point being made is that these European and North American nations had first-hand ‘front-line’ experience with the virus, certainly before any nation in Asia and at that level of intensity. As a professional researcher (in the business world), this obviously stimulated a strong interest to ‘dig deeper’ into the cause-and-effect elements, and especially to review if there were any ‘lessons learned’ from this pandemic.

Concurrent with my international corporate executive responsibilities over the past 30 years, I have also been teaching MBA programs related to multi-national operational and organizational management and human resources development during the same period. For the past 13 – 14 years, these courses have been extended to focus on cross-cultural management expounding on the principles and concepts established through Edward T. Hall, Fons Trompenaars, and Gerard Hendrik Hofstede. Consequently, when the highest negative outcomes from the Covid-19 pandemic consistently show these Western nations being included in the Top 20 list of highest-infected nations, there had to be other causes that are not related to wealth, politics, or technology. This was when I looked at the possibility of some level of association between culturally-induced behaviour and the negative outcomes in response to the Covid-19 pandemic. This then became the theme and scoping of the research into the growth, expansion, and sustainability of Covid-19 over the past three years. In this respect, I considered Hofstede’s concepts on cross-cultural dimensions to be more appropriate with regard to the Covid-19 pandemic. In terms of political-culture and social-cultural behavioural patterns in response to this global crisis, Hofstede’s cross-cultural dimension for power distance, individualism, pragmatism, and indulgence seems to be the most applicable.

History has shown, that the virus has attacked and impacted the well-being of the human race at least three times since the beginning of the 20th. century with the level of deaths reaching tens of millions of people, not to mention disruptions and disintegration of both national and global economies, namely the misnomer Spanish flu, the Asian flu, and the Hong Kong Flu. At the beginning of the 21th. the century saw the infliction of the SARS-Cov-1, and the current Covid-19 (previously referred to as the SARS - Cov -2). The probability is extremely high that this will not be the last or the worst of this century.

My most important goal is to underscore the fact that exposure to virus threats is part of the environment on this planet and is linked to Man’s existence and well-being just like the air we breathe. This research, its findings, and assessments are to better understand the ‘cause and effect’

¹ Attributed to Ben Jonson’s city comedy, Every Man in His Humour. 1598.

elements along with their dynamics, in order to identify, verify, and accumulate the viability and practicality of 'lessons learned' for the inevitable re-occurrence of virus attacks in the future.

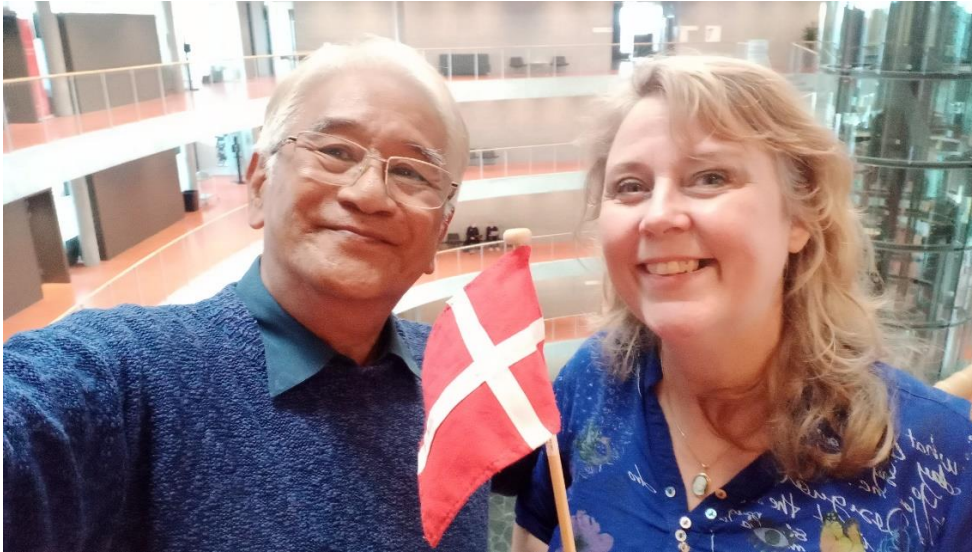
Finally, the objective of this book is not to be a reference textbook of knowledge from the academic perspective, but more importantly, a guidebook of practical knowledge for the general public in addressing and responding to most forms of natural biological-based transmissible infections. (The same may not be said for man-made biological attacks).

Personal assessments: National culture does have some influence and impacts on a population's behavioural patterns, although the degree of significance and effectiveness would vary from country to country, and most likely also, from generation to generation. There is no doubt that globalisation has had significant impacts not only with respect to the global economy, or politics but also on society through the interaction and evolution of cultural values and behavioural traits. It is foreseeable that over time, and through new generations, this cultural evolution will continue at a faster pace. In fact, the global economic 'supply-chain' can also be compared to the network for cultural change. Through this process, globalisation will undoubtedly play a role, ranging from slight to significant, in influencing changes to certain traditions and customs in national cultures through 'cultural osmosis'.

From a personal perspective, one of the most remarkable and reoccurring impressions is the seemingly frequent struggle, if not clash, between the political-social culture of "doing it right, versus doing the right thing". This 'conflict' is most noticeable and evident among the Western democratic nations whose constitution places control, limitations, and accountability on government leadership in exercising power and authority in the administration of the country, especially in declaring emergency decrees in times of crises.

Nevertheless, government leadership around the world has imposed cultural adjustments by invoking emergency decrees in executing crisis management policies against the spread of Covid-19. This would have had an influence on initiating certain cultural adjustments and adaptations in crisis situations, through specific and temporary 'cultural detours' during national emergencies such as in addressing the Covid-19 pandemic. Nevertheless, as has been demonstrated, the level of success depends on the level of acceptance, participation, and conformity on the part of the general population. This is essentially an element of culturally-induced behaviour. Therefore the level of outcomes in terms of infections and deaths related to Covid-19 varies from nation to nation in relation to cultural traits and behaviours.

THE TEAM



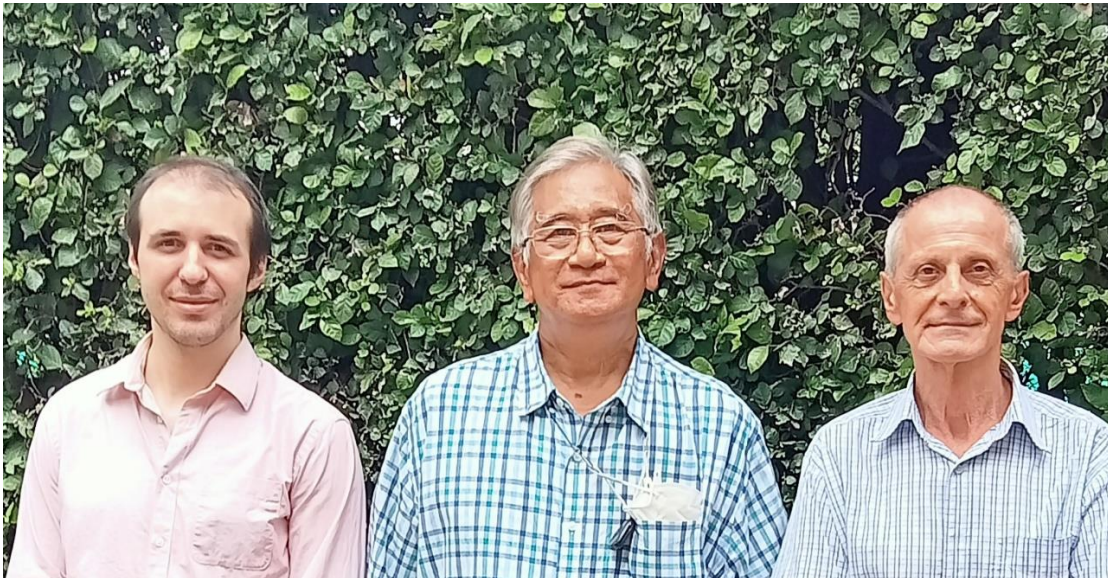
Camilla, Copenhagen, Denmark



Jaakko, Stockholm, Sweden



Marina, Luzern, Switzerland



Charles (Paris, France), and Alessio (Bergamo, Italy), Bangkok, Thailand

THE OUTBREAK, FACT FINDINGS, AND ASSESSMENTS

Chapter 13

THE VIRUS, AND MANKIND - AN INSEPARABLE BOND

A. The evolution of Earth, biodiversity life forms, the virus, and Mankind

The creation of our planet Earth goes back about 4.54 billion years and includes the formation of the oceans. Between 4.28 to 3.42 billion years ago within these oceans evolved the earliest life forms which were found in hydrothermal vent precipitates¹. These earliest known life forms were microscopic organisms (microbes) with indications of a type of carbon molecule that is produced by living organisms. It was not until 2.9 million years later, or about 800 million years ago that the first sign of animals, in the form of sponges was discovered.² This was part of the evolution of lifeforms on Earth and the emergence of the planet's biodiversity which was made up of five kingdoms of living species namely Animalia, Plantae, Fungi, Protista, and Bacteria.³

There is still a continuing discussion regarding when and from whence emerged the virus on Earth. The oldest virus dating theory is that viruses may be as old as life on earth itself, or perhaps even older, which would date the virus in the range of 3 billion years, give or take a few million years.⁴ This is based on the concept that the virus may have co-existed and plagued the cellular life forms through the creation of life forms on Earth. Another concept tries to answer the issue, of which came first, the virus or the cell? This question is a reflection of another common question, "which came first, the chicken, or the egg?". This study suggests that viruses and bacteria derived from the same cellular origin that lived around 3.4 billion years ago with the emergence of life on the planet. Then followed the process whereby the bacteria "evolved in the direction of increasing complexity", while the virus took the other direction which "gradually shed genes they found they didn't need – until they could

¹ Dodd, Matthew S.; Papineau, Dominic; Grenne, Tor; Slack, John F.; Rittner, Martin; Pirajno, Franco; O'Neil, Jonathan; Little, Crispin T. S. (2 March 2017). "Evidence for early life in Earth's oldest hydrothermal vent precipitates

² Smithsonian. National Museum of Natural History. Early Life on Earth – Animal Origins
<https://naturalhistory.si.edu/education/teaching-resources/life-science/early-life-earth-animal-origins>

³ NASA. Astrobiology. OCT. 22, 2001
<https://astrobiology.nasa.gov/news/the-three-domains-of-life/>

⁴ Bob Holmes . Viruses have plagued the Earth for 3 billion years. New Scientist. May 8, 2004
<https://www.newscientist.com/article/mg18224462-100-viruses-have-plagued-the-earth-for-3-billion-years/>

no longer even reproduce on their own.” This evolution of the virus could be dated to about 1.5 billion years ago.⁵ For this reason, viruses are dependent on ‘living host cells’ to reproduce and infect other host cells to spread.

A more definitive timeframe of the virus was established by researcher Elisabeth Herniou, from the University of Tours in France that indicated viruses were already infecting organisms some 300 million years ago, such as an insect-infecting virus. This 300 million years timeframe relatively coincides with the evolution and emergence of insects themselves. "Our insect viruses are already present right from the beginning of the evolution of insects," Herniou said. Of significant interest is that these viruses existed during the age of dinosaurs, and, most importantly, were able to survive the mass extinction that killed them! These viruses exist today and continue to infect every form of life on the planet, notably in the animal kingdom, which includes Mankind, or Man, the “homo” species. There are even viruses that infect viruses.⁶ However, this timeframe does not mean that the virus emerged 300 million years ago. It means that 300 million years ago was a milestone in the timeline of the virus.

Obviously, this makes the virus a senior resident on our planet, and Man, is definitely the “new kid on the block” who didn’t exist on the planet until just short of 300 million years later, namely about 2.5 to 2.0 million years ago. As previously indicated, Man or ‘homo’ belongs to the animal kingdom and evolved from the biological order Primates, the species commonly related to the lemurs, monkeys, and apes. Of course, we, the homo did not replace these primates, but evolved parallel to them, fortunately taking the ‘high’ road of evolution.... and yes, we all still love bananas!

The timeline of human evolution can be briefly summarized as follows,⁷

- 2.5 – 2.0 million years ago: The genus Homo, apparently, first appeared in East Africa.
- 1.9 – 0.5 million years ago: The Homo erectus emerged.
- 300,000 years ago: Earliest Homo sapiens was presumed to have emerged
- 243,000 – 44,000 years ago: Homo neanderthalensis emerged. The species became extinct 40,000 years ago, following inter-breeding with Homo sapiens estimated to be between 60,000 and 40,000 years ago.
- 160,000 – 90,000 years ago: The Homo sapiens sapiens (modern Homo sapiens), a subspecies of Homo sapiens emerged sometime during this period⁸. This subspecies continues to the present day (yes, that’s us!).

⁵ Viviane Richter. What came first, cells or viruses? A biological enigma that goes to the heart of the origin of life. Cosmos. October 19, 2015. <https://cosmosmagazine.com/science/biology/what-came-first-cells-or-viruses/>

⁶ Jennifer Welsh. Oldest Viruses Infected Insects 300 Million Years Ago LiveScience. September 13, 2011 <https://www.livescience.com/16015-oldest-viruses-insects.html>

⁷ Biology on line. Human. May 26, 2022 <https://www.biologyonline.com/dictionary/human>

⁸ <https://www.britannica.com/topic/Homo-sapiens-sapiens>

Viruses' inter-twining existence with Man is such that over time, the evolutions of one often determine the mutation or evolution of the other. If it wasn't for the mutation of viruses, humans might never have emerged on this planet and would have remained part of the animal species! Viruses are known to be a primary driver of human evolution. This was confirmed in a new study by researchers at Stanford University applying big-data analysis to reveal the full extent of viruses' impact on the evolution of humans. According to Dr. David Enard, who was associated with the study, " .. during a pandemic or an epidemic at some point in evolution, the population that is targeted by the virus either adapts or goes extinct..... viruses have been shown to have such a strong impact on adaptation."⁹ The human body naturally adapts to virus mutations by building defensive mechanisms including immunity. According to professor Dmitri Petrov, associate chair of the biology department at Stanford, "We're all interested in how it is that we and other organisms have evolved, and in the pressures that made us what we are". "The discovery that this constant battle with viruses has shaped us in every aspect—not just a few proteins that fight infections, but everything—is profound. All organisms have been living with viruses for billions of years; this work shows that those interactions have affected every part of the cell."¹⁰

B. The perpetual inter-twining relationship between the virus and Man

As previously stated for the virus to become contagious it needs to infiltrate itself into a living host like a parasite, to regenerate and spread infection within the host first, and then to transmit and spread the infection to other hosts in the surrounding environment. This cycle of interactions between the virus and the host (animal and plant life) from the very beginning of the emergence and development of the life forms is linked to and runs parallel with, the evolution, and emergence of varied living organisms and species on the planet with which it continually interacts, and become intertwined. Eventually, during timelines of evolution, the virus and host (animals and plants) become interdependent, on each other. The virus can and continually does attack most life forms on our planet, from bacteria to plants to animals.

Man, namely homo sapiens sapiens, which is also a carbon-based biological organism¹¹ (remember Star Trek?) is susceptible to infectious connectivity with viruses. It has been so for hundreds of millions of years and will most likely continue even after Man is no longer on Earth if there are still other living species still remaining. As long as there remain living forms on the planet, the virus will continue to exist for billions of years until the end of Earth. Viruses are microscopic particles that exist almost everywhere on Earth, and are biological entities that can only thrive and multiply through a host, which is a living organism such as homo sapiens sapiens, an animal, a plant, or essentially any other living organism. Some viruses cause disease, such as COVID-19. A virus'

⁹ Viruses Are a Primary Driver of Human Evolution. GEN. July 14, 2016
<https://www.genengnews.com/news/viruses-are-a-primary-driver-of-human-evolution/#:~:text=Now%2C%20a%20new%20study%20by,have%20been%20driven%20by%20viruses>

¹⁰ Ditto

¹¹ About 18% mass composition of the human body is composed of carbon.

objective is to reproduce and spread to new hosts or cells. MedicalNewsToday a highly acknowledged source of reliable health information and medical research informs that viruses can generally be transmitted to humans in many ways as follows,¹²

Touch: A person's hands and/or fingers contaminated with the virus, can transmit the infection into the body by touching the nose, mouth, or eyes. This is how Covid-19 is transmitted into the body (host for the virus). Some viruses can remain active on an object for several hours or even days. If a person with the virus on their hands touches an item, the next person picking up that same object becomes infected by the virus by just touching it. That is why the recommendation is to frequently sanitize hands, and fingers, when touching anything, in public places such as stores, and supermarkets.

Respiratory droplets: Viruses can be present in respiratory droplets, which are produced when people talk, cough, or sneeze. This is the most common and widespread method of transmitting Covid-19. This is why the wearing of protective masks in public is mandatory in certain crowded public places or on mass transit systems.

Direct contact: Some viruses may spread through direct contact with a person that has the virus of the type that can spread via direct contact with the skin or even can spread through saliva, such as while kissing.

Bodily fluids: For Example, HIV, can pass from one person to another through the exchange of semen or blood.

Contaminated food or water: Some viruses can enter the body through contaminated food or water.

Insects: Mosquitoes carry the virus from one person to another.

In other words, as humans, we are exposed to potential virus contact, contamination, and infections 360 degrees, and 24/7.

Viruses can undergo several genetic changes over time. Changes can be insignificant, a cause for concern, or even life-threatening significant. Some can result in making the virus more transmissible, and others can increase the seriousness of the illness or even greater mortality risk. Since the outbreak, the SARS-Cov-2, later to be called Covid-19, had undergone several changes in the past three years from the initial alpha, through beta, gamma, delta, and now omicron. The Omicron is now undergoing mutation into some other subspecies.

Currently, we are experiencing the coronavirus, which is referred to as Covid-19. However, this is not the only virus infection currently spreading globally, either now, or in the past.

Other viral diseases impacting Man include smallpox, the common cold, different types of flu, measles, mumps, rubella, chickenpox, hepatitis, herpes simplex virus (HSV), polio, rabies, Ebola,

¹² MedicalNewsToday

<https://www.medicalnewstoday.com/articles/158179#when-viruses-change>

hantavirus, HIV, SARS, dengue fever, and Zika.¹³ These viruses come and go, and return again. In May 2022 monkeypox re-emerged in Europe.¹⁴ By December 2022 at least 82,594 monkeypox infections have been reported from 108 countries.¹⁵

C. The recorded worse pandemics in Earth's history

Going back some 2,000 years into Earth's history, the 10 worst pandemics experienced by Mankind from viruses and other infections are summarized as follows.¹⁶

Antonine Plague (165 AD-180 AD) (smallpox/measles): The pandemic originated in the Roman Empire, infected all the Roman cities in Italy, and Greece, and eventually, spread to Spain, Egypt, North Africa, and Asia. Deaths were estimated at around 5 million. While this number seems comparable to the current mortality level of the Covid-19 pandemic at 6.2 million (as of April 22, 2022), it should be noted that the global population at that time was estimated at 185 million, compared to the current day estimated global population of 7.9 billion!

Plague of Justinian (541-542) (bubonic plague): Total deaths are estimated at 25 million, said to have killed half of Europe.

The Black Death (1346-1353) (bubonic plague): Believed to have originated in Asia, from fleas living with rats, and spreading through Africa and Europe. Estimated deaths ranged from 75 to 200 million.

Third Cholera Pandemic (1852–1860) (cholera): Believed to have originated in India, and spread through Asia, Europe, North America, and Africa. Total estimated deaths at 12 million.

FLU Pandemic (1889-1890) (influenza): Originally referred to as the “Asian flu” or the “Russian flu” it was traced to its origins in Turkestan, Canada, and Greenland before spreading globally. Deaths were estimated at 1 million.

Sixth Cholera Pandemic (1910-1911) (cholera): As with the previous 5 outbreaks of cholera, this sixth outbreak also originated in India before spreading to the Middle East, North Africa, Eastern Europe, and Russia. Deaths were estimated just below 1 million of which over 800,000 were in India.

The Spanish FLU Pandemic (1918 - 1920) (influenza): The name Spanish Flu is considered a misnomer, since many believed that it could have originated in Britain, China, France, or the United States, where the first known case was reported at Camp Funston in Fort Riley, Kansas in 1918

¹³ <https://www.medicalnewstoday.com/articles/158179#viral-diseases>

¹⁴ The WHO. Monkeypox. Key facts. May 19, 2022

<https://www.who.int/news-room/fact-sheets/detail/monkeypox>

¹⁵ Reuters. December 12, 2022

<https://www.reuters.com/graphics/HEALTH-MONKEYPOX/xmpjomlqqvr/>

¹⁶ Outbreak: 10 of the worst pandemics in history. MPHonline.

<https://www.mphonline.org/worst-pandemics-in-history/?msckid=5fd7ea0bc1ff11ec97a21db9cea35d35>

(Google it). The only 'origin' from Spain was the announcement of its outbreak. This pandemic occurred at the end of the First World War (WWI) and killed an estimated 20 – 50 million people.

Asian FLU (1956-1958) (influenza): Originating in China, the pandemic spread to Singapore, Hong Kong, and the United States. An estimated 2 million people died.

The Hong Kong FLU (1968) (influenza): Originating in Hong Kong, the pandemic spread to Singapore, Vietnam, The Philippines, India, Australia, Europe, and the United States. An estimated 1 million died.

(The relevance of the Spanish Flu and the subsequent outbreaks of the Asian and Hong Kong Flu above could have, and should have, played a more meaningful and decisive role in guiding responses to containing the Covid-19 pandemic.)

HIV/AIDS (1981) (HIV/AIDS): Originating in Africa, in 1981 HIV/AIDS became a major global pandemic peaking during 2005 - 2012, eventually killing more than 36 million people.

Needless to say, the above major pandemics occurring during the past 2,000 years and spreading globally were mainly due to the lack of medical knowledge for treatments and medications. The first vaccine ever developed was for smallpox in 1796. Several pandemics became endemic when the occurring virus was matched by the body's defense mechanism including immunity.

As Man and the environment evolve and change, additional virus diseases will emerge accordingly, and also most likely that more infections will be added to the list than those being written-off. Based on the track record of the past several hundred million years, the virus is here to stay as a long-term resident of this planet. As long as there are lifeforms such as the animal kingdom (including homo sapiens sapiens), and the plant kingdom on this planet viruses will exist and continue to infect all life forms, from animals and plants to microorganisms, including bacteria and archaea.¹⁷ After surviving one of the greatest devastations on this planet 66 million years ago which destroyed the dinosaurs, the virus has demonstrated its resilience to survive and evolve.

For this research, the focus is on the coronavirus, since it is the root cause of the Covid-19 pandemic and a threat to Man. The coronavirus is a submicroscopic infectious agent, also referred to as an agent, germ, or pathogen which can produce disease and various associated illnesses and derivatives. The continual evolution, behavior, and impact of Man's existence on the planet (the community, the economy, and social well-being), has resulted in the proliferation of emerging new organisms and species. Concurrent with this development, the viruses continue to interact and co-exist with Man and his environment. During this process, the viruses continue their incessant mutation to maintain the inter-twined relationship "in almost every ecosystem on Earth and are the most numerous type of biological entity"¹⁸. According to Naveen Jandu, (School of Public Health & Health Studies,

¹⁷ Koonin EV, Senkevich TG, Dolja VV (September 2006). "The ancient Virus World and evolution of cells". *Biology Direct*. 1 (1): 29. doi:10.1186/1745-6150-1-29. PMC 1594570. PMID 16984643.

¹⁸ Lawrence CM, Menon S, Eilers BJ, Bothner B, Khayat R, Douglas T, Young MJ (May 2009). "Structural and functional studies of archaeal viruses". *The Journal of Biological Chemistry*. 284 (19): 12599–603. doi:10.1074/jbc.R800078200. PMC 2675988. PMID 19158076.

University of Waterloo), “there are more viruses on Earth than there are stars in the universe or cells in the human body”¹⁹. To be more numerically indicative, scientists have estimated that there are more than a quadrillion individual viruses, or an estimated 10 nonillion (10 to the 31st power) individual viruses exist on our planet—enough to assign one to every star in the universe 100 million times over²⁰. Mankind will never extinguish viruses on this planet, and most likely will never ‘outlive’ the virus either!

This is the environment and status of the relationship between the virus and homo sapiens sapiens. It can be said that the current Covid-19 pandemic is a continuation of this inter-twined relationship. In conclusion, there is no getting away from virus contamination or infection risk. The inter-twining relationship between the viruses on Man’s existence on this planet is perpetual.

The bottom line, Man and viruses co-exist on this planet, inseparable like the air we breathe. As the Covid-19 pandemic fades, it will be replaced, inevitable, sometime.....

¹⁹ Narveen Jandu, School of Public Health & Health Studies, University of Waterloo

The Conversation. May 12, 2020

<https://theconversation.com/human-activities-are-responsible-for-viruses-crossing-over-from-bats-and-causing-pandemics-like-coronavirus-134226>

²⁰ Katherine J. Wu. National Geographic April 15, 2020

<https://www.nationalgeographic.com/science/article/factors-allow-viruses-infect-humans-coronavirus>

THE OUTBREAK, FACT FINDINGS, AND ASSESSMENTS

Chapter 14

THE OUTBREAK, THE W.H.O. RESPONSE TIMELINE, AND THE DECLARATION OF THE GLOBAL COVID-19 PANDEMIC

A. The Outbreak of the Virus (coronavirus) in Wuhan City, China (December 2019)

The latest Coronavirus outbreak (2019) was first discovered at the Huanan Seafood Market, in Wuhan, the capital of Hubei province in central China. This was in the form of a cluster of pneumonia cases and was first reported to the local government on December 27, 2019, and later was officially reported by the Wuhan Municipal Health Commission on December 31, 2019. However, further investigation of records traced China's first confirmed SARS – CoV – 2 case going back to as early as November 17, 2019.¹ However, the reports regarding this case were only shared internally among the government's medical and administrative circles without making them known to the general public. Initial tests and analysis indicated that it was similar to an earlier outbreak from 2002 – to 2003 in the southern Chinese province of Guangdong, which was known as the SARS – CoV (severe acute respiratory syndrome coronavirus). This SARS – CoV lasted about 8 months from November 2002 to July 2003 and had spread to 29 countries, infecting 8,096 people and resulting in 774 deaths. Of those infected, about 87.5% were in China and Hong Kong, with the remaining 12.5% spreading worldwide, mainly in Taiwan, Canada, and Singapore. At that time, the Chinese government was widely criticized for delaying for more than two months before informing the international community of the outbreak through the World Health Organization (WHO) or even its citizens of this outbreak.

In this instance of the outbreak end of December 2019, China was more forthcoming by sharing information about the outbreak more quickly and comprehensively. The Chinese authorities allowed experts from the WHO China Country Office and WHO's Western Pacific Regional Office to undertake a brief visit to Wuhan during January 20-21, 2020. Consequently, this outbreak of December 2019 became initially referred to as the SARS – CoV-2 by the WHO.

B. The WHO timeline of initiatives and responses up to the declaration of the latest variant Omicron and a variant of concern (November 2021).

¹ South China Morning Post. 13 March 2020. Retrieved 23 March 2020.
Davidson, Helen (13 March 2020). "First Covid-19 case happened in November, China government records show—report". The Guardian. ISSN 0261-3077. Retrieved 15 March 2020.

Soon after the WHO designated the name SARS – CoV – 2 to this outbreak it later changed the coronavirus disease to Covid-19 to avoid confusion between the first and second SARS – CoV outbreak.

In the case of the outbreak of the SARS – CoV – 2 (2019), the Chinese government was more forthcoming in announcing the outbreak in a timely fashion as well as in sharing information in a comprehensive manner. The timeline of developments, responses, and initiatives by the WHO² during the first few months of the outbreak are summarized as follows (along with some pertinent and related additional information from other sources as indicated):

December 31, 2019: The Wuhan Municipal Health Commission issues “urgent notices” to city hospitals about cases of atypical pneumonia linked to the city’s Huanan Seafood wholesale market. These notices were discussed by Wuhan medical workers discussing cases in online chat groups. These “urgent notices” in Wuhan were picked up by the Program for Monitoring Emerging Diseases (ProMED - a program of the International Society for Infectious Diseases, and a U.S.-based open-source platform for early intelligence about infectious disease outbreaks), from a report in the *Yicai*, the largest financial media arm of China’s State-owned Shanghai Media Group. It described contents from the Wuhan Municipal Health Commission which were leaked online.³

WHO’s Country Office in the People’s Republic of China picked up a media statement by the Wuhan Municipal Health Commission from their website on cases of ‘viral pneumonia in Wuhan, People’s Republic of China.

The Country Office notified the International Health Regulations (IHR) focal point in the WHO Western Pacific Regional Office about the Wuhan Municipal Health Commission media statement of the cases and provided a translation of it.

WHO’s Epidemic Intelligence from Open Sources (EIOS) platform also picked up the report on ProMED about the same cluster of cases of “pneumonia of unknown cause”, in Wuhan.

It was through the ProMED that the WHO Headquarters in Geneva first learned about the outbreak in Wuhan, and prior to any official notification from any Chinese authority and requested the WHO China Country Office to officially request “verification of the event” from the Chinese government under Articles 9 and 10 of the International Health Regulations (IHR – 2005) protocol. China is a signatory to IHR (2005), which is a legally binding instrument of international law that aims for international collaboration “to prevent, protect against, control, and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks and that avoid unnecessary interference with international traffic and trade”. The IHR is the only international legal treaty with the

² <https://www.who.int/news/item/29-06-2020-covidtimeline>

³ COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

responsibility of empowering the World Health Organization (WHO) to act as the main global surveillance system.⁴ Article 9 provides for the WHO to "take into account reports from sources other than notifications or consultations" by State Parties, and then "attempt to obtain verification from the State Party in the WHO's territory the event is allegedly occurring", and Article 10 requires State Parties to respond to verification requests from the WHO within 24 hours.⁵

Several health authorities from around the world contacted the WHO seeking additional information.

January 1, 2020: The WHO China Country Office formally requested verification of the outbreak in Wuhan from the Chinese government. At the same time, the WHO headquarters activated its Incident Management Support Team (IMST), as part of its emergency response framework, which ensures coordination of activities and response across the three levels of the WHO organization: headquarters, regional headquarters, and country-level putting the organization on an emergency footing for dealing with the perceived potential outbreak.

January 2, 2020: The WHO Representative in China wrote to the National Health Commission, offering the WHO support and reiterating its previous request for further information and clarifications on the 'rumored' cluster of cases. The WHO also informed the Global Outbreak Alert and Response Network (GOARN) partners (major public health agencies, laboratories, sister UN agencies, international organizations, and NGOs) about the cluster of pneumonia cases in the People's Republic of China. GOARN was created in April 2000 to improve the coordination of international outbreak responses and to provide an operational framework to ensure that countries have rapid access to the most appropriate experts and resources for outbreak response.⁶

January 3, 2020: In response to the WHO request of January 1, 2020, Chinese officials provided information on the cluster of cases of 'viral pneumonia of unknown cause' identified in Wuhan to the WHO. At the same time, Director-General Gao Fu of the Chinese Center for Disease Control and Prevention (China CDC) informs his counterpart at the U.S. Centers for Disease Control and Prevention (U.S. CDC) Director Robert Redfield about a pneumonia outbreak in Wuhan.⁷

January 4, 2020: Based on information and clarifications received from the Chinese government the previous day, the WHO tweeted that there was a cluster of pneumonia cases in Wuhan, Hubei province, People's Republic of China. No deaths have been reported and an investigation to identify the cause was underway.

⁴ Youde, Jeremy (2010), Youde, Jeremy (ed.), "The International Health Regulations", Biopolitical Surveillance and Public Health in International Politics, New York: Palgrave

⁵ COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

⁶ <https://www.theWHO.int/csr/outbreaknetwork/goarnenglish.pdf>

⁷ COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

January 5, 2020: The WHO issued the first Disease Outbreak News on the new virus. This is a public, web-based platform for the publication of technical information addressed to the scientific and public health communities, as well as global media. The report contained information about the number of cases and their clinical status along with details about the Wuhan national authority's response measures. It included the WHO's risk assessment and advice on public health measures and surveillance of influenza and severe acute respiratory infections. The WHO also shared detailed information about a cluster of cases of pneumonia of unknown cause to all Member States through the IHR (2005) Event Information System. This included providing available information on cases and included the WHO's risk assessment and advice on public health measures to the Member States to take precautions to reduce the risk of acute respiratory infections,

January 6, 2020: In response to China's direct notification to the U.S.CDC (made on January 3, 2020) U.S. CDC Director Redfield and Secretary Alex M. Azar II, Department of Health and Human Services (HHS) offered to send U.S. CDC experts to China.⁸

January 9, 2020: On being informed by the Chinese authorities, the WHO reported that Chinese authorities have determined that the outbreak is caused by a novel coronavirus. Accordingly, the WHO convened the first of many teleconferences with global expert networks and initiated the Clinical Network.

January 10-12, 2020: The WHO published a comprehensive package of guidance documents for countries, covering topics related to the management of an outbreak of a new disease consisting of

- Infection prevention and control
- Laboratory testing
- The national capacities review tool
- Risk communication and community engagement
- Disease Commodity Package (v1)
- Disease Commodity Package (v2)
- Travel advice
- Clinical management
- Surveillance case definitions

January 10, 2020: A team made of The Shanghai Public Health Clinical Center & School of Public Health, in collaboration with the Central Hospital of Wuhan, Huazhong University of Science and Technology, the Wuhan Center for Disease Control and Prevention, the National Institute for Communicable Disease Control and Prevention, the Chinese Center for Disease Control, and the University of Sydney, Sydney, Australia lead by Prof. Yong-zhen Zhang, a Chinese virologist known

⁸ COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

for his work relating to the COVID-19 pandemic from the Fudan University in Shanghai, post the genetic sequence of the virus on an open-access platform, sharing it with the world.⁹

January 11, 2020: China authorities share the virus' genomic sequence with the WHO. The WHO tweeted that it had received the genetic sequences for the novel coronavirus from the People's Republic of China and expected these to soon be made publicly available. China CDC and two other Chinese teams subsequently also posted genetic sequences of the virus on an open-access platform.¹⁰

Chinese media reported the first death from the novel coronavirus.

January 13, 2020: The WHO convened the first teleconference with the diagnostics and laboratories global expert network. The WHO also announced that the Ministry of Public Health in Thailand reported a lab-confirmed novel coronavirus imported from Wuhan, China. This was the first recorded case of the novel coronavirus outside of China.

WHO published the first protocol for an RT-PCR assay by a WHO partner laboratory to diagnose the novel coronavirus.

January 14, 2020: The WHO held a press briefing during which it stated that based on initial findings by the Chinese authorities' experience with respiratory pathogens in Wuhan, the potential for human-to-human transmission in the 41 confirmed cases in the People's Republic of China existed: "it is certainly possible that there is limited human-to-human transmission". There were found to be mainly among family members none of whom were directly exposed to the Huanan Seafood Market. It was deduced that they were infected by those who were directly exposed to the Huanan Seafood Market. This was the first indication of the possibility of human-to-human transmission of the coronavirus. Dr. Maria Van Kerkhove the WHO's technical leader for the Covid-19 response made the announcement at the Press Briefing and also expressed the opinion that human-to-human transfer was, "no longer a unique conditional environment for infection transfer or spread". She added that this was not surprising given the experiences with SARS, MERS, and other respiratory pathogens¹¹ and indicated that this would create a real risk of leading to a possible wider outbreak. Dr. Maria is an American infectious disease epidemiologist, with a background in high threat pathogens, and specializing in emerging infectious diseases.

However, the WHO also tweeted that preliminary investigations by the Chinese authorities had found "no clear evidence of human-to-human transmission". In its risk assessment, WHO stated that additional investigation was "needed to ascertain the presence of human-to-human

⁹ This posting is communicated by Edward C. Holmes, University of Sydney on behalf of the consortium led by Professor Yong-Zhen Zhang, Fudan University, Shanghai.

¹⁰ COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

¹¹ <https://www.the-who.int/news-room/detail/08-04-2020-the-who-timeline---covid-19>

transmission, modes of transmission, common source of exposure and the presence of asymptomatic or mildly symptomatic cases that are undetected”.

January 15, 2020: The Japanese Ministry of Health, Labour, and Welfare informed the WHO of a confirmed second case outside of China (following Thailand) in a person who had returned to Japan after visiting Wuhan, China.

January 17, 2020: The WHO convened the first meeting of the analysis and modeling working group for the novel coronavirus.

January 19, 2020: The WHO Western Pacific Regional Office (WHO/WPRO) tweeted that, according to the latest information received and WHO analysis, there was evidence of limited human-to-human transmission.

January 20, 2020: China confirms additional cases of the coronavirus human-to-human transmission which was becoming increasingly evident among medical workers.

January 20 – 21, 2020: With cooperation from the Chinese authorities, the WHO conducted the first fact-finding mission to Wuhan which included meetings with local public health officials to learn about the Chinese response to the cluster of cases of the novel coronavirus.

January 21, 2020: The WHO tweeted that it was now very clear from the latest information received from China that there was “at least some human-to-human transmission”, confirming earlier deductions that infections among healthcare workers were rife as a result.

The United States confirmed its first case of the novel coronavirus being a person who had returned from Wuhan City, China. This was the first case in the WHO-designated region of the Americas (North and South America) after Asia.

January 22, 2020: The first WHO Fact-finding Mission to China issued an official statement on return confirming evidence of human-to-human transmissions in Wuhan which were supported by collected data, detailed epidemiological investigation, and the use of new test kits. However, the WHO indicated that further analysis of the epidemiological data would still be needed to determine the full extent of human-to-human transmission of the coronavirus.¹²

January 22 – 23, 2020: The WHO Director-General Dr. Tedros Adhanom Ghebreyesus convened an IHR Emergency Committee (EC) regarding the outbreak of novel coronavirus. The EC was comprised of 15 independent experts from around the world and was charged with advising the Director-General as to whether the outbreak constituted a ‘public health emergency of international concern’ (PHEIC). After deliberating for two days the EC members were equally divided as to whether the event constituted a PHEIC, as several members considered that there

¹² <https://www.the WHO.int/news-room/detail/08-04-2020-the WHO-timeline---covid-19>

was still not enough information. As there was a divergence of views, the EC did not advise the Director-General that the event constituted a PHEIC but said it was ready to be reconvened for further consideration within 10 days.

January 24, 2020: The first cases of the novel coronavirus were confirmed in France, making this the first confirmed incident in the WHO-designated European Region. These cases consisted of three people all of whom had traveled from Wuhan City, China.

January 25, 2020: The first coronavirus case in the Oceania region was declared by the Australian government.¹³ Oceania was part of the WHO-designated Western Pacific Region.

January 27-28, 2020: The Chinese government headed by President Xi Jinping received a top delegation from the WHO which was led by Director-General Dr. Tedros Adhanom Ghebreyesus in Beijing. This WHO delegation had the objectives to meet Chinese leaders and learn more about their responses to the SARS – CoV – 2, and to offer technical assistance for monitoring, control, and containment. During discussions with Chinese President Xi Jinping on January 28, 2020, the WHO Director-General discussed continuing the comprehensive collaboration on containment measures including the situation in Wuhan City, public health measures in other cities and provinces, conducting further studies on the severity and transmissibility of the virus, continuing to share data, and a request for China to share biological material with the WHO. It was agreed that an international team of leading scientists and experts would travel to China as soon as it was formed with the objectives to better understand the context of the epidemic, the overall Chinese response, and the exchange of information and experience.

January 29, 2020: The WHO Director-General Dr. Tedros Adhanom Ghebreyesus presented an update of his findings on the situation in China and her response to the outbreak of novel coronavirus to the Member States on his return to the WHO headquarters. Dr. Tedros Adhanom Ghebreyesus also decided to reconvene the Emergency Committee (EC) again on January 30, 2020, to reconsider whether the outbreak constituted a PHEIC. This decision was based on the “deeply concerning” increase in cases of human-to-human transmission occurring outside of China, and potentially leading to a much larger outbreak. The Director-General announced the agreement with President Xi Jinping for the WHO to form a team of international experts to visit China as soon as possible to work with the government on increasing the understanding of the outbreak, to guide global response efforts.

On the same day, the United Arab Emirates reported the first cases in the WHO-designated Eastern Mediterranean Region.

¹³ <https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/first-confirmed-case-of-novel-coronavirus-in-australia>

January 29, 2020: The WHO issued an advisory on the use of masks in the community, during home care, and in health care settings in the context of the novel coronavirus outbreak

January 30, 2020: The reconvened WHO Emergency Committee (EC) reached a consensus and advised the Director-General that the outbreak constituted a Public Health Emergency of International Concern (PHEIC). The Director-General accepted the recommendation and declared the novel coronavirus outbreak a PHEIC. At that time there were 98 cases and no deaths in the 18 countries outside of China. Four countries (Germany, Japan, the United States of America, and Viet Nam) had 8 confirmed cases of human-to-human transmissions.

January 31, 2020: the World Health Organization Director-General Dr. Tedros Adhanom Ghebreyesus declared the coronavirus outbreak a Public Health Emergency of International Concern.¹⁴

February 2, 2020: The first dispatch of RT-PCR lab diagnostic kits was shipped to the WHO Regional Offices.

February 3, 2020: The WHO finalized its Strategic Preparedness and Response Plan (SPRP), centered on improving the capacity to detect, prepare and respond to the outbreak. The SPRP translated what had been learned about the virus at that stage into strategic action to guide the development of national and regional operational plans. Its content is structured around how to rapidly establish international coordination, scale-up country preparedness and response operations, and accelerate research and innovation.

February 4, 2020: The WHO Director-General asked the UN Secretary-General to activate the UN crisis management policy, which held its first meeting on February 11, 2020.

During the 146th Executive Board, the WHO delivered a technical briefing on the novel coronavirus during which the Director-General urged Member States to prepare themselves with immediate action stating that “... While 99% of cases are in China, in the rest of the world we only have 176 cases”.

(Note: it would appear that this advice was not effectively actioned since within the same year, China's cases had reduced to 1% while the rest of the world ended up with 99% of cases.)

During the said Executive Board briefing the Secretariat also revealed that “it is possible that there may be individuals who are asymptomatic that shed virus, but we need more detailed studies around this to determine how often that is happening and if this is leading to secondary transmission”.

¹⁴ "Coronavirus declared global health emergency". BBC News. 31 January 2020. Archived from the original on 30 January 2020. Retrieved 2 February 2020.

<https://www.who.int/news/item/27-04-2020-who-timeline---covid-19>

(Note: It would be later revealed that asymptomatic cases would be a key factor in the spread of the coronavirus.)

February 5, 2020: The WHO's Headquarters began holding daily media briefings on the novel coronavirus, and it was the first occasion that the WHO's Director-General or Executive Director of the WHO Health Emergencies Programme gave these daily briefings directly.

February 9, 2020: During the WHO delegation's visit to China at the end of January between the WHO's Director-General and President Xi Jinping it was agreed to formulate and launch the WHO-China Joint Mission to China. Accordingly, the WHO deployed an advanced team to spend five days in intensive preparation for the Mission, working with China's National Health Commission, the Chinese Center for Disease Control and Prevention, local partners and related entities, and the WHO China Country Office.

February 11, 2020: The WHO changed the name for the new coronavirus epidemic from SARS – CoV – 2 to be named COVID-19. This follows the best practices, whereby the name of the disease would avoid any indication of stigma and therefore did not refer to a geographical location, an animal, an individual, or a group of people (i.e. it would not be called the Wuhan or Chinese Virus epidemic, like the Spanish Flu, or the Hong Kong Flu, as in the past.)

WHO's headquarters began holding daily media briefings on the novel coronavirus, the first time that WHO has held daily briefings by the Director-General or Executive Director of the WHO Health Emergencies Programme.

February 15, 2020: The WHO announced the confirmed first case of Covid-19 by Egypt's Health Ministry made on February 14, 2020.¹⁵ in the WHO designated African Region.

February 16 – 24, 2020: The previously agreed WHO – China Joint Mission of an international team of leading scientists to China was formed and dispatched. This international team consisted of 25 experts from Germany, Japan, the Republic of Korea, Nigeria, the Russian Federation, Singapore, the United States of America, the host nation the People's Republic of China, and the WHO. The Joint Mission was led by a Senior Advisor to the WHO Director-General, Dr. Bruce Aylward, and Dr. Wannian Liang, Head of the Expert Panel for the COVID-19 Response at the China National Health Commission (NHC) as co-lead.

Key objectives of the Mission were to assess the seriousness of Covid-19¹⁶, its transmission dynamics, and the nature and impact of China's control measures. Mission teams made field visits

¹⁵ THE WHO. Coronavirus disease 2019 (COVID-19). Situation Report #26. 15, February 2020

¹⁶ Although not specifically highlighted in this context, one would assume this would include the infectiousness and infectivity of the Covid-19. Infectiousness measures the level of ease with which the coronavirus is transmitted. Infectivity measures the ability of the coronavirus to enter, survive and multiply. In hindsight, perhaps the frequency, speed and durability of "mutation" would also be added.

to Beijing, Guangdong, Sichuan, and Wuhan where they held discussions and interviewed local health officials, scientists, and health workers in the various health facilities.

February 24, 2020: The Team Co-Leaders of the WHO-China Joint Mission on COVID-19 held a press conference to report on the main findings of the mission. The Mission warned that "much of the global community is not yet ready, in mindset and materially, to implement the measures that have been employed to contain COVID-19 in China". The Mission stressed that "to reduce COVID-19 illnesses and deaths, near-term readiness planning must embrace the large-scale implementation of high-quality, non-pharmaceutical public health measures", such as case detection and isolation, contact tracing and monitoring/quarantining, and community engagement.

The Mission recommendations were divided into three tiers based on the level of infections. The highest response level was developed for the People's Republic of China, followed by a medium response level for countries with imported cases and/or outbreaks, with the remaining lowest response level for countries "not yet" infected with Covid-19. All response levels were directed to the appropriate government policies and strategies, and to the general public in terms of prevention and cure. Particular attention was directed at countries already with infected Covid-19 cases, either through imports or localized outbreaks due to human-to-human infections with the recommendation to "immediately activate the highest level of national Response Management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19". More details of the Joint WHO – China International Experts Mission are covered in more detail under a separate sub-heading below.

On March 11, 2020: After the coronavirus had been discovered in 113 countries outside of China and with the real threat of continued widespread and growth, the WHO declared Covid-19 to be a global pandemic¹⁷. On the day of this declaration, total global infections had reached 118,319 confirmed cases and 4,291 deaths. Of this figure, 37,364 confirmed cases, or 31.5%, and 1,130 deaths or 26% were outside of China. By this time, all of the WHO-designated six regions had confirmed cases of the Covid-19 pandemic.

March 23, 2020: WHO and FIFA (Federation of International Football Associations) joined forces to launch the 'Pass the message to kick out coronavirus' awareness campaign, advocating people around the world to protect their health, through hand washing, coughing etiquette, not touching one's face, maintaining physical distance and staying home if feeling unwell. Lionel Messi (Argentina, FIFA World Cup Champion 2022), and Carli Lloyd (USA) headline a list of 28 international soccer stars from all five regions in the campaign to fight the coronavirus which was issued in 13 languages.

The list of 28 international soccer stars in the campaign include¹⁸

¹⁷ <https://www.the-who.int/director-general/speeches/detail/the-who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

¹⁸ Meredith Cash. INSIDER. March 24, 2020.

<https://www.insider.com/lionel-messi-carli-lloyd-fifa-who-coronavirus-campaign-2020-3>

- Argentina: Lionel Messi, Juan Sebastián Verón.
- Brazil: Alisson Becker,
- Cameroon: Samuel Eto'o, USA)
- China: Han Duan, Sun Wen.
- Colombia: Radamel Falcao,
- Egypt: "Mido",
- England: Gary Lineker, Michael Owen,
- France: Youri Djorkaeff, Laura Georges,
- Germany: Miroslav Klose, Philipp Lahm, Céla Šašić,
- Italy: Gianluigi Buffon,
- India: Sunil Chhetri,
- Ivory Coast: Yaya Touré,
- Japan: Asako Takakura ,
- South Korea: Park Ji-sung,
- Mexico: Jared Borgetti,
- Russia: Valeri Karpin,
- Kingdom of Saudi: Sami Al Jaber,
- Spain: Iker Casillas, Carles Puyol, Xavi Hernández
- Turkey: Emre Belözoğlu,
- USA: Carli Lloyd ,

March 26, 2020: WHO's Director-General addressed the Extraordinary G20 Summit on COVID-19, which was chaired by H.M. King Salman of Saudi Arabia, calling on G20 leaders to unite and fight, against COVID-19.¹⁹

April 2, 2020: WHO reported on evidence of transmission from symptomatic, asymptomatic, and pre-symptomatic people infected with COVID-19. Notably, that transmission from a pre-symptomatic case can occur before the onset of symptoms.²⁰

April 6, 2020: WHO issued an advisory on the use of masks in the context of COVID-19: interim guidance. This focused on medical masks being reserved for healthcare workers as a priority. For the general public, WHO felt that the use of medical masks in the community may create a false sense of security, leading to neglect of other essential measures, such as hand hygiene practices and physical distancing, and may lead to touching the face under the masks and under the eyes. At the time the WHO felt that there was currently no evidence that wearing a mask by healthy persons in the wider community setting, including universal community masking, can prevent them from infection with respiratory viruses, including COVID-19.²¹

¹⁹ Timeline of WHO's Response to COVID-19 - PAHO/WHO | Pan American Health Organization

²⁰ <https://www.who.int/news/item/29-06-2020-covidtimeline>

²¹ <https://apps.who.int/iris/handle/10665/331693>. License: CC BY-NC-SA 3.0 IGO

April 2020: In an initiative that began in April 2020, the WHO jointly with the GAVI vaccine alliance, the Coalition for Epidemic Preparedness Innovations (CEPI), and UNICEF as key delivery partners formed the COVID-19 Vaccines Global Access, (COVAX), is a worldwide cooperation aimed at equitable access to COVID-19 vaccines for people in all countries, especially the low-to-middle-income countries.²² Member nations were donors, sponsors, or beneficiaries. By October 19, 2020, 184 countries had joined COVAX.²³ World Health Organization.²⁴ COVAX began distributing vaccines in February 2021 and by July 6, 2021, COVAX had delivered 100 million doses.²⁵ On January 15, 2022, a shipment of 1.1 million COVID-19 vaccines was sent to Rwanda which included the billionth dose supplied via COVAX.²⁶

June 6, 2020: WHO revised its advice regarding wearing masks stating clearly for the first time that masks be worn by the general public in public where social distancing is not possible to help stop the spread of coronavirus.²⁷

(Note: this announcement was made almost 3 months after declaring Covid-19 a global pandemic.)

December 31, 2020: The Pfizer/BioNTech Comirnaty COVID-19 mRNA became the first vaccine to receive the emergency use authorization (EUA) validation by WHO. This was subsequently followed by other WHO-approved EUA vaccines, as follows,²⁸

February 15, 2021: Two AstraZeneca/Oxford COVID-19 vaccines, produced by AstraZeneca-SKBio (Republic of Korea) and the Serum Institute of India

March 12, 2021: Janssen (Johnson & Johnson) COVID-19 vaccine Ad26.COV2.S

April 30, 2021: Moderna Biotech COVID-19 mRNA Vaccine (nucleoside modified),

May 7, 2021: Sinopharm vaccine from Beijing Bio-Institute of Biological Products Co Ltd,

June 1, 2021: Sinovac-CoronaVac COVID-19 vaccine by Sinovac Biotech,

January 5, 2021: Following Pfizer/BioNTech's approval as an EUA-approved vaccine, WHO's Strategic Advisory Group of Experts on Immunization (SAGE) met to review its vaccine data and to formulate the policy for recommendations on how best to use it.

²² "COVAX explained". gavi.org. GAVI. Retrieved 25 February 2021.

<https://www.gavi.org/vaccineswork/covax-explained>

²³ <https://www.who.int/news/item/15-07-2020-more-than-150-countries-engaged-in-covid-19-vaccine-global-access-facility>

²⁴ "More than 150 countries engaged in COVID-19 vaccine global access facility". Retrieved 3 February 2021.

²⁵ @gavi (6 July 2021). "100 million doses delivered" (Tweet) – via Twitter.

²⁶ <https://www.who.int/news/item/16-01-2022-covax-delivers-its-1-billionth-covid-19-vaccine-dose>

²⁷ <https://www.bbc.com/news/health-52945210>

²⁸ <https://www.who.int/news/item/01-06-2021-who-validates-sinovac-covid-19-vaccine-for-emergency-use-and-issues-interim-policy-recommendations>

February 2021: The COVID-19 Vaccines Global Access (COVAX) began distributing vaccines in February 2021 and by July 6, 2021, COVAX had delivered 100 million doses. On January 15, 2022, a shipment of 1.1 million COVID-19 vaccines was sent to Rwanda which included the billionth dose supplied via COVAX.

COVAX is a worldwide cooperation aimed at equitable access to COVID-19 vaccines for people in all countries, especially low-to-middle-income countries.²⁹ COVAX is an initiative that began in April 2020, by WHO jointly with the GAVI vaccine alliance, the Coalition for Epidemic Preparedness Innovations (CEPI), and UNICEF as a key delivery partner. Member nations are donors, sponsors, and beneficiaries. By October 19, 2020, 184 countries had joined COVAX.³⁰

November 26, 2021: On the advice of its Technical Advisory Group on Virus Evolution (TAG-VE), WHO designated the Covid-19 variant B.1.1.529 as Omicron, as well as a variant of concern (VOC). This decision was based on the evidence presented to the TAG-VE that Omicron has several mutations that may have an impact on how it behaves, for example, on how easily it spreads or the severity of illness it causes.³¹

October 27, 2022: As the Omicron continues to be the dominant variant globally, the WHO continues to track the numerous mutations of the Omicron, including the latest sub-lineages BQ.1 and XBB. The WHO warns all member nations to be vigilant and continue to monitor and report sequences, including comparative analyses of the different Omicron sub-lineages³².

²⁹ "COVAX explained". gavi.org. GAVI. Retrieved 25 February 2021.
<https://www.gavi.org/vaccineswork/covax-explained>

³⁰ <https://www.who.int/news/item/15-07-2020-more-than-150-countries-engaged-in-covid-19-vaccine-global-access-facility>

³¹ <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline#!>

³² WHO News. TAG-VE statement on Omicron sub-lineages BQ.1 and XBB.
October 27, 2022

<https://www.who.int/news/item/27-10-2022-tag-ve-statement-on-omicron-sublineages-bq.1-and-xbb>

THE OUTBREAK, FACT FINDINGS, AND ASSESSMENTS

Chapter 15

THE JOINT W.H.O. - CHINA FACT FINDING MISSION TO WUHAN CITY, CHINA (2020)¹

The Joint Mission's findings, assessments, and recommendations are based on information, data, interviews, and observations of laboratory technicians, hospital medical teams, and field health workers while in Wuhan and other districts and provinces in China. These are described and highlighted as follows, along with some 'lessons learned' from China's front-line medical team experiences and feedback. As of 20 February 2020, China had reported a cumulative total of 75,465 COVID-19 cases. These Reported cases were based on the National Reporting System (NRS) between the 6 National and Provincial Health Commissions. The NRS issues daily reports of newly recorded confirmed cases, deaths, suspected cases, and contacts. The Joint WHO – China Mission's findings were based on the information and data references drawn from 55,924 laboratory-confirmed cases and , 2,114 deaths reported in China as of 20 February 2020, which was mid-way in the timeframe of the Joint Mission period in China. The Joint WHO – China Mission's scope of observation included on-site visits to Wuhan City (Hubei province), Shenzhen and Guangzhou cities (Guangdong province), Chengdu city (Sichuan province), and Beijing. Key issues from the Joint WHO – China Mission Report are highlighted and summarized below. It should be noted that being an official Joint WHO – China Mission, these assessments, findings, and recommendations reflect both WHO and China authorities, contributions, along with other members of the multinational team of experts.

These Joint Mission's findings and subsequent recommendations would form the basic 'roadmap' for the defense against the growth and expansion of the coronavirus in the event that it expands globally. They then become the basis for the design and advocacy of advisories and recommendations to world governments on the containment of the coronavirus.

A. The multinational group of experts and mission objectives

The Joint WHO – China Mission consisted of 25 national and international experts from China, Germany, Japan, Korea, Nigeria, Russia, Singapore, the United States of America, and the World Health Organization (WHO). The Joint Mission was headed by Dr. Bruce Aylward of WHO (Senior Advisor to the Director-General, World Health Organization, Geneva, Switzerland) and Dr. Wannian Liang as the counterpart from the People's Republic of China (Head of the Expert Panel, National

¹ <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf?msclkid=85bd1b86c2ed11ecb24b4cf7e7687b45>

Health Commission). The Joint Mission was undertaken over a 9 – day period during February 16 – 24, 2020.

The Joint WHO – China Mission key objectives were as follows (extracts):

- To enhance understanding of the evolving COVID-19 outbreak in China and the nature and impact of ongoing containment measures;
- To share knowledge on COVID-19 response and preparedness measures being implemented in countries affected by or at risk of importation of COVID-19;
- To generate recommendations for adjusting COVID-19 containment and response measures in China and internationally; and
- To establish priorities for a collaborative program of work, research and development to address critical gaps in knowledge and response and readiness tools and activities.

To achieve its goals, the Joint Mission gave particular focus to addressing key questions related to the natural history and severity of COVID-19, the transmission dynamics of the COVID-19 virus in different settings, and the impact of ongoing response measures in areas of high (community level), moderate (clusters), and low (sporadic cases or no cases) transmission

B. Key mission findings, assessments, and recommendations.

Findings

This section highlights the three most important findings along with other findings relative to the development of the coronavirus in the Covid-19 pandemic as follows:

Routes of transmission

- Based on reports received the coronavirus is considered to be transmitted via droplets and fomites during close “unprotected” contact between the infected person and the general public. The Mission did not receive any report nor was given evidence indicating that transmission spread could include airborne virus and therefore did not consider this to be a significant transmission threat.
- The success of the Chinese authorities in launching the timely preventive measures of containment based on non-pharmaceutical measures was the most effective response to

counter-act the routes of transmission. These were based on establishing and maintaining a 'social distancing environment' and included the wearing of masks in public or in gatherings, and frequent washing or sanitizing of hands after touching anything or anybody.

- Transmission of the coronavirus in closed settings has been reported in prisons (Hubei, Shandong, and Zhejiang, China), hospitals, and long-term living facilities. The close proximity and regular frequent contact among people in these settings coupled with the potential for environmental contamination were important factors, which could amplify and facilitate the transmission of the coronavirus.²

Household Transmission (Human-to-human)

- The Joint Mission received detailed information and evidence of human-to-human transmission of the Covid-19 virus from the investigation of clusters in a number of provinces which also included some household transmission studies. Among 344 clusters involving 1308 cases (about 71% out of a total of 1836 cases reported) in Guangdong Province and Sichuan Province, over three-quarters of the clusters (78%-85%) have occurred in families. Household transmission studies were underway, but preliminary studies ongoing in Guangdong estimate the secondary attack rate in households ranges from 3-10%.
- A 'cordon sanitaire' was established and imposed on January 23, 2020, by the Chinese authorities around Wuhan and neighboring municipalities has effectively prevented further exportation of infected individuals to the rest of the country (for a period).
- However, given Wuhan's transport hub status and population movement during the Chinese New Year (Chunyun), transmission beyond Wuhan City and the Hubei province was inevitable resulting in infected individuals quickly and expansively spreading the coronavirus throughout China. Infection clusters were particularly concentrated in cities with the highest volume of traffic with Wuhan leading to generating limited human-to-human transmission chains at their destinations. The majority of infections spread have occurred in households.
- In addition, investigations among the over 40,000 healthcare workers in China indicated that the exposure for most was reported to have been traced back to the household environment. Therefore, many transmissions of Covid-19 to healthcare workers may have been through infection within the household rather than in a healthcare setting.
- The Report also noted that individuals with the highest risk of severe illness and death resulting from infection include the elderly aged over 60 years and those with underlying conditions such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease, and cancer. The highest risk would likely be those with both factors.

² <https://www.the WHO.int/news-room/detail/08-04-2020-the WHO-timeline---covid-19>

- The Report also noted that in addition to the health care settings, transmissions were recorded in prisons (Hubei, Shandong, and Zhejiang), and other closed settings such as long-term living facilities. “The close proximity and contact among people in these settings and the potential for environmental contamination are important factors, which could amplify transmission. Transmission in these settings warrants further study.”

In this regard, the Joint WHO – China Mission Report described the Chinese government’s quick and dramatic response to contain and disrupt the human-to-human interaction chain such as the “cordon sanitaire” around Wuhan and neighboring municipalities imposed in January 2020 as having effectively prevented further exportation of infected individuals to the rest of the country.

Asymptomatic Cases

Asymptomatic infection (infection without display of symptoms) has been reported by China’s National Infectious Disease Information System (IDIS), since early January 2020 in Wuhan, Hubei (outside of Wuhan), China (outside Hubei). However, the majority of the relatively rare cases which appeared to be asymptomatic on the date of identification/report went on to develop the symptoms of the disease later. People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever, on an average of about 5-6 days after infection (mean incubation period 5-6 days, range 1-14 days). The proportion of truly asymptomatic infections is unclear but appears to be relatively rare and does not appear to be a major driver of transmission.

Other noteworthy findings include

- COVID-19 is neither like the original SARS which originated in China during 2002 – 2003, nor it is specifically influenza. It is a coronavirus with its own characteristics. Even with limited information at the time, but based on the already identified and recognized differences the Joint WHO – China Mission emphasized the need for rigorously applying non-pharmaceutical oriented public health measures to interrupt chains of human-to-human transmission”. This was proven and evident in China as witnessed in the various provinces inspected by the mission teams and provides vital lessons learned for sharing with the global response.
- Taking note of the Chinese government’s response the Joint WHO – China Mission noted that to be successful and effective in establishing and maintaining containment of the coronavirus would necessitate “an unusual and unprecedented speed of decision-making by top leaders, operational thoroughness by public health systems, and engagement of society.”

C. The Joint WHO – China mission assessments

Assessments by the Joint WHO – China Mission are based on the practical and reality-based policies, strategies, and rolled-out responses of the Chinese government and relative authorities. From these

actions and initiatives, important and significant ‘lessons learned’ emerge for sharing in the event of the global spread of Covid-19.

The Chinese initiatives and responses

Four key actions and responses by China’s leadership are highlighted as follows.

1. In the view of the Joint Mission, given the relatively unknown virus, China had initiated and implemented the most ambitious, aggressive as well as a flexible disease containment effort. The strategy of the containment effort was a unified national approach that focused on universal temperature monitoring, masking, and hand washing or sanitization which directly addresses the infection transferrable element of the outbreak.
2. The rapid response which included the ‘cordon sanitaire’ of actual and potential high-risk infection areas underscored China’s ability to achieve exceptional coverage and control in the execution of effective containment measures. The high level of effectiveness has been possible due to the deep commitment of the Chinese government, and people in collective action in the face of this outbreak and threat. This was evident at a community level which demonstrated the remarkable solidarity of provinces and cities in support of the most vulnerable populations and communities resulting from the outbreak. Governors and Mayors from other cities and provinces, despite their own outbreaks, contributed thousands of healthcare workers as well as shared their vital PPE supplies to Wuhan City and the Hubei province. and Wuhan city.
3. China’s quick and aggressive approach (quick and comprehensive lockdowns) to contain the rapid spread of this new respiratory pathogen has positively “impacted the course of a rapidly escalating and deadly epidemic”. An example of the rapid containment impact was demonstrated during the Joint Mission period. On the first day of the advance team’s work there were 2478 newly confirmed cases of COVID-19 reported in China. Two weeks later, on the final day of this Mission, China reported that newly confirmed cases dropped to only 409 cases. This decline in COVID-19 cases was also evidenced across China.
4. As a result of the foregoing actions and responses, and concurrent with efforts to continually contain the Covid-19 transmission, China is already able to initiate bringing back her society to a level of normalcy including reopening schools and rebooting her economy. This recovery will be further enhanced and structured as more information and science-based solutions emerge to reduce the risk of new clusters and transmissions.

Lessons learned for sharing with the Global Response

Based on the Chinese initiatives and lessons learned from proven effective results in China, the Joint WHO – China Mission made the following assessment for planning the design of the Global response.

First, it is recognized that COVID-19 is not SARS and it is not influenza. For example, compared to influenza the transmission in children appears to be limited, and the clinical picture differs from SARS.

It is a new virus with its own characteristics which is unique among human coronaviruses. It is highly contagious and capable of spreading quickly, and “causing enormous health, economic and societal disruption in any setting.” It must be assumed that the global population is susceptible to this virus.

Based on China’s proven successes albeit with limited data, there is apparent efficacy of virus containment through “rigorously applying the non-pharmaceutical, public health measures to interrupt chains of human-to-human transmission”. This non-pharmaceutical initiative has been applied in multiple settings throughout China with registered successes in containing the number of new cases in Wuhan City and Hubei province from the time of the initial outbreak, and subsequently in other provinces. Transmission containment has been effective, especially among family clusters which seem to be the center of the human-to-human transmission of the virus. The lessons learned provide meaningful initial guidelines for establishing the global response.

However, The Joint WHO – China Mission acknowledges that the global community may not share China’s strategy and determination approach (disciplinary and authoritarian ?), nor have the necessary material resources (masks, sanitization gels, temperature monitoring devices, PPE, etc.), to implement these non-pharmaceutical measures. Also, such an aggressive approach would require an “exceptionally high degree of population understanding and acceptance of these measures.” In the case of China, achieving such a high level of effectiveness requires ” an unusual and unprecedented speed of decision-making by top leaders, operational thoroughness by public health systems, and engagement of society.” Nevertheless, under current circumstances, these are the only proven measures to interrupt or minimize the human-to-human transmission of the coronavirus.

D. Key recommendations

The Recommendations at the end of the Joint WHO – China Mission were comprehensive and divided into five categories based on infection status. Four of the categories (a. – e.) were addressed to governments with guidelines on policies, strategies, and action plans for pre- or post-infection status. Only one category, (e) was addressed to the general public with regard to delivering guidelines and recommendations on appropriate behavioral adjustments and responses to the pandemic crisis.

a) China (also representing nations that were already infected with the coronavirus)

1. Maintain an appropriate level of emergency management protocols, depending on the assessed risk in each area and recognizing the real risk of new cases and clusters of COVID-19 as economic activity resumes, movement restrictions are lifted, and schools reopen;
2. Carefully monitor the phased lifting of the current restrictions on movement and public gatherings, beginning with the return of workers and migrant labor, followed by the eventual reopening of schools and lifting of other measures;
3. Further strengthen the readiness of emergency management mechanisms, public health institutions (e.g. CDCs), medical facilities, and community engagement mechanisms to ensure

sustained capacity to immediately launch containment activities in response to any resurgence in cases;

4. Prioritize research that rapidly informs response and risk management decisions, particularly household and health care facility studies, age-stratified seroepidemiologic surveys, and rigorous investigation of the animal-human interface; establish a centralized research program to fast-track the most promising rapid diagnostics and serologic assays, the testing of potential antivirals and vaccine candidates, and Chinese engagement in selected multi-country trials; and

5. As the country with the greatest knowledge on COVID-19, further enhance the systematic and real-time sharing of epidemiologic data, clinical results, and experience to inform the global response.

b) For countries with imported cases and/or outbreaks of COVID-19 (or countries with newly discovered emergence of coronavirus infections)

1. Immediately activate the highest level of national Response Management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19 with non-pharmaceutical public health measures;

2. Prioritize active, exhaustive case finding and immediate testing and isolation, painstaking contact tracing, and rigorous quarantine of close contacts;

3. Fully educate the general public on the seriousness of COVID-19 and their role in preventing its spread;

4. Immediately expand surveillance to detect COVID-19 transmission chains, by testing all patients with atypical pneumonia, conducting screening in some patients with upper respiratory illnesses and/or recent COVID-19 exposure, and adding testing for the COVID-19 virus to existing surveillance systems (e.g. systems for influenza-like-illness and SARI); and

5. Conduct multi-sector scenario planning and simulations for the deployment of even more stringent measures to interrupt transmission chains as needed (e.g. the suspension of large-scale gatherings and the closure of schools and workplaces).

c) For uninfected countries (or countries not yet infected but need to prepare for the inevitable occurrence of infections)

1. Prepare to immediately activate the highest level of emergency response mechanisms to trigger the all-of-government and all-of-society approach that is essential for early containment of a COVID-19 outbreak;

2. Rapidly test national preparedness plans in light of new knowledge on the effectiveness of non-pharmaceutical measures against COVID-19; incorporate rapid detection, largescale case isolation

and respiratory support capacities, and rigorous contact tracing and management in national COVID-19 readiness and response plans and capacities;

3. Immediately enhance surveillance for COVID-19 as rapid detection is crucial to containing spread; consider testing all patients with atypical pneumonia for the COVID-19 virus, and adding testing for the virus to existing influenza surveillance systems;

4. Begin now to enforce the rigorous application of infection prevention and control measures in all healthcare facilities, especially in emergency departments and outpatient clinics, as this is where COVID-19 will enter the health system; and

5. Rapidly assess the general population's understanding of COVID-19, adjust national health promotion materials and activities accordingly, and engage clinical champions to communicate with the media.

d) For the international community (representing all nations and underscoring the need for sharing of information, data, best practices, lessons learned, and knowledge)

1. Recognize that true solidarity and collaboration is essential between nations to tackle the common threat that COVID-19 represents and operationalize this principle;

2. Rapidly share information as required under the International Health Regulations (IHR) including detailed information about imported cases to facilitate contact tracing and inform containment measures that span countries;

3. Recognize the rapidly changing risk profile of COVID-19 affected countries and continually monitor outbreak trends and control capacities to reassess any 'additional health measures' that significantly interfere with international travel and trade.

e) For the public (representing the global population in preparedness for the 'new normal' way of life)

1. Recognize that COVID-19 is a new and concerning disease, but that outbreaks can be managed with the right response and that the vast majority of infected people will recover;

2. Begin now to adopt and rigorously practice the most important preventive measures for COVID-19 by frequent hand washing and always covering your mouth and nose when sneezing or coughing;

3. Continually update yourself on COVID-19 and its signs and symptoms (i.e. fever and dry cough), because the strategies and response activities will constantly improve as new information on this disease is accumulating every day; and

4. Be prepared to actively support a response to COVID-19 in a variety of ways, including the adoption of more stringent 'social distancing' practices and helping the high-risk elderly population.

The Joint Mission also made clear, that through the globalization of economies and social interactions, and inter-dependencies, this Covid-19 epidemic in China could not be completely isolated from the rest of the world. On the date of the Join Mission Report on February 24, 2020, the global figures were 79,331 infections and 2,618 deaths, of which 77,262 infections (97%) and 2,595 (99%) were Chinese. Globalization particularly in business, industry, trade, and services, such as tourism, would play a significant role, in the spread and transmission of the coronavirus worldwide. This would no longer be a China issue, but a global issue, and more specifically, each country would be confronted with a national crisis management issue.³

³ Coronavirus disease 2019 (COVID-19). Situation Report #71. March 31, 2020.

THE OUTBREAK, FACT FINDINGS, AND ASSESSMENTS

Chapter 16

OBSERVATIONS AND COMMENTS ON THE WHO – CHINA JOINT MISSION

These observations and comments are directed to the Joint WHO-China Mission Report. The make-up of international experts, the scope of work, goals, and objectives are already stated in the previous Chapter related to the Joint WHO-China Mission. Of the team of 25 experts drawn from 8 nations, there were no detailed descriptions of their area of expertise or even direct experience relevant to the SARS – Cov 2 outbreak. One assumes therefore that the only real proven practical real-time experiential knowledge would come from the Chinese members of this expert team. That being the case, after two months of real-time practical experience in dealings with, and containing the outbreak in Wuhan, the Chinese inputs and contributions to this Mission would be valuable, relevant, and most certainly more timely, as opposed to standard textbook historical reference and knowledge.

This Joint WHO – China Mission during the period February 16 to 24, 2020 followed an earlier preliminary fact-finding and verification mission to Wuhan city the previous month during January 20 – 21, 2020, and consisting of experts from the WHO-China and WHO-Western Pacific regional offices. The Joint WHO – China Mission focused mainly on Wuhan city being the origin of the outbreak, its province of Hubei, and the surrounding provinces. The Joint WHO – China Mission was able to observe, review, analyze, and receive feedback from the Chinese health team on the frontline of selected infected areas. The result was a very comprehensive report of findings, assessments, and recommendations for sharing with the global community. These were contained at the End of Mission Report presented in the form of a ‘White Paper or Guidelines’ and focused on giving guidelines for governments in drawing-up plans and strategies for executing preventive initiatives and measures to contain the coronavirus threat.

A. Transmission Dynamics of COVID-19

Although not specifically highlighted or underlined in the WHO Joint Mission Report as being the key critical factor in formulating preventive strategies for governments to manage and contain the coronavirus spread, there was no doubt that it was.

i. Pre-WHO – China Joint Mission of February 16 – 24, 2020

Very soon after the outbreak in Wuhan City, China, and following the almost immediate closure of the Huanan Seafood Wholesale Market in Wuhan it had become apparent to the Chinese frontline health workers that the continuing and subsequent spread of the coronavirus was through human-to-human transmission. After the closure of the Huanan Seafood Wholesale Market in Wuhan there were already indications of infection spreading among the family members of infected people, the health workers who were in contact with those infected, and the immediate community adjacent to and surrounding the Market. However, the Chinese government was not ready to announce the human-to-human transmission cases publicly at the time. It was not until about a month later, on January 14, 2020, that the WHO held a press briefing during which it stated that based on initial findings and reports from the Chinese authorities, the potential for human-to-human transmission was evident. Dr. Maria Van Kerkhove the WHO's technical leader for the Covid-19 response and a MERS specialist made an announcement and expressed the opinion that human-to-human transfer was, "no longer a unique conditional environment for infection transfer or spread". She stated that this was not surprising given the experiences with SARS, MERS, and other respiratory pathogens¹ and indicated that this would create a real risk of leading to a possible wider outbreak. Regarding the SAR-CoV-2 outbreak, Kerkove added, "Right from the start, from the first notification we received on December 31, given that this was a cluster of pneumonia — I'm a MERS specialist, so my background is in coronaviruses and influenza — so immediately thought, given that this is a respiratory pathogen, that, of course, there may be human-to-human transmission".²

A week following Kerkhove's announcement on behalf of the WHO, the Chinese National Health Commission (NHC) declared publicly on January 20, 2020 that it was now established beyond doubt that transmission of the coronavirus was through "human-to-human" connectivity and interaction. In an interview with CCTV Dr. Zhong Nanshan, a renowned scientist at NHC, and a member of the team that exposed the scale of the SARS outbreak, stated, "currently, it can be said it is affirmative that there is the phenomenon of human-to-human transmission".³ The human-to-human transmissions, became clearly evident when family members who had not been to the Wuhan fish market were infected by those who had. Also human-to-human transmissions of coronavirus infections were becoming increasingly evident among NHC's medical workers⁴. On the date of this

*COVID-19 and China: A Chronology of Events (December 2019-January 2020)

Congressional Research Service. May 12, 2020 – May 13, 2020. <https://www.everycrsreport.com/reports/R46354.html>

¹ <https://www.the-who.int/news-room/detail/08-04-2020-the-who-timeline---covid-19>

² K. Walker And Jeff Dunetz, WHO Official Immediately Suspected COVID-19 Spread Human-To-Human, But Spread Chinese Propaganda For WEEKS After. Apr 14, 2020
<https://liddblog.com/dr-maria-van-kerkhove/>

³ China confirms human-to-human transmission of new coronavirus

France 24. January 20, 2020

<https://www.france24.com/en/20200120-china-confirms-human-to-human-transmission-of-new-coronavirus>

⁴ <https://www.the-who.int/news-room/detail/08-04-2020-the-who-timeline---covid-19>

announcement, there were already 282 confirmed cases of SARS – Cov 2 reported in four countries namely China (278 cases), Thailand (2 cases), Japan (1 case), and the Republic of Korea (1 case).⁵



Zhong Nanshan (C), the renowned Chinese respiratory specialist, speaks during a press conference in Guangzhou, south China's Guangdong Province, on Jan. 21, 2020. The People's Government of Guangdong Province held a press briefing on Jan. 21 on the pneumonia outbreak and epidemic prevention and control measures. (Xinhua/Huang Guobao)

Information and data gathered during and following the outbreak in Wuhan along with findings, analysis, and assessments, were now shared with the international community through the WHO. Consequently, following this announcement and during January 20 – 21, 2020 experts from the WHO-China and WHO-Western Pacific regional offices visited Wuhan City on a preliminary fact-finding and verification mission. Following this WHO preliminary mission on January 22, 2020, the WHO issued a statement saying that there was evidence of human-to-human transmission in Wuhan but more investigation was needed to understand the full extent of transmission, i.e. whether solely through human-to-human transmission or also from bats.⁶ Although early cases based on Wuhan City indicated only a limited number of cases in the secondary transmission of the coronavirus between and among family members, it still demonstrates that the spread of infections through human connectivity was possible and probable. Taking the broader perspective, if human-to-human transmissions can take place within closed quarters of a household, then it is also logical to assume that infection transmissions are possible in similar close quarters such as workplaces, restaurants, factories, mass transport systems, department stores, in public buildings, and schools? From an even broader perspective, the human-to-human connectivity can become the network for the spread of the coronavirus, not only at the local level but also globally.

It should be noted that this most important and critical element regarding the coronavirus transmission threat was already known by the national (Chinese), and global (the WHO) health authorities since around mid-January 2020.

⁵ W.H.O. Novel Coronavirus (2019-nCoV). Situation report – 1. January 21, 2020

⁶ <https://www.who.int/news/item/27-04-2020-who-timeline---covid-19>

ii. During the WHO – China Joint Mission: Investigating transmission dynamics

During the WHO – China Joint Mission of February 16 to 24, 2020, this critical issue regarding the human-to-human transmission risk was also investigated, reviewed, and reconfirmed by the Mission’s team of experts.

Unfortunately, the WHO-China Joint Mission’s end of mission Report seemed to indicate by inference rather than by specifically pinpointing or highlighting the human-to-human transmission factor. The language was not layman language crystal clear, i.e.

- Under the heading “Source of infection” the Report listed
 - Animal origin and natural reservoir of the virus
 - Human-animal interface of the original event
- Under Modes of Transmission the Report listed
 - Role of aerosol transmission in non-health care settings
 - Role of fecal-oral transmission
(no spelling out the human-to-human transmission as a real risk)
- As risk factors for infection the Report listed mentions behavioral and socio-economic risk factors for infection in
 - Households/institutions
 - The Community
 - Risk factors for nosocomial infection
 - Among healthcare workers
 - Among patients

(all these risks factors are obviously human-to-human elements, and yet the term “human-to-human transmission risk “ is not stated)
- Under Prevention and control measures the Report listed
 - Effectiveness of infection prevention and control (IPC) measures in various health care settings
 - Effectiveness of entry and exit screening
 - Effectiveness of the public health control measures and their socio-economic impact
 - Restriction of movement
 - Social distancing
 - School and workplace closures

(again, these are all related to the human-to-human interaction environments. These preventive and control measures refer to human connectivity, i.e. the rationale for “social distancing” or school and workplace closures.)

This lack of definitive identification and pinpointing of the probable cause of coronavirus transmissions through human-to-human interaction would affect the general public's awareness or alertness to high-risk factors. It is possible that this seemingly vague and unstated stance regarding the transmission threat would influence the level of resolve and urgency in the direction of policy and strategic planning of governments worldwide. As the designated global authority responsible for the containment effort, the world would look to the WHO to identify the predominant threat of coronavirus transmissions. The WHO-China Joint Mission of international experts has had the opportunity to confirm this on-site, not to mention the previous announcements by the WHO in this respect on January 14th. and followed by the Chinese government's announcement on January 20th. and again by the WHO on January 22nd following its preliminary mission regarding the real threat of human-to-human transmission. Why then did this Joint Mission not highlight or declared in a conclusive statement that 'yes' human-to-human transmission is both possible and probable?

With the benefit of hindsight, the conclusion by the Chinese National Health Commission (NHC) and made public through a press conference on January 20, 2020, was probably the most important revelation regarding the coronavirus made public at the very early stages of the Covid-19 pandemic. Had this been taken more seriously outside of China and applied as the basis for global containment strategies, such as social distancing and other non-pharmaceutical initiatives, it is likely that the figures for confirmed cases and deaths might have been lower during the first few months of the epidemic. Again, this human-to-human transmission was known one month before the Joint WHO – China Mission in February 2020.

B. Non-pharmaceutical initiatives (NPIs)

The Chinese government and its relevant authorities were quick to recognize the significance of the human-to-human transmission route of the coronavirus and immediately launched the non-pharmaceutical initiatives (NPIs) strategy to give preventive protection to the general public against infections from diseases as well as to stem the spread of the coronavirus. In the absence of any pharmaceutical solution or options, the only viable and timely implementation of infection control and containment was the non-pharmaceutical interventions or initiatives (NPIs). The Chinese adopted this NPIs strategy in launching the initial defense against the spread of Covid-19 in Wuhan City. With its previous experiences with the SARS – Cov-1, the Hong Kong Flu and association with the MERS, the NPI option was almost automatic. NPI relies solely on the human factor, in terms of behavioural change, discipline, and community effort. This is centered on the establishment and maintaining 'social distancing' in public and especially in high-risk crowded areas both outdoors and indoors. Physical separation included lockdowns, curfews, travel restrictions, quarantines, and even closures of public venues. When this was unavoidable such as traveling in mass transit systems, visiting department stores and supermarkets, schools, on crowded streets, etc, social distancing, also included wearing virus protective masks and frequent sanitization of hands if and when coming into contact with potentially infection-exposed objects and surfaces. This NPIs approach became the 'mainstay' of the Chinese government's initial containment strategy which was adopted throughout China.

The WHO – China Joint Mission Report’s list of recommendations for nations with imported cases and/or outbreaks of COVID-19 from China, advises,

“Immediately activate the highest level of national Response Management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19 with non-pharmaceutical public health measures.”

However, there were no further instructions or details given with regard to the elements of ‘non-pharmaceutical public health measures’. Nor were there any mention or references to China’s full range of NPIs protocols, which also included the critical issue of ‘cordon sanitaire’, wearing masks, or sanitization of hands.

Under a different sub-heading in the Joint WHO-China Mission Report, which was the guidelines for ‘the public’ there was advice on the importance of “frequent hand washing and always covering your mouth and nose when sneezing or coughing”. Feedback from the Chinese frontline health workers on the importance and effective protection against infection transmission in wearing protective masks in public was not mentioned here at all. This was despite the acknowledgment that this practice was proven to be a critical element in China’s transmission control and containment strategy in the Joint WHO-China Mission’s findings. The only reference to wearing protective masks was directed at the medical and health workers, based on the rationale that they were on the front line in interacting with infected persons. This of course was a misleading perception since prior to connecting with the health workers, these infected people were already moving around in public, and interacting with the general public, in workplaces, on trains, buses, trams, and along the streets, even as they were making their journey to the hospitals or health centers for treatment. The clusters of contact for infected cases to spread the coronavirus to others are not the health workers but in fact, their immediate clusters of people at work, on the streets, in stores, restaurants, and in mass transit systems. Imagine the number of people already infected during the pre-symptomatic phase to be followed by more infection spread during the symptomatic phase as each infected case travel before their arrival at the hospital, or local health clinic. Certainly more than the healthcare community. For reference, as of February 1, 2023, there have been 753,651,712 confirmed cases of COVID-19, including 6,813,845 deaths, reported to WHO⁷ of which 99.9% were the general public. This in no way diminishes the vital importance of health workers but with regard to the issue of wearing masks, or distribution of masks, this needs to be put in the appropriate perspective.

Of course, prioritizing the distribution of the scarce and limited supply of masks to health workers is appropriate and desirable. But this is not a medical issue. The shortage of protective masks is not a WHO concern, and maybe it should be the WTO’s problem, but certainly, it should be the respective national governments’ problem. The medical issue is whether a mask is required as protection against getting infected irrespective of whether the person is a medical worker or not. The WHO, as the global health authority and agency, should give a definitive health-related

⁷ WHO Covid-19 Dashboard. February 1, 2023.

guideline only, not on issues related to 'supply and demand' priorities. From the health and medical perspective, should the general public be wearing masks or not to protect against the Covid-19 endemic? The Chinese did it in January 2020. The Joint WHO-China Mission witnessed it in February and probably also wore protective masks throughout the Mission period in China. So, are protective masks required, 'yes' or 'no'? Why was wearing protective masks highlighted in the Joint WHO-China Mission Report's guidelines and recommendations to the world? What was the rationale for the 25 international experts from 8 nations, including China, to side-step the important issue of wearing a protective mask? To be fair, the China section of the Mission Report guidelines and recommendations does mention wearing masks, but not for the rest of the world....? On the other hand, to be fair to governments worldwide, had they been advised about the importance of wearing protective masks back in January 2020 following the Chinese example as well as from WHO's preliminary fact-finding mission by its China regional and Western Pacific regional offices to Wuhan City, they would have had the time to order and build-up their national stocks of masks by the time the WHO declared the Covid-19 a global pandemic in mid-March, 2020. Yet, even after declaring the global Covid-19 pandemic the WHO continued not to recommend wearing masks to the general public and only indicated that for sneezing and coughing (coronavirus symptomatic phase exposed) it was only required to either do it into the inner elbow, use a tissue, or to cover the mouth. In fact it was not until May 2020⁸, three months after the Joint WHO-China Mission in February 2020, and two month after declaring the Covid-19 a pandemic in March 2020 that the WHO issued guidelines and recommendations for the general public (not only health workers), to wear protective masks in public.

However, due to the continued and uncontrollable spread of Covid-19 in Europe, especially in Bergamo, Italy⁹, and North America especially in New York¹⁰, the United States, and both occurring in March 2020 resulting in over-demand for hospitalisations and high rates of deaths, several nations in those regions were issuing directives to their general public to follow the social distancing protocols and especially to wear protective masks in public with many nations also advocating for the frequent sanitization of hands when returning from home after being in public. These government initiatives were launched prior to the WHO declaration of Covid-19 as a global pandemic, which still did not include guidelines or recommendations for wearing protective masks in public. Eventually, many western nations launched the NPIs approach similar to the Chinese including applying the 'cordon sanitaire' protocols such as national lockdowns, curfews, travel restrictions, quarantines, closures of public venues, and setting limits on public gatherings, and

⁸ WHO. COVID-19: physical distancing. May 10, 2020.

<https://www.who.int/westernpacific/emergencies/covid-19/information/physical-distancingAmericas>

⁹ James Mackenzie, Alex Fraser. City at center of Italy's COVID-19 tragedy works to heal 'deep scar'.

Reuters. May 14, 2020

<https://www.reuters.com/article/us-health-coronavirus-italy-bergamo-idUSKBN22Q1LN>

¹⁰ CDC. COVID-19 Outbreak — New York City, February 29–June 1, 2020

November 20, 2020

<https://www.cdc.gov/mmwr/volumes/69/wr/mm6946a2.htm>

social activities. They did this on their own initiative without waiting for guidelines or recommendations from the WHO.

The NPIs issue was not the same for non-western regions such as the Asian, Middle Eastern, and African regions which had past experiences with several diseases such as SARS – CoV-1, MERS (Middle East respiratory syndrome), Hong Kong Flu, avian influenza, etc. Once they learned about the SAR-Cov-2 outbreak in China they did not need any convincing from anyone to adopt the NPIs and proceeded to do so almost immediately following the Chinese without waiting for the WHO advisory. The acceptance of the human-to-human transmission risk factor was immediate and became the critical guideline for adopting the heretofore-proven ‘social-distancing’ strategies. The Chinese government’s NPI strategy only confirmed their own reading of the situation based on their own experiences with SARS-CoV-1 and other similar infections. Similarly, and more importantly, these NPIs preventive measures were also immediately accepted and complied with by their population who have been through this process several times. This made it much easier for their respective governments to plan and launch protective strategies successfully and with assurances of getting the desirable behavioral responses from the general public. The combined statistics for infections, hospitalisations, and deaths in these regions were less than for the European and the Americas regions,¹¹ with less than 25% of the global population.

As at end of January 2023, after two full years of vaccination roll-out, less than two-thirds of these regions’ population, or only 64% have completed the primary vaccination protocol. For the more than one-third of the global population that still have not completed the primary vaccination protocols, the NPIs are a long-term if not the only preventive strategy. Therefore the other more obvious reason for practicing NPIs was that being very poor and under-developed, getting access to pharmaceutical solutions was low, and depended mainly on donations, which were few and limited to many nations. For them, non-pharmaceutical protocols were their only choice. As at end of January 2023, about 26% of the low-income nations received only one dose of vaccine, not even completing the two- vaccination protocol required. In the Asian region about 72% of the population received complete vaccination protocols. However, this high rate was due to the inclusion of India and China, both G – 20 nations having their own vaccine development and manufacturing capabilities. Excluding these two nations, the figure would drop significantly. In the African region, only 28% of the population completed the vaccination protocol. However this region included the Middle Eastern nations, and although without development or manufacturing facilities, many had the wealth to buy their vaccines.¹² For those other nations, the NPI was not a choice but the only option available. For these nations, the NPIs were not a temporary measure, but a full-time way of life in the face of any epidemics or pandemics.

¹¹ WHO. Covid-19 dashboard.

<https://covid19.who.int/?mapFilter=vaccinations>

¹² Our World in Data.

<https://ourworldindata.org/covid-vaccinations>

As a UN agency, one would assume that the WHO was aware of the social–economic disparities between the rich and poor nations and therefore would expect that the guidelines and recommendations would take such matters into account, especially with regard to highlighting the vital importance of initiating NPIs. The importance of NPIs as the de facto strategy for poor nations should have been given the level of attention and consideration that it deserved for other nations rather than associating it solely with China, as was expressed in the Joint WHO – China Mission Report.

i. Focus on Social Distancing and exposure risk to Covid-19

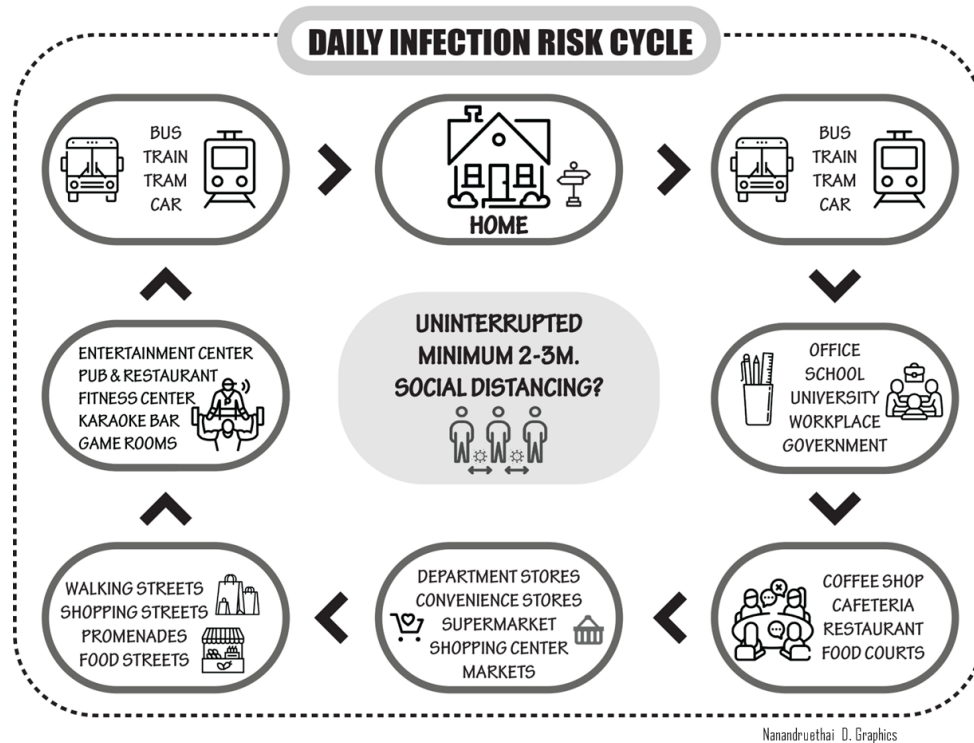
This social distancing is applicable anywhere in public places where there is interaction with other people and with a high risk of either exposure and contracting the infection, or transmitting the infection to others through connectivity with crowds. In other words, anytime or anyplace outside the home. Within the daily lifestyle of modern society, this means workplaces such as business and government offices, factories, or social venues such as shops, department stores, Malls, food centers, restaurants coffee shops, bars, cinemas, entertainment venues, schools, universities, and large crowded events such as exhibitions, sports events such as football matches, or entertainment. For example, major sports events which cater to large crowds of people also create a high risk of exposure and transmission and spread of the coronavirus. For example, a football match in Milan, Italy in February 2020, in an arena of over 40,000 people, resulted in the highest infection and death rates in the country during March 2020. However, the most daily high risk exposure would be all forms of mass transit networks (trains, buses, planes, trams, ships, etc) commonly used to get from one place to another, and commonly used by the general public every day.

Social distancing, in the case of the Covid-19 pandemic, means a 2-3 meters radius of separation between each person, and not the one-meter radius indicated in the early WHO guidelines. In the real world, maintaining this social distancing of 2-3 meters at all times is not possible, nor can it be practiced at all times and at all places, i.e. on mass transit systems, business offices, factories, schools, etc. Therefore the practical and workable solution is really ‘contact separation’. Meaning establishing a ‘health protection wall’ between each person even while being in close vicinity. In the case of the Covid-19 this essentially means wearing masks, and other forms of protective clothing. Also, since we cannot avoid touching objects around us, when in public (such as door handles to open doors, tables, and chairs, or tools and equipment at work), this also means having to continually sanitize hands and fingers after touching anything. Wearing masks and sanitization of hands (and particularly fingers) is because the coronavirus is airborne, which means we breathe it, or can land on any surface or object within a radius of the source, i.e. the nose and mouth during breathing, speaking, laughing, shouting, coughing, and singing, or just by touching, holding and catching objects. The opportunity to pick up the coronavirus infection is everywhere, even your own mobile, iPad or laptop if they are left exposed to virus contamination.

In reality, where can anyone realistically maintain a 2-3 meters uninterrupted social distancing during the regular weekday lifestyle? Consider the following standard scenario of the daily work

routine (or rather the daily cycle of infection risk marathon) for working adults and students as indicated in Graph 16.1. below.

Graph 16.1. Covid-19 infection risk exposure



As can be imagined from the above routine, maintaining constant physical social distancing all the time while outside the home is impossible. Therefore the need for ‘contact separation’ equipment such as wearing masks and sanitization of hands needs to be practiced when leaving the house.

C. WHO’s guidelines for government initiatives

The Joint WHO – China Mission Recommendations were divided into five categories of which four targeted responsible ministries and agencies responsible for policy, planning, and launching government policies and strategies. The remaining category was directed at the general public advocating the need for behavioral changes in response to government crisis management policies, strategies, and actions to contain the coronavirus epidemic. Building on the principle that “it’s the people who make things work!” perhaps more guidelines could have been given to governments on how to guide, direct and motivate the general public to follow the new government initiatives, especially when it means adjusting social lifestyles. There was some reference to the need for the general public to ‘buy -in’ to government initiatives to make them work, or how the government should motivate the general public to accept and conform to the emergency laws, decrees, and regulations that enforce social distancing. However, there were not many guidelines regarding government leadership functions and roles in crisis management or behavioral change

management. No doubt that the WHO was correct in focusing on giving guidelines and recommendations to governments who would lead the fight against the Covid-19 pandemic. However, the presentation and phrasing of these guidelines and recommendations could have been more sensitive to the different forms of governments.

Just as in the case of NPIs where differences in importance and practice exist between the rich and poorer nations, so also are there differences with regards to government policies, strategies, and actions for the containment of Covid-19 pandemic between the political ‘-isms’ or status. Democratic governments and their respective general public would have different values and political cultures as compared to authoritarian or communist governments. Accordingly, any guidance or recommendations in planning and actions, especially in respect of issuing new laws and mandates would necessarily vary from one form of government to another. Of course, this would extend to the respective general public with regard to behavioural responses and conformity.

Democratically governed nations, particularly in the western regions of Europe and the Americas, would have different values and beliefs which affect their attitude and corresponding responses which are prone to resisting any form of enforcement, changes in lifestyles, reduction in freedom of movement, freedom to practice their profession or carry out their business. Authoritarian or communist governments would be more autocratic in enforcement and their general public would respond in an almost ‘robotic’ disciplinary fashion. Having said that, it should be recognized that most Asian, Middle Eastern, and African nations would expect their general public to be responding positively to government initiatives in times of crisis, irrespective of their political ‘ism’. This is based on traditions, customs, and culture, which outdate political structures. Therefore issuing any guidance to governments, especially with regard to leading and motivating positive behavioral responses from their general public would require a comprehensive and in-depth understanding of the cross-cultural divergences between the nations in the different geographical regions. Cultural differences would influence and have impact on the design, planning, and implementation of government strategies and consequently on the level of success in the outcomes. Throughout the global Covid-19 pandemic, what has been evident from the very beginning of the outbreak was that this single common threat generated different responses and outcomes. This will be further discussed and illustrated in subsequent Chapters.

Nevertheless, it is not the W.H.O.’s responsibility to solve national problems or to instruct them on how to proceed. These responsibilities rest solely with the respective governments. It is understandable that the WHO assumes each nation would work out the design, structure, and implementation of its guidelines and recommendation under its own constitution, and laws in accordance with the political and social culture or values of each nation. This is because the differentiated cultural values would affect the level of commitment, enforcement, and intensity of social distancing protocols from country to country. Also, the geo-political structure of some regions could be a challenging issue. In regions where national borders are clear and with controlled cross-border mobility, such as in Asia and Africa, the national defense against the inflow

of infection is established and secured. However, in Europe, there are no border controls among the 26 Schengen States, which means the free movement of people across all their geographical borders. This means for each member state no matter how well they manage their coronavirus infection controls locally was still exposed to risks of cross-border infections from other member states which may or may not have imposed appropriate or effective controls in their own country. Also, this free access to inflows of coronavirus infections is not limited to only the 26 Schengen States members, but to any nationality around the world holding Schengen States entry visas. It was not until early March 2020 that this cross-border infection threat was evident and significant that the Schengen States started to close their borders to member states, which of course was contrary to the principles of the Schengen States agreement. As of March 11, 2020, the global confirmed cases exceeded 125,000 with total deaths at about 4,600. China's figures were 80,981 cases and 3,173 deaths respectively. Europe followed second with about 23,000 cases and 950 deaths respectively¹³. Of the European region totals, the Schengen States alone represented over 70% of cases and about 98% of deaths. The rapid spread and growth of the coronavirus were very evident when several weeks later, as of March 31, 2020, the global confirmed cases rose to 750,890 with a total of 36,405 deaths. By this time, the world had taken over the lead from China which now had only 82,545 (11%) confirmed cases and 3,314 (9%) of deaths. Again, the European region had the highest rates with 423,946 confirmed cases and 26,694 deaths. Of the European figures, the Schengen States represented over 80% of confirmed cases and 90% of deaths.¹⁴ For a better perspective of these figures, it should be noted that the total population of Europe is about 740 million, compared to China's 1,400 million. As previously mentioned, beginning in early March 2020, the Schengen States started to close their borders to member states, other European nations, and the rest of the world, by imposing travel restrictions and quarantines on entry. It should also be noted that these actions for the closure of borders were implemented one month after the issuance of the WHO – China Joint Mission guidelines and recommendation, and about two months after it was declared that the spread of the Covid-19 was mainly through human-to-human transmissions. Obviously, had these closures been made earlier, even without waiting for the WHO guidelines, the levels of cases and deaths would probably be less in Europe, not to mention in other regions of the world.

The rapid rise and spread of infections, hospitalization and deaths underscored the fundamental element of the Covid-19 pandemic, namely the human-to-human transmissions through connectivity, and consequently the critical importance of social distancing. Perhaps this geographical 'borderless' issue could have been highlighted and included in the Joint WHO – China Mission recommendations.

D. Differentiated guidelines and recommendations?

¹³ WHO Situation Report # 52. March 12, 2020

¹⁴ WHO Situation Report # 71. March 31, 2020

The only political – social cultural consideration in the Joint WHO – China Mission Report referred to China. This was most likely due to the fact that China co-partnered in leading this Joint Mission. As mentioned above, it was unfortunate that this element of different political–social culture did not extend to other parts of the world.

Accordingly, the Joint WHO – China Mission End of Mission Report, covered in a previous section, there seemed to be a two-tiered manual of guidelines and recommendations. One for the Chinese government (and the Chinese population), and another for the rest of the world. The version for China was stringent and focused on social distancing and NPIs, while the version for the rest of the world was more flexible, and suggested more self-determination of the crisis management options with broader guidelines. It is most likely that as the ‘co-lead’ of this Joint WHO – China Mission, the Chinese were drafting their own coronavirus ‘containment strategy’ based on their experience, findings, and assessments in Wuhan. Needless to say, the WHO side of the delegation would not have the same experience or practical expertise as the Chinese with regard to this outbreak. Probably also for the first SARS-CoV-1 for many delegation members. So the Chinese were definitely going to ‘do their thing and in their own way’ in relation to Covid-19. Consequently, the WHO recommendations for the rest of the world was also significantly different from the Chinese version in both tone and coverage. We, therefore, have an official End of Mission Report issued under the auspices of the WHO with different recommendations and advisories on how to address, respond, and prepare for the potential global outbreak of the coronavirus, or SARS -CoV-2 as it was called then. It was as if the same coronavirus threat generated two different strategic recommendations based on ;political-social culture. The key rationale for these differentiated guidelines and recommendations as indicated in the WHO – China Joint Mission Report was,

“China’s uncompromising and rigorous use of non-pharmaceutical measures to contain transmission of the COVID-19 virus in multiple settings provides vital lessons for the global response. This rather unique and unprecedented public health response in China reversed the escalating cases in both Hubei, where there has been widespread community transmission, and in the importation provinces, where family clusters appear to have driven the outbreak....

Much of the global community is not yet ready, in mindset and materially, to implement the measures that have been employed to contain COVID-19 in China. These are the only measures that are currently proven to interrupt or minimize transmission chains in humans. Fundamental to these measures is extremely proactive surveillance to immediately detect cases, very rapid diagnosis and immediate case isolation, rigorous tracking and quarantine of close contacts, and an exceptionally high degree of population understanding and acceptance of these measures.”

Apparently, this is a reference to differences in political-social cultures of both government leadership as well as the Chinese people. Consequently, WHO’s guidelines and recommendations were somewhat ‘toned-down’ with a broader perspective compared to the Chinese version, and were followed by most of the “western nations” i.e. North and South America and European regions. At the same time, most of the Eastern Mediterranean, African and Asian nations regions closely followed the more stringent Chinese approach to non-pharmaceutical intervention

strategies (NPI). This was no surprise since these regions had a long history of various types of virus outbreaks, and take such threats really seriously. Many Asian nations had direct experience with the SARS – Cov -1 epidemic during 2002 – 2004 (also originated in China) which had spread to 29 nations globally including several western nations including Canada, the United States, Germany, France, Sweden, United Kingdom, Italy, Ireland, Russia, Spain, Switzerland, Australia, and New Zealand¹⁵. Similarly the Eastern Mediterranean region had direct experience with the MERS-Cov (Middle East Respiratory Syndrome) in 2012 and which also spread globally and to at least 27 nations including several western nations including Austria, France, Italy, Germany, Greece, the Netherlands, Turkey, United Kingdom, and the United States¹⁶. Both these coronavirus epidemics were also spread through human-to-human transmissions. These Eastern Mediterranean and Asian nations took the human – to human transmission threat very seriously and once this was confirmed by the Chinese government from the very beginning of the Wuhan outbreak they didn't need to rely on the WHO for guidelines or recommendations before taking stringent precautions. Wearing protective masks and sanitization of hands were already being implemented as preventive measures in those nations even before the WHO – China Joint Mission in mid-February, 2020. Consequently, while the WHO – China Joint Mission's Report separated China from the rest of the world, in terms of giving guidelines and recommendations, in reality, it was more the case of the eastern nations following the Chinese protocol (except for the extended 'zero tolerance' policy), and the western nations relying mostly on the WHO guidelines .

E. “Cordon sanitaire”, or ‘Lockdown’

Another preventive and containment strategy by the Chinese authorities and an off-shoot from the ‘social distancing’ strategy, was the execution of the “cordon sanitaire”, or ‘infection-zone lockdown’ which was launched for the containment of the coronavirus in Wuhan City. This was a ‘big deal’ considering that it involved a population of over 11 million people. While social distancing represents individual separation within a community, the “cordon sanitaire”, or ‘infection-zone lockdown’ separates the whole community from the rest of the country. Effectively, this ‘lockdown’ essentially isolated Wuhan City from all the other communities in the Hubei province, the rest of China, and the effectively the rest of the world also. This strategy by the Chinese authorities would be continually adopted throughout China.

Although considered harsh and authoritarian at the time, eventually by April 2020, half of the world's population, spread over more than 90 nations, were under some form of lockdowns, from community, provincial to national.¹⁷ These were also either preceded or followed by curfews, closures, travel restrictions (both domestic and foreign). Following the WHO declaration of the global Covid-19 pandemic, the line between China's stringent acts and the rest of the world was getting very thin.

¹⁵ "Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003". World Health Organization. 21 April 2004. Archived from the original on 19 March 2020. Retrieved 4 February 2020.

¹⁶ . [https://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-\(mers-cov\)](https://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov))

¹⁷ Sandford, Alasdair. Coronavirus, : Half of humanity on lockdown in 90 countries. Euronews. May 19,2020.

The only significant exception and difference was China's continued enforcement of the 'zero-tolerance policy'. This was still enforced in March 2022, with the lockdown of Shanghai City, China's largest city with a population of approximately 28.5 million people, and the highest contributor to the national GDP. Lockdowns eventually included Beijing and Guangzhou. Since August 2022 at least 74 Chinese cities have been under partial or full Covid-19 lockdowns, impacting over 300 million people, equivalent to about 90% of the total population of the United States.

However, by December 2022, around the third anniversary of the initial outbreak, the Chinese government's "zero tolerance" policy was softened, after numerous public protests nationwide, but more significantly, the serious continuous deterioration of the national economy. This is most likely due to the characteristics and low fatality threat of the current Omicron mutation of Covid-19. However, should this give way to more deadly mutations, it is likely that strict enforcements would return.

F. Symptomatic vs Asymptomatic cases

Another significant finding of the Joint Mission was with regards to the asymptomatic cases, which were included in the End of Mission Report, suggesting that further study was needed to evaluate and measure the significance of the impact of asymptomatic cases on transmissions. Asymptomatic cases are people who are infected but show no signs of an illness or disease, such as the Covid-19, nor do they 'feel' that they are ill or infected. Nevertheless, they are infected and therefore they are 'carriers' of the coronavirus, and can transmit the infection to others. Infected persons who are asymptomatic are truly the "invisible" enemy.

China's National Infectious Disease Information System (IDIS), had already begun to identify asymptomatic cases in Wuhan City, other towns in Hubei province, as well as other provinces in China, as early January 2020. From the time of the outbreak end of December 2019, and up to February 20, 2020 during the period of focused investigation, and during the WHO – China Joint Mission cases of asymptomatic infections were consistently discovered, albeit in small numbers. But they were consistent nevertheless. (Mission Report stated, " The proportion of truly asymptomatic infections is unclear but appears to be relatively rare and does not appear to be a major driver of transmission."

This asymptomatic element may not have been significant during the early stages of the Covid-19 outbreak since the number of cases was still low, but as the figures continued to rise globally this additional source of infection threat would become more significant in drawing-up a comprehensive strategy to stem the spread of the coronavirus from every angle. Unfortunately, following the end of the WHO-China Joint Mission and its End of Mission Report, not much focus or development was given to this 'invisible' asymptomatic threat. This perception was

expressed by the WHO during a news conference on June 8, 2020 when Maria Van Kerkhove¹⁸, the WHO's technical lead for the COVID-19 response, stated it's "very rare" for asymptomatic carriers of COVID-19 to spread the virus and that in countries tracking asymptomatic cases, they were "following contacts and they're not finding secondary transmission onward." Based on available data, which was probably both limited and inconclusive, it is possible that this seemed a rational conclusion. Not surprisingly the WHO clarified the statement the following day, with Kerkhove noting that the WHO "actually doesn't have that answer yet," regarding if -- and how often -- asymptomatic carriers of COVID-19 spread the virus.¹⁹ Most likely it was not the case of asymptomatic cases rarely transmitting the infection, but rather that due to limited data, cases of transmission through confirmed asymptomatic cases were rare. In reality, do all hospitals around the world identify and separate symptomatic from asymptomatic cases? Taking into consideration that most nations on this planet, say 60-70%, are categorized as under-developed, developing, or emerging economies, and most likely do not have the process, manpower, technology, equipment or the wealth for such detailed recording of data and dissemination of data. It is therefore more likely that all confirmed cases reported to the WHO and other agencies, do not separate symptomatic and asymptomatic status. The key significance of the difference between symptomatic and asymptomatic infection is the level of risk and threat to the general public.

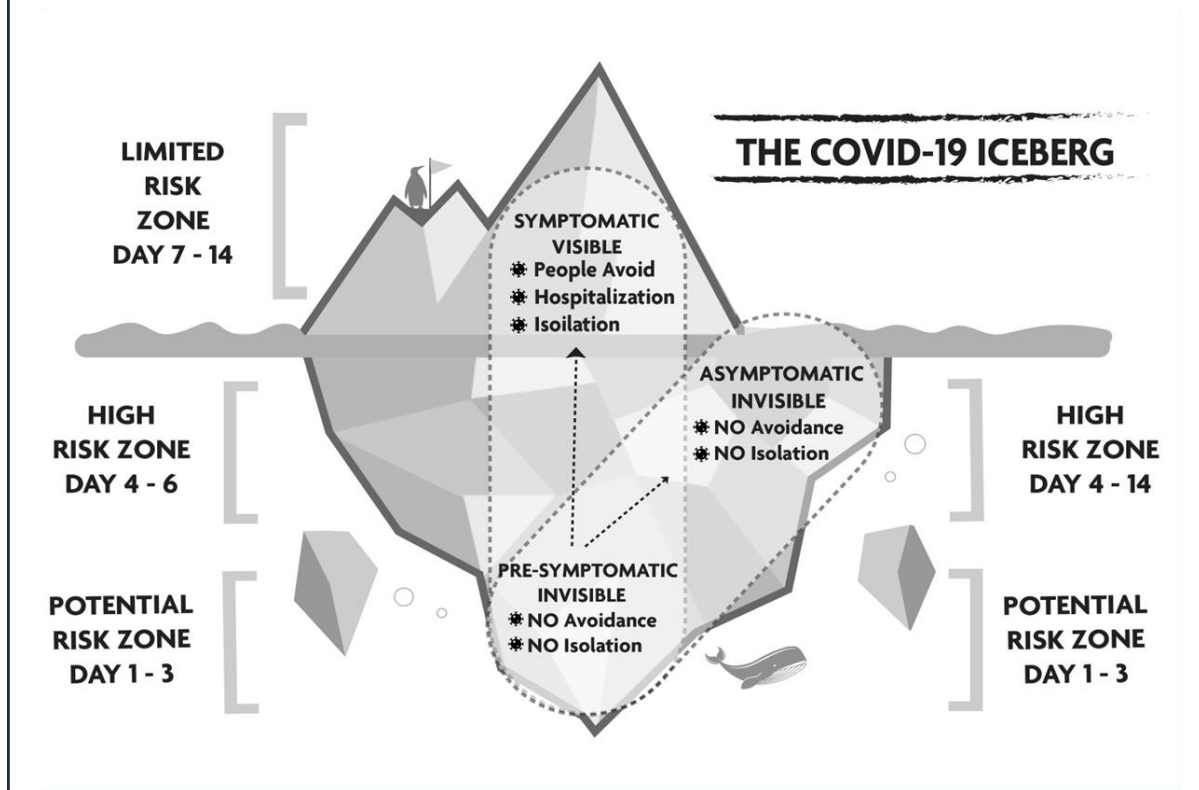
The average cycle of Covid-19 infection is around 14 days. During this cycle, normally the infected person can spread the coronavirus to others for about 11 days (although infections can last longer than 14 days depending on the level of illness and immunity level of the infected person). These 11 days of spreading the infection are divided into two phases. First is the "pre-symptomatic" phase, namely the period before symptoms, (i.e. sneezing, coughing, high temperatures, respiratory difficulties, etc.) start showing and lasts for 2- 3 days (day 4-6). During this phase there is high risk in transmission to others by the infected person, without being aware of doing it (because it's during the 'pre-symptomatic' period). There is also the potential for an infected person to transmit the coronavirus to others during the first 3 days also, but not usually. The symptomatic phase is when all the various symptoms occur, usually day 7-14, and you know, and feel, you're infected. This can last for about 7 days (or possibly longer) and during this period, you can continue infect other people, until you are 'cured'.

Covid-19 is like an iceberg. The part you can see above the water level, gives you the opportunity to avoid it. The part that is under the water and can't be seen, you run into it. Visibility of the threat and infection creates the opportunity of avoiding getting infected as indicated in Graph 16.2. below.

¹⁸ Kerkhove was also a member of the WHO – China Joint Mission

¹⁹ Amanda Capritto. . Can people who are asymptomatic spread coronavirus? What we know right now
Aug. 21, 2020 5:00 a.m
<https://www.cnet.com/health/can-you-spread-coronavirus-even-if-you-dont-have-symptoms/>

Graph 16.2. Asymptomatic: The Covid-19 Iceberg



Nanandruethai D. Graphics

Obviously, common sense, and community decency, would expect that after the symptoms show the symptomatic infected person would wear a mask, maintain social distancing until visiting the doctor for medication or treatment, and if serious, as for elderly people, would be hospitalized. Whatever the case, when this happens, this infected individual would be 'out of circulation' from the general public contact and pose limited or no threat to the community. Also, after the Covid-19 symptoms show, other people would be aware of the infection and would separate themselves from close or direct contact with the infected person. This means that of the possible 11 days of potentially spreading the infection to others, the threat is only for the 2 -3 days during the pre-symptomatic phase, meaning that the infection transmission period for symptomatic cases is only about one-third of the normal high threat period, assuming the voluntary isolation or being admitted into hospital for treatment.

In the case of the asymptomatic case (without display of any symptoms) the cycle of the infected is the same, for about 14 days, with 11 days of infecting others. The pre-symptomatic period is the same 2-3 days. However, in this case, pre-symptomatic is not followed by symptomatic but by asymptomatic infection, which means there are no displays, occurrences, or feelings of any symptoms of the Covid-19 infection. In this condition, and unaware of being infected, the asymptomatic infected person will continue to mix, mingle and spread the infection to the general public for the full 11 days being unaware of this happening. This means

that each asymptomatic case of infection spreads the coronavirus to the community for a period three times that of a symptomatic case (11 days instead of 3 days). This does not mean an asymptomatic case infects three times more than a symptomatic case. More likely, it could be very much more maybe up to 10 times depending on where the infected person goes in public. For example, think in terms of being in a crowded mass transit system during rush hours, department stores and malls, supermarkets, schools, entertainment venues, etc. The only way to identify asymptomatic cases is through testing everyone, which is not feasible, either logistically or financially, especially in low-income nations.

Recent reports and analyses, and again with the benefit of hindsight, asymptomatic cases have significantly contributed to the growth of infections, especially among people and groups who do not strictly follow social distancing practices or the wearing of masks in public because they did not ‘feel’ they were infected. It has been estimated that about 35% of all COVID-19 cases never show symptoms, meaning that they were asymptomatic.²⁰ Over a period of time, statistics would indicate that this one-third of asymptomatic cases with the potential capability of infecting at least 3 times the number of infection transmissions from symptomatic cases would end up with asymptomatic cases infecting more people. This would make asymptomatic infection cases an issue of concern and critically affect the fight against the Covid-19 pandemic spread. This threat was not apparent in the Joint WHO – China Report. In fact, after almost three years following the WHO-China Joint Mission and its Report, the WHO has not issued any qualified or definitive figures on the percentage breakdown between symptomatic and asymptomatic cases, nor emphasized the significant level of threat and risks associated with asymptomatic cases in spreading the Covid-19. In fact, unless the asymptomatic cases are under control, it would be unrealistic and impractical to declare the Covid-19 endemic.

G. Speed of decision-making and execution

One of the key contributory elements to the timely response to the Wuhan outbreak by the Chinese government leadership was the speed of decision-making and execution of responses. These elements were definitely key factors for the speedy containment and abatement of the coronavirus spread as well as in the expeditious launching of preventive, and recuperating initiatives. The Joint WHO – China Mission Report, identified China’s success in speedily containing the Covid-19 outbreak to, a) the speed of decision-making at the government level, b) the unity of command in the execution of government initiatives and policies at all levels of the relevant administrative functions. i.e. the national, to provincial, and finally the local authorities, and most importantly, c) the collective response, behavioural conformity, and compliance of the Chinese people to governments’ initiatives. Such unity of direction and the collective behavioral response was in fact deep-rooted in China’s almost 5,000 years of

²⁰ Emerging Pathogens Institute: A new study found that 35% of all COVID-19 cases are asymptomatic. Children are most likely to lack symptoms, while the elderly are least likely. University of Florida. August 23, 2021 <https://epi.ufl.edu/2021/08/23/about-35-of-all-covid-19-cases-never-show-symptoms/>

traditions, values, and customs referred to as high power distance cultural dimension (Do it. Don't as why?) which is practiced and observed at all social levels, namely the family, the community and the nation.

In this regard, the Joint WHO – China Mission Report, pointed out that this high power distance cultural dimension works in China, but most likely would not be practiced in most other nations, having different historical roots, values, beliefs, and cultural norms. This statement was not actually correct since many of China's values and political-cultural norms are also shared in many nations in the Asian, African, and Middle Eastern regions. These three regions represent around 75% of the global population, with many nations continuing to be governed by absolute monarchies, dictatorships, and hybrid 'democracies' where power and authority lie with the ruler. The only exceptions are the real democratic nations mostly in European, the Americas, and Oceania regions where power is shared and balanced between the state and the people and therefore low power distance (Ask why? Then decided to do it.) was more the norm. This is because power and authority are divided between the executive branch (the government) and the legislative branch (normally in the form of a "bicameral legislature" consisting of two separate houses or assemblies, such as the House of Representatives and the Senate in the United States, or the Upper and Lower Houses of Parliamentary systems under most democratic constitutions). The power and authority of national governance are shared and balanced (theoretically) between these two government branches. More about the political-culture will be covered in Part Three. This is fundamentally the difference in national governance between authoritarian and democratic and would impact on the speed of decision-Making and execution of policies.

This would also underscore why the Joint WHO – China Mission Report made differentiated guidelines and recommendations with regard to the containment of the coronavirus outbreak. In fact for the rest of the world, and representing at least two-thirds of the human race on the planet, the high power distance cultural dimension was very much the practiced cultural norm. In fact, one of the critical key elements for nations in the Asian, Middle Eastern, and African regions regarding the speed of decision-making and execution in adopting immediately the Chinese government's NPIs was linked to this high power distance cultural dimension in terms of unified collective response to government initiatives. It also explains why the nations in these regions did not rely on the WHO to tell them the what and then when in terms of initiating Covid-19 containment measures.

In addition to the high power distance issue in relation to the speed of decision-making and execution of Covid-19 preventive initiatives, there is also the economic-cultural issue arising from the disparity in the wealth of nations. This disparity leads to the economic-based culture, differentiating between the culture of wealthy nations, the 'haves', from the culture of poor nations, the 'have nots'. The level of wealth establishes and creates a range of options for crisis management responses in terms of capability, capacity, wealth, resources, and technology to implement. The emerging economic-culture will vary between indulgence for the wealthy nations

and constraint for the poorer nations. For example, something considered as basic as tracing and tracking infection for developed nations can be difficult and challenging for under-developed nations. Needless to say, an economic constraint can impact both what governments can do, and what the population is able to accept. Therefore economic limitations would impact the speed of decision-making and scope of response to the Covid-19 crisis.

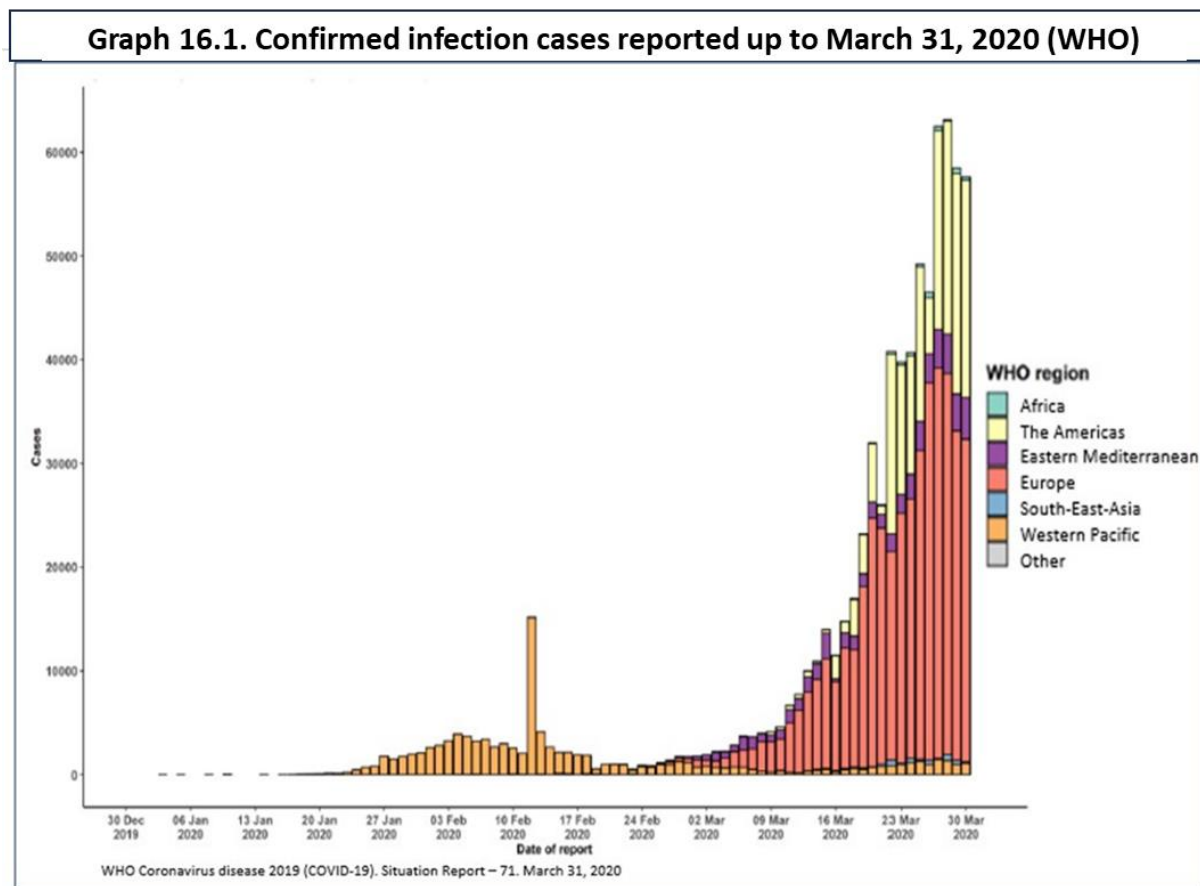
H. Conclusion

There is no doubt that the findings, assessments, and recommendations emerging from this Joint WHO – China Joint Mission Report were extremely important and useful guidelines for governments in the design and formulation of strategies to contain the Covid-19 pandemic. It was also obvious that the Chinese team members probably had the greater real ‘hands-on’ practical experience with this particular coronavirus, and had much to contribute in terms of verifiable knowledge, and information compiled from real situations and cases. That being the case, perhaps it was a pity that the Chinese delegation’s ‘inputs’ into the findings and recommendations were not as comprehensive or more compelling in pushing certain critical aspects and issues, especially with regard to the full application of NPIs. It seemed that some issues could have been expressed more forcefully in the Mission Report to emphasize their importance, such as wearing masks in public, and ‘cordon sanitaire’. Instead, Mission Report’s recommendations only mention ‘covering the mouth when sneezing and coughing’. After all, the wearing of masks in public was a proven effective defense against the spread of infections in Wuhan and eventually all of China. The Chinese government would swear by this principle of wearing masks in public, especially where and when effective physical social distancing was not possible, i.e. in department stores, mass transit systems, marketplaces, supermarkets, food courts, etc. China’s success in containing the coronavirus was noted and praised in the Mission Report under ‘findings’ which alluded to the importance of ‘masking’ as a key factor in the non-pharmaceutical measures. But this was not mentioned in the recommendations for the rest of the world. The first question is, as members and co-lead of the Joint WHO-China Mission, why did the Chinese experts, being the only party with practical experience, not re-enforce the full range of NPIs for inclusion in the Joint WHO – China Mission recommendations for the rest of the world? The second question is, as co-lead and organizer of this Joint Mission which declared that the SARS-CoV-2 epidemic in China would spread to the rest of the world through the globalization of economies and social interactions, why did the WHO not include China’s complete NPIs in the recommendations for the rest of the world?.

On the day that the Joint WHO – China Mission made its Report (February 24, 2020), the global Covid-19 figures were 79,331 confirmed infections cases and 2,618 deaths, of which 77,262 infections (97%) and 2,595 (99%) were from China. One month later on March 31, 2020, the impact of globalization on Covid-19 became very evident with confirmed infection cases jumping to 750,890 (an increase of 846%), with 36,405 deaths (an increase of 1,290%). Of these figures, 89% of confirmed infections, and 91% of deaths, were outside of China. Globalisation through economic inter-dependencies and social interactions triggered this rapid growth and widespread expansion. This was no longer a Chinese problem but a global issue, and more specifically, each country would

be confronted with the same national crisis as China to manage and contain what was now declared by the WHO as the Covid-19 pandemic.²¹

Five weeks following the Joint WHO – China Mission and its guidelines and recommendations, there was the biggest surge of Covid-19 infection as seen in the WHO Graph below. Of this surge, over 75% of the global infections were in the Americas, and European regions, with 25% in the remaining regions of the Eastern Mediterranean (the Middle East), Africa, Oceania, and Asia (representing over 80% of the global population) as indicated in Graph 16.1. below. This was really not surprising since the Asian, Middle Eastern, and African regions had automatically followed the Chinese NPIs approach in addressing the coronavirus since the outbreak. These regions started NPIs at the beginning of January 2020.



The following Table 16.1. gives the global Covid-19 pandemic infections for the first year of the pandemic in 2020. The South East Asia region also includes Southern Asian nations such as India. The Western Pacific region includes China.

²¹ Coronavirus disease 2019 (COVID-19). Situation Report #71. March 31, 2020.

| | Table 16.1. | CUMMULATIVE CONFIRMED CASES FOR 2020 BY QUARTER | | | | | |
|--|-------------|---|---------|------------|------------|------------|---------|
| WHO REGIONAL ZONES | | | MARCH | JUNE | SEPTEMBER | DECEMBER | % SHARE |
| | | | | | | | |
| THE AMERICAS | | | 163,014 | 5,136,705 | 16,233,110 | 34,403,371 | 43.5% |
| | | | | | | | |
| EUROPE | | | 423,946 | 2,692,086 | 5,662,875 | 25,271,220 | 32.0% |
| | | | | | | | |
| SOUTH EAST ASIA | | | 4,215 | 784,931 | 6,720,771 | 11,842,422 | 15.0% |
| | | | | | | | |
| EASTERN MEDITERRANEAN | | | 50,349 | 1,058,055 | 2,340,215 | 4,823,157 | 6.0% |
| | | | | | | | |
| AFRICA | | | 3,786 | 297,290 | 1,172,342 | 1,831,227 | 2.0% |
| | | | | | | | |
| WESTERN PACIFIC | | | 104 868 | 215,566 | 600,891 | 1,059,751 | 1.5% |
| | | | | | | | |
| DIAMOND PRINCESS | | | 712 | | | | |
| GLOBAL TOTAL | | | 750,890 | 10,185,374 | 32,730,945 | 79,231,893 | 100% |
| (% INCREASE) | | | | 1,256 | 221 | 142 | |
| Source: WHO Covid-19 Situation Reports | | | | | | | |

Chapter 17

FROM GLOBALIZATION TO LOCALIZATION OF THE COVID-19 PANDEMIC

Fundamentally, the spread of Covid-19 to become a global pandemic was due to globalization. Just as globalization had established the global connectivity networks for business, social, and political interactions, so also had these networks become the transmission channels leading to the growth and spread of the coronavirus. The global supply chain which was fundamental for the development, expansion, and sustainability of the global economies, became also the highways and expressways for the initial growth and global expansion of Covid-19 through its multinational and multi-regional connectivity. Every original route of the coronavirus from China entering the global arena occurred through one of these channels of globalization. Once it was revealed by the Chinese government that transmission of the coronavirus included human-to-human connectivity, the tourism, and international travel industries and services became a key target for control. Consequently, the first and most important action by the various governments during the first month of the SARS – CoV – 2 outbreak was to impose travel restrictions to and from China. China was cut off from the rest of the world, but before that happened, the coronavirus had already infiltrated many nations worldwide. This was because the infection incubation period, (the time from being infected to when the symptoms start to show, or the pre-symptomatic period), for the SARS -CoV-2 is around 6 to 7 days. During this pre-symptomatic period, the person is unaware of being infected and continues to intermingle with other people and spread the coronavirus to family members, friends, co-workers, and the general public.

A. The globalization of the Covid-19 pandemic

The first case of coronavirus ‘export’ outside of China was to the South East Asian region, with Thailand being the first importing nation. This was through a Chinese tourist visiting the country from Wuhan city. The Chinese tourist flew from Wuhan to Thailand most likely on an Airbus A350-900 which carries over 200 passengers. This means a high probability that many passengers, including the cabin crew on the plane, would be infected, and were spreading the coronavirus among each other during the long flight from Wuhan city to Bangkok. The infected tourist arrived in Bangkok on January 8, 2020, and was not diagnosed with the coronavirus until January 13, 2020, when the symptoms were already showing. Due to the incubation period (6 to 7 days) before displaying symptoms, it is difficult to say if the tourist brought the virus from Wuhan, or

just caught it on the plane flying over to Bangkok. However, since showing symptoms on January 13, 2020, it can be assumed that he had been spreading the virus everywhere he went around Bangkok since his arrival on January 8, 2020. Not surprisingly, this case was soon followed by many other Chinese tourists to Bangkok and eventually throughout Thailand. The infected Chinese tourists were imports of the coronavirus, but the first local human-to-human transmission in Thailand was discovered on January 31, 2020¹. This localized human-to-human infection transmission eventually spread throughout Thailand (more details are covered in the Thailand country profile in Chapter 7). Of course, Thailand was not the only nation in South East Asia to be infected since this region is traditionally one of the most popular destinations for Chinese tourists. By the end of December 2020, the accumulated cases in South East Asia reached 11,842,422 confirmed infections and 180,737 deaths, representing about 14% and 10 % of the global total.

The first case of the SARS-CoV-2 in The Americas region was in the United States which was confirmed by the US CDC (Center for Disease Control and Prevention) with a man returning to Seattle on January 15, 2020, after visiting Wuhan city². The first case in South America was confirmed by Brazil's Ministry of Health on February 25, 2020, with a 61 years-old man, who had been to Lombardy in northern Italy a week earlier and where there was a major coronavirus outbreak at the time.³ This was a case of a third-nation transmission (presumably the coronavirus exported from China to Italy by one person, and then imported from Italy to Brazil through another person). This third-nation transmission would soon be the common route for the globalization of Covid-19. By end of December 2020, the United States' accumulated cases had reached 18,648,989 with 328,014 deaths. The total accumulated combined figures for the Americas region reached 34,403,371 confirmed cases and 840,247 deaths and representing 43% and 47% of the global total figures respectively making the region first in the ranking. This region ranked first. Of this figure, the United States alone accounted for 54% of the Americas' regional total.

The first cases of the coronavirus in the Eastern Mediterranean region (the Middle East) and confirmed by the country's Ministry of Health and Community Protection were by a Chinese family traveling from Wuhan City and arriving in the United Arab Emirates (UAE) on January 16, 2020. By end of December 2020, the accumulated figures for the Eastern Mediterranean region totaled 4,823,157 confirmed cases with 119,004 deaths representing 6% and 6% of the global total respectively.

¹ COVID-19: THE WHO's Action in Countries | September 2020

² Audrey McNamara . CDC confirms first case of coronavirus in the United States
CBS News. January 21, 2020

<https://www.cbsnews.com/news/coronavirus-centers-for-disease-control-first-case-united-states/>

³ Alfonso J. Rodriguez-Morales, COVID-19 in Latin America: The implications of the first confirmed case in Brazil.
February 29, 2020 doi: 10.1016/j.tmaid.2020.101613
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7129040/>

The European region's first 'import' of the coronavirus was in Bordeaux, France, on January 24, 2020, through a group of French citizens returning from China. France also registered the first death from SARS-CoV-2 in the western world on February 14, 2020. This was a Chinese tourist who had been admitted to a hospital in Paris a couple of weeks earlier. Europe was also where the first case of human-to-human transmission occurred outside of China on January 28, 2020, in Germany. A man contracted the virus from a colleague arriving from China who was attending a company training event in the state of Bavaria. The colleague did not display any symptoms during the training sessions but only after leaving Germany and returning to China, indicating that the transmission had occurred during the colleague's pre-symptomatic period. At the end of December 2020, the European region's accumulated confirmed cases had reached 25,271,220 confirmed cases with 554,716 deaths, representing 31% and 31% of the global total respectively making this region second in the ranking after the Americas.

The African region got its first case on February 25, 2020, located in Algiers which was confirmed by its Ministry of Health, Population, and Hospital Reform.⁴ He was an Italian who arrived in the country on February 17, 2020 and tested positive for coronavirus disease⁵. This would appear to be another third-nation transmission by way of Italy. By the end of December 2020, the African region's total accumulated figures reached 1,831,227 confirmed cases with 40,299 deaths, representing 2% and 2% respectively of the total global figures.

As for the West Pacific region, the origin of the coronavirus outbreak in China, the total accumulated figures at end of December 2020, were 1,059,751 confirmed cases and 19,558 deaths representing 1% and 1% respectively of the total global figures. Of these totals, China's accumulated totals were 96,324 confirmed cases and 4,777 deaths.

As can be seen from the above summaries for each global region, by the end of December 2020, or about 12 months after the outbreak in Wuhan, China, the coronavirus (SARS – CoV-2) had spread to all six regions of the globe with total accumulated confirmed cases at 79,231,893 and 1,754,574 deaths. Of this sum, 99% of the infections were through human-to-human transmissions, as was identified by the Chinese and indicated in the Joint WHO – China International Mission in mid-February 2020. The globalization of the SARS-CoV-2 which started in China was transmitted through human-to-human connectivity and can be traced to two basic channels,

A. Direct infection from China and transmitted through 'inbound' traffic into the Host nation. This can be either by

⁴ Actually the first case of the COVID-19 on the geographical continental Africa was in Egypt and confirmed on February 14, 2020 by her Minister of Health and Population. However, Egypt comes under the Eastern Mediterranean region under the WHO zoning. The second case on the African continent was in Algiers and since it was grouped in the African region under the WHO zoning, it became the first case for this region.

⁵ WHO. <https://www.afro.who.int/news/second-covid-19-case-confirmed-africa>

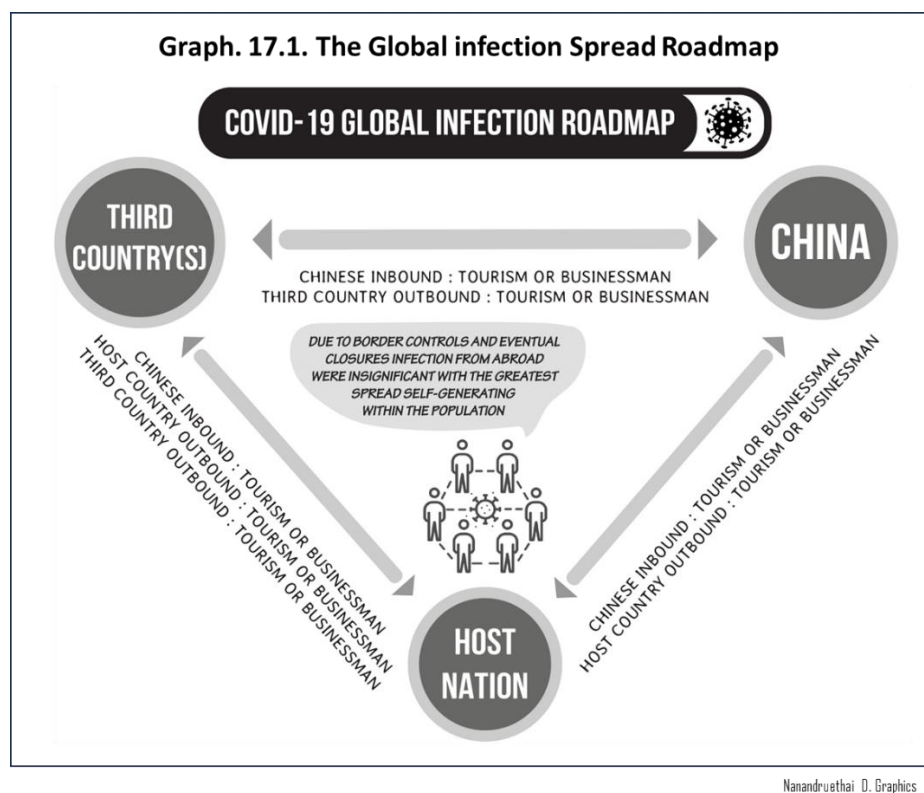
- An infected tourist, business traveler, or family member from China visiting the host nation, or
- A citizen from the host nation visiting China as a tourist, business traveler, or visiting family and returning home with the infection.

B. Indirect infection from China through a third country into the host nation. This can be either by

- A tourist, business traveler, or family from China, in transit or visiting a third nation before continuing to enter the host nation with the infection (the infection could either originate i) in China or ii) in the third country)
- An infected tourist, business traveler, or family member from a third nation visiting the host nation, (no connection to China)
- A host nation tourist, business traveler, or family member who got infected in the third country returning home with the infection.

The original infection cases during the first month of the outbreak may have originated from China through Chinese visitors or Host nation returnees, but due to the almost immediate imposition of travel restrictions and closing borders between China and the rest of the world (including the Host nation), subsequent infection spread was due to either self-generated infections within the Host nation, and/or inbounds of infected visitors and returnees from third nations.

Of the two infection “routes” above, the main ‘inflows’ of the SARS-coV-2 into the Host country would most likely be by way of the returning citizen since they cannot be stopped from entering their country. The spread of the coronavirus has been rapid during the first months since there were no policies or enforcements of quarantines for visitors or returnees into the Host country. The main routes of Covid-19 into any host nation are illustrated in the following Graph 17.1. demonstrates how the globalization of Covid-19 resembles the global supply chain networks.



B. The regional highs and lows of infections and mortality rates

Three months after the outbreak in December 2020 in Wuhan, China, the coronavirus rapidly spread globally, infecting 113 nations. The WHO divided the world into six WHO administrative regions namely, The Americas (35 countries), Europe (53 countries), Eastern Mediterranean (22 countries) Africa (47 countries), South East Asia (11 countries), and West Pacific (27 countries). (See attached Appendix for the WHO regions map and list of nations).

On March 11, 2020, when the SARS-CoV-2 infection had reached 118,391 confirmed cases, of which 37,364 or 36.6% and 4,292 deaths of which 1,130 deaths or 26.3%, were discovered outside of China, the WHO upgraded the Covid-19 epidemic status to be a global pandemic. On this date, the global spread of Covid-19 based on the WHO regional groupings as indicated in Table 17.1 was as follows:

| Table 17.1 COVID-19 as at March 11, 2020 | | | | |
|---|---------------|------------|---------------|------------|
| WHO REGIONS | CASES | % | DEATHS | % |
| AMERICAS | 938 | 0.79 | 28 | 0.65 |
| EUROPE | 18,129 | 15.32 | 717 | 16.71 |
| SEA | 160 | 0.14 | 2 | 0.05 |
| EAST MEDITERRANEAN | 8,578 | 7.25 | 300 | 6.99 |
| AFRICA | 39 | 0.03 | 0 | 0 |
| WEST PACIFIC* | 89,779 | 75.88 | 3,238 | 75.44 |
| DIAMAND CRUISE SHIP | 696 | 0.59 | 7 | 0.16 |
| TOTALS | 118319 | 100 | 4292 | 100 |
| * China 80,955 cases / 3,162 deaths Source: WHO Situation Report, March 11, 2020. | | | | |

Of the total global figures, the highest concentration was in the European region with 18,129 confirmed cases (15.3%) and 717 deaths (16.7%) followed by the East Mediterranean region with 8,578 confirmed cases (7.2%) and 300 deaths (7%). Three months later, by the end of June 2020, the Covid-19 pandemic had exploded to 10,185,374 cases. Of these figures, over 99% were incurred outside of China. This global Covid-19 pandemic was no longer linked to China. Nor did these increases generate from China. Long before the WHO declared the global Covid-19 pandemic in mid-March 2020, global travel restrictions were already enforced two months earlier in January 2020, isolating China from the rest of the world. This means the rise and spread of the coronavirus infection globally were self-generated within each nation and intra-regional respectively, especially in Europe.

During the first 21 months of the Covid-19 outbreak, there were three waves of infection surges, with each having a different timeframe. The Americas and the European regions continued to dominate the global Covid-19 pandemic scene throughout this period as demonstrated in Tables 17.2 A & B for confirmed cases and deaths, below

| Table. 17.2.A. CONFIRMED CASES BY WAVES | | | | | | | |
|--|-------------|-------------------------|---------|-----------------------|---------|------------------------|---------|
| | | 1ST. WAVE PERIOD | | 2ND. WAVE PERIOD | | 3RD. WAVE PERIOD | |
| WHO REGION ZONES | | DEC. 30. 19 - FEB.14.21 | | FEB.14.21 - JUN.13.21 | | JUN.13.21 - SEPT.24.21 | |
| | | INFECTION | %/share | INFECTION | %/share | INFECTION | %/share |
| THE AMERICAS | | 48,228,712 | 44% | 21,290,542 | 32% | 19,322,031 | 35% |
| | | 3,326,118/Month | | 5,322,635/Month | | 5,520,580/Month | |
| EUROPE | | 36,575,529 | 34% | 18,412,573 | 27% | 14,109,042 | 26% |
| | | 2,522,450/Month | | 4,603,143/Month | | 4,031,154/Month | |
| SOUTH EAST ASIA | | 13,188,211 | 12% | 20,244,079 | 30% | 9,314,488 | 17% |
| | | 909,532/Month | | 5,061,020/Month | | 2,661,282/Month | |
| EASTERN MEDITERRANEAN | | 5,998,998 | 6% | 4,471,700 | 7% | 5,114,454 | 9% |
| | | 413,724/Month | | 1,117,925/Month | | 1,461,272/Month | |
| AFRICA | | 2,723,431 | 3% | 935,545 | 1% | 2,325,976 | 4% |
| | | 187,823/Month | | 233,886/Month | | 664,564/Month | |
| WESTERN PACIFIC | | 1,531,366 | 1% | 1,731,704 | 3% | 4,899,306 | 9% |
| | | 105,611/Month | | 432,926/Month | | 1,399,801/Month | |
| GLOBAL TOTAL (WAVE) | | 108 246 992 | 100% | 67,086,143 | 100% | 55,085,297 | 100% |
| GLOBAL | WAVE PERIOD | 14.5 months | | 4 months | | 3.5 months | |
| GLOBAL TOTAL AVERAGE | | 7,465,310/Month | | 16,771,536/month | | 15,738,656/Month | |
| WHO Situation Reports: COVID-19 Weekly Epidemiological Updates | | | | | | | |

In terms of confirmed cases, the first wave was for a period of about 14.5 months (lasting from the outbreak in December 2019 through to mid-February 2021) with an average infection rate of 7.4 million cases per month. The second wave lasted four months with average infections more than doubling to 16.7 million cases per month. This figure reduced slightly during the third wave as at end of September 2021 to 15.7 million cases per month. During these three waves, the Americas and European regions continued to dominate the Covid-19 pandemic with combined levels of 78%, 59%, and 61% of cases respectively. They were followed by the Asian regions (South East Asia and West Pacific) with 13%, 33%, and 26% of cases respectively. It should be noted that the second and third waves occurred after the launch of the global vaccination with both the Americas and European regions having the highest access to western-manufactured Covid-19 vaccines, namely AstraZeneca, Pfizer, and Moderna. This data confirmed that these vaccines were not developed to protect against infection. The post-vaccine period showed significantly higher transmissions of Covid-19 than the pre-vaccine phase (the issues of these vaccines and vaccinations are covered in more detail in Chapter 19). However, it should also be noted that during the second wave, and thereafter, Covid-19 testing kits were introduced for self-testing, home testing, and more importantly proactive public community testing to identify and detect infected cases during the pre-symptomatic and asymptomatic phases. These tests would ‘dig out’ the still hidden infection cases for early treatment and isolation from spreading to others. The tremendous increase in cases during the second and subsequent waves for the Americas and European regions which had access to these kits could be due to their aggressive and widespread proactive testing which would lead to a surge of infection cases. In other words, infection cases did not necessarily increase during this period in these regions, but rather the identification of their existence did. The cumulative confirmed cases during each wave as well as cases per one million population are given in Table. 17.2B below

| Table. 17.2B. CUMMULATIVE CONFIRMED INFECTION CASES DURING EACH WAVE | | | | | | | |
|--|--|---|---------|-----------------------|---------|------------------------|---------|
| | | END OF 1ST. WAVE | | END OF 2ND. WAVE | | END OF 3RD. WAVE | |
| WHO REGION ZONES | | DEC. 30. 19 - FEB.14.21 | | FEB.14.21 - JUN.13.21 | | JUN.13.21 - SEPT.24.21 | |
| | | INFECTION | %:Share | INFECTION | %:Share | INFECTION | %:Share |
| THE AMERICAS | | 48,228,712 | 48% | 69,519,254 | 40% | 88,841,285 | 39% |
| | | 47,158* | | 67,976* | | 86,869* | |
| EUROPE | | 36,575,529 | 34% | 54,988,102 | 31% | 69,097,144 | 30% |
| | | 39,197* | | 58,930* | | 74,051* | |
| SOUTH EAST ASIA | | 13,188,211 | 8% | 33,432,290 | 19% | 42,746,778 | 19% |
| | | 6,524* | | 16,539* | | 21,147* | |
| EASTERN MEDITERRANEAN | | 5,998,998 | 6% | 10,470,698 | 6% | 15,585,152 | 6% |
| | | 8,208* | | 14,327* | | 21,326* | |
| AFRICA | | 2,723,431 | 3% | 3,658,976 | 2% | 5,984,952 | 3% |
| | | 2,432* | | 3,268* | | 5,345* | |
| WESTERN PACIFIC | | 1,531,366 | 1% | 3,263,070 | 2% | 8,162,376 | 3% |
| | | 779* | | 1,660* | | 4,152* | |
| GLOBAL | | 108,246,992 | 100% | 175,333,154 | 100% | 230,418,451 | 100% |
| * Infection per 1 Million population (estd.) | | WHO Situation Reports: COVID-19 Weekly Epidemiological Updates (Dashboard September 24, 2021) | | | | | |

The death rates during the same three waves were related to these regions' infection rates also, therefore the high ranking rates in the Americas region, the European, and the Asian regions were more or less matched pro-rata with their death rates accordingly. However, it is noteworthy and significant that the infection: death ratio had started to decline significantly from 2.2% during the pre-vaccination first wave to only 1.7% by the third wave, which was about nine months into the vaccination roll-out. This would indicate that the vaccination roll-out could have had positive impacts on reducing the fatality risk from Covid-19 as indicated in Table. 17.3. below.

| Table. 17.3. COVID-19 DEATHS BY WAVES | | | | | | | |
|---------------------------------------|-------------|-----------------------------|---------|--|---------|-------------------------|--------|
| WHO REGION ZONES | | 1ST. WAVE PERIOD | | 2ND. WAVE PERIOD | | 3RD. WAVE PERIOD | |
| | | DEC. 30. 19 - FEB.14.21 | | FEB.14.21 - JUN.13.21 | | JUN.13.21 - SEPT.24.21. | |
| | | DEATHS | %/share | DEATHS | %/share | DEATHS | % |
| THE AMERICAS | | 1,136,906 | 48% | 689,866 | 49% | 361,517 | 39% |
| | | 78,407/Month | 2.3%** | 172,466/Month | 3.2%** | 103,290/Month | 1.8%** |
| EUROPE | | 812,410 | 34% | 249,231 | 18% | 260,988 | 28% |
| | | 56,028/Month | 2.2%** | 62,308/Month | 1.4%** | 74,568/Month | 1.8%** |
| SOUTH EAST ASIA* | | 202,607 | 8% | 354,090 | 25% | 115,598 | 12% |
| | | 13,973/Month | 1.5%** | 88,522/Month | 1.7%** | 33,028/Month | 1.2%** |
| EASTERN MEDITERRANEAN | | 139,468 | 6% | 69,030 | 5% | 76,932 | 8% |
| | | 9,618/Month | 2.3%** | 17,257/Month | 1.5%** | 21,980/Month | 1.5%** |
| AFRICA | | 68,294 | 3% | 21,380 | 1% | 54,664 | 6% |
| | | 4,710/Month | 2.5%** | 5,345/Month | 2.3%** | 15,618/Month | 2.3%** |
| WESTERN PACIFIC* | | 27,019 | 1% | 22,916 | 2% | 61,947 | 7% |
| | | 1,863/Month | 1.8%** | 5,729/Month | 1.3%** | 17,699/Month | 1.3%** |
| GLOBAL TOTAL (WAVE) | | 2,386,717 | 100% | 1,406,513 | 100% | 931,646 | 100% |
| GLOBAL | WAVE PERIOD | 14.5 months | | 4 months | | 3.5 months | |
| GLOBAL TOTAL | | 164,601/Month | 2.2%** | 351,628/Month | 2.1%** | 266,184/Month | 1.7%** |
| *: Asian regions | | **: death as % of infection | | Source: WHO Situation Reports: COVID-19 Weekly Epidemiological Updates | | | |

C. Rationalisation of data and statistics⁶ for relevancy and pertinence

In order to analyze and better understand the relationships, influences, and impacts of national cultures, beliefs, and values on leadership and population behaviors and responses, it is necessary to view the Covid-19 data and statistics within the framework of the individual national perspective. This means breaking down the global and regional figures into individual national statistics and outcomes. Following that, and before undertaking any data analysis and situation evaluation of Covid-19 pandemic status, trends, and impacts on individual nations it is necessary to understand the source of information and to rationalize both the completeness, reliability, and applicability of these data.

Following the coronavirus outbreak and epidemic in Wuhan, WHO established the 'Covid-19 Situation Reports' in early January 2020, to record and compile data and statistics on infections, hospitalizations, and deaths. These were based on data inputs from its regional and country offices as well as requesting all member nations to report their daily statistics accordingly. As a result of this initiative, there have been daily inflows of information and data from those members who have been affected and infected by the Covid-19 outbreak. From the beginning, statistics have shown high figures in the Americas and European regions for confirmed cases, serious infections, hospitalizations, and deaths. In this regard, the WHO acts as a 'clearing house' of any and all information received, and does not, could not, either practically, or reliably check or confirm all data received from each country on a daily real-time basis. Inputs of data are from the nationally responsible agencies for gathering or organizing information and data related to the Covid-19 pandemic. Therefore the completeness and reliability of data received from all member nations depend on the human capacity, technical and process capability, communications resources, and organizational set-up of each nation in terms of tracking, monitoring, recording, and processing data relevant to the coronavirus outbreak of each nation.

i. Quality and Quantity of Reporting

From the very beginning of the Covid-19 outbreak, as well as the establishment of the WHO global reporting process, the data compiled indicated the highest figures on the growth and spread of the Covid-19 epidemic to have been submitted by nations mostly belonging to the Americas and European regions. On a prima facie basis this would suggest a high level of infections and deaths centering in those regions, which is both possible and probable. All these Western nations have efficient and well-established data-gathering systems and networks, so their data inputs would be comprehensive and complete. However, it is also possible and very likely that many nations in the third world, mostly made up of developing and under-developed countries cannot deliver comprehensive and complete data thus creating a statistical imbalance. Many nations in the African, Middle Eastern, and Asian regions do not have the technical resources and communications infrastructure for gathering and disseminating data. It then becomes an issue regarding the completeness and timeliness of the information received from these nations. Rationalization of data

⁶ Definition: Data is the raw quantitative information input to create the statistical outcome

received by the WHO with regards to infections, hospitalizations, and even deaths means that higher figures do not necessarily mean higher rates of infection, but higher efficiency in gathering and reporting the data. The same rationalization of statistics also means that lower figures do not necessarily mean fewer infection figures, but also possibly fewer resources to gather all the data required, and for reporting in a timely matter. Essentially it could be comparing complete with incomplete data. Therefore the WHO Situation reports need to be viewed with an open mind with due regard to the completeness, reliability, and quality of the information received. The level of bureaucratic systems and processes for recording and compiling data combined with the technicalities and technologies of national communications networks are sure to vary from country to country. This would certainly have varying influences on the quality, reliability, and completeness of data gathered and submitted to the WHO. Consequently, since the 'inputs' are influenced by various variables, the corresponding 'outputs' would incorporate these variables. Obviously, the raw data input from these nations would impact the various WHO downstream statistical reports regarding infection rates, hospitalization including serious illness and ICU cases, and deaths whether caused by or stimulated by Covid-19. Importantly, statistics measuring cases per one million population which are necessary to compare one nation with another based on a common denominator would be based on such raw data inputs. In other words, the WHO and any data processing resources cannot guarantee a 100% reflection of the true Covid-19 situation since the reliability and completeness of the original source of data inputs from reporting nations determines the accuracy and trustworthiness of the statistical outcomes. The level of reliability is tied to the combination of complete and incomplete data inputs.

The WHO Situation Reports and updates on the global Covid-19 pandemic status have always indicated the Americas and European regions as first and second highest ranking in terms of confirmed cases, serious illness, and deaths. In fact, with the exception of the first few months of the original outbreak in China, and throughout the coronavirus pandemic during the past three years, these two regions represented over two-thirds of the global rates, with the remaining four regions which includes Africa, and the Western Pacific and consisting of more than two-thirds of the global population, only recorded the remaining one-third of the rates. On a prima facie basis one might think, "Why are there such high figures for the Americas and European regions?" The answer would be that this was because their infection rates are really high, which would be the case if we were comparing 'apples to apples'. However, due to the various issues and variables enumerated above with regards to many of the third-world nations, it could be because we are not comparing 'apples to apples' but more likely 'apples to cherries'. This in no way is a criticism of the reporting ethics of third-world nations. It's like comparing a fax machine to the internet. One can only do what one can with what one has.

It is obvious that for any data to be compiled it has to be on the same basis, and that includes the same criteria, categorization, accuracy, and completeness. This would require three key criteria, namely, i) an efficient and effective data monitoring and quality assurance process with regards to categorizing, identifying, collecting, recording, and reporting, ii) a high level of reliable communications networks and information technology for data, transfer, consolidation, and

dissemination, and iii) data recording discipline, transparency (without political influences) and verification. It is unfortunate, but nevertheless true and realistic that not all the 220 nations reporting their Covid-19 data and updates to the WHO can meet all three criteria. In almost all cases, this is not because they will not do it, but because they cannot, due to their limited resources (money, manpower, and materials), capabilities (processes, data infrastructure, and skills), and technology (systems and networks). For example, compare the availability and accessibility of these key resources and elements between the United Kingdom and Sudan and how they would affect the completeness of their Covid-19 reports. An example related to the lack of resources such as manpower, material, and money, is nations with limited frontline medical/healthcare personnel and medicines, to be accessible to those needing assistance and care. Their reports and data would exclude many people who were beyond their outreach. Also, due to limitations in resources, these nations would have difficulty in launching aggressive proactive testing of the general public. Compared to most western developed nations which are able to carry out these pro-active testing aggressively and widely there would be an imbalance in reporting parameters. In fact, many of the Third-world nations would have problems just connecting with and reporting symptomatic cases, never mind including pre-symptomatic cases. Mostly because they don't have the resources to do it, and others because it's not part of their reporting protocol. As a result, it is possible, and probable, that reports from these nations could be incomplete or understated. Their figures, therefore, are not on the same platform as the developed and industrialized nations and therefore making comparisons is fundamentally unrealistic. It's just like putting 'the haves' with 'the have-nots' in the same box.

As a result, it is probable that about 100 of the 220 nations reporting Covid-19 data to the WHO are doing so on different baselines and may not completely reflect the realistic level of the Covid-19 pandemic status in their respective country. This is an element of the socio-economic inequality of nations and means that their reports on confirmed cases, hospitalization, and deaths may not fully reflect the true picture and the level of the global pandemic status. From this follows that it is likely that data from these nations reporting to the WHO could very well be significantly understated. However, this does not mean that there is a probability that the African and Asian regions would outrank and surpass pass the Americas or European regions. The statistical gap between these two groups of regions (western and non-western) is so great that bridging the gap would seem unlikely. However, the gap could be less.

Therefore in view of the above circumstances, the total figures for infections and more importantly for serious illnesses and deaths could likely be significantly higher than what has been officially recorded or stated. Differences between actual and reported data originate at the national level and then are fused into just the category of 'officially reported' statistic when filed with the WHO or any other database which is then officially consolidated to the regional level and finally to the global level of reporting. The 'gap' between the actual and reported cases becomes greater at each level of consolidation, but only the officially reported is seen. As of the end of 2021, the global reported confirmed cases and deaths were about 279 million and 5.4 million respectively. Of these sums, 71% of confirmed cases and 75% of deaths were statistically reported by the Americas and European regions, with the remaining 29% and 25% respectively allocated to the remaining regions of South

East Asia, Africa, Eastern Mediterranean, and Western Pacific regions. Based on these figures, it is remarkable when considering the fact that 75% of deaths from Covid-19 are from the combined populations of both the Americas and Europe which represent only 23% of the global population, while the remaining 24% of deaths are from the remaining regions with combined 77% of the global population. Therefore, the accuracy of these global figures for the distribution of infections and deaths probably needs to be further reviewed.

ii.. Relevance and Pertinence

The WHO had declared the coronavirus to be a global Covid-19 pandemic on March 11, 2020, after infections had spread to 113 countries with numbers reaching 118,391 confirmed cases and 4,292 deaths. At this time about one-third of both infections and deaths were outside of China. Within just two weeks of this announcement, by the end of March 2020, Covid-19 had increased to 750,290 confirmed cases (+ 650%), and to 36,398 deaths (+800%). This indicated that 89% of the cases and 90% of deaths, were already outside of China at the time.

The Top 20 nations with the highest infection rates from the Covid-19 pandemic as of March 31, 2020 were as illustrated in the Table. 17.4. below,

| Table. 17. 4 TOP 20 GLOBAL CONFIRMED CASES AND DEATHS AS AT MARCH 31, 2020 | | | | |
|--|---|----------------|--------------------------------|------------------|
| RANK | COUNTRY | CASES | DEATHS | WHO REGIONS |
| 1 | USA* | 140,640 | 2,398 | The Americas |
| 2 | ITALY* | 101,739 | 11,591 | Europe |
| 3 | SPAIN * | 85,195 | 7,340 | Europe |
| 4 | CHINA* | 82,545 | 3,314 | West Pacific |
| 5 | GERMANY* | 61,913 | 581 | Europe |
| 6 | FRANCE* | 43,977 | 3,017 | Europe |
| 7 | IRAN | 41,495 | 2,757 | E. Mediterranean |
| 8 | UNITED KINGDOM* | 22,145 | 1,408 | Europe |
| 9 | SWITZERLAND | 15,412 | 295 | Europe |
| 10 | BELGIUM | 11,899 | 513 | Europe |
| 11 | NETHERLANDS | 11,750 | 864 | Europe |
| 12 | TURKEY* | 10,827 | 168 | Europe |
| 13 | SOUTH KOREA* | 9,786 | 162 | West Pacific |
| 14 | AUSTRIA | 9,618 | 108 | Europe |
| 15 | PORTUGAL | 6,408 | 140 | Europe |
| 16 | CANADA* | 6,317 | 66 | The Americas |
| 17 | ISREAL | 4,831 | 17 | Europe |
| 18 | AUSTRALIA* | 4,359 | 18 | West Pacific |
| 19 | BRAZIL* | 4,256 | 136 | The Americas |
| 20 | SWEDEN | 4,028 | 146 | Europe |
| | TOTAL TOP 20 (a) | 679,140 (90%) | 35,039 (96%) | 5.1% (d) |
| | G-20+1 MEMBERS* (b) | 573,699 (84%) | 30,199 (86%) | 5.2% (d) |
| | THE AMERICAS REGION (c) | 151,213 (20%) | 2,600 (7%) | 1.7% (d) |
| | EUROPEAN REGION (c) | 389,742 (52%) | 26,188 (72%) | 6.7% (d) |
| | GLOBAL CASES | 750,890 (100%) | 36,398 (100%) | 4.8% (d) |
| | (a) Percentage of global total | | (b) Percentage of Top 20 Total | |
| | (c) Percentage of global total | | (d) Infection:death rate (%) | |
| | *G-20+1 Members 11 out of 19 nations (excl. EU seat) + Spain. | | | |
| | Source: WHO Weekly Situation Report : March 31, 2020 | | | |

These Top 20 nations had a total of 679,149 cases and 35,039 deaths representing 90% and 96% of the global total respectively. Notably, more than half of these Top 20 nations were from the European region (13). The European region alone constituted 52% and 72% respectively of the global confirmed cases and deaths. Three nations from the Americas region were also included in this list. The combined totals of the Americas and European regions represented 72% and 79% of total global infection cases and deaths respectively. Of interest (and even somewhat of a surprise) more than half of this Top 20 listing, 13 nations, are members of the G-20, considered and acknowledged as being among the wealthiest and most economically and technologically advanced nations in the current age of globalization. The G-20 was established in September 1999 with representations from all six regions of the world and operates as an inter-governmental forum for member nations with roles and goals to work together as “influencers” to address major issues impacting the global

economy, such as global financial stability, climate change, and sustainable development through global economic forums. There are 19 Member nations of the G-20 consisting of Argentina, Australia, Brazil, Canada, China, France Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom, the United States of America, and the European Union, with Spain as the permanent observer. These G-20 member nations represent around 85% of the global GDP, over 75% of the global trade, and about 65% of the global population.

As can be seen in Table. 17.4. above, there were 13 G-20 nations (including Spain as a permanent observer) that had a combined total of 573,699 infection cases and 30,199 deaths which constituted 84% and 86% respectively of the listed Top 20 total. With regards to the infection-to-death rate, these top 20 nations registered an average of 5.1% rate, which was higher than the global average of 4.8% rate. This was probably mainly due to the very high ratio for Europe with a rate of 6.7%, and likely related to the disastrous surge of deaths in Bergamo, Italy.

At the G-20 summit hosted by Italy in Rome from October 30, 2021, to Oct 31, 2021, global Covid-19 vaccination was included on the agenda. Members pledged to implement the primary vaccination series up to 40% of the world's population against COVID-19 by 2021 and increase to 70% by 2022.⁷ The Italian Prime Minister Draghi raised the issue of disparities in vaccine distribution, stating that such "differences are morally unacceptable and undermine the global recovery" efforts. This issue was strongly backed by the WHO which appealed to G-20 national leaders in an open letter, to commit to increasing vaccine supplies for the world's poorest nations, as well as ensuring access to vaccines for refugees, migrants, internally displaced people, and asylum-seekers. The WHO underlined the call for supporting low and middle-income countries to combat the virus, saying that the "current vaccine equity gap between wealthier and low-resource countries demonstrates a disregard for the lives of the world's poorest and most vulnerable."⁸

The list of the Top 20 nations with the highest number of infected cases and deaths was more or less consistent with strong representations from the G-20 Group throughout the Covid-19 pandemic period from the start of the global spread in March 2020. As of December 31, 2021, the G-20 Group had 14 nations on the list made up of seven from Europe, four from the Americas, two from Asia, and one from Africa with totals representing 66% of infection cases and 65% of fatalities of the global total as can be seen in Table. 17.5 below. Table. 17.5. also shows comparative figures for infections and deaths in terms of both absolute figures and cases per million population in relation to each nation's population. Based on this per-capita approach, the hierarchy of cases for both infections and deaths undergoes significant changes. By adopting this approach, it is possible to compare the outcomes of different nations on the same platform, i.e. cases per one million populations, for

⁷ G20 Italia 2021. G20 Rome leaders' declaration

https://www.g20.org/content/dam/gtwenty/about_g20/pdf_leaders_declaration/2021_G20%20Rome%20SummitDECLARATION.pdf

⁸ Chris Liakos and Kara Fox. Vaccine distribution disparities are "morally unacceptable," Italian PM says <https://edition.cnn.com/world/live-news/g20-rome-saturday-session/index.html>

comparisons, and realistically reflect the true rankings of these nations based on their real levels of infection cases in relation to their respective population. The real true ranking of infection cases for each nation should be linked to the population to get a common perspective and baseline of the Covid-19 pandemic status in each nation. For this, it is necessary to calculate the data for each nation based on a common denominator for all, so that all nations, large and small, can be compared on an equal basis and therefore can be 'ranked' correctly on the same standard, on the basis of "apples to apples", instead of "apples to cherries" or the Airbus 320 to the Airbus 380, as previously when using only the raw absolute data for comparison and ranking. The figures per million population give the real picture of the true infection cases and deaths for each nation as indicated in Table 17.5. below.

| Table. 17.5. TOP 20 GLOBAL CASES AS AT DECEMBER 31, 2021 | | | | | | |
|--|-----------------|--------------------------------|------------------|--|------------------|---------------------|
| RANK | COUNTRY | CASES | DEATHS | CASES PER 1 MIL. POP | POPULATION (MIL) | INFECTION:DEATH (%) |
| 1 | USA* | 58,047,187 | 851,475 | 173,831 | 333.9 | 1.5% |
| 2 | INDIA* | 35,018,358 | 482,551 | 25,005 | 1,400.4 | 1.4% |
| 3 | BRAZIL* | 22,323,837 | 619,426 | 103,910 | 214.8 | 2.8% |
| 4 | UK* | 13,641,520 | 148,941 | 199,368 | 68.4 | 1.1% |
| 5 | RUSSIA* | 10,585,984 | 313,015 | 72,492 | 146.0 | 2.9% |
| 6 | FRANCE* | 10,589,505 | 124,563 | 161,693 | 65.5 | 1.2% |
| 7 | TURKEY* | 9,652,394 | 82,932 | 112,621 | 85.7 | 0.9% |
| 8 | GERMANY* | 7,279,025 | 113,471 | 86,462 | 84.2 | 1.5% |
| 9 | SPAIN* | 6,785,286 | 89,689 | 145,040 | 46.7 | 0.9% |
| 10 | ITALY* | 6,566,947 | 138,045 | 108,855 | 60.3 | 2.1% |
| 11 | IRAN | 6,201,467 | 131,778 | 72,436 | 85.6 | 2.1% |
| 12 | ARGENTINA* | 5,820,536 | 117,294 | 127,028 | 45.8 | 2.3% |
| 13 | COLOMBIA | 5,203,374 | 130,100 | 100,645 | 51.7 | 2.5% |
| 14 | INDONESIA* | 4,264,136 | 144,109 | 15,345 | 277.9 | 3.4% |
| 15 | POLAND | 4,162,715 | 98,666 | 110,171 | 37.8 | 2.3% |
| 16 | MEXICO* | 4,008,648 | 299,711 | 30,606 | 131.0 | 7.5% |
| 17 | UKRAINE | 3,682,659 | 96,709 | 84,974 | 43.3 | 2.6% |
| 18 | SOUTH. AFRICA* | 3,483,590 | 91,451 | 57,641 | 60.4 | 2.6% |
| 19 | NETHERLANDS | 3,198,835 | 20,990 | 186,065 | 17.2 | 0.7% |
| 20 | THE PHILIPPINES | 2,871,745 | 51,662 | 25,691 | 111.8 | 1.8% |
| (a) | TOTAL TOP 20 | 223,387,748 (77%) | 4,146,578 (76%) | | | |
| (a) | G-20+1 MEMBERS* | 192,934,585 (66%) | 3,548,423 (65%) | | | |
| | GLOBAL CASES | 290,959,019 (100%) | 5,446,753 (100%) | 111K | | 1.9% |
| * G-20 Members 14 (+ Spain) | | (a) Percentage of total Global | | Coronavirus Statistics Wordometer: https://www.worldometers.info/coronavirus/ | | |

The listing of the Top 20 nations as of December 31, 2021, based on raw absolute data shows the United States ranking top with 58 million infection cases, followed by India with 35 million in second place, the United Kingdom placed fourth with 13.6 million and The Netherlands placed 19th place with 3.2 million accordingly. However, by applying the cases per one million population as the 'common denominator ' for all nations listed, we can enumerate the infection cases for each nation on the same common standard for comparison and ranking. By linking infection cases to population size, it can be seen that the United States' infection rate of 58.0 million cases, was 17.4% of its 333.9

million population or 173,831 cases per one million people. In the case of India, its infection rate of 35.0 million cases, was only 2.5% of its total population of 1,400 million or 25,005 cases per one million people. By the same standard of calculation, the United Kingdom's infection rate of 13.6 million cases was about 20% of its 68.4 million population or 199,368 cases per one million people; and the Netherlands' infection rate of 3,198,835 infection cases was about 19% of its 17.2 million population or 186,065 cases per one million people. In other words, the true representation of the level of infections and deaths shows that in fact, both the United Kingdom and the Netherlands had higher infection rates per one million population than either the United States or India. This outcome demonstrates the principle of relativity. Ten cases in a community of 20 people (50%) will have different values and impacts compared to ten cases in a community of 100 people (10%).

Based on this rationalization of infection cases to population ratio, where ranking is based on a common standard of the number of infections per one million population, the Top 20 ranking list ranking for the highest infection cases in Table 17.5. would be reconfigured according to Table. 17.6. below.

| Table. 17.6. TOP 20 GLOBAL CASES AS AT DECEMBER 31, 2021 (cases per one million population) | | | | | | |
|---|-----------------|-------------------|--------------------|------------------|------------------|-------------------|
| RANK | COUNTRY | CASES / 1 MIL.POP | CASES | DEATHS | POPULATION (MIL) | INFECTION:DEATH % |
| 1 | UNITED KINGDOM* | 199,368 | 13,641,520 | 148,941 | 68.4 | 1.1% |
| 2 | NETHERLANDS | 186,065 | 3,198,835 | 20,990 | 17.2 | 0.7% |
| 3 | USA* | 173,831 | 58,047,187 | 851,475 | 333.9 | 1.5% |
| 4 | FRANCE* | 161,693 | 10,589,505 | 124,563 | 65.5 | 1.2% |
| 5 | SPAIN* | 145,040 | 6,785,286 | 89,689 | 46.7 | 0.9% |
| 6 | ARGENTINA* | 127,028 | 5,820,536 | 117,294 | 45.8 | 2.3% |
| 7 | TURKEY* | 112,621 | 9,652,394 | 82,932 | 85.7 | 0.9% |
| 8 | POLAND | 110,171 | 4,162,715 | 98,666 | 37.8 | 2.3% |
| 9 | ITALY* | 108,855 | 6,566,947 | 138,045 | 60.3 | 2.1% |
| 10 | BRAZIL* | 103,910 | 22,323,837 | 619,426 | 214.8 | 2.8% |
| 11 | COLOMBIA | 100,645 | 5,203,374 | 130,100 | 51.7 | 2.5% |
| 12 | GERMANY* | 86,462 | 7,279,025 | 113,471 | 84.2 | 1.5% |
| 13 | UKRAINE | 84,974 | 3,682,659 | 96,709 | 43.3 | 2.6% |
| 14 | RUSSIA* | 72,492 | 10,585,984 | 313,015 | 146.0 | 2.9% |
| 15 | IRAN | 72,436 | 6,201,467 | 131,778 | 85.6 | 2.1% |
| 16 | S. AFRICA* | 57,641 | 3,483,590 | 91,451 | 60.4 | 2.6% |
| 17 | MEXICO* | 30,606 | 4,008,648 | 299,711 | 131.0 | 7.5% |
| 18 | THE PHILIPPINES | 25,691 | 2,871,745 | 51,662 | 111.8 | 1.8% |
| 19 | INDIA* | 25,005 | 35,018,358 | 482,551 | 1,400.4 | 1.4% |
| 20 | INDONESIA* | 15,345 | 4,264,136 | 144,109 | 277.9 | 3.4% |
| (a) | TOTAL TOP 20 | | 223,387,748 (77%) | 4,146,578 (76%) | | |
| (a) | G-20+1 MEMBERS* | | 192,934,585 (66%) | 3,548,423 (65%) | | |
| | GLOBAL CASES | 111K | 290,959,019 (100%) | 5,446,753 (100%) | | 1.9% |

* G-20 Members 14 (+ Spain)

(a) Percentage of total Global

Coronavirus Statistics Wordometer: <https://www.worldometers.info/coronavirus/>

As can be seen from the above table, the top rankings previously held by the largely populated nations such as the United States, India, and Brazil have been replaced by the mid-sized population nations in Europe such as the United Kingdom, Netherlands, France, Spain, Poland, and Italy. In this case, the United Kingdom became the highest-ranking nation followed by the Netherlands with the

United States ranking third. India, because of its population size dropped from second place ranking under the absolute figure basis to 19th ranking when linked to its population size. Therefore If we are going to analyze and compare nations, then it should be based on this same standard of values, i.e. cases per million population (i.e. comparing ‘apples to apples’). The ranking in Table 17.5. which was based on absolute figures for Covid-19 cases does not give a true representation of the infection or death rates impacting on a country based on population size.

The correct and realistic approach would be to adopt a different basis of calculation that links infection cases to population size, i.e. cases per one million population which would establish the common denominator for comparison and ranking. If this method of calculating the Top 20 nations, then the listing of nations would be significantly different as can be seen in the following Table 17.7. This Table gives comparative figures for confirmed cases per one million populations as of February 28, 2021, and as of November 1, 2021 to illustrate the level of increase in cases within the short period of seven months. The change in ranking also illustrates either the deterioration or improvement in a nation’s strategy in containing the Covid-19 pandemic.

| Table. 17.7. COMPARATIVE COVID-19 INFECTION CASES (PER 1.MIL.) | | | | | | |
|--|-------------|-------------|---|-------------|--------------|-----------|
| FEBRUARY 28, 2021 INFECTION CASES | | | NOVEMBER 1, 2021. INFECTION:DEATH | | | |
| RANKING | COUNTRY* | PER 1. MIL. | RANKING | COUNTRY* | PER 1.MIL.** | % of POP. |
| 1 | CZECH REP | 79934 | 1 | CZECH REP. | 164470/2867 | 16.4 |
| 2 | USA | 62891 | 2 | ISREAL | 142339/0869 | 13.7 |
| 3 | SLOVANIA | 60540 | 3 | USA | 140366/2297 | 14.0 |
| 4 | BELGIUM | 56161 | 4 | UK | 132498/2057 | 13.2 |
| 5 | SWITZERLAND | 53377 | 5 | SERBIA | 131494/1146 | 13.1 |
| 6 | ISREAL | 51779 | 6 | NETHERLANDS | 124062/1071 | 12.4 |
| 7 | NETHERLANDS | 48983 | 7 | BELGIUM | 116726/2230 | 11.7 |
| 8 | SWEDEN | 43308 | 8 | ARGENTINA | 115609/2535 | 11.5 |
| 9 | PORTUGAL | 42330 | 9 | SWEDEN | 115045/1472 | 11.5 |
| 10 | SPAIN | 41896 | 10 | FRANCE | 109475/1798 | 11.0 |
| 11 | FRANCE | 41626 | 11 | COSTA RICA | 108553/1363 | 10.8 |
| 12 | AUSTRIA | 40,794 | 12 | PORTUGAL | 107378/1788 | 10.7 |
| 13 | UK | 40091 | 13 | SPAIN | 106465/1858 | 10.7 |
| 14 | POLAND | 39955 | 14 | BRAZIL | 101649/2833 | 10.3 |
| 15 | ARGENTINA | 36484 | 15 | SWITZERLAND | 99848/1287 | 10.0 |
| 16 | BRAZIL | 36478 | 16 | COLOMBIA | 96938/2466 | 9.7 |
| 17 | ITALY | 35828 | 17 | LEBANON | 94628/1253 | 9.5 |
| 18 | SLOVAKAI | 34453 | 18 | TURKEYE | 93903/0825 | 9.4 |
| 19 | ROMANIA | 33453 | 19 | AUSTRIA | 91570/1251 | 9.1 |
| 20 | COLOMBIA | 33137 | 20 | HUNGARY | 89681/3192 | 8.9 |
| * Countries with population over 5 mil. | | | **164470/2867 = Infection/Deaths per one million population | | | |
| Source: Coronavirus Statistics Wordometer: https://www.worldometers.info/coronavirus/ | | | | | | |

For practicality, only mid-sized nations with populations of at least five million or higher are included (if the smaller nations with lower populations were included, they would most likely dominate the rankings). As it is, many of the Top 20 listings consist of mid-sized populations as illustrated in Table. 17.7. above.

Of interest is that the European region dominated the Top 20 list with 16 nations as of February 28, 2021, while the remaining four nations are from the Americas region. November 1, 2021, Top 20 listing consisted changed slightly with 14 European nations, 5 nations from the Americas, and one nation from the Eastern Mediterranean region. Many of these mid-size population nations such as Belgium, Czech Republic, Sweden, or Switzerland would never have been included if infection cases were based only on absolute figures. This is why the rationalization of data linked to the population is essential to gauge the seriousness of the Covid-19 pandemic's impact on each nation. It is also remarkable that these Top 20 lists do not include any nation from either the African or Asian regions. Again, as discussed in the previous section, this could be due to having really very low figures, or due to limitations in delivering complete reporting resulting from limited local logistics, communications networks, and technology resources. Most likely it is the combination of both but there is no clear indication regarding the weightage value for each possibility.

Another noticeable factor from these statistics (Table. 17.7.) is that Covid-19 infection levels continued to increase significantly when comparing the Top 20 rankings between February 28, 2021, and November 1, 2021, which ranged from 100% to 250 % with the highest rates registering from the European and followed by the Americas regions. This outcome is despite the launching of vaccination rollouts globally which started in those regions in January 2021.

This is why it is necessary to analyze and calculate the infection rates and deaths relative to the nation's population, and not just on absolute data, which may give a false sense of 'controlled' Covid-19 pandemic management.

Appendix: World Health Organization (WHO) Global Member Nations and Regions

The World Health Organization (WHO) was established in 1948, having its Head Office in Geneva, Switzerland, as well as six Regional Offices and 150 country offices globally. The world is divided into six WHO regions, for the purposes of reporting, analysis, and administration. These six regions are the basis for the WHO Situation Reports during the Covid-19 pandemic.⁹

Map of the WHO's regional offices and their respective operating regions:



Source: World Health Organization and wikimedia¹⁰

⁹ Source: World Health Organization. 2021

<https://apps.who.int/iris/bitstream/handle/10665/342703/9789240027053-eng.pdf>

¹⁰https://commons.wikimedia.org/wiki/File:World_Health_Organisation_regional_offices.svg?uselang=en#Licensing

WHO African Region: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

WHO Region of the Americas: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States of America, Uruguay, Venezuela (Bolivarian Republic of)

WHO South-East Asia Region: Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste

WHO European Region: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, Uzbekistan

WHO Eastern Mediterranean Region: Afghanistan, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen.

WHO Western Pacific Region: Australia, Brunei Darussalam, Cambodia, China, Cook Islands, Fiji, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Tonga, Tuvalu, Vanuatu, Viet Nam.

Chapter 18

NON-PHARMACEUTICAL INTERVENTIONS (NPIs) PERIOD (2020)

(Reliance on the human behavioral-based responses)

The Joint WHO – China Mission to Wuhan, China (February 16 to 24, 2020), announced its findings and recommendations to the world to prepare for the impending global coronavirus epidemic. At this time, by end of February 2020, there were already 85,403 confirmed cases and 2,838 deaths of which 93% and 100% respectively were in China. However, it also indicated that 6,009 confirmed cases and 86 deaths were spread throughout all five regions of the globe and emerging in 53 nations, of which 24 nations were in Europe.¹ As the spread of the coronavirus continued to increase rapidly on March 11, 2020, when these figures reached 125,260 confirmed cases and 4,613 deaths, the WHO declared this outbreak a global Covid-19 pandemic. At this time, 44,279 (35%) confirmed cases and 1,440 deaths (31%) had spread globally to 117 nations.²

During this period, and until the end of the year there were no viable or suitable vaccines for distribution. Therefore during the first year of the Covid-19 pandemic (2020), the only defensive option relied on the human-based initiatives, namely social distancing, creating human-to-human physical separation, masking, and sanitizing of hands and fingers. This was the first and most important phase and strategy in terms of timely global crisis management and response. Do what you can ‘now’, based on what you have and what you can do. No time for theoretical case studies and long-term trials and errors. Lives are at stake, and the cost of lessons learned through experiments, and mistakes, can be very expensive. During the Joint WHO - China Mission the Chinese health authorities indicated that they immediately adopted the non-pharmaceutical initiatives (NPIs) in dealing with the outbreak and throughout the pre-vaccine availability period as discussed in Chapter 18. However, the Joint WHO – China Mission issued duo standard recommendations differentiating China from the rest of the world with regard to the NPIs defense strategy against the spread of coronavirus infections. The Joint WHO – China Mission recommended that China (specifically) continues with what she was already doing in terms of policies, strategies, and legal enactments, which are essentially the

¹ WHO. Coronavirus disease 2019 (COVID-19). Situation Report – 40. February 29, 2020

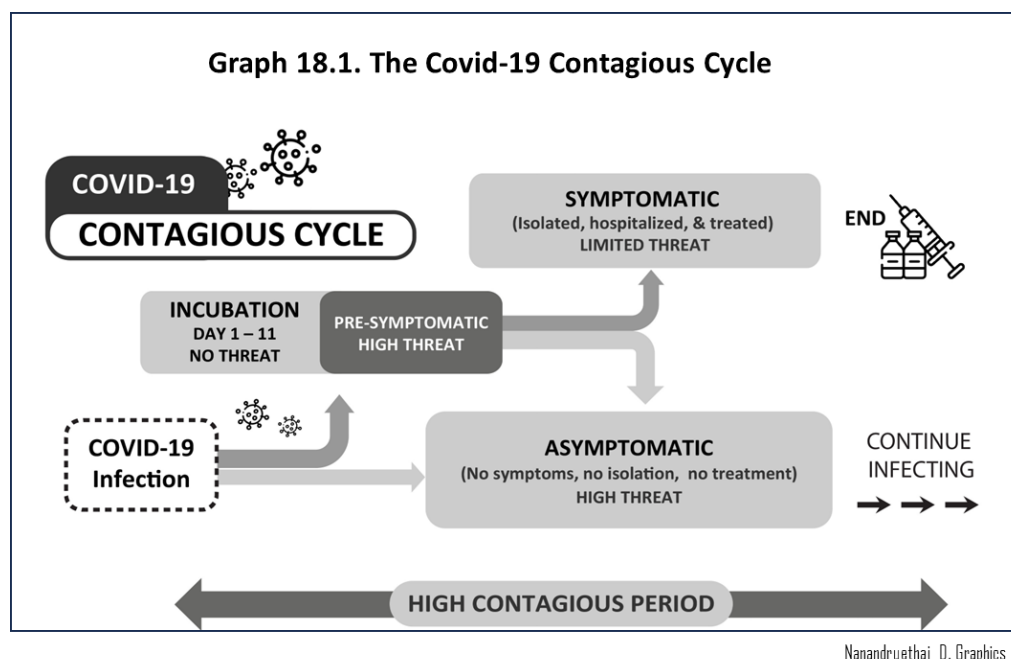
² WHO: Coronavirus disease 2019 (COVID-19) Situation Report – 52. March 12, 2020.

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200312-sitrep-52-covid-19.pdf?sfvrsn=e2bfc9c0_4

NPIs. On the other hand, recommendations for the rest of the world were essentially only broad guidelines, consisting of less specific directives, less stringent measures, and somewhat loose parameters in terms of social distancing practices and leaving the interpretations to the individual nations to decide in formulating and designing their own protective and preventive courses of action. There were no references to China’s practice of NPIs or the elements involved.

Nevertheless, the logic that in the absence of any viable vaccines at the time, and most likely to continue for at least the rest of 2020, the only viable option was to follow the non-pharmaceutical interventions (NPIs), which essentially rely solely on human behavior and discipline. Since it had already been well-established by the time of the Joint WHO – China Mission in February, as well as confirmed during their visit, that transmissions of the coronavirus included human-to-human connectivity, which essentially means social distancing and separation. This is nothing new as it had been practiced as a critical containment strategy for previous coronavirus infections, including the misnomer “Spanish flu” at the end of the First World War in 1918, which centered mainly in Europe and was estimated to have killed over 20 million people.

Based on the available information, along with the experiences of previous coronavirus epidemics, the virus's contagious cycle required the practice of ‘social distancing’ as a key factor of non-pharmaceutical defense initiatives. The coronavirus was contagious, with a high threat of infections during the pre-symptomatic and symptomatic periods. However, of higher risk is the asymptomatic state when the virus’s threat is invisible and therefore can infect easily and without any indicative warning.



The Chinese NPIs were implemented by its front-line emergency medical teams, emphasizing social distancing such as maintaining 1-2 meters separation between people, lockdowns (of towns, cities, and provinces), closedowns of public venues, quarantines, curfews, as well as self-protection by wearing masks, personal protective equipment (PPE), and continuous sanitization of hands after touching any potentially infected objects in public. These NPIs were almost immediately adopted by many nations in Asian, Eastern Mediterranean, and African regions since they had experienced numerous virus infections spread in the past. However, in the absence of specific WHO guidelines and recommendations on the practice of NPIs, most of the Americas and European regions did not enforce strict or stringent social-distancing protocols.

This led to the one common global Covid-19 disease being more or less addressed differently between the western and eastern regions. It was therefore not so surprising that the outcomes would also be different between these regions. This became evident one month after the Joint WHO – China Mission issued its guidelines and recommendations, at end of March 2020, when the global total had surged to 750,890 infection cases and 36,405 deaths, of which 89% of cases and 91% of deaths were outside China. The western regions of Europe and the Americas accounted for 78% of infection cases and 81% of deaths in the global total.³

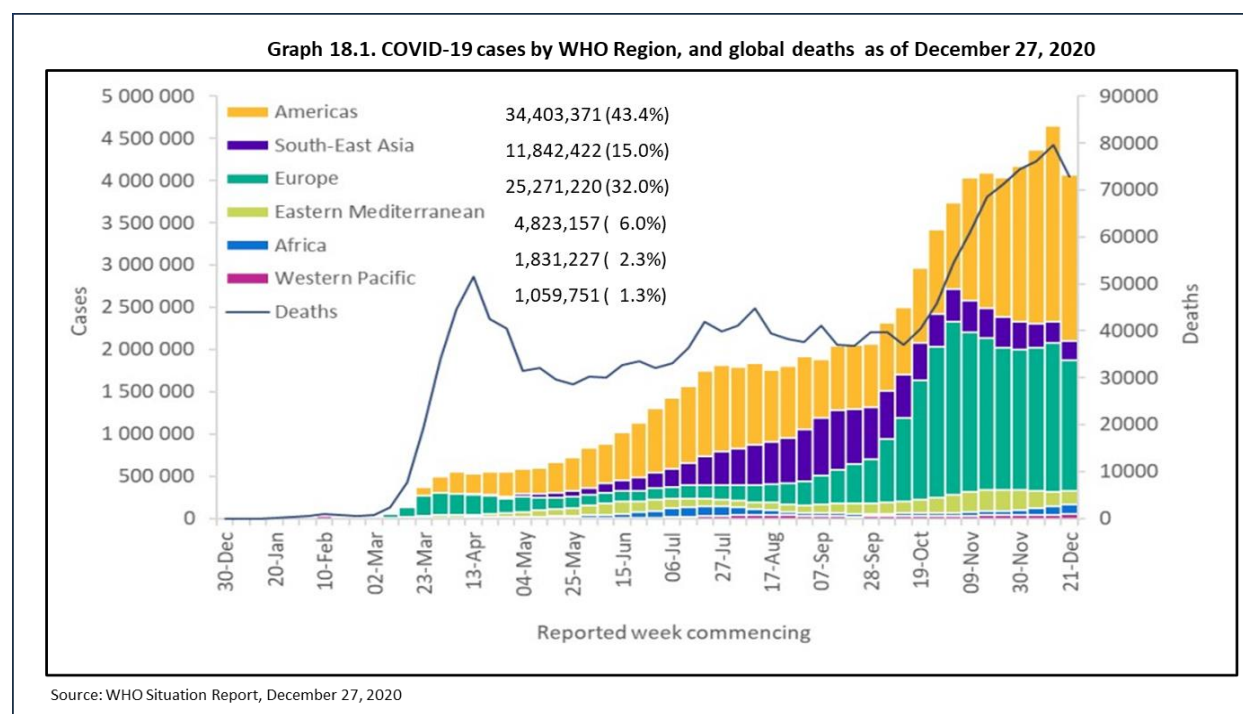
By contrast, in the absence of any vaccines anywhere in the world, most nations in the eastern regions had applied non-pharmaceutical initiatives focusing on social distancing protocols that relied on human behavior and tolerance as being the only viable defense.

The Joint WHO – China Joint Mission predicted that the differentiated approach as indicated in its guidelines and recommendations would result in differentiated outcomes globally with each nation adopting various forms of non-pharmaceutical-based preventive strategies. These would most likely follow their national behavioral cultures which include beliefs and values (including political culture), and would inevitably lead to diverse government responses, strategies, and approaches, as well as different behavioral patterns of the general public, and would result in different levels of containment outcomes. These cultural differences and influences are covered in Part Three (Cultural issues and influences on national leadership and behavioral responses).

By end of the year on December 27, 2020, the Covid-19 pandemic had infected the whole world with infection figures increasing by about 93 times since the Joint WHO – China Mission in February to 79,231,893 cases and 1,754,574 death. Of these figures, China's reports only accounted for 96,324 cases (0.1%) and 4,777 deaths (0.3%). The rapid spread of Covid-19 from China to the rest of the world indicated the high level of human mobility and connectivity in this

³ WHO. Coronavirus disease 2019 (COVID-19). Situation Report – 71. March 31, 2020

age of globalization. WHO's global Covid-19 statistics and records are categorized into its six administrative and operations regions as given in Graph 18.1. as of December 27, 2020 below.⁴



The Graph 18.1. above illustrates the first year of the Covid-19 pandemic (December 2019 – December 2020) indicating the accumulated global infections and deaths as broken down by the WHO designated regions. The Graph 18.1. shows the rate of growth rate and concentration of the Covid-19 pandemic for the first year from December 2019 to December 2020, indicating the concentration of confirmed cases in the Americas and European regions which combined represented 75.4% of the global total. To be fair to the nations (33) in the Americas region which ranked first, the United States of America alone contributed more than half of the region's total 43.4 percent. The European region followed in second ranking with 32 percent. The other three regions shared the remaining 24.6% of the total global cases, with the Western Pacific region, which includes China, registering the lowest rate at 1.3 percent. As previously mentioned, most nations in these regions actively practiced the NPIs following China.

For a better perspective of the global Covid-19 pandemic impacts it should be noted that the combined populations of The Americas and Europe regions which totaled about 1,560 million

⁴ WHO: COVID-19 Weekly Epidemiological Update.

Data as received by WHO from national authorities, as of 27 December 2020, 10 am CET

(2021 est.), representing about 23% of the global population of 7.7 billion⁵, had a 75.4% share of the global Covid-19 pandemic infections. Conversely, the remaining 77% of the world's population, which included China with 1,410 million (Western Pacific region) and India with 1,393 million (South East Asia region), only registered 24.6% of the global infections.

By the end of the first quarter, and soon after WHO declared the global Covid-19 pandemic in mid-March 2020, the global figure was 750,890 confirmed infection cases. However, by the end of June, just three months later, the infection level had grown to over 10 million infection cases. These figures would also suggest that the guidelines and recommendations issued by the Joint WHO – China Mission did not create a significant impact on the global responses, particularly in the European and the Americas regions. The differentiated levels of infection levels would indicate the variable responses and interpretations of “social distancing” in these regions. It is also possible that this jump was most likely due in part to the establishment and activation of the global daily reporting systems. This would result in a ballooning of data inflow from the national statistics worldwide and would probably include a significant accumulated backlog of confirmed cases during the early months before the launch of the weekly WHO situation reporting system. This was probably why subsequent figures reported in subsequent quarters were more stabilized and most likely represented real-time occurrence for each period as demonstrated in the lower rates of increase of 221% in the third quarter (September) and 142% in the last quarter (December 2020). The end of June data also indicated that Covid-19 had become a truly global pandemic with over 98% of cases occurring outside of China. It then follows that the speed and level of the coronavirus growth were probably closely tied to the level of achievability and sustainability of social distancing policies, if any, under the NPIs in each nation since there were no other options available at the time. The following Table 18.1. tracks the quarterly growth of the Covid-19 pandemic during the first year.

⁵ Wordometer: Regions in the world by population (2022). Of deaths.
<https://www.worldometers.info/world-population/population-by-region/>

| Table. 18.1. | | COVID-19 CONFIRMED CASES 2020 | | | | |
|--|--|-------------------------------|------------|------------|------------|---------|
| WHO REGIONAL ZONES | | MARCH | JUNE | SEPTEMBER | DECEMBER | % SHARE |
| THE AMERICAS | | 163,014 | 5,136,705 | 16,233,110 | 34,403,371 | 43.5% |
| EUROPE | | 423,946 | 2,692,086 | 5,662,875 | 25,271,220 | 32.0% |
| SOUTH EAST ASIA | | 4,215 | 784,931 | 6,720,771 | 11,842,422 | 15.0% |
| EASTERN MEDITERRANEAN | | 50,349 | 1,058,055 | 2,340,215 | 4,823,157 | 6.0% |
| AFRICA | | 3,786 | 297,290 | 1,172,342 | 1,831,227 | 2.0% |
| WESTERN PACIFIC | | 104 868 | 215,566 | 600,891 | 1,059,751 | 1.5% |
| DIAMOND PRINCESS | | 712 | | | | |
| GLOBAL TOTAL | | 750,890 | 10,185,374 | 32,730,945 | 79,231,893 | 100% |
| (% INCREASE) | | | 1,256 | 221 | 142 | |
| Source: WHO Covid-19 Situation Reports | | | | | | |

Of interest was to observe the management of cross-border controls in the two regions with multi-national borderless agreements, namely the Schengen states in Europe incorporating 26 nations, and the ASEAN zone in Asia with 10 nations. These two zones allowed for free movement for their citizens without border controls, and for non-citizens, this is also possible with the appropriate Schengen or ASEAN visa. With these borderless controls under multinational agreements, these two regions eventually had to overcome their political – social - economic integration status and replace it with isolationist policies by imposing travel bans and closing borders within these zones. The ASEAN zone was the first to impose closure of their national borders as well as travel restrictions and enforcement of quarantines for any inbounds, both national and foreign just weeks after the outbreak. These nations were quick to take action having all had previous experiences with both the SARS and MERS where social distancing was the primary containment response. This was followed by the European Union several months later and only after the WHO had declared Covid-19 as a global pandemic in mid-March 2020⁶.

With the closure of their borders, these nations initiated the NPIs with special regard to social distancing. For the ASEAN nations, along with many Asian, Eastern Mediterranean, and African nations, the practice of NPIs was launched almost immediately after the Chinese as early as January 2020 and with stringent enforcements and controls. These nations were quick to take action having all had previous experiences with both the SARS and MERS where social

⁶ DW. EU closes borders: What you need to know. March 18, 2020.

<https://www.dw.com/en/eu-closes-borders-to-foreigners-to-halt-coronavirus-spread-what-to-know/a-52824499>

distancing was the primary containment response. For the European and the Americas regions, NPIs were implemented later and there were no enforcements initially. Stringent controls and enforcements only occurred later when the surges of infections, resulting in overloading hospitals had reached a critical point as illustrated in Table 1.6. In fact, even after the launch of vaccination rollouts beginning in 2021, the NPIs were still considered important and essential and continued to be so into 2022.

It was not until towards the end of 2021, after the launch of vaccination roll-outs in most ASEAN member nations that some started to relax cross-border traffic, but only with continued impositions of strict vaccination and limited quarantine controls. It would not be until 2022 that these vaccination and quarantine controls were relaxed or lifted, mainly to promote tourism and reboot an important sector of the national economy.

Chapter 19

PHARMACEUTICAL INTERVENTIONS (PIs) WITH COVID-19 VACCINES (2021)

On January 10, 2020, three weeks after the coronavirus outbreak in Wuhan, China, a consortium of experts led by Professor Yong-Zhen Zhang from the Fudan University in Shanghai posted the genetic sequence of the virus on an open-access platform for sharing with the world following which the development of vaccines was initiated in various countries.¹

A. Emergency Use Authorization (EUA) by the WHO

At the time that the WHO declared the coronavirus a global pandemic on March 11, 2020, there were no applicable vaccines. Therefore the immediate appropriate and implementable strategy had to rely on non-pharmaceutical interventions (NPIs) which emphasized social distancing and physical separation and fundamentally relied solely on human behavior and discipline. A typical vaccine development timeline (to develop, test, and certify), can take several years ranging between five to ten years, and sometimes even longer². What was achieved within the accelerated timeframe could only have been possible under the Emergency Use Authorization (EUA) by the WHO.

With regards to the coronavirus, it continued to mutate and develop new variants all of which were capable of inducing serious illnesses and deaths at varying degrees depending on the health of the infected. The accelerated speed of infection spread along with the increasing level of hospitalization, medical care and treatment required created a critical overloading of health workers' response capabilities and capacities, as well as hospital facilities, and available medical equipment. Most importantly impacting the demand overload was affecting the quality and quantity of medical response and treatments for serious and emergency cases. In countries, both developed and less developed, the demand for hospitalization and medical treatment significantly exceeded their capacity to respond, especially with regard to the availability of

¹ This posting is communicated by Edward C. Holmes, University of Sydney on behalf of the consortium led by Professor Yong-Zhen Zhang, Fudan University, Shanghai.

² Johns Hopkins University & Medicine. Vaccine Research & Development
<https://coronavirus.jhu.edu/vaccines/timeline>

hospital beds and necessary types of equipment such as life-supporting medical equipment to treat serious cases. Many developing and under-developed nations with limited health facilities and resources, both manpower and materials, were unable to give the necessary medical care or to give treatment promptly and had to leave the sick lying on the streets waiting for beds and treatment.

This was the scenario of the Covid-19 pandemic which put pressure on both the WHO and national health authorities to develop vaccines as soon as possible. Every nation was desperate for a pharmaceutical solution to stem the pandemic spread globally as well as to lessen the level of serious illness to reduce overloading pressures on hospitals and healthcare workers. Of course, the WHO fully advocated for and supported all efforts by the pharmaceutical industry to develop new vaccines and was willing to issue the Emergency Use Authorization (EUA) accordingly. This would facilitate and expedite local national drug administration authorities to evaluate and approve similar emergency use authorization (EUA) for distribution in their countries as well as abroad.

By the end of the first year, the level of the Covid-19 pandemic showed significant declines globally both for infections (-12%) as well as for deaths (-8%) as illustrated in the following Table from the WHO Situation Report as of December 27, 2020, below.

| WHO Region | New cases in last 7 days (%) | Change in new cases in last 7 days * | Cumulative cases (%) | New deaths in last 7 days (%) | Change in new deaths in last 7 days * | Cumulative deaths (%) |
|-----------------------|-------------------------------------|---|------------------------------|--------------------------------------|--|------------------------------|
| Americas | 1 965 774 (48%) | -15% | 34 403 371 (43%) | 31 142 (42%) | -3% | 840 247 (47%) |
| Europe | 1 545 682 (37%) | -12% | 25 271 220 (31%) | 31 005 (42%) | -15% | 554 716 (31%) |
| South-East Asia | 231 978 (5%) | -6% | 11 842 422 (14%) | 3 911 (5%) | -1% | 180 737 (10%) |
| Eastern Mediterranean | 157 595 (3%) | -9% | 4 823 157 (6%) | 3 482 (4%) | -10% | 119 004 (6%) |
| Africa | 114 530 (2%) | 20% | 1 831 227 (2%) | 2 558 (3%) | 37% | 40 299 (2%) |
| Western Pacific | 53 073 (1%) | 13% | 1 059 751 (1%) | 663 (0%) | 4% | 19 558 (1%) |
| Global | 4 068 632 (100%) | -12% | 79 231 893 (100%) | 72 761 (100%) | -8% | 1 754 574 (100%) |

*Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.

**For all figures included in this report please see [data](#), [table](#) and [figure notes](#)

Most significantly, the highest levels of decline for both infections and deaths were registered in the Americas and European regions, followed by Southeast Asia and the Eastern

Mediterranean region. However, significant increases continued in the African and Western Pacific regions. Although the link cannot be definitively confirmed, it is noted that the regions with significant declines also launched aggressive vaccination rollouts during the year. Needless to say, the pharmaceutical solution through vaccinations has a long 'learning curve' since it would take more than a year to vaccinate just the majority of the population of a nation. It would certainly take much longer to cover the whole globe, if at all, since more than half of the nations have to rely on donations because they lack the financial resources to buy vaccines. Therefore during the waiting period for completing the primary vaccination protocols (two injections 5-6 months apart), all nations still had to aggressively apply non-pharmaceutical protocols.

This was indicated in the figures for the Covid-19 pandemic as at end of December 2021, one year after the launch of vaccinations globally, which was also one year following the outbreak. The above WHO Table 1. Showed that global infections had reached over 79 million cases, averaging over 4.0 million cases per week, with deaths at 1.7 million and averaging about 73,00 deaths per week. Of these figures, 74% of infections and 78% of deaths were concentrated in the Americas and European regions.... and these were mostly the rich nations that could afford the vaccines.

The first Covid-19 vaccine to be approved was developed in the United States by Pfizer-BioNTech on December 11, 2020. This was soon followed by other Covid-19 vaccines also developed in the United States as well as in other European and Asian nations such as the Oxford–AstraZeneca (UK), Janssen/ Johnson & Johnson (US), Novavax (US), Moderna (US), Sinopharm (China), CoronaVac/Sinovac (China), and the Sputnik V/Gamalya (Russia) to name a few. All these vaccines were approved under the Emergency Use Authorization (EUA) category in their respective countries prior to receiving WHO's approval for global distribution.

The EUA category means that the vaccine had not yet fully completed the normal certification process and the WHO was willing to accept and approve them as part of the global emergency crisis management strategy. Global EUA approvals were necessary to accelerate as well as expedite the worldwide roll-out of vaccination to contain the rapid expansion and growth of the coronavirus. Most important was the need to quickly alleviate the overwhelming pressures of inadequate hospitalization facilities, health workers, and medical care which could lead to increased deaths. The WHO criteria for EUA approvals are based on the vaccine being a) duly approved by the respective Food and Drugs Administration (FDA) of each country in accordance with its laws and regulatory standards, and b) that vaccines have a safe and workable pharmaceutical solution which guarantees above 50% efficacy in building immunity against the Covid-19. The WHO approval for these vaccines under the EUA category was to facilitate the initiation of similar approvals at the national level of each country by their respective health authorities and agencies such as the Center for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA).

The rationalization of WHO's approval of the newly developed Covid-19 vaccines was based on two fundamental factors. First, having EUA vaccines, even with just over 50% efficacy during this accelerating global pandemic, was better than having nothing for the next 3 to 5 years until a duly fully approved pharmaceutical solution was available. Second, with the overload of hospital facilities, medical equipment, and health workers resulted in seriously ill infected people being literally left on the streets and corridors, which would surely and inevitably further aggravate the already increasing fatality rates. For these people, a 50:50 chance of survival was better than being left with no option for several years, therefore these EUA vaccines could and would significantly reduce this seriously ill population and increase their chance for survival. Ironically however, the greatest need for these vaccines are nations with the lowest healthcare resources and the least capacity and capability to handle the Covid-19 pandemic are in the low-income regions, which actually do not have the financial resources to purchase these vaccines. In fact, the first year of vaccination roll-outs in 2021 was concentrated in the high-income nations (the Americas and European regions) with very (very) few donations to the low-income nations. For these nations, the NPIs remain their only applicable option while waiting for donations to cover their population which could and would take several years.

The Pfizer–BioNTech vaccine had taken less than one year in the development cycle before seeking WHO approval under the EUA category. Despite approvals by the WHO, and the US Food and Drug Administration (FDA) there was general skepticism from the scientific, medical, and general public both in the United States and in Europe where the Pfizer–BioNTech vaccine was widely used regarding both the safety and efficacy factors of the vaccine. The whole process and timeline seemed too much like a fast-track / crash course on the part of both the pharmaceutical industry and the regulators. Key concerns were the side effects and repercussions of the vaccine. These sentiments were likely built on a long history of credibility and distrust for the politically powerful pharmaceutical industry in the United States. Most of the vaccines for global distribution were from the United States.

For the WHO and the national FDAs, the cost of indecision or delay was too high in terms of daily loss of lives. At the time of EUA approvals and launching vaccination end of December 2020, the average Covid-19 deaths had reached 72,700 per week with the highest rates in the Americas and European regions, both with weekly averages exceeding 31,000 deaths for each region.³ The first roll-out of vaccinations occurred in mid-December 2020 and was started in North America and several countries in Europe. They were soon followed by other nations in South America and Europe.

³ WHO Covid Situation Report December 27, 2020

On August 23, 2021, the Pfizer-BioNTech vaccine, became the first Covid-19 vaccine to be fully approved by the US FDA and was marketed as Comirnaty. This was followed in the following year by the Moderna vaccine which was approved by the US FDA on January 31, 2022, and is now marketed under the name of Spikevax. Nevertheless, the skeptics continued, to be joined by the ‘anti-vaxxers’. This is discussed in further detail in Chapter 20.

Following the launch of vaccinations, a study was undertaken by the Institute for Health Metrics and Evaluation (IHME), an independent global health research center at the University of Washington, tracking the performance of these vaccines from the perspective of prevention against getting infected, and severe disease (serious illness leading to hospitalization and/or death). The efficacy of these vaccines was measured against the full series of Covid-19 variants from the outbreak and was reported on IHME’s website of findings on November 18, 2022, as summarized in Table 19.1 below.⁴

| Vaccine | Ancestral | | Alpha | | Beta | | Gamma | | Delta | | BA.1/BA.2 | | BA.5 | |
|-----------------------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|
| | Severe disease | Infection | Severe disease | Infection | Severe disease | Infection | Severe disease | Infection | Severe disease | Infection | Severe disease | Infection | Severe disease | Infection |
| AstraZeneca | 94% | 63% | 94% | 63% | 94% | 69% | 94% | 69% | 94% | 69% | 71% | 36% | 71% | 36% |
| CanSino | 66% | 62% | 66% | 62% | 64% | 61% | 64% | 61% | 64% | 61% | 48% | 32% | 48% | 32% |
| CoronaVac | 50% | 47% | 50% | 47% | 49% | 46% | 49% | 46% | 49% | 46% | 37% | 24% | 37% | 24% |
| Covaxin | 78% | 73% | 78% | 73% | 76% | 72% | 76% | 72% | 76% | 72% | 57% | 38% | 57% | 38% |
| Johnson & Johnson | 86% | 72% | 86% | 72% | 76% | 64% | 76% | 64% | 76% | 64% | 57% | 33% | 57% | 33% |
| Moderna | 97% | 92% | 97% | 92% | 97% | 91% | 97% | 91% | 97% | 91% | 73% | 48% | 73% | 48% |
| Novavax | 89% | 83% | 89% | 83% | 86% | 82% | 86% | 82% | 86% | 82% | 65% | 43% | 65% | 43% |
| Pfizer/BioNTech | 95% | 86% | 95% | 86% | 95% | 84% | 95% | 84% | 95% | 84% | 72% | 44% | 72% | 44% |
| Sinopharm | 73% | 68% | 73% | 68% | 71% | 67% | 71% | 67% | 71% | 67% | 53% | 35% | 53% | 35% |
| Sputnik-V | 92% | 86% | 92% | 86% | 89% | 85% | 89% | 85% | 89% | 85% | 67% | 44% | 67% | 44% |
| Other vaccines | 75% | 70% | 75% | 70% | 73% | 69% | 73% | 69% | 73% | 69% | 55% | 36% | 55% | 36% |
| Other vaccines (mRNA) | 91% | 86% | 91% | 86% | 88% | 85% | 88% | 85% | 88% | 85% | 67% | 45% | 67% | 45% |

Institute for Health Metrics and Evaluation

Its findings indicated that all these vaccines had the lowest protection indexes against the current Omicron variant, which became the dominant Covid-19 variant globally in 2022 and continued into 2023. With the exception of the CoronaVac (Sinovac) and the CanSino vaccines (both developed in China), all of them (some were just barely) were still able to achieve the WHO’s EUA protection threshold above the 50% baseline for severe disease/serious illness

⁴ IHME. COVID-19 vaccine efficacy summary. November 18, 2022
<https://www.healthdata.org/covid/covid-19-vaccine-efficacy-summary>

only, and all failed the mark for prevention of infection. It should also be noted that based on this study, the CoronaVac (Sinovac) vaccine had failed to meet the WHO EUA criteria of the above 50% threshold for the prevention of both severe illness and infection since its launch. Based on this study, until there are further developments in the available vaccines (existing and new) to match the Omicron variant, and its mutations, most likely that the Omicron infections would be more widespread, more rapid, and more numerous. It also follows that with continuous mutations of the Omicron variant, and due to several existing vaccines currently barely meeting the WHO EUA threshold, there is a threat that eventually these vaccines would fail in the prevention of severe illness also. It is not surprising therefore that very soon after its emergence end of 2021, the Omicron variant quickly by the first quarter 2022 overtook the Delta variant to become the dominant variant of Covid-19 globally.

Of course, this is not the final definitive study of the efficacy levels of vaccines as there are many other completed or ongoing research covering the same topics and issues with each study probably using different population demographics, nationalities, and group sizes. The outcomes of these various studies could very well be different, but probably not so drastic or dramatically different since we humans are all made up of fundamentally the same biological elements, and also vaccines are based on the same construction.

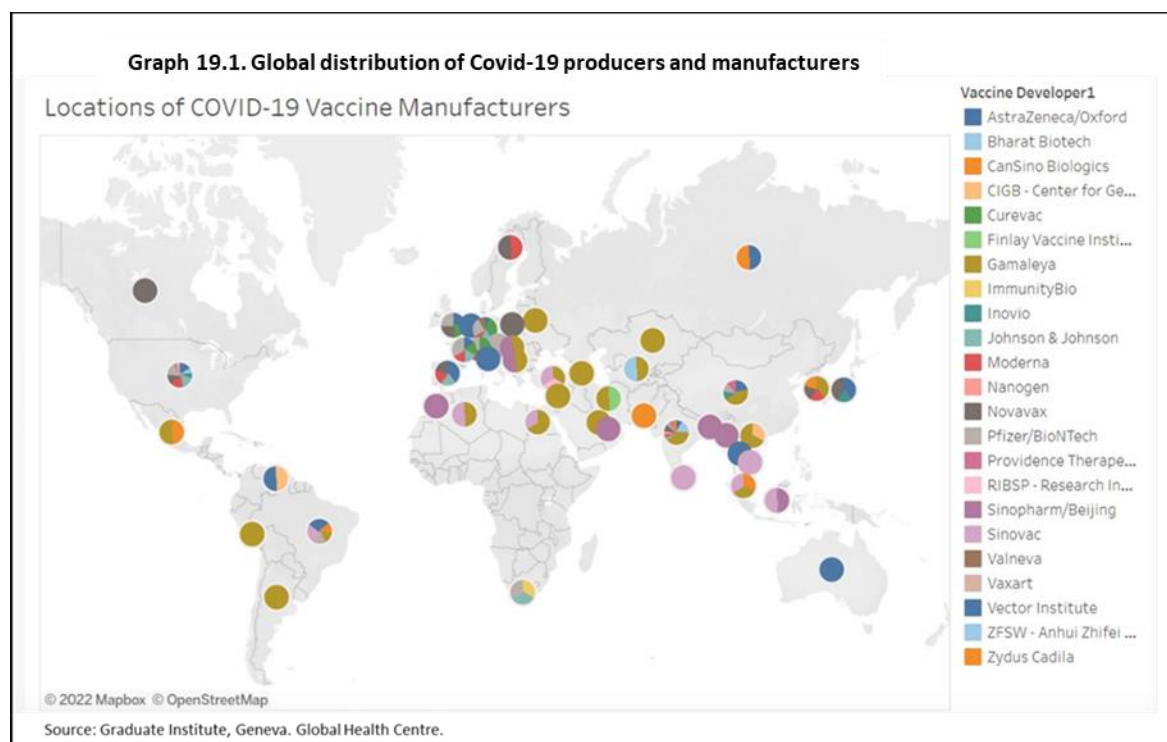
Nevertheless, there is one fundamental element that is related to this study, and also supported by current statistics related to Covid-19 generated or enhanced hospitalization and deaths. That is the accepted fact that this Omicron variant, under the current series of mutations is less deadly and causes less serious illness than the previous Delta variant. This was Mother Nature's gift of reprieve to mankind, during this period when the vaccines' efficacy has been reduced dramatically. More about this is in Chapter 21. The Elusive Endemic

B. Global production of vaccines

Global production of vaccines is dispersed between the home-based manufacturing facilities of each brand as well as international production facilities through contracts and licensing with multi-national manufacturing or assembly partners. The multi-national vaccine supply chains were quickly developed and would be the backbone and lynchpin for the global distribution supply strategies. Manufacturing partners in the different countries were mostly private enterprises and some were connected to government agencies or state-owned enterprises. Currently, vaccines are produced in over 45 nations, most of which are located in Europe. Production arrangements with brand owners are at three levels of manufacturing, a) based on bulk substance production⁵, b)

⁵ Bulk substance production refers to drug substances in various forms to be used as active ingredients in the compounding, manufacturing, processing, or packaging of a drug formulation.

based on ‘fill-and-finish’ assembly - production⁶, and c) full process manufacturing⁷. In terms of product distribution with manufacturing in the home country, about 32% are either primarily or exclusively for the local market, 23% are earmarked for exports to specific nations, with the remaining 45% to unspecified markets.⁸ The global distribution of these assembly and manufacturing partners is illustrated in Graph 19.1.⁹ below.



In terms of population size, Europe is by far the largest producer – manufacturer of Covid-19 vaccines. These are mainly for the vaccines developed by the United States such as Pfizer, Moderna, and John & Johnson, and followed by the British-developed AstraZeneca vaccine. The Asian region followed next in terms of vaccine production – manufacturing, again mainly for the three United States-developed vaccines, followed by the Chinese CanSino, Sinopharm, and Sinovac vaccines, and the Russian Gamaleya vaccine among other locally developed brands.

⁶ ‘Fill and finish’ is similar to the assembly processing method and applied to producing a drug formulation, consisting of a) creating the defined dosage and filling it into a capsule, vial, syringe, ampoule, or cartridge, depending on the drug, and b) inspection, labeling, and packaging for distribution

⁷ Fully integrated manufacturing process from ‘input of with A’ to ‘completed output at Z’.

⁸ COVID-19 Vaccine Manufacturing, The Knowledge Network on Innovation and Access to Medicines, Global Health Centre. Graduate Institute, Geneva.

<https://www.knowledgeportal.org/covid19-vaccine-manufacturing>

⁹ Graduate Institute, Geneva. Global Health Centre. <https://www.knowledgeportal.org/covid19-vaccine-manufacturing>

C. Global roll-out of vaccinations

The first EUA-approved Covid-19 vaccine to be officially injected into a member of the general public was developed by the US pharmaceutical group Pfizer /BioTech on December 8, 2020 . However, this did not take place in the United States but in the United Kingdom, with British grandmother Margaret Keenan, who was just one week short of turning 91 years young and representing the high-priority segment of the global human race, the above 90 years age group.¹⁰ (Good on you, granny!).



British grandmother Margaret Keenan, 91, gets the world's first Covid-19 vaccine inoculation at University Hospital in Coventry, on December 8, 2020. Source: BBC News

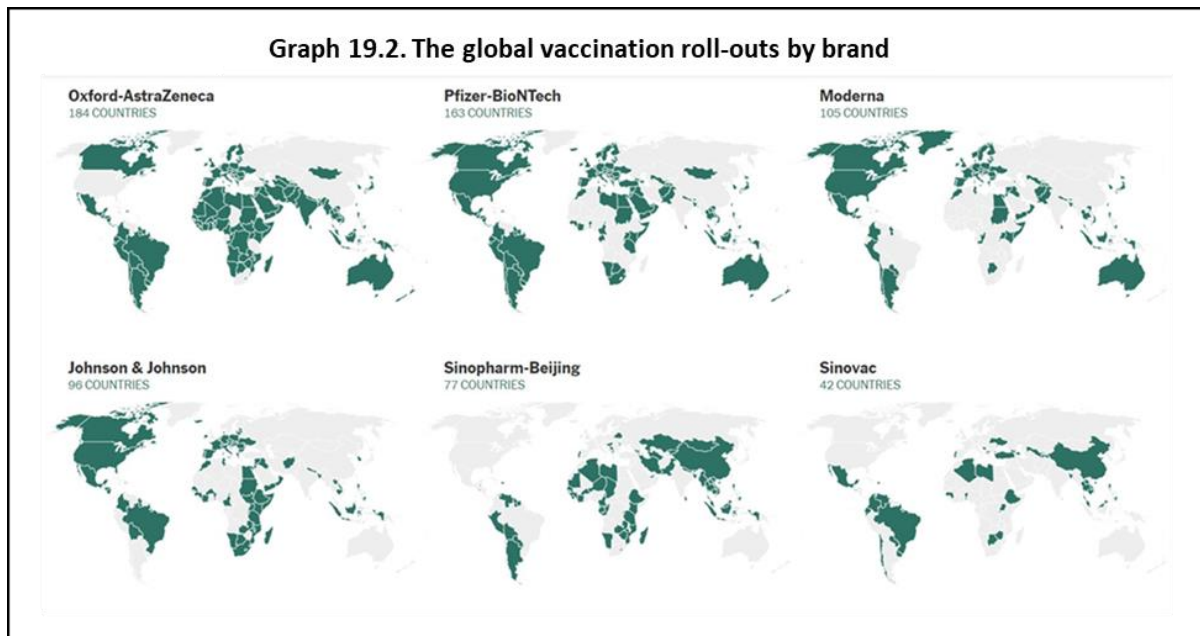
The United States and Canada soon followed with full vaccinations roll-out a week later on December 14, 2020, also with the Pfizer–BioNTech vaccine. They were soon followed by other nations in the Americas region. The European region's rolling-out of vaccination started on December 27, 2020, especially among the 27 Schengen states. These European nations mostly used the Pfizer–BioNTech vaccine. The global selection of vaccination roll-outs by the brand is illustrated in the Graph 19.2. below¹¹:

¹⁰ BBC News. December 8, 2020. Covid – 19 vaccine: First person receives Pfizer jab in UK.

¹¹ Josh Holder, Tracking Coronavirus Vaccinations Around the World.

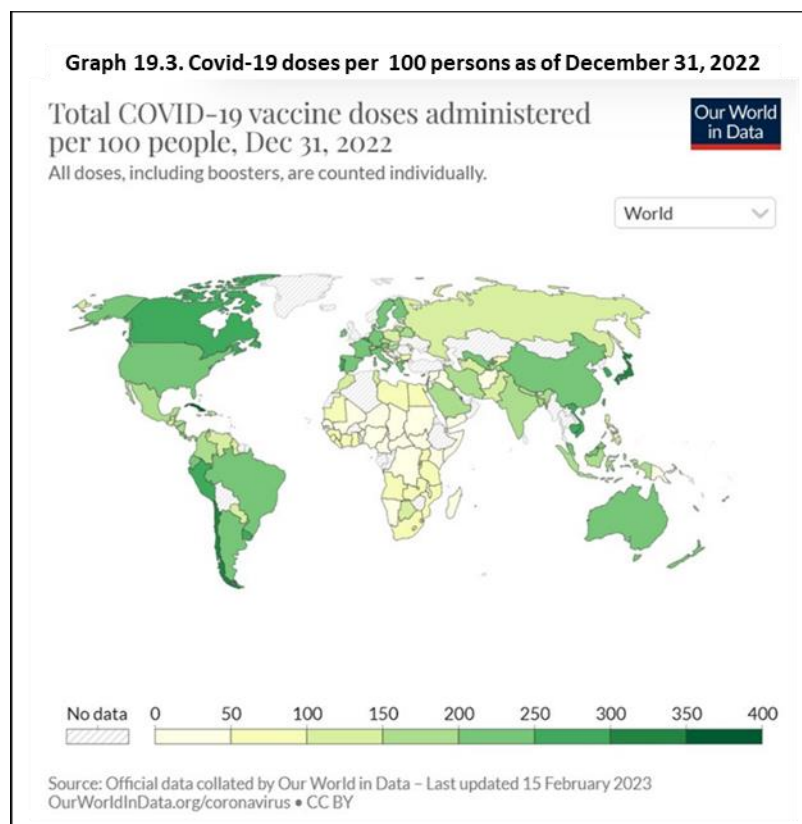
New York Times. May 15, 2022

<https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html>



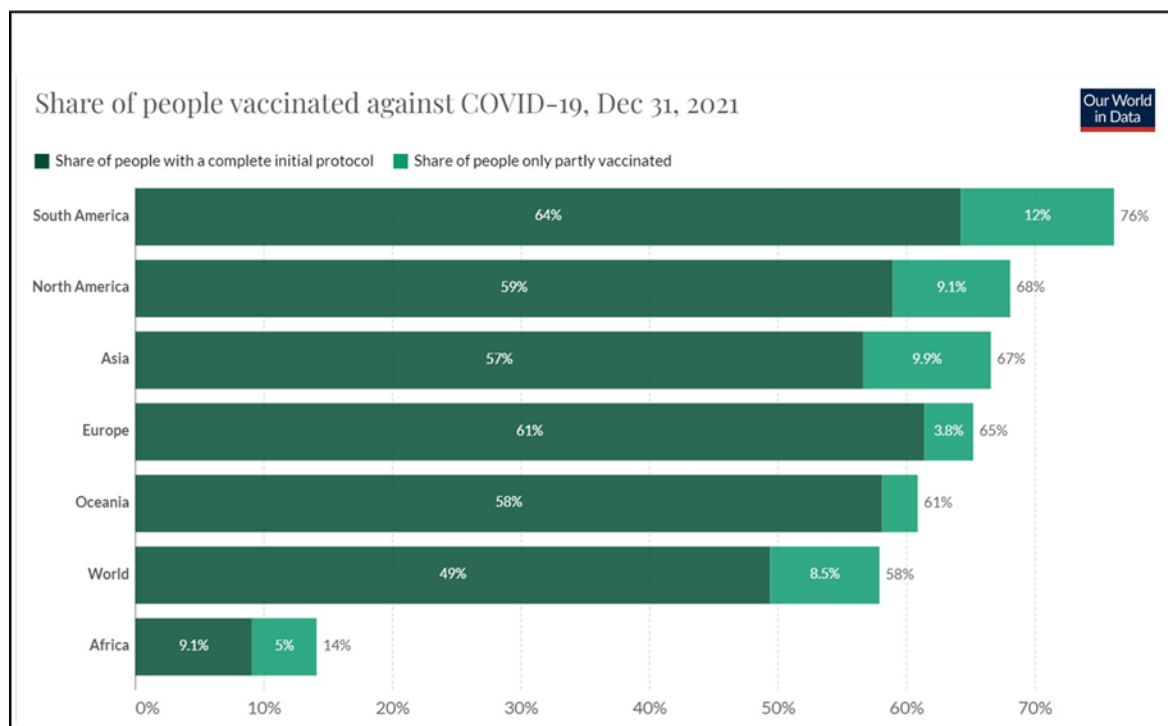
The New York Times. May 15, 2022

By year-end 2021, global vaccination under the primary vaccination protocol had reached the 50% benchmark but was mostly concentrated among the western nations with the biggest gap in the African region as illustrated in the Graph 19.3. below



The percentage of the global population that completed the primary vaccination protocols are given in Graph 19.4. below at the end of the first year of the vaccination roll-out.

Graph 19.4. Percentage of the population completing the primary vaccination protocol



As can be seen, the world rate for completion of the primary vaccination protocol was 49%, just below the minimum 50% of the population target set by the WHO. Only five global regions were able to exceed 50% of the population target with the highest in South America at 64%, followed by Europe at 61%, North America at 59%, Oceania at 58%, Asia at 57%, and Africa having the lowest at 9 percent. However, this did not even slow down the Covid-19 pandemic in terms of infections or deaths as indicated in Table. 19.2. below.

| Table. 19.2. PRE/POST VACCINATIONS COMPARATIVE FIGURES (2020/2021) | | | | | | |
|--|---------|------------|---------------|--------|------------|-------------|
| REGIONS | CASES | % INCREASE | DECEMBER.2020 | | % INCREASE | (Unit/Mil.) |
| | | | SHARE | DEATHS | | SHARE |
| THE AMERICAS | 34.403 | | 43% | 0.840 | | 48% |
| EUROPE | 25.272 | | 32% | 0.554 | | 32% |
| OTHERS | 19.556 | | 25% | 0.360 | | 20% |
| GLOBAL | 79.231 | | 100% | 1.754 | | 100% |
| REGIONS | CASES | % INCREASE | DECEMBER.2021 | | % INCREASE | (Unit/Mil.) |
| | | | SHARE | DEATHS | | SHARE |
| AMERICAS | 101.243 | 194% | 36% | 2.400 | 185% | 44% |
| EUROPE | 97.360 | 286% | 35% | 1.651 | 198% | 31% |
| OTHERS | 80.111 | 310% | 29% | 1.343 | 273% | 25% |
| GLOBAL | 278.714 | 252% | 100% | 5.394 | 207% | 100% |

Source: WHO Situation Report December 2020 and 2021.

The above Table shows that despite theoretical propositions justifying spending US\$ billions of taxpayers' money on vaccines would reduce infections and fatalities, and eventually contain the global Covid-19 pandemic, the real outcome proved to be contrary. Comparative figures for Covid-19 pandemic cases between 2020 (pre-vaccination/non-pharmaceutical year) and 2021 (post-vaccination/pharmaceutical solution year) in fact showed continued significant increases for both infection cases at 252% and deaths at 207 percent. Both the Americas and the European regions continued to dominate the global pandemic in 2021 with 71% of infection cases and 75% of deaths. The increased cases for these regions are remarkable given the fact that they had the highest levels of populations vaccinated with 64% for South America, 59% for North America, and 61% for Europe (Graph. 19.4.). During the period of just 12 months, the European region had the highest increase for both infection cases at 286% and deaths at 198%, followed by the Americas with a 194% increase in cases and 185% increases in deaths. These two regions combined constituted 71% of cases and 75% of deaths in 2021. The remaining four global regions of Africa, Eastern Mediterranean, West Pacific, and Oceania combined had total increases of 310% in cases and 273% in deaths. Consequently, these regions' combined share of the global total was 29% confirmed cases, and 25% deaths. This was despite the fact that all these regions had lower population vaccination rates than the western regions.

This raises several questions with regard to the vaccines and mandatory vaccinations. First, does the vaccine's declared efficacy rate deliver effective protection or prevention? Second, did the outcome justify spending taxpayers' money on vaccines? Third, when the WHO stated that the EUA vaccine category was better than having 'nothing', was that really true? Four, if there were significant inefficiencies and ineffectiveness were they due to the policy, planning, execution, or the people involved? Finally, the most challenging question is, who were the real winners and losers?

D. Covid-19 vaccination boosters: a question of reliability, and credibility.

At the time of launching global vaccinations by the various governments worldwide, the inoculation campaigns and slogans were focused on the 'relatively' safety of these vaccines in terms of side effects, significant prevention against infections, and the high level of protection against a serious illness that would require hospitalization or resulting in death. Priority for inoculations was the high-risk population of the elderly over 65 years, and the immunocompromised. The level of protection (efficacy of immunity) against serious illness and deaths ranged from 70 – 95% depending on the vaccines. However, the true reliability of efficacy for most vaccines becomes suspect when several comparative studies of these vaccines show different values. Various studies by Yale Medicine¹², the Institute for Health Metrics and

¹² Kathy Katella, Comparing the Covid-19 Vaccines: How are they different? Yale Medicine. February 18, 2022. <https://www.yalemedicine.org/news/covid-19-vaccine-comparison>

Evaluation (IHME)¹³ (based specifically on the current dominating DELTA variant), and 'healthline'¹⁴ indicate different levels of efficacies for infection and serious illness as shown in Table. 19.4. below. It should be noted that the efficacies for preventing serious or severe illness can also be linked to the level of protection against death.

| Table. 19.4. Comparative efficacies of Covid-19 vaccines | | | | |
|--|-------------------------------|--|--|--|
| Covid-19 | Vaccines | Yale Medicine | healthline | IHME |
| | Pfizer – BioNTech (two jabs): | 95% efficacy | 95% efficacy | 84%(infection), 95%(serious illness) |
| | Moderna (two jabs): | 95% efficacy | 94.1% efficacy | 91% (infection), 97% (severe illness) |
| | Johnson & Johnson (one jab): | 67% efficacy | 66.3% (infection), 85% (serious illness) | 64% (infection), 76% (severe illness) |
| | Novavax (two jabs): | 90% (infection), 100% (serious illness) | 89.7% (infection, 100% (serious illness) | 82% (infection), 86% (severe illness) |
| | Oxford/AstraZeneca (2 jabs): | 76-85% (infection), 100% (serious illness) | 77% (infection), 100% (serious illness) | 69% (infection), 94% (serious illness) |

Source: Yale Medicine, Healthline, and Institute for Health Metrics and Evaluation (IHME)

For clarification, a 95% efficacy with regard to getting infected means that within a vaccinated population, should they come into contact with or are exposed to Covid-19, 95% of this group, are 'most likely' to be protected against being infected.¹⁵ On the same principle, a 95% efficacy with regard to getting a serious illness, means that within a vaccinated population, of the people who got infected with Covid-19, 95% of this group, are 'most likely' to be protected against serious illness (leading to hospitalization and death). The study by 'Healthline' also gave indications of the period of protection for each of the five vaccines in Table. 19.5. as follows.

| Table. 19.5. How long do the Covid-19 vaccines protect you? | | | | | |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Moderna | Pfizer-BioNTech | Johnson & Johnson | Oxford-AstraZeneca | Novavax |
| How long it lasts | about 6 months | about 6 months | about 8 months | about 3 months | about 6 months |
| Efficacy | 94.1% | 95% | 66.3% | 77% | 89.7% |
| Doses | two, 28 days apart | two, 21 days apart | one | two, 4–12 weeks apart | two, 21 days apart |
| Immunity | 2 weeks after second dose | 2 weeks after second dose | 2 weeks after single dose | 15 days after second dose | 2 weeks after second dose |
| Type | mRNA | mRNA | adenovirus vector | adenovirus vector | protein adjuvant |

<https://www.healthline.com/health/how-long-does-covid-vaccine-protect-you>

¹³ IHME. www.healthdata.org/covid/covid-19-vaccine-efficacy-summary

¹⁴ healthline. How Long Do the COVID-19 Vaccines Protect You?
<https://www.healthline.com/health/how-long-does-covid-vaccine-protect-you>

¹⁵ WHO. Vaccine efficacy, effectiveness, and protection. July 14, 2021
<https://www.who.int/news-room/feature-stories/detail/vaccine-efficacy-effectiveness-and-protection>

However, these levels of efficacy were established by the pharmaceutical companies (the sellers) based on ‘their’ testing protocols, ‘their’ laboratory conditions and environment, ‘their’ selection of testing participants, etc. The elements, parameters, and details of outcomes, findings, and reports are not made available in full to third-party scientists and independent evaluators for verification. More on these issues in Chapter 20. (Anti-vaxxers, transparency, and credibility). Since many of these tests were carried out in different countries (market-based demographic testing) it is unlikely that these tests were under the same universal conditions and standards as the vaccine developer host nation, i.e. Pfizer, Moderna, Johnson & Johnson in the United States, or AstraZeneca in the United Kingdom, etc. The wide spectrum of the global population environment with different cultural behaviors, standards of living and lifestyles, level of healthcare facilities and capabilities, not to mention the make-up of demographics or geographical environmental factors. So it is likely that these levels of ‘efficacies’ could and would vary in the different nations and regions of the world.

Following the launch of Covid-19 vaccinations, Pfizer-BioNTech did a follow-up study and discovered/detected a significant waning of the efficacy of protection six months after the completion of the primary vaccination protocols (1 + 1 doses). In September 2021 Pfizer-BioNTech recommended a single additional ‘booster’ dose and consequently submitted for US FDA approval to initiate a ‘booster’ dose for those who were vaccinated 6 months or longer. The original objective of the booster dose was to regain and maintain the protection original high level, especially for people 65 years and older, individuals 18 through 64 years of age who are immunocompromised, and individuals 18 through 64 years of age who are frequently exposed to Covid-19 environment or contacts. Pfizer-BioNTech’s submission was approved by the US FDA within the same month on September 22, 2021.¹⁶ This was soon followed in October 2021 by similar announcement and submission from Moderna. The US CDC later announced that everyone who was 12 years and older and who had completed their COVID-19 vaccine primary series (Pfizer and Moderna) can get the first booster after five months. Those under the J & J Janssen protocol can get their first booster shot two months later.¹⁷

The Pfizer -BioNTech findings in the deterioration of the vaccine’s effectiveness were also confirmed by several independent studies, not lonely for the Pfizer -BioNTech, but most of the leading vaccines approved under the EUA category. In the absence of complete access to data and reports from the vaccine developers, third-party independent studies for measuring, verifying, and evaluating the effective period of protection had to be based on actual statistics

¹⁶ US. FDA Authorizes Booster Dose of Pfizer-BioNTech COVID-19 Vaccine for Certain Populations
September 22, 2021.

<https://www.fda.gov/news-events/press-announcements/fda-authorizes-booster-dose-pfizer-biontech-covid-19-vaccine-certain-populations>

¹⁷ US CDC: COVID-19 Vaccine Boosters

Updated May 13, 2022

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html>

in real-time as they occur. A study undertaken by Cohan et al, (2021)¹⁸ based on 780,225 veterans under the Veterans Health Administration, for the period March to September 2021 reflected the Pfizer -BioNTech findings. The objective was to measure the level of effectiveness against infection and death by the three American-made vaccines, namely Pfizer -BioNTech, Moderna, and Janssen (Johnson & Johnson) which were exclusively applied in the country during that period. The findings of this study also indicated significant declines in the efficacy of the vaccines' protection against infections and death as illustrated in Graph 19.5. below. This study indicated that Veterans who were fully vaccinated with the Moderna vaccine retained the highest protection against infection, followed closely by those who received the Pfizer-BioNTech vaccine.

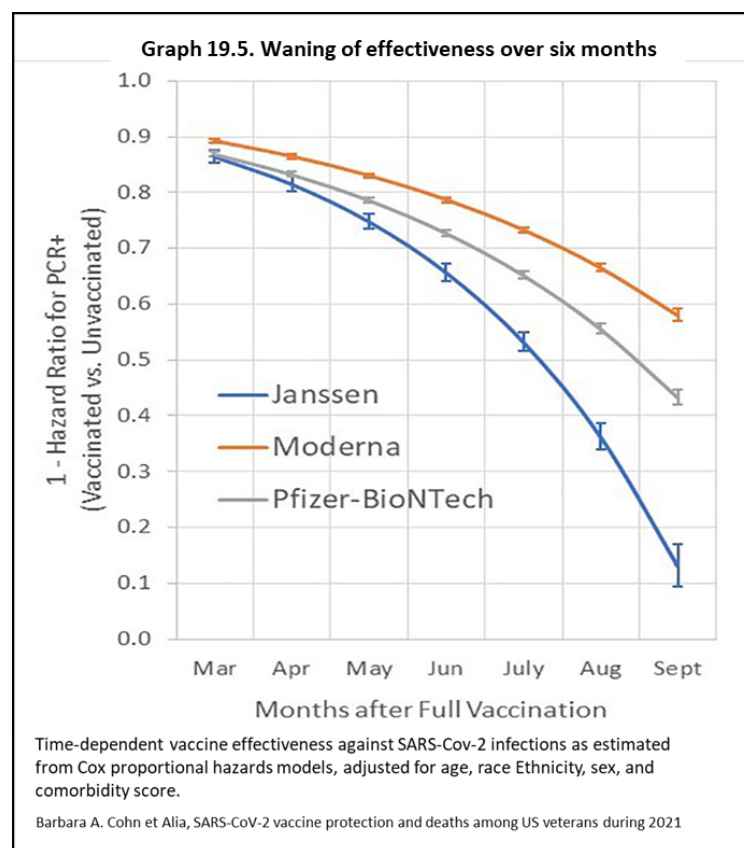


Table. 19.6. below indicates that six months after completion of the vaccination protocol in March 2021, i.e. September 2021, the Moderna vaccine effectiveness waned from 89.2% to 58%, followed by Pfizer – BioNTech’s vaccine which was reduced by half from 86.9% down to 43.3%, and with the greatest decline recorded by Janssen (Johnson & Johnson) which dropped

¹⁸ B.A. Cohn et al, SARS CoV–2 Vaccine protection and deaths among US Veterans during 2021. November 4, 2021. Vol 375, Issue 6578 pp. 331-336. DOI: 10.1126/science.abm0620 <https://www.science.org/doi/10.1126/science.abm0620>

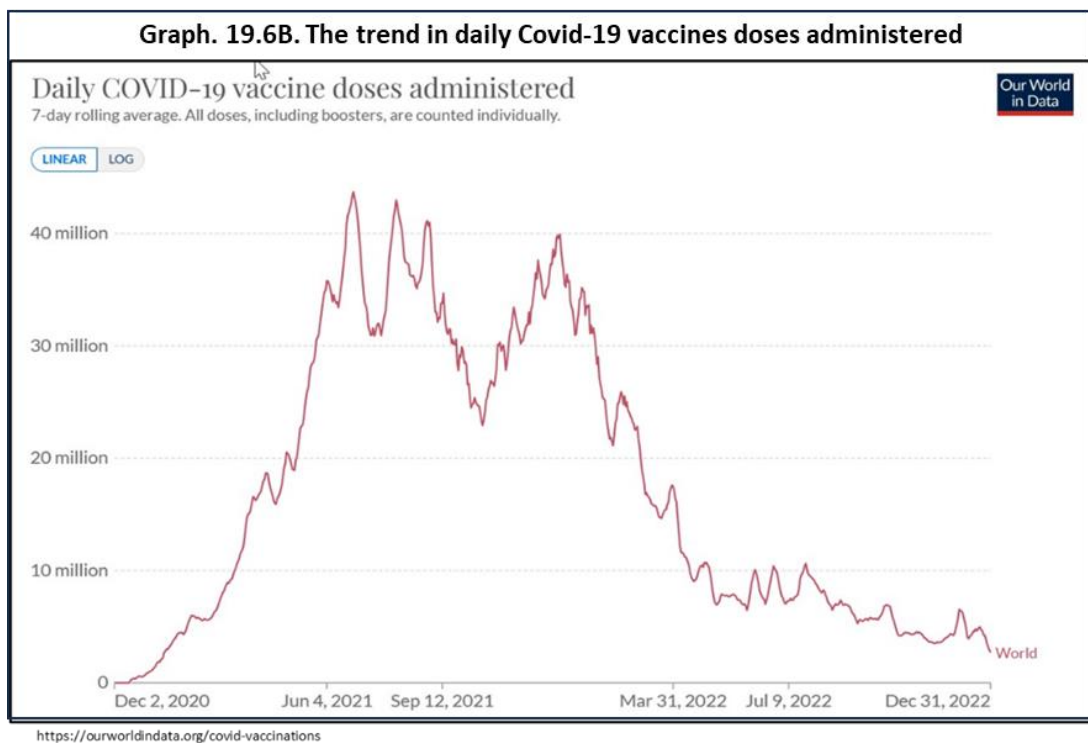
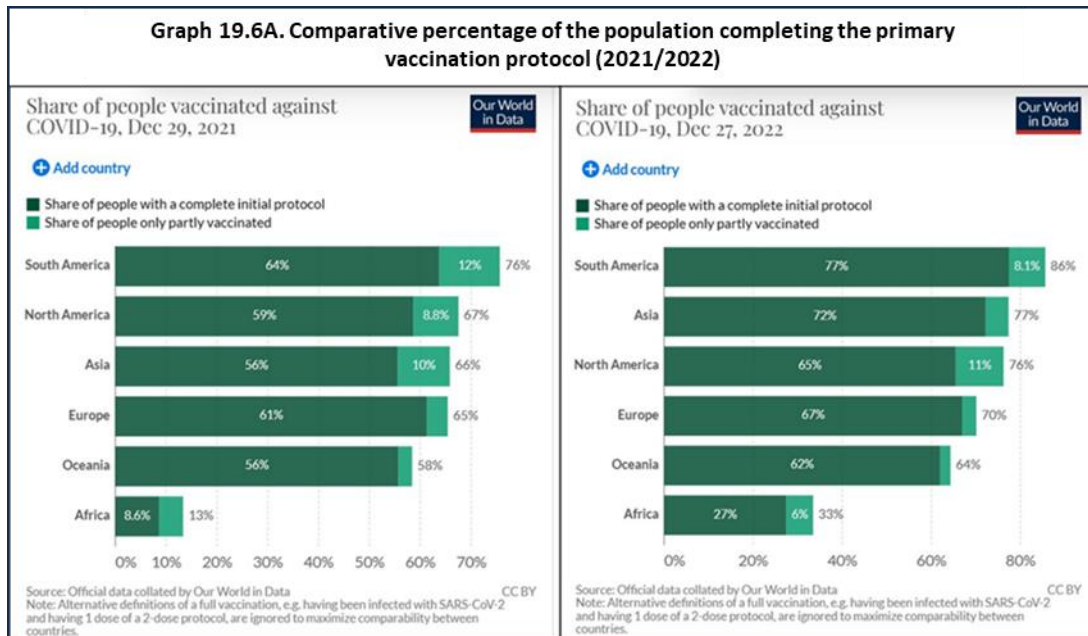
by 85% from 86.4% to 13.1%. The same study also analyzed the effectiveness of protection against death but was based only after three months (July 2021).

| Table. 19.6. Effective rate of protection against infections and deaths (2021) | | | | | |
|--|---------------------------------|--|-----------|-----------------------------|----------------|
| | EFFECTIVENESS AGAINST INFECTION | | | EFFECTIVENESS AGAINST DEATH | |
| | MARCH | | SEPTEMBER | 65 + YEARS | UNDER 65 YEARS |
| Pfizer -BioNTech | 86.9% | | 43.3% | 70.10% | 84.3% |
| Moderna | 89.2% | | 58% | 75.50% | 81.5% |
| Janssen (J & J) | 86.4% | | 13.1% | 52.20% | 73% |

Source: B.A. Cohn et al, SARS CoV – 2 Vaccine protection and deaths among US Veterans during 2021. Science

These rates showed for those above 65 years, the rates were down to 75.5% for Moderna, 70% for Pfizer-BioNTech, and 52.2% for Janssen vaccines; and for those aged 65 years and below effective protection was reduced to 84.3% for Pfizer-BioNTech, 81.5% for Moderna, and 73% for Janssen vaccines. This study confirmed significant deterioration of protection for both against infection and serious illness by the three U.S.-developed vaccines and declared the need for one booster dose six months following the completion of the primary vaccine protocol as proposed by Pfizer-BioNTech. By end of 2021, the US FDA also approved the booster doses for both Moderna and Janssen following the Pfizer-BioNTech vaccine. Following these approvals, the US CDC recommended a single booster dose six months following the completion of the primary vaccination protocol which was also supported by the WHO which issued advisories to this effect globally.

However, in the case of the WHO, its support for additional ‘booster’ doses was one of ‘mixed’ feelings. The WHO had to look at the situation from the global perspective, and therefore with major populations of the developing and under-developed world still not having either started or completed the primary vaccination series, redirecting available vaccines for ‘booster’ doses for the rest of the developed and industrialized world would necessarily deprive the remaining unvaccinated population of the much-needed vaccines, especially in term of donations. These nations represent more than two-thirds of the global population as indicated in Graphs 19.6A/ 19.6B. below as at end of December 2021. Also indicated is that one year later, as at end of December 2022, there has been little improvement in the level of vaccination coverage for this segment of the global population. For these people, their only option is the reliance on non-pharmaceutical practices which continue with no sign of ending.



The announcements of the need for booster shots following the completion of the primary vaccination protocol (two doses for Pfizer -BioNTech and Moderna vaccines, and one dose for Janssen vaccine) probably caught most people by surprise. Understandably, most thought they had gotten the appropriate pharmaceutical solution and cure to beat the Covid-19 pandemic and were ready to return to their previous normal social lifestyle and economic activities. Since the need for a booster dose was not 'an option, but 'a must', to sustain the effectiveness of protection four key

questions emerge. First, is a mere six months protection period considered a workable solution, for a disease that is not seasonal? Second, when the WHO establish the criteria for minimum 50% effectiveness of protection to qualify for EUA approval, did it not consider the timeframe of protection? Third, were the pharmaceutical companies and the FDA aware of this limited timeframe of protection and the possible causes affecting the protection timeframe? Four and most important since the development of these vaccines, were probably with some support funding from the government (with tax-payers' money) was the government aware of this limited timeframe, considering the fact that this would mean allocating additional budgets?

The only people not surprised by the need for additional booster doses were probably the 'anti-vaxxers'¹⁹ who considered this as a form of capitalist conspiracy to make more money for the pharmaceutical industry. This development only raised more questions and concerns regarding the transparency of reports from the pharmaceutical companies regarding the sustainable protection of their vaccines, and the effective oversight of the clinical trials, data recording, and reporting process of the quality assurance regulators, namely the FDA. Within a short period following the Pfizer -BioNTech and Moderna vaccine developers' announcements for the third shot as a 'booster' dose, there was growing public reaction and opposition. Many were among the large still hesitant or 'wait and see' population who now are leaning more towards the 'anti-vaxxers' sentiments. Just like their vaccines, credibility, trust, and reliability in the pharmaceuticals and the government regulators were rapidly waning among the general public. Eventually, the pharmaceutical corporations made public statements admitting to the fact that the durability of their vaccines' protection period lasted for only 5 – 6 months following the completion of the primary vaccination series. After this period, the effectiveness of protection would decline rapidly to ineffectiveness. For this reason, a third shot was needed as a 'booster' dose to maintain the level of effective protection. The vaccine developers rationalized that these vaccines were based on the original genetic sequence of the virus during the outbreak in Wuhan China, but since then there have several variants i.e. alpha, beta, gamma, and currently the delta which was the predominant variant at the time of the vaccination launch in 2021. The accumulated mutations of the coronavirus resulted in the continuing emergence of different variants which affected the effectiveness of the vaccines. An additional 'booster' dose was needed to reinforce the vaccine's effective protection level.

i. Understanding the 'booster' dose

Since this is a key issue and critical to establishing effective global protection against Covid-19 through the pharmaceutical solution, i.e. vaccines, it might be necessary to recap the definition and role of a 'booster dose'. A 'booster dose' refers to a third dose of a vaccine following the completion of the primary vaccination series, (two doses for Pfizer -BioNTech, and Moderna, and one dose for Janssen (Johnson & Johnson) for the general public worldwide. However, for the special group of people who are immunocompromised, by either age or health condition, or professions such as health workers who are frequently or regularly exposed to, or in direct contact with Covid-19 this 'booster' dose, also commonly referred to as an 'additional dose' would be

¹⁹ People who refuse to be vaccinated due to concerns about safety and transparency of findings and outcomes

required due to the waning of the effectiveness of protection given under the primary vaccination series. The Booster or additional dose does not necessarily have to be the same vaccine as the primary vaccination series, meaning other vaccines are also applicable. Usually, third-world nations are administered a 'cocktail' of vaccine doses based on the makeup of the type of vaccines donated. On the other hand, if a person does not fall into any of these categories then a booster dose may not be 'critically' required. However, this assumes common sense behavior by the continuation of the non-pharmaceutical protocols whenever in public namely social distancing, wearing a mask, and frequent sanitization of hands.

For most governments and the global general public, especially those grouped as "the undecided" with regards to getting vaccinated (as opposed to the 'anti-vaxxers' who already decided against being vaccinated), any guidelines, and recommendations from the WHO play an important decision-making role. Therefore the WHO, with the support of the Strategic Advisory Group of Experts (SAGE) on Immunization and its COVID-19 Vaccines Working Group, gave full support to the 'booster' dose and explains its rationale for supporting and justifying an additional booster dose for vaccines but only for vaccines approved under its Emergency Use Listing (EUL) as follows: ²⁰

- Booster doses would be required for a vaccinated population that has completed the primary vaccination series (two doses for Pfizer -BioNTech, and Moderna, and one dose for Johnson & Johnson), but after a certain period, the immunity and clinical protection starts to wane or to deteriorate, to a level considered to be below the acceptable rate deemed sufficient (in accordance to WHO EUA standard which was 50% and above). The justification for a booster dose is to restore vaccine effectiveness to an acceptable level of protection accordingly.
- An additional dose of vaccine may be necessary for people who are immunocompromised resulting in the immune response rate following the standard primary vaccination series (which is deemed normal dosage for regular healthy people) being considered insufficient or below the required standard. Therefore it may be necessary to give a third dose (booster dose) as an extended primary vaccination series to optimize or enhance the immune response and establish a sufficient level of effectiveness against Covid-19. This group should include also older adults who may similarly respond poorly to the standard primary series.

In addition to the above justifications, due to the continuing change in Covid-19 variants, new or modified vaccines were being developed to match the continual mutation of the coronavirus. These new vaccines need to be administered as a 'booster' dose to closely 'match' the current coronavirus variant. Since the outbreak in December 2019, the coronavirus has undergone numerous mutations and variants demonstrating that it is a dynamic and continually mutating and

²⁰ WHO. Interim statement on booster doses for COVID-19 vaccination. October 4, 2021
<https://www.who.int/news/item/04-10-2021-interim-statement-on-booster-doses-for-covid-19-vaccination>

evolving virus. Consequently, the development of vaccines must also be adaptive in response to such evolutions and mutations of the coronavirus. Therefore, subsequent booster doses of Covid-19 vaccines would be required to ensure continued protection against serious illness to avoid hospitalization, and deaths, which is essentially the real primary function of the vaccines. Since the beginning of 2022, the predominant variant is currently the Omicron, which took over globally from the Delta variant at the end of 2021. New vaccines have been developed accordingly and would be administered as a 'booster' dose accordingly.

Of course, it should also be noted that the degree of diminishing protection varies according to the different vaccines administered, population health status, and social behavior, along with the current virus mutation dominating a country or region at a given time. Due to the above variables between vaccines and population demographics, it is probable that the effective protection and immunization period varies from one community to another which also affects the effectiveness and durability of the primary vaccine series and therefore justifies the need for getting a booster dose. So, how long a period of effective protection should we expect following the completion of the primary vaccination protocols?

ii. The effective protection period of the primary vaccination protocol

This refers only to the first launch of vaccinations and does not focus on vaccines for children. The effective protection period as declared by the vaccine developers, which was subsequently accepted and approved by the FDA becomes more credible when acknowledged by independent third-party evaluators.

- According to the WHO Strategic Advisory Group of Experts on Immunization (SAGE) the effectiveness of the primary series of vaccination ranges from 4 to 6 months after which a booster dose is advised.²¹
- According to MedicalNewsToday, experts are unsure exactly how long the primary vaccine series provides protection but most research indicates that immunity lasts around four months.²² This means that a booster dose would be required after this period.

²¹ WHO. Coronavirus disease (COVID-19): Vaccines. May 17, 2022

[https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-\(covid-19\)-vaccines](https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-(covid-19)-vaccines)

²² MedicalNewsToday. November 29, 2022

<https://www.medicalnewstoday.com/articles/how-long-does-the-covid-vaccine-last>

- According to Yale Medicine, the primary vaccine series with Pfizer-BioNTech or Moderna are estimated to have the effectiveness of six months, and for the Janssen (Johnson & Johnson) single dose vaccine a period of two months, after which a booster dose would be required.²³
- A study by the UK Health Security Agency indicated the primary vaccination series rate of protection against severe disease declined to 40% after six months.²⁴

The popular estimation for the duration of effective protection following the completion of the primary vaccine series of two doses by other numerous studies also places the effective protection period between four to six months. For the Janssen (Johnson & Johnson) one-dose vaccine the common recommendation is around two months. After these periods the vaccine's effectiveness of protection deteriorates significantly to the point of being ineffective and below the WHO EUA threshold of 50 percent. However, the issue of distrust and lack of credibility still remains with the 'anti-vaxxers' and most of the still hesitant vaccination avoiders. This is based on the key question, was this shorter-than-expected protection period known by the developers prior to, or after, the public sale and distribution of these vaccines?

iii. The effective protection period of the 'first booster' dose

Based on the revelation of the short-term protection of the primary series, it is obvious to raise the same issue with the 'booster' dose which most likely has the same limited effective protection period. In deciphering the technical language from the vaccine developers' various statements, the desired impression of developers is to indicate that each dose lasts for at least 5 – 6 months. However, third-party independent peers and scientists were not so generous and estimated that the effective period of protection could be from a low of 3 months to a high of 6 months. Should this be the case, this essentially translates into requiring at least 'two' booster doses per period of 12 months post-primary vaccine protocols. Good news for the sellers. Bad news for the buyers. Notwithstanding the above, it has to be noted that these independent estimations are based on the limited data and information made available to the public during the past 3 years related to the launch of the original primary vaccine series (December 2020). How much information has been made public can only be put into some perspective by gauging

²³ Kathy Katella. How Long Will Your Coronavirus Vaccination Last? December 17, 2021
<https://www.yalemedicine.org/news/how-long-will-coronavirus-vaccine-last>

²⁴ UK Health Security Agency. SARS-CoV-2 variants of concern and variants under investigation in England Technical briefing 34. January 14, 2022
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1050236/technical-briefing-34-14-january-2022.pdf

it with the total amount of information available. This was recently indicated, in the case of only the Pfizer -BioNTech Covid-19 vaccines, when the US Court had to force the FDA to release over 450,000 pages of data and reports not previously made public for peer review or scientific analysis, verification, and evaluation.

In the meanwhile, across the Atlantic, the UK Health Security Agency did a study of the additional 'booster' dose protection period. With regards to protection against infection, the study estimated a period of less than six months, similar to the primary series. The Pfizer -BioNTech vaccine 'booster' dose will initially give around 95% protection against a symptomatic infection, but after two weeks, this drops to a rate of about 70%, i.e. 66.5% protection, and in three months, this drops again to a rate of 50% protection, i.e. 47.5 % protection. In a subsequent study, the U.K. researchers estimate that in about four months the rate would further decline to the rate of around 40%, i.e. 38% protection.²⁵

According to immunologist Jennifer Gommerman at the University of Toronto, this decline " is perfectly normal and expected,..... in terms of protection against infection, we will see some protection early on with a booster, but that protection is going to wane."²⁶ This cycle is common with any vaccine, where the level of antibodies rises quickly right after the dose and then diminishes again with time. However, Jennifer also states that although this decline in antibody levels, might make one vulnerable to getting infected this does not mean being vulnerable to the disease also. This was also confirmed by the UK study which found that the booster offered more sturdy protection against incurring severe illness than against infection. Specifically, the researchers found that after a 'booster' dose of Pfizer, protection against hospitalizations starts out above 95% (two weeks after the shot) and stabilizes at around 80% even after four months.

Indications of the effective protection period for the booster dose were eventually made known by the vaccine developers when six months following the application for approval of the first 'booster' dose in September 2021, Pfizer -BioNTech filed to the FDA for EUA approval for a second booster dose, i.e. a 'booster to the booster' dose, on March 15, 2022. The rationale and justification given for the second booster dose were similar to those given in justifying the first 'booster' dose, i.e. targeting the elderly group of 65 and older to bolster the waning immunity that occurs 'several months' after the first booster.²⁷ This application was again, speedily approved by the FDA on March 29, 2022. In its authorization of both the Pfizer -BioNTech and Moderna Covid-19 vaccines'

²⁵ UK Health Security Agency. SARS-CoV-2 variants of concern and variants under investigation in England Technical briefing 34. January 14, 2022

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1050236/technical-briefing-34-14-january-2022.pdf

²⁶ Michaela Doucette. Booster longevity: Data reveals how long a third shot protects
npr. Goats and Soda. January 19, 2022.

<https://www.npr.org/sections/goatsandsoda/2022/01/19/1071809356/covid-booster-omicron-efficacy>

²⁷ Laurie McGinley, Tyler Pager and Carolyn Y. Johnson. Pfizer and BioNTech seek authorization of second coronavirus booster shot for people 65 and older. Washington Post. March 15, 2022

second booster dose, the FDA stipulated conditions for administering the second booster dose as follows:

- Those who are 50 years of age or older can get the second booster dose of the Pfizer-BioNTech COVID-19 Vaccine or Moderna COVID-19 Vaccine at least 4 months following the first booster shot of any Covid-19 vaccine
- Those who are 12 years of age or older, with severe immune-deficient can now receive the second booster dose Pfizer-BioNTech COVID-19 Vaccine after at least 4 months
- Those who are 18 years of age and older with the same certain kinds of immunocompromise can receive a second booster dose of the Moderna COVID-19 Vaccine at least 4 months after the first booster dose of any authorized or approved COVID-19 vaccine

These conditions were supported by the CDC which stated also that adults who were administered Janssen's (Johnson & Johnson) primary vaccine as well as their first booster shots, can also get the second booster dose of Pfizer- BioNTech or Moderna's vaccines.²⁸

iv. The effective protection period of the 'second Booster' dose:

Pfizer- BioNTech and Moderna's revelation of the need for a second booster dose within six months after the first booster dose was obviously not well received by the global general public who foresaw further time-consuming efforts and hassles in getting vaccinated, and foreign governments, especially those in developing and under-developed nations, who saw this as a continuous pressure and squeeze not to mention further depletion, of their already depleted national reserves and budgets. Other priorities for the betterment and well-being of their people were being sacrificed again due to limited and scarce financial resources. For industrialized and developed governments, it meant that the pressure of crisis management would continue with further delays and challenges to bringing their economies to normalcy. For most governments, in addition to the financial strain, there would be continuing issues regarding distribution logistics, vaccination promotion campaigns, and vaccination executions nationwide. Administering booster doses means going back to square one and repeating the vaccination process for everyone. As it is, all governments were already bogged down with the yet incomplete administration of the primary vaccination series, as well as the incomplete first 'booster' doses, now a third tier of vaccination under the second 'booster' dose is to be

²⁸ FDA. Coronavirus (COVID-19) Update: FDA Authorizes Second Booster Dose of Two COVID-19 Vaccines for Older and Immunocompromised Individuals. March 29, 2022.
<https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-second-booster-dose-two-covid-19-vaccines-older-and>

launched. It is probably safe to say that half of the governments around the globe would have problems finding budgets for just completing the primary vaccination series. Without a definitive conclusion regarding the protection period of the second 'booster' dose it is safe to assume that it would most likely be within the same timeframe as the primary vaccines and the first booster dose, i.e. 4 to 6 months.

v. Development of variant dedicated new 'boosters' continuing

New boosters continue to be developed by the pharmaceutical industry to catch up with the evolution of the Covid-19 mutations under the current Omicron variant. On August 31, 2022, the FDA authorized the new Omicron booster developed by Pfizer-BioNTech and Moderna, and the following day on September 1, 2022, these boosters were approved by the CDC.²⁹ On November 4, 2022, Pfizer-BioNTech announced the development of its 'Omicron booster' declaring that it generates a stronger immune response than the original vaccine which was based on the original outbreak (launched in December 2020). According to Pfizer-BioNTech this updated booster targeting the Omicron variant is designed to target the Omicron original virus strain as well as its subsequent mutations BA.4 and BA.5 currently widespread globally. It should be noted that these Omicron boosters were authorized without human testing. The results, which Pfizer announced only through a news release, have not been published in any medical journal or peer-reviewed by independent scientists. Pfizer-BioNTech's press release did not contain sufficient or measurable data or report to determine whether the updated shots are significantly effective against infection or severe illness, according to Dr. Ofer Levy, the director of the Precision Vaccines Program at Boston Children's Hospital. This sentiment was also expressed by John Moore, a professor of microbiology and immunology at Weill Cornell Medical College.³⁰ So, theoretically, a new booster vaccine dose to match the current Omicron coronavirus mutation is rational and justifiable. However, the reliability and credibility of such booster vaccines remain questionable without third-party peer-evaluation verification and confirmation. Don't hold your breath. The complete details on clinical trials for the original vaccine of December 2020 (three years ago) are still unavailable for third-party peer reviewers and scientists. In early 2023, a new Omicron subvariant XBB.1.5 also

²⁹ Rebecca Corey and Laura Ramirez-Feldman. New Omicron-targeting COVID-19 boosters are approved. Here's what you need to know. September 2, 2022

<https://news.yahoo.com/omicron-booster-shots-vaccines-approved-pfizer-moderna-140546645.html>

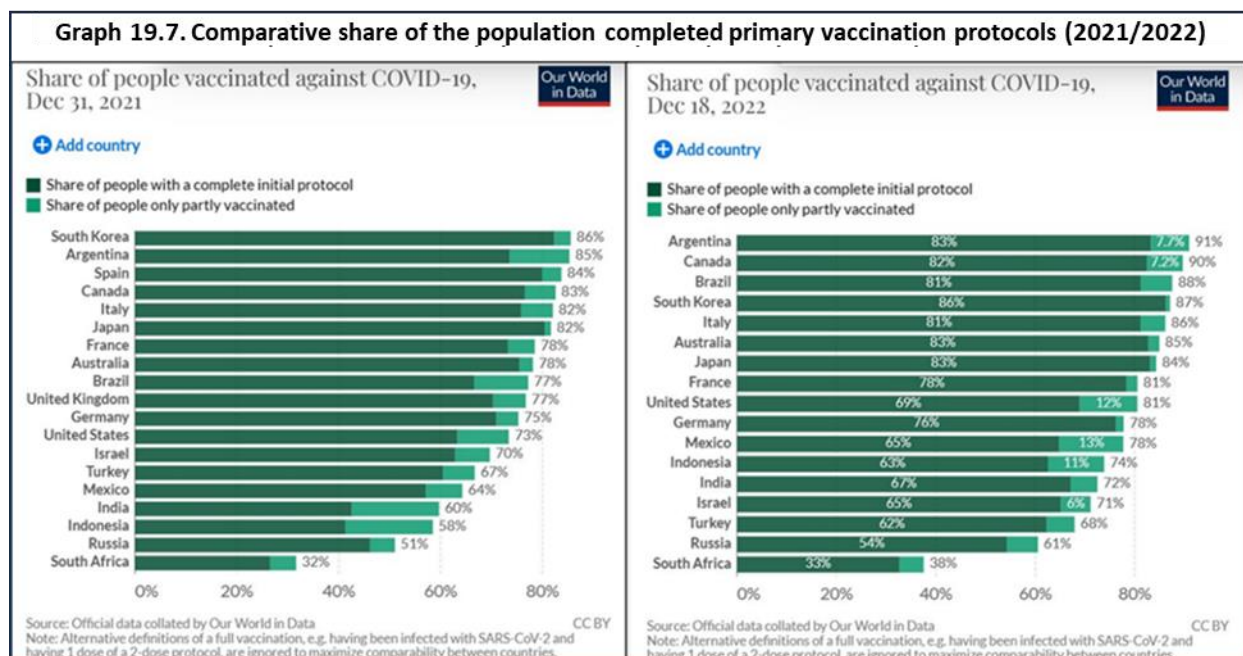
³⁰ Berkeley Lovelace Jr. Pfizer says omicron booster generates stronger immune response than original vaccine. Results still don't answer whether the updated Covid shots are better against infection or severe illness, experts say. NBC News. November 4, 2022.

<https://www.nbcnews.com/health/health-news/pfizer-omicron-booster-generates-stronger-response-original-rcna55571>

referred to as 'Kraken'³¹ emerged to become the predominant variant in the US, and according to Yale Medicine, it appears to be the most transmissible but there is no evidence yet it causes more severe disease than other Omicron strains.³²

For the general public, it probably means additional expenses whether direct or indirect through additional vaccination protocols, insurance premiums, out-of-pocket expenses, etc., or the risk of frequent disruptions to work and social activities through continual exposure to infections and serious illness. As of the end of 2021 and the beginning of 2022, there was no definitive confirmation to reclassify the Covid-19 pandemic to endemic status. The expected definitive pharmaceutical solution to ending the pandemic expeditiously did not happen. In fact, the opposite as more vaccination doses were added, extending the risk factors of both infections and severe illnesses. Worse hit were the nations with limited or no social welfare programs, very limited national budgets, and limited healthcare capacities, logistics, and resources.

However, the key factors of the credibility and reliability in the sustainable effectiveness of the vaccines remain and were demonstrated by the insignificant increases in vaccinations globally by regions as indicated in the comparative figures for 2021 and 2022 in Graph 19.7. below which also includes the wealthy members of the G-20 who could very well afford the vaccines.



³¹ Yale Medicine. Why is it nicknamed 'Kraken'? The Kraken is an enormous mythical multi-tentacled sea monster, like a giant squid or octopus, in Scandinavian lore. XBB.1.5 was nicknamed "Kraken" by some scientists online who were noticing its rapid spread. <https://www.yalemedicine.org/news/omicron-xbb-kraken-subvariant>

³² Kathy Katella. Omicron XBB.1.5 'Kraken' Subvariant Is on the Rise: What To Know February 10, 2023. <https://www.yalemedicine.org/news/omicron-xbb-kraken-subvariant>

It is both possible and probable that these developments regarding the effectiveness period of the Covid-19 vaccines along with the handling of the issue by government regulators would sow the seeds of discontent and mistrust among the general public. This would be especially in the developed nations that have better education and freedom of choice with regard to evaluating and challenging the credibility of these vaccines as well as the reliability of government institutions. Many questions are being asked by the general public, especially in democratic nations, and answers are not fully forthcoming, or crystal clear. For example, prior to the global campaign and advocacy for vaccination did the pharmaceutical companies who developed and manufactured these vaccines, as well as the WHO, CDC, or FDA, mention or gave notice regarding the limited period of effective protection after completion of the primary vaccine protocols? Were there any indications or clearly expressed declarations that the primary vaccine protocols would be more or less redundant and ineffective after six months of completion? Or the probable need for subsequent 'booster' doses to sustain the effectiveness of protection? In establishing the criteria for EUA status and the subsequent authorizations and approvals by the WHO, FDAs, and CDCs of each nation (developer, manufacturer, and importer) was this issue effective protection period considered? Or does the principle of having something is better than having nothing supersede all other considerations?

By third-quarter 2022, both Pfizer-BioNTech and Moderna, have developed the updated COVID-19 vaccines, also referred to as "bivalent" vaccines for addressing the Omicron variant BA.4 and BA.5. These are called 'updated vaccines' because they protect against both the original virus that causes COVID-19 as well as the Omicron variant BA.4 and BA.5. The original COVID-19 vaccines are sometimes called "monovalent" because they were designed to protect against the original virus that causes COVID-19. The 'updated/bivalent' vaccines were developed by the two American pharmaceutical companies and became available on September 2, 2022, for people aged 12 years and older. Younger age groups were able to get these vaccines during the last quarter of 2022.

One dose of the updated Pfizer-BioNTech or Moderna COVID-19 vaccine is recommended for everyone aged 6 years and older, while those aged 65 years and older may get a second dose. This should be four or more months after the 1st updated COVID-19 vaccine. Consequently, as of April 18, 2023, the original Pfizer-BioNTech and Moderna COVID-19 vaccines were no longer authorized for use by the FDA in the United States, and were replaced by the 'updated' Pfizer-BioNTech and Moderna COVID-19 vaccines for all age groups.³³

The Australian Technical Advisory Group on Immunisation (ATAGI), issued recommendations on the use of the Moderna bivalent (Original/Omicron BA.4/5) COVID-19 vaccine as the latest booster

³³ Stay Up to Date with COVID-19 Vaccines
CDC. June 7, 2023.

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html#:~:text=Updated%20vaccines%2C%20sometimes%20called%20%E2%80%9Cbivalent,developed%20updated%20COVID%2D19%20vaccines>

dose.³⁴ This followed early evidence from clinical trials which suggests a booster dose of Moderna bivalent BA. 4/5 vaccine provides greater protection against hospitalisation and death from severe Omicron disease compared to a booster dose of Moderna original vaccine at 1-3 months in adults (63.8% vs 38.6%, respectively).³⁵

As with previous 'booster' vaccines, the effective period of protection, including the period of effectiveness waning below the 50% benchmark, ranges from a low of four months to six months.³⁶

Under the somewhat dynamic environment with regards to the vaccines, as indicated above, there should be no surprise to the emergence and growing skepticism, mistrust, and lack of credibility, on the part of the 'anti-vaxxers'. This is not only directed at the pharmaceutical corporations, but also at the credibility and trust of the authorized regulators established by the respective governments to act on behalf of, and in the interests of, the general public, i.e. the taxpayers. This is where the political 'culture' of nations is spotlighted, analyzed, and measured, and would be considered normal for 'democratic' governments and societies. Obviously, the values, behaviors, and political 'culture' of autocratic or authoritarian governments would be significantly different.

However, a more detailed presentation and discussion on transparency and credibility issues along with the global emergence and spread of 'anti-vaxxers' are covered in the following Chapter 20. on 'Anti-vaxxers, transparency, and credibility'.

³⁴ ATAGI recommendations on use of the Moderna bivalent (Original/Omicron BA.4/5) COVID-19 vaccine. Published 28 February 2023.

[https://www.health.gov.au/news/atagi-recommendations-on-use-of-the-moderna-bivalent-originalomicron-ba45-covid-19-vaccine#:~:text=Early%20evidence%20suggests%20a%20booster,vs%2038.6%25%2C%20respectively\).](https://www.health.gov.au/news/atagi-recommendations-on-use-of-the-moderna-bivalent-originalomicron-ba45-covid-19-vaccine#:~:text=Early%20evidence%20suggests%20a%20booster,vs%2038.6%25%2C%20respectively).)

³⁵ Lin DY, Xu Y, Gu Y, et al. Effectiveness of Bivalent Boosters against Severe Omicron Infection. N Engl J Med. 2023 Jan 25. doi: 10.1056/NEJMc2215471. Epub ahead of print. PMID: 36734847. Available at:

<https://www.nejm.org/doi/full/10.1056/NEJMc2215471> (Accessed 20/02/2023)

³⁶ Gillings School of Global Public Health,

<https://sph.unc.edu/sph-news/bivalent-covid-19-boosters-effectively-protect-against-new-omicron-subvariants/#:~:text=Effectiveness%20waned%20to%2048%25%20after,designed%20to%20target%20the%20BA.>

³⁷ Alyssa Hui , How Long Will Immunity Last With the New COVID Bivalent Booster?

Published on October 07, 2022

<https://www.verywellhealth.com/how-long-does-immunity-last-with-the-bivalent-booster-6747061#:~:text=The%20updated%20bivalent%20COVID%20D19,to%20what%20earlier%20shots%20offered.>

Chapter 20

ANTI-VAXXERS, TRANSPARENCY, AND CREDIBILITY

A. Emergence of the 'Anti-vaxxers'

i. Getting to know the 'anti-vaxxers'

Definition: a) a person who is opposed to vaccination in general, or b) a person who is opposed to vaccination due to i) taking it by force, or ii) being considered unsafe or unproven.

History: Anti-vaxxer movement started in the 18th. century and linked to the smallpox inoculations of the vaccine developed by Edward Jenner in the 1790s. He developed the vaccine using the pus from infected cattle because he observed that people who contracted cowpox, a virus spread by cattle, were immune to smallpox. BTW, the word "vaccine" comes from the Latin word for cow, "vacca".

Covid-19 'anti-vaxxers': This is a minority but very vociferous group mainly in the United States and several nations in Europe, who for most are acting based on the 'b)' rationale. The vaccines were developed and administered too quickly with unsubstantiated verification and validation by third-party peer-reviewed valuation, especially with regard to trials and tests on humans. Many believed the vaccination rollout was using the general public as guinea pigs. Most importantly, on the principle of constitutionalized human rights, and based on the EUA status of these vaccines, government mandates represented government overreach and therefore illegal and unconstitutional. Consequently, the 'anti-vaxxers' rebelled, held protest demonstrations, and filed numerous suits against the government and relevant government agencies and institutions. They won some, they lost some. The Covid-19 'anti-vaxxers' have been accused of spreading false, misleading, and biased information regarding vaccines, the pharmaceutical corporations, government agencies, and other elements of the establishment which includes the WHO. On the other hand, the 'anti-vaxxers' have accused the pharmaceutical corporations of misguiding information, lack of transparency, and opportunism. They have also accused government agencies and elements of the establishment of

inefficiencies and ineffectiveness in enforcing and regulating safety assurance for the general public with regard to these vaccines.

ii. Emergence of the 21st century ‘anti-vaxxers’

Four key issues sowed the seeds for the growth and expansion of Covid-19 ‘anti-vaxxers’ worldwide. First, the unusually rapid development, authorization, and distribution of the vaccines which took place within less than a year were significantly shorter than the normal development of other vaccines. Second, the explosion of infections, hospitalizations, and deaths during the vaccination roll-out period doubled and triple the rates during the previous year’s non-pharmaceutical period. Three, the somewhat belated admission from the vaccine manufacturers that the effectiveness of these vaccines was short-lived (5 – 6 months), and would require additional ‘booster shots’ which are expected to last for 4-6 months for each dose (first an additional single ‘booster’ dose, then 4 – 6 months later the need for a second ‘booster’ dose). Based on the same durability of protection, does this mean that at least two booster shots would be required every year? Fourth, these vaccines don’t guarantee protection against infection, re-infection, hospitalization, or death but would ‘significantly’ reduce hospitalization and death risks. However, it could take several years to verify this definitively. In the meanwhile, these vaccines would continue to be distributed and sold to the general public with support and sometimes enforcement, by some governments. These issues motivated growing resistance by the general public in various countries to mandatory vaccination and led to the formation of “anti-vaxxers” worldwide. The idea of the seemingly continuous need for booster shots raised serious questions about the reliability, suitability, and safety of these EUA vaccines which were approved by the WHO, the national Food and Drugs Administration (FDA), and the national Centers for Disease Control and Prevention (CDC).

It was also not surprising that the ‘anti-vaxxers’ movements, mostly in the more highly educated and well-informed western nations, seriously questioned and challenged the justifiability of their governments to enforce mandatory vaccination of EUA category vaccines on the general public. In the United States, the “anti-vaxxers” movements had support from their state governors and supreme courts in challenging their government’s mandatory decrees. A total of 12 states (25%) in the United States overturned and discarded the vaccine mandates issued by President Biden in their states¹. Similar protests by the “anti-vaxxer” groups also emerged in several European countries also.²

i. Misinformation and disinformation to the general public

¹ <https://www.beckershospitalreview.com/workforce/11-states-banning-covid-19-vaccine-mandates-how-it-affects-healthcare-workers.html>

² Why Europe's fight against the pandemic is about to get much more dangerous

By Melissa Bell, Dalal Mawad and Richard Allen Greene, CNN. Updated 1200 GMT (2000 HKT) December 14, 2021

Nine months after the Covid-19 outbreak and three months after declaring it a global pandemic, the WHO released a statement on its website on September 23, 2020 warning that the infodemic of misinformation and disinformation was spreading faster than the pandemic itself. The contents of misinformation and disinformation materials do not require undergoing 'peer reviews, fact-check or professional accountability'. They can be transmitted directly to the general public through social media and at the speed of clicking "enter". The result and impact are undermining and reducing the global governments' effectiveness and ability to address and stop the pandemic. With regards to the Covid-19 pandemic, the WHO defines 'infodemic' as "an overabundance of information, both online and offline. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals." Misinformation and disinformation can be harmful to people's physical and mental health, instigating polarization of public opinion leading to increase stigmatization, amplifying conflicts, and leading to poor observance of public health measures, such as immunization campaigns (or campaigns to promote effective vaccines). This not only "contributes to extending the coronavirus's ability to thrive and survive but also to the increase in serious illnesses and deaths."³

However, if this topic is considered, analyzed, and evaluated from a 360 degrees perspective, it would be unjust to place all misinformation and disinformation on the shoulders of the 'anti-vaxxers'. According to many independent scientists, the 'pro-vaxxers', starting with the vaccine developers, manufacturers, and sellers have not been transparent in making available for public scrutiny, analysis, and evaluation all necessary information on implemented protocols, procedures, and processes; nor have they made accessible to the general public the outcomes of raw data, facts, and figures, especially with regard to human testing in clinical trials. Consequently, these data and reports from such clinical trials have not undergone satisfactory and sufficient peer reviews by independent bodies. Under such circumstances, the 'information' made public by the vaccine developers are likely to lack the full extent of information required for true verification and process quality assurance. This practice and situation resulting from what has been considered by many as insufficiently substantiated information or clarity of interpretation regarding clinical trial outcomes and findings could be considered and construed as a form of misinformation and disinformation on the part of the vaccine developers also. To many of the general public not yet vaccinated, including the 'anti-vaxxers' and the still undecided, by approving and 'echoing' the position of the vaccine developers, the responsible government institutional agencies are essentially substantiating the position and perspective of the vaccine developers. There is no suggestion of taking one side or the other but looking at the big picture and a 360 degrees perspective, in truth and reality, no one side is innocent in misleading or misinforming the general public. The general public is the

³ WHO Statement. Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation. September 23, 2020.
<https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation>

injured party or even a scapegoat in this conflict. However, it seems that pharmaceutical corporations don't have to be on the defensive since there are several institutions such as the WHO, CDC, and other agencies, both private and public, who come to their defense.

In the numerous reports and discussion on this issue, the terms 'misinformation and disinformation seem to be interchangeable as if they were synonyms. This is not the case as they are significantly different. Both refer to delivering incorrect, or false information. However, the critical distinction between misinformation and disinformation lies in the 'intent'.

There are two aspects of misinformation. First, the drafting of the 'information', and second, the sharing of the same. Misinformation that occurs in the drafting is usually based on misunderstanding, misinterpretation or just 'missing the point' due to limited knowledge, experience, or even under the influence of personal bias. Second, the sharing of misinformation which really by far is the most common and frequent aspect, especially through the various channels of social media. The 'intent' is to spread and share information *that we believe or assume to be correct* and therefore be beneficial or useful to the recipient (s). How often have we read something posted on our Facebook, Twitter, or even WhatsApp, which we almost automatically share with our contacts without thinking, or even any thoughts of checking for verification? There is no malice intended.

Similar to misinformation there are also two aspects of disinformation. First, the drafting of the disinformation and second, the sharing of the same. Here the intent is about 180 degrees different. Here, there is a deliberate intention to mislead or create and share intentionally false information, which is done knowingly, with the focused objective to impose, manipulated, misguide, or misleading the recipient. Disinformation can be a very powerful scheme and tactic, to create division, conflict, and manipulated confusion. This can also include conspiracy theories which are used as a tool for advocacy. The intent is malicious and commonly practiced to undermine a government, organization, or public figure.

Based on the above definitions, there is no doubt that at the root of misinformation, lies disinformation, and that the general public is being unknowingly used as advocates, credibility builders, and distribution channels for the dissemination of disinformation (disinformation laundering through social media?). It is probably safe to consider that most of the so-called misinformation contained in the infodemic is really disinformation. The 'anti-vaxxers' are the common target of blame for the dissemination of misinformation and disinformation. However, the 'anti-vaxxers' incorporate various interest groups or persons and are not only limited to concerns about the reliability or safety of the vaccines themselves. Each group has its own agenda and includes politicians (New York Magazine, NPR)⁴, medical doctors (CNN, Yahoo

⁴ New York Magazine. Intelligencer.

<https://nymag.com/intelligencer/article/anti-vaccine-republican-party-desantis-tucker-carlson.html>
NPR.org.

<https://www.npr.org/2021/12/06/1057344561/anti-vaccine-activists-political-conference-trump-republicans>

News)⁵, businesses (NPR, Le Monde)⁶, and religious orders (The New Statesman, Frontiers)⁷ to identify some with various issues for opposing vaccinations, such as human rights with regard to mandates, business conflicts and competition (alternative cures and medicines), moral issues, etc. generated by the vaccination solution. In other words, even if these vaccines were perfect, there would probably still be ‘anti-vaxxers’ because of the other forms of conflict of interest.

In addition to the ‘anti-vaxxers’ there is also another group of unvaccinated people who are classified as undecided, hesitant, or just ‘wait-and-see’ regarding side effects and the outcomes before deciding. This group is actually growing in numbers, and is significantly influenced and swayed by the profusion of information, misinformation, and disinformation. This group of undecideds has the same concern with credibility issues as the ‘anti-vaxxers’ with regards to vaccination and represents the ‘silent majority’ of the unvaccinated. They seek reliable and verifiable information from neutral third parties, regarding the reliability and safety of vaccines but are also getting a lot of misinformation and disinformation regarding the reliability and safety of the vaccines, which is further compounded by problematic transparency issues related to the reports of trials and test outcomes from the pharmaceutical companies.

ii. Advocacy role of pro-vaxxers: Know your primary target group

As is common with most crises there are always two ways of looking at the same issue. In this case, the ‘anti-vaxxers’ versus the ‘pro-vaxxers’, with the ‘anti-vaxxers’ being accused of spreading false information and generating public resistance and hesitancy in getting vaccinated. This misinformation and disinformation are then shared with, between, or among other people through various channels, such as mainstream mass media or the more informal but widespread and instantaneous social media such as Twitter, Facebook, YouTube, and Instagram. Communication is therefore both widespread and swift. Nevertheless, this does create problems for governments trying to expedite the vaccination process.

It is interesting to note that pharmaceutical companies don’t have to be on the defensive too much since there are several institutions such as the WHO, the national FDAs, CDCs, and health

⁵ <https://edition.cnn.com/2021/10/19/us/doctors-covid-vaccine-misinformation-invs/index.html>
<https://news.yahoo.com/anti-vax-doctor-whos-one-071002288.html>

⁶ NPR.org.

<https://www.npr.org/sections/health-shots/2021/05/12/993615185/for-some-anti-vaccine-advocates-misinformation-is-part-of-a-business>

Le MONDE

https://www.lemonde.fr/en/france/article/2022/09/24/behind-alternative-medicines-and-anti-vax-speeches-there-s-a-certain-business-acumen_5998031_7.html

⁷ The New Statesman

<https://www.newstatesman.com/international-politics/society-international-politics/2021/12/how-the-christian-right-is-driving-the-anti-vaxx-movement>

Frontiers

<https://www.frontiersin.org/articles/10.3389/fpubh.2022.824560/full>

leaders and professionals who are always ready to come to their defense. Anyway, no one really expects pharmaceutical companies to respond with crystal clear transparency and comprehensive disclosure. So it is the 'pro-vaxxers' such as government medical and health institutions and authorities who commonly and frequently respond with scientific details and facts based on peer-reviewed articles in various medical journals and publications. However, these arguments usually fall on deaf ears on the part of the 'anti-vaxxers' who know, that any and all information being disseminated by the authorities is based on the controlled and limited data and information input from the vaccine developers. In other words, getting 100% clarification and disclosure based on less than 50% input of facts and figures. How reliable is that since it is 100% based on a 50% input, not 100% of a 100% input? In terms of advocacy efforts by the 'pro-vaxxers', they may be somewhat ineffective and impractical because their approach, delivery, and dissemination could be a combination of misalignment with the target audience, using the wrong media (mainstream and social platforms), and most importantly, applying and using the wrong communication style and language.

Most importantly, it is critical to identify the target group among the 'anti-vaxxers' which consists of the leaders and the herd of followers. The leaders are the instigators and motivators of the 'anti-vaxxers' movement and are determined to achieve their goals which do not exclude disseminating misguiding and misleading their followers through disinformation or with the intention to deceive. The end may justify the means. Then there are the herds of followers around the globe, consisting of both 'anti-vaxxers' and the 'yet undecided'. These herds could very well run into hundreds of millions of people on the global scale, and in fact, could represent the backbone of the human society exposed to the Covid-19 pandemic. and should be, the primary and focused priority target audience for the attention of the 'pro-vaxxers', not to mention possibly being the key barrier to any hope of achieving the coronavirus endemic. This global grouping of herds should be the primary target group for the 'pro-vaxxers' and should be clearly identified up-front to establish the fundamental criterion, framework, and basis, for the design, formulation, and launching of strategies for countering the 'anti-vaxxers' and advocating pro-vaccine campaigns. This target audience is not made up of medical practitioners, health industry workers, scientists, academicians, or educated elites. They are ordinary people, from all walks of life, belonging to multitudinous professions, and representing possibly over 99% of the unvaccinated population. They are ordinary people who work at McDonald's, Walmarts, supermarkets, bus and train stations, airports, banks, government agencies, factories, offices, gas stations, etc. who have no knowledge or understanding of medical or health-related issues and therefore are natural mass and mob targets for manipulation for political, economic or social gains and benefits by those who do know. This target group doesn't need PhD. or sophisticated scientific theories or formulas nor does the majority of this audience read medical or scientific journals or academic research. So all those researches, articles, studies, etc. are lost to this audience. They need layman's (laywoman's ?) style of explanations and terminologies (chat / tik-tok communication style?) and easily accessible on their information and communication networks based on social media platforms,

such as Twitter, Facebook, Instagram, etc. The other viable options through mainstream communication networks such as YouTube, television, and newspapers also work, but again, using the appropriate communication and language style suitable for the herd audience. Third, the organization, presentation format, and language of information and clarifications need to be practical-oriented, i.e. “to jab, or not to jab, that is the question.” (humble apologies to The Bard⁸) to be easily understood by the majority of the unvaccinated general public. For the target audience analysis think in terms of the employers at Walmart (2.3 million), McDonald’s (1.9 million), or Amazon.com (1.5 million) who need to first, understand, and then be motivated by the pro-vaccine campaigns. Therefore use short, clear, and simple terminologies, designed to explain, teach, clarify, and correct misinformation and disinformation in a language that is understood by the mass. Also, deliver as a storyboard with numerous short specific focus topics (with a link to more detailed information and presentation for those who want more details), rather than a comprehensive 20 - 25 page research format. This target audience has neither the time, the patience, nor the concentration span to read that they don’t understand. Therefore 10 separate responses of 1-2 pages each and focusing on 1-2 specific issues with clarifications, facts, and busting false information would be more effective than a long article covering 10 issues at one time. Slowly, but surely, is the best strategy when lives are at stake. An overload of information and technical clarification leads to a self-defeating infodemic. People are more responsive to what they understand easily than to a profusion of comprehensive intelligence. The objective of busting false information is to stimulate mindset change, as well as to educate. Therefore focus on key issues of concern and correct any misinformation with credible facts and statistical references.

B. Slowly, but surely in stimulating mindset change for vaccinations

In 2022, Europe was the worst region impacted by the Covid-19 pandemic both in terms of infection cases and deaths per million population. Consequently, much focus and effort were initiated by numerous nations in European to contain the high rates as well as to stimulate more people to be vaccinated. The key objective was not only with regard to reducing cases for health reasons, but more importantly to establish the credibility of infection safety in order to open up their nations for the much-needed quick cash flows from the tourism sector, and eventually to the normalization of industrial and trade activities for medium-term rebooting their economies also. This would require the opening up of their respective land borders across the European region.

Consequently, there have been significant successes in convincing the ‘anti-vaxxers’ as well as the ‘yet undecided’ population to go for vaccination in many Western European nations. As usual, it’s the money talk that generates the best results. However, this was probably also substantiated by the verifiable statistical evidence of continued high levels of hospitalization

⁸ William Shakespeare is referred to as ‘The Bard of Avon’. Bard means “poet”.

and deaths among the unvaccinated population, especially during the deadly and widespread Delta variant. These statistical facts which were verified by several independent scientific research along with published clarifications and ‘busting’ of false information spread by the ‘anti-vaxxers’ helped guide the ‘yet undecided’ population along with a growing number of ‘anti-vaxxers’ also to become more receptive to getting vaccinated in early 2022. However, towards mid-2022 the willingness to be vaccinated started to show signs of decline again. This was mainly due to the emergence and rapid expansion of the Omicron mutation, which soon replaced Delta as the predominant variant. Although the Omicron variant was more contagious what was crucially significant was that it caused significantly less serious illness and fatality risks. It seemed that the threat of hospitalization and death was removed for the unvaccinated population. Consequently, instead of getting vaccinated by what was perceived as a yet unreliable and unproven vaccine, many decided to risk exposing themselves to the Omicron infection to get natural immunization. This actually turned out to be an informal mass - movement toward achieving herd immunity globally.

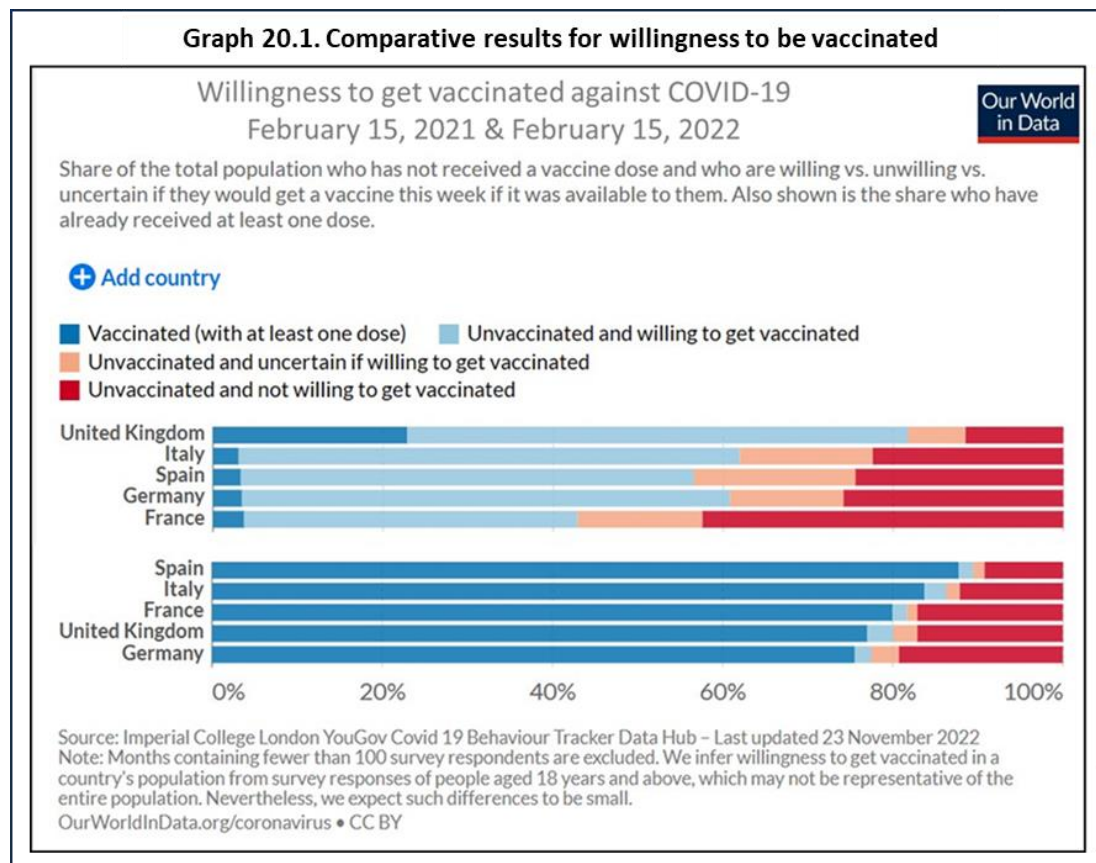
However, from the perspective of the ‘pro-vaxxers’ this practice was dangerous and considered to be another misconception generated through misinformation and disinformation from the ‘anti-vaxxers’. Research by the U.S. Centers for Disease Control and Prevention (CDC), Johns Hopkins Medicine, and McGill still advocate getting vaccinated as being the best protection against getting COVID-19, even after getting infected. In a report released on October 21, 2021, the CDC stated that getting vaccinated after getting infected by COVID-19 significantly enhances immune protection and further reduces the risk of reinfection. This was followed by another CDC report published on November 5, 2021, which found that the chances of testing positive for COVID-19 were 5.49 times higher in unvaccinated people who had natural immunity than for those with no previous Covid-19 infection but who had been vaccinated. In a Research Letter to the Journal of the American Medical Association on November 1, 2021, Johns Hopkins Medicine stated that antibody levels against COVID-19 remained higher and for a longer period “in people who were infected by the virus and then were fully vaccinated with mRNA COVID-19 vaccines compared with those who only got immunized.”⁹ A study from McGill confirmed that natural immunity through infection and vaccination is not an “either-or proposition”. Anyone previously infected with Covid-19 should still get vaccinated. Natural immunity through infection will not give protection forever and will decline over time. In addition, any new variant will likely reduce the level of previous protection. The vaccines still provide a critical immune boost.¹⁰

It is very likely that these studies and their qualified and verifiable finding are having a positive influence on the undecided population and some ‘anti-vaxxers’. A study undertaken by the

⁹ <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/covid-natural-immunity-what-you-need-to-know>

¹⁰ <https://www.mcgill.ca/oss/article/covid-19/natural-immunity-covid-has-its-limits>

Imperial College, (Institute of Global Health Innovation - IGHI) and partnering with the YouGov surveyed 29 countries from April 2020 to March 2022 tracking shifts in attitudes towards COVID-19 vaccines and boosters.¹¹ The figures indicated that the “anti-vaxxers” population, which in February 2021 ranged between 13 to 40% had reduced to 10% - 20% by the following year in February 2022, in the selected five European nations, namely the United Kingdom, Italy, Spain, Germany, and France, as indicated in Graph 8.7. below.



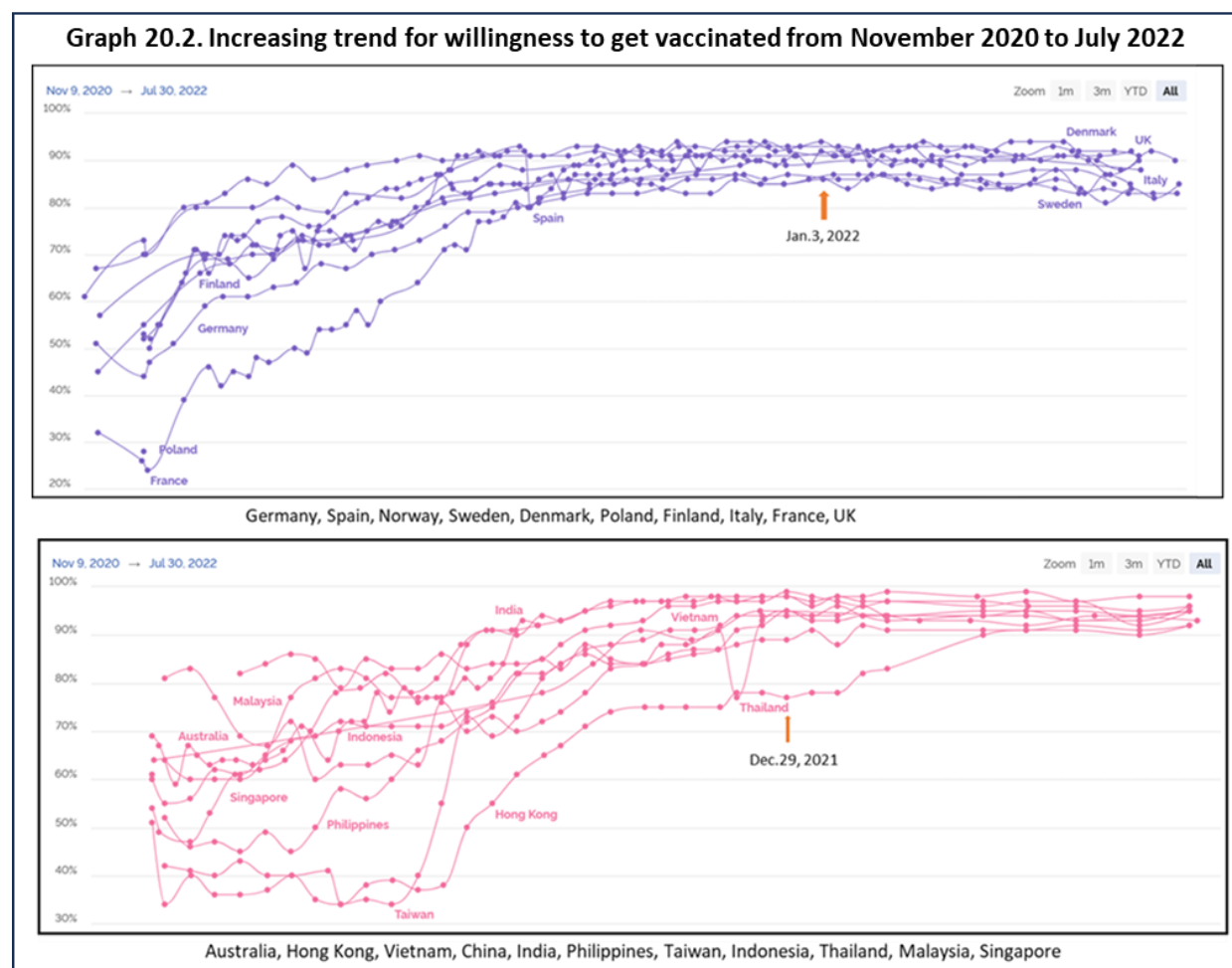
It is interesting to note that only the United Kingdom among the five nations studied showed an increase in the unwillingness to be vaccinated from 10% to 18% during the same period.¹²

A subsequent survey by a UK-based international research data and analytics group called YouGov compared the trends in willingness to be vaccinated between selected European and Asian region nations for the period from November 2020 to July 2021. The selected nations of both regions indicated a similar increasing attitudinal trend in accepting to be vaccinated, with

¹¹ https://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/Two-year_ICL-YouGov-Covid-19-Behaviour-Tracker-FINAL.pdf

¹² <https://ourworldindata.org/grapher/covid-vaccine-willingness-and-people-vaccinated-by-country?time=latest&country=FRA~ESP~DEU~ITA~GBR>

the Europeans ranging between 80% to 90%, and the Asians all above the 90% as indicated below.¹³



These figures and trends indicate that the ‘pro-vaxxers’ were gaining ground with ‘yet undecided’ and ‘anti-vaxxers’ groups. However, it should be noted that these figures only represent the primary vaccination series. For the vaccinated population to be sustainable at this level after completion of the primary series, would require continuous rounds of ‘booster’ and ‘re-booster’ shots every 4 – 6 months. It is very possible, and more probable, that the willingness to be vaccinated for the primary protocol doses does not automatically lead to the acceptance of subsequent booster and re-booster shots. Therefore these levels of acceptance to be vaccinated would more likely nose-dive with regards to accepting ‘booster’ doses. The continuous need for these additional doses, so soon after the primary series can only ‘boost’ the position of the ‘anti-vaxxers’ credo of mistrust, lack of credibility, transparency, and reliability of both the vaccine developers and the government regulators regarding health

¹³ <https://today.yougov.com/topics/international/articles-reports/2021/01/12/covid-19-willingness-be-vaccinated>

medication assurance. Campaigns by the ‘pro-vaxxers’ need to continue with positive data-supported outcomes of these ‘booster’ doses to spotlight and underscore the need to avoid deterioration of efficacy and protection of the vaccines against serious illness, hospitalization, and deaths. In this respect, it is also possible and likely that the ‘anti-vaxxers’ could be replaced by the ‘anti-boosters’ in 2023, now entering the fourth year of the Covid-19 pandemic.

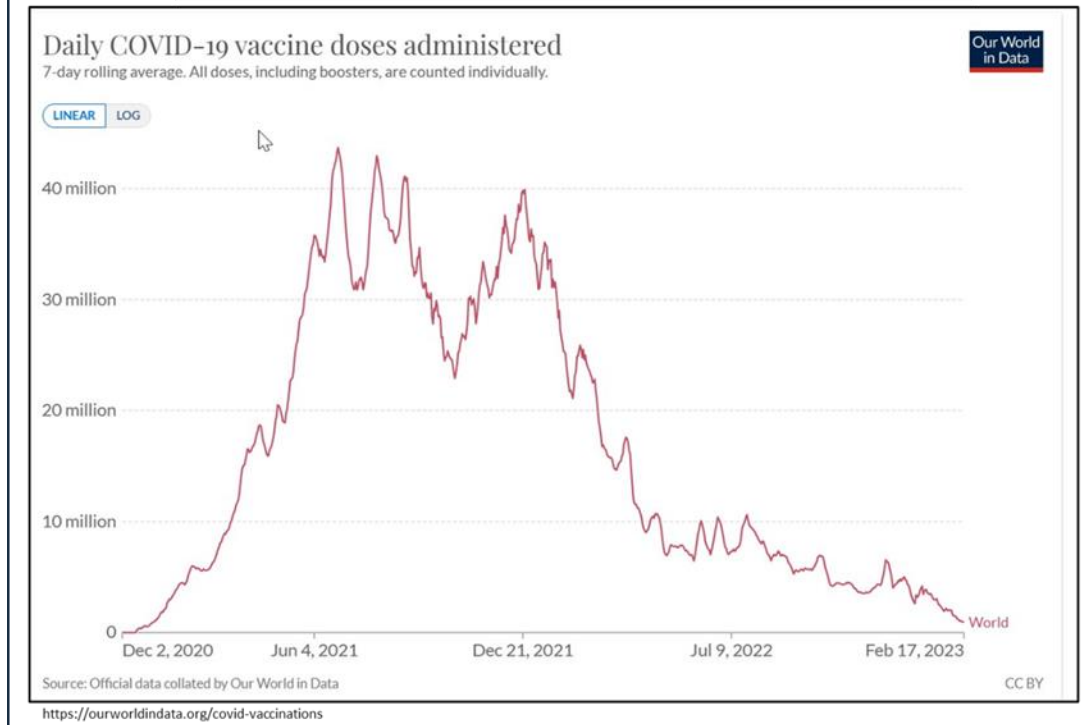
Many Western nations, mainly in North America and Europe (incidentally the two regions with the highest infections and death rates) are treating Covid-19 as endemic. The WHO, has warned that it is still too premature to adopt this behavior. The evolution of the Omicron variant continues with more mutations and their effects remain uncertain. Back in early January 2022 when these nations started talking about the endemic, WHO’s senior emergency officer for Europe, Catherine Smallwood stated in a press conference, “We still have a huge amount of uncertainty and a virus that is evolving quite quickly, imposing new challenges. We are certainly not at the point where we are able to call it endemic,”.¹⁴ By the end of December 2022, these warnings remain true. Other regions, namely in South East Asia and Africa continue to consider Covid-19 as a pandemic. In the case of Asia, the surge of infections and deaths in Japan, South Korea, and more recently China in 2022 indicate that the coronavirus is far from being contained. This feeling is also in consideration of the fact that the remaining large population of the world still needs to be vaccinated to attain the global target of 70% coverage. However, to achieve and sustain this global 70% vaccinated target, those that have completed their primary series, need to take the booster doses.

That means every person vaccinated in 2021 and early 2022, needs to get either a booster or re-booster dose in 2022. As of December 2022, none of these vaccination goals for either primary series or ‘booster’ doses have been effectively implemented. In fact, the percentage of the updated fully vaccinated population was significantly less than for 2021 and continues to decline into 2023 as indicated in Graph 20.3. below.

¹⁴ Reuters. January 29, 2022.

<https://www.reuters.com/business/healthcare-pharmaceuticals/who-warns-against-treating-covid-19-like-flu-2022-01-11/>

Graph 20.3. Daily Covid-19 vaccine doses administered globally as of February 17, 2023



As recently as December 24, 2022, Hong Kong's Health Secretary Lo Chung-mau stated that misinformation on Covid-19 vaccines was to blame for the low inoculation rate in Hong Kong. Unfortunately, this also included the high-risk population, such as the elderly with serious health problems such as heart or lung conditions, weakened immune systems, obesity, or diabetes. "Unfortunately, there is a lot of misinformation in the media and in the community about the adverse effects of vaccines, a lot of anti-science," stated Lo.¹⁵

Nevertheless, there is no suggestion that the creation and dissemination of misinformation or disinformation are 100% without foundation. Based on the principle that there is 'no smoke without a fire' or that 'it takes two to tango', there is no definitive or absolute assurance that the pharmaceutical manufacturers or even the institutional 'pro-vaxxers' are innocent and unblemished with regard to any form of deception. Deception includes a lack of complete transparency in sharing information critical for full and proper due diligence and evaluation of the vaccine development and trials.

¹⁵ RTHK news. December 24, 2022.
<https://news.rthk.hk/rthk/en/component/k2/1681203-20221224.htm>

C. Transparency issues.

Transparency measurement and evaluation are necessary to ensure that proper and appropriate business ethics and practice is being observed within this context with reference to the Covid-19 vaccine development and manufacturing. This is necessary for the following reasons:

- i. Since lives depend on the reliability and efficacy of the vaccines, safety, and performance assurances are absolutely required and must be verifiable and continuous.
- ii. The pharmaceutical industry is making sizable profits from selling these products globally
- iii. In many cases, the vaccine development costs include contributions from the taxpayers who have the right to know how the money was spent, and to what extent they are benefiting.
- vi. The money paid to them by governments to purchase and launch inoculations of their vaccines originates from the taxpayers
- v. These coronavirus vaccines will continue to be developed with updated modifications, for manufacturing and sales globally even after the eventual endemic,

During the development process, including the essential and critical clinical trials the vaccine developers and manufacturers have to submit relevant data and reports with their submissions to the national FDA and the WHO for national and global EUA approvals. However, post-EUA approvals by the national FDA and the WHO, the commitments to transparency in making data and clinical trial reports public were not satisfactorily honoured by the developers and manufacturers in the eyes of the general public, independent quality assurance, and evaluators, or the WHO. Consequently, several months following the EUA approvals and the global roll-out of Covid-19 vaccinations, the WHO and the International Coalition of Medicines Regulatory Authorities (ICMRA) issued a joint statement on May 7, 2021, complaining of the lack of transparency and data integrity with regard to the development and verification of the reliability, effectiveness, and safety of these vaccines.¹⁶

This issue of the lack of transparency regarding making public data and records of clinical trials was also picked-up by Transparency International¹⁷. On May 25, 2021, TI identified several issues

¹⁶ [https://www.who.int/news/item/07-05-2021-joint-statement-on-transparency-and-data-integrityinternational-coalition-of-medicines-regulatory-authorities-\(icmra\)-and-who](https://www.who.int/news/item/07-05-2021-joint-statement-on-transparency-and-data-integrityinternational-coalition-of-medicines-regulatory-authorities-(icmra)-and-who)

¹⁷ Transparency International (TI) is a global movement working in over 100 countries to end the injustice of corruption with the mission to stop corruption and promote transparency, accountability, and integrity at all levels and across all

related to the lack of transparency such as vaccine trials (Clinical Trial Transparency), unpublished secretive contracts (Contract Transparency), and ‘science by press release’ related to the development, testing, and distribution of the Covid-19 vaccines. As stated by Transparency International, “the case for transparency in vaccine development and contracts is clear: the huge global demand, the vast sums of public money already and still to be invested and spent, and the need to build public confidence in vaccines as the best way to bring the pandemic under control”

These warnings with ‘red flags’ were based on TI’s in-depth study of the development and sale of the world’s top 20 COVID-19 vaccines in its report entitled “For Whose Benefit?”. This included its findings and assessments of vaccines developed by AstraZeneca, Moderna, Pfizer/BioNTech, Johnson & Johnson, Novavax, Sinovac Biotech, and the Gamaleya Research Institute. This was a joint study conducted by Transparency International’s Global Health Program, the World Health Organization Collaborating Centre (for governance, accountability, and transparency in the pharmaceutical sector), and the Leslie Dan Faculty of Pharmacy, University of Toronto with the objective to reduce corruption and promote transparency, good governance, integrity, and accountability within the pharmaceutical and healthcare sectors.¹⁸

A breakdown and clarification of the transparency issues are summarized as follows:¹⁹

a. Clinical trial transparency issues

Description of clinical trials: According to the National Institutes of Health (NIH) and National Institute on Aging (NIA), clinical trials are research studies performed on people that are aimed at evaluating a medical, surgical, or behavioral intervention. They are the primary way that researchers find out if a new treatment, like a new drug or diet, or medical device (for example, a pacemaker) is safe and effective in people. Often a clinical trial is used to learn if a new treatment is more effective and/or has less harmful side effects than the standard treatment.²⁰

Clinical trials are, therefore, essential, crucial, and legally binding on pharmaceutical companies or laboratories developing drugs or diets, or medical devices for public consumption or use. Therefore the issue of clinical trial transparency is both crucial and imperative in the development of the Covid-19 vaccine because these reports, data, findings, assessments, and conclusions become the fundamental basis and foundation for regulatory evaluations, verifications, and eventual approvals by the relevant regulatory authorities. They are accountable for making the right decisions for the safety, treatment, and wellness of the

sectors of society. TI is a German registered association based in Berlin and founded in May 1993, focusing on holding the corrupt powerful to account. Through advocacy, campaigning, and research, TI works to expose systems and networks that enable corruption to thrive, demanding greater transparency and integrity in all areas of public life.
<https://www.transparency.org/en/>

¹⁸ <https://ti-health.org/wp-content/uploads/2021/05/For-Whose-Benefit-Transparency-International.pdf>

¹⁹ Ditto

²⁰ <https://www.nia.nih.gov/health/what-are-clinical-trials-and-studies>

general public who essentially, are their paymasters as taxpayers. In this respect, such regulatory authorities are empowered but also accountable for exercising their responsibilities in overseeing and regulating the development, performance quality, and safety assurance of these Covid-19 vaccines. This would include the analysis, evaluation, and verification of clinical trials associated with the development of the vaccines as conditional for approvals, which also include the EUA category. These regulatory authorities would include the Food and Drugs Administration (FDA) in terms of approvals, the Centers for Disease Control and Prevention (CDC) in launching campaigns and advocacy for inoculations, and the relevant government health agencies, institutions, and departments who launch, execute, manage and control the vaccination process. Unlike communist and authoritarian governments where true transparency may be questioned, democratic governments are expected to promote, ensure, regulate, and enforce transparency for the general public good which means ensuring the qualifiable and quantifiable verification of clinical trials. (Right..?)

However, it was not the local governments (either authoritarian or democratic) but Transparency International (a non-governmental organization) that took the lead to push for the enforcement of transparency in the development of the Covid-19 vaccines, especially because these vaccines were being sold and distributed globally. Key transparency issues raised by TI through findings from its study were (extracts)²¹,

- the lack of prescriptive guidance and legislation on the sharing of clinical trial results by pharmaceutical developers, funders, and drug regulatory agencies during a public health emergency.
- the risk of undue influence and manipulation in the clinical development process.
- the immense pressure to rapidly produce treatments and vaccines, combined with the huge amounts of money on offer for effective products.
- the lack of legally mandated, harmonized, transparent processes and timelines for sharing clinical trial results, pharmaceutical developers can present their data in the most flattering and beneficial light or choose to withhold the data altogether.
- the different levels of data sharing protocols which depended on the location of clinical trials, where the vaccines are to be manufactured, and the country applied to for approval,
- the difference in clinical trial transparency requirements from country to country
- the lack of transparency including access to relevant research and trial reports and materials makes it impossible to carry out real meaningful due diligence.

For undertaking as well as achieving effective and meaningful independent third-party due diligence and verification, the research design, methodology of approach and process, trial

²¹ <https://ti-health.org/wp-content/uploads/2021/05/For-Whose-Benefit-Transparency-International.pdf>

monitoring and management, and all associated data are necessary for determining the reliability, and credibility of the outcome of the clinical trials.

Key findings pinpointing to the lack of transparency were based on TI's analysis of 86 registered clinical trials by 20 different COVID-19 vaccines as summarized as follows (extracts)²²,

- Only six vaccines out of the total 20 studied, or 30% of the total under review were manufactured in countries that do not align with best practices that require the reporting of clinical trial summary results within 12 months of trial completion.
- Only two of the nine countries where developers are based made available clinical study reports
- Out of the total 86 registered clinical trials, there were protocols for only 10 trials, or 12 percent. This means that there were no publicly accessible protocols for 76 registered trials or 88% giving key details of how the clinical trials were designed, controlled, and managed. This makes it impossible for verification by independent third-party peer evaluators.
- Eighteen out of the 20 vaccines reviewed by TI only had some clinical trial results announced, with two vaccines without any trial results.

In summary, of the total 86 registered clinical trials analyzed only 39 trials or 45% had their results announced. Of this sum, only 23 trials, or 59% were with published data analysis. This means that of the total 86 clinical trials only 23 trials, or 27% of the total were with published data analysis. This means that about 73% of the registered clinical trials were without published data analysis and had their results announced only through press releases, press conferences, or media reports and of course, without complete data analysis. Just delivering information on the outcome, according to and within the framework of the developers. In other words, relying on the published statements through the likes of Al Jazeera, The New York Times, Le Monde, The Guardian, Der Spiegel, The Times of India, etc. based on their press releases to establish third-party credibility and integrity. However, for scientists and those in the industry, this is referred to as 'science by press release'. Such media releases would of course exclude the full data not normally made available for the press, and therefore do not support public scrutiny or academic review.²³

Jonathan Cushing, head of Transparency International's global health program stated that the "lack of transparency of many clinical trials combined with the huge financial incentives for producing effective treatments leaves the door wide open for selective reporting of results or

²² Ditto

²³ Transparency International Global Health Press Release, May 25, 2021
<https://www.transparency.org/en/press/covid-19-vaccines-lack-of-transparency-trials-secretive-contracts-science-by-press-release-risk-success-of-global-response>

outright data manipulation,” and also that the “lack of publicly accessible data creates space for misleading and potentially dangerous half-truths, disinformation, and conspiracy theories, which in turn contribute to vaccine hesitancy.”²⁴

b. secretive contracts

TI reviewed a total of 182 agreements for the purchase of 12 different COVID-19 vaccines and found that

- Only 11 or 6% of vaccine contracts between developers and public buyers have been published through formal channels.
- Just one contract, or 0.5% of the total, was published by buyers without redaction. The vast majority redact large sections that are of critical public interest, price per dose and delivery timetables.
- For certain vaccines, upper-middle-income countries are paying an average of 25% more per contract than high-income countries.

Through detailed analysis of contracts for vaccine sales up to March 2021, the research exposed the frequency of poor transparency supported by governments censoring key details of their orders from drug companies. Clinical trial transparency is the only way to monitor the safety and efficacy of vaccines and is a key safeguard against selective reporting of results or manipulation of data. which would exclude the full data not made available for media scrutiny or academic review.²⁵

Transparency International’s complaints about transparency were verified and supported by some peer reviewers three months later in August 2021 in an article entitled “Evidence-Based Medicine (EBM) Transparency of COVID-19 vaccine trials: decisions without data” published by the Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, Baltimore, USA.²⁶ A month later on September 13, 2021, these same transparency issues and concerns were repeated by the European Public Health Alliance (EPHA), which called for “enhanced clinical trial transparency and good governance in the European Medicines Agency.”²⁷ This announcement from the EPHA actually represents a one year anniversary following the commitment by a group of vaccine developers which include Moderna, AstraZeneca, Pfizer- BioNTech, Merck, GlaxoSmithKline, Janssen (Johnson & Johnson), Sanofi, and Novavax who signed a written pledge to practice “high ethical and scientific standards on

²⁴ <https://www.pharmacy.utoronto.ca/news-announcements/poor-transparency-vaccine-trials-and-secretive-contracts-risk-success-global-covid-19-response-report-finds>

²⁵ Transparency International Global Health Press Release, May 25, 2021
<https://www.transparency.org/en/press/covid-19-vaccines-lack-of-transparency-trials-secretive-contracts-science-by-press-release-risk-success-of-global-response>

²⁶ <https://ebm.bmj.com/content/27/4/199>. BMJ. August 2022.

²⁷ <https://epha.org/epha-joins-calls-for-enhanced-clinical-trial-transparency-and-good-governance-in-the-ema/>

the vaccine-testing process.”²⁸ It looked good as a public relations or social responsibility at the time, but many, particularly the ‘anti-vaxxers’ thought this was all a ‘blatant sham’ (BS) from the associated pharmaceutical corporations. It was not until a year after the Covid-19 vaccines had already received EUA approvals, i.e. on November 5, 2020, that only three of the signatories, namely Moderna, AstraZeneca, Pfizer- BioNTech were willing to make their vaccine trial protocols public, and only Johnson & Johnson was committed to sharing participant-level data, results, protocols, and other trial documents. These developments and reactions from the four companies “were taken only recently, long after trials began enrolling patients, as vaccine developers came under intense public scrutiny.”²⁹

In the absence of any significant positive response from the vaccine developers to its advocacy for transparency earlier in May 2021, Transparency International repeated its call again on October 22, 2021, five months later, and with somewhat stronger language, highlighting that (extracts),³⁰

- The development of COVID-19 medicines and vaccines is critical, as is the publication of results from clinical trials to show what is effective – and equally important – what is not, so that researchers can learn from existing studies and not lose time chasing scientific dead ends.
- Yet, publication rates of clinical study results are notoriously low, particularly for publicly funded research, including in the EU. While privately funded clinical trials have a slightly better publication rate, many reports include large amounts of redacted text to protect commercially sensitive data.
- Unfortunately, corruption often thrives during times of crisis, particularly when institutions and oversight are weak, and public trust is low.

It is both plausible and reasonable to pinpoint the roots of the ‘anti-vaxxers’ sentiments and movement against vaccination to this somewhat blatant lack of transparency on the part of the vaccine developers. It is also logical to assume that this anti-vaccine movement could have started before the EUA approvals by either the FDA or the WHO.

D. Credibility of the regulators

Concurrent with the transparency issues associated with the vaccine developers, the seeming inability of the relevant authorized regulators to control or enforce conformity and abidance also led to the lack of trust, reliability, and credibility of these government health and safety

²⁸ Lev Facher. Amid broad mistrust of FDA and Trump administration, drug companies seek to reassure public about Covid-19 vaccine safety. September 8, 2020.

²⁹ Jennifer E. Miller, Joseph S. Ross and Michelle M. Mello, Far more transparency is needed for Covid-19 vaccine trials. STAT+. November 5, 2020.

<https://www.statnews.com/2020/11/05/transparency-is-needed-for-covid-19-vaccine-trials/>

³⁰ Another shot at vaccine transparency. 22 October 2021

<https://www.transparency.org/en/blog/shot-at-vaccine-transparency-pfizer-covax>

assurance agencies. Their continual failure, in carrying out the oversight and in regulating the development of these vaccines with appropriate transparency obviously was not well accepted by the 'anti-vaxxers' as taxpayers. This negative attitude was highest in the United States, which developed and manufactured the three most popular and globally distributed Covid-19 vaccines, where the trust, and credibility in the relevant federal agencies and regulators have declined following their inability to monitor and enforce transparency in reporting and submitting of relevant data by the vaccine developers.

As early as September 2020 during the Covid-19 pandemic, the National Medical Association (NMA), the oldest and largest national organization founded in 1895, and essentially representing African American physicians and their patients in the United States, created its own expert task force to independently examine and evaluate various US regulators' decisions related to Covid-19 drugs and vaccines. In particular, because of their respective roles, involving high power and authority in decision-making and issuing approvals, the focus was directed at the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC). Leon McDougle, president of the NMA explained that there was "concern that some of the recent decisions by the Food and Drug Administration have been unduly influenced by politicians."³¹

This trend of political influence leading to the growing distrust in both the FDA and the CDC was expressed a month later in November 2020 by Yale School of Medicine and Stanford University School of Medicine following findings of their joint study regarding the credibility, and independence of these agencies in performing their respective roles. This study indicated that about two-thirds or 62% of Americans were concerned that the FDA would rush to approve Covid-19 vaccines without adequate safety assurances and performance effectiveness due to political pressure, and only 25% had absolute trust in the CDC in approving the rolling-out of vaccinations, meaning 75% did not. Their findings also indicated that only 21% of Americans would definitely intend to be vaccinated while almost half, or 49% would either certainly or more likely, would not. These concerns were obviously, linked to the "warp speed," in the development of these vaccines, but more importantly most likely to receive regulatory approvals without appropriate or sufficient ascertaining and verifying their trial-testing process.³²

On August 23, 2021, the US.FDA granting full approval to Pfizer/BioNTech for its vaccine to inoculate the age group 16 years and older thereby upgrading it out of the EUA status³³. In the

³¹ Eric Boodman. Not trusting the FDA, Black doctors' group creates panel to vet Covid-19 vaccines STAT+. September 21, 2020 .

<https://www.statnews.com/2020/09/21/black-doctors-group-creates-panel-to-vet-covid19-vaccines/>

³² Jennifer E. Miller, Joseph S. Ross and Michelle M. Mello, Far more transparency is needed for Covid-19 vaccine trials. STAT+. November 5, 2020.

<https://www.statnews.com/2020/11/05/transparency-is-needed-for-covid-19-vaccine-trials/>

³³ Jared S. Hopkins & Stephanie Armour. FDA Gives Pfizer-BioNTech Covid-19 Vaccine Full Approval The Wall Street Journal. August 23, 2021

following month, on September 16, 2021, a group of medical professionals and scientists, belonging to the Public Health and Medical Professionals for Transparency (PHMPT)^{34 35}, a non-profit group, filed a lawsuit demanding that the FDA allows access to the complete data and records on which the FDA approval was based. The good news, in response to the lawsuit the FDA applied to the court for approval to make public disclosure of the data it relied upon to license Pfizer's Covid-19 vaccine. The bad news, is in the application the FDA also requested this to be executed in the year 2096, or in 75 years. If approved by the court, the outcome means those who filed the lawsuit, and those people who were inoculated with the FDA-approved vaccine from Pfizer/BioNTech would either be dead (most likely), or make the information made available at that time become redundant to those still alive. This response by the FDA could indicate the nature of its regard for the constitutional and democratic rights of the American public. The FDA declared that the total page count was at least 451,000 pages and based on the delivery of approximately 500 pages per month, this would take 75 years.

U.S. District Judge Mark T. Pittman determined the duration requested by the FDA unreasonable, comparing it to “the actions of totalitarian nations”, and on January 6, 2022, ordered the FDA to produce at least 55,000 pages per month. In his judgment, Pittman declared that the American people needed transparency and independent scientists to review this data related to the Covid-19 vaccine now and not in 75 years. In order to better appreciate Judge Pittman's verdict and perspective on this issue, it should be noted that while the FDA declared it needed 75 years to prepare and deliver all the relevant documents related to the Pfizer-BioNTech Covid-19 vaccine approval, it took just several months to consider and approve this application which included analysis, review, evaluation, verification, and make a judgment on the same 451,000 pages to determine that it was appropriate and safe to upgrade the Pfizer-BioNTech Covid-19 vaccine from the EUA category to full approval status.³⁶

E. What about the W.H.O?

The questionable standard of transparency of the vaccine developers, which reflects on the credibility and reliability of data and reports related to their clinical trials, has been raised by Transparency International, along with several local medical and scientific institutions and groups. In addition, there is the questionable reliability and credibility of the national regulators in both overseeing and controlling the vaccine developers to ensure conformity to established

<https://www.wsj.com/articles/fda-approves-pfizer-biontech-covid-19-vaccine-for-people-16-and-older-11629726322>

³⁴ PHMPT, a group of more than 30 medical and public health professionals and scientists from institutions such as Harvard, Yale, and UCLA as well as public health professionals and journalists

³⁵ Michael Nevradakis, Ph.D. Pfizer, FDA Lose Bid to Further Delay Release of COVID Vaccine Safety Data The Defender. February 7, 2022

<https://childrenshealthdefense.org/defender/pfizer-fda-lose-bid-delay-release-covid-vaccine-safety-data/>

³⁶ Bloomberg Law: Why a Judge Ordered FDA to Release Covid-19 Vaccine Data Pronto. Jan. 18, 2022.

<https://news.bloomberglaw.com/health-law-and-business/why-a-judge-ordered-fda-to-release-covid-19-vaccine-data-pronto>

standards and transparency of procedures, as well as transparency of their own actions in evaluating, verifying, and approving these vaccine applications. How then can the WHO, as the global health regulator with responsibility for health safety assurance, be sure of getting the true data and relevant information necessary to approve these vaccines under its global EUA listing? Does the WHO undertake its own evaluation and verification process (does it have the staff and time to go through 451,000 pages of data and reports), or basically 'rubber stamp' it with its 'branded' approval?

The three of the top most popular and globally distributed vaccines are Pfizer-BioNTech, Moderna, and Johnson & Johnson, developed in the United States, and AstraZeneca developed in the United Kingdom. According to Transparency International, they all have transparency issues. Should the WHO not take TI's revelations into consideration in issuing, extending, or expanding their new generation vaccines? Of course, this should not exclude all the other remaining vaccines included in the WHO EUA listing.

How does the issue of transparency regarding the FDA's considerations and approvals of vaccine submissions affect the WHO? First and foremost, the WHO only issues the EUA status to vaccines approved by the national FDA. Since the WHO does not have the resources to carry out detailed due diligence and verification of the submissions for EUA status approvals, most likely it will depend on the reliable professional accurateness and thoroughness of the national FDA to issue the appropriate and justifiable approvals on which the WHO would base its EUA approval. However, while the national FDA has limited responsibility for its approval within the nation, the WHO is responsible for expanding this approval globally. It should not be overlooked that governments around the globe look to the WHO for guidance in approving these vaccines for their people. This scope of responsibility on the part of the WHO is further amplified by the fact that the WHO also actively promotes the use of these vaccines to global leaders for the vaccination of their people.

Therefore to what extent is the WHO responsible for promoting these vaccines, which still lack, independent third-party peer evaluation and verification? On one side of the coin, it is acceptable according to what the WHO says that on the positive side, having something that can cure, even with 50% limited reliability is better than nothing. What about the other side of the coin? What does the WHO say about the negative side? Does the fact that these vaccines don't have clear-cut indications or guarantee against negative side effects also acceptable?

Chapter 21

THE ELUSIVE ENDEMIC

A. Shortfalls in the long-awaited pharmaceutical solution – Covid-19 vaccines

The first year of the Covid-19 outbreak and pandemic in December 2019 through 2020 relied solely on human-based non-pharmaceutical initiatives, centering on social distancing behaviors. The arrival of the pharmaceutical solution through various newly developed vaccines followed by the launching of vaccinations worldwide a year later beginning in December 2021 and still continuing through 2023, was considered a blessing of modern-day technology, and the signal for imminent Covid-19 endemic. However, in September 2021, nine months after the roll-out of vaccinations Pfizer-BioNTech was the first vaccine developer to reveal that its vaccine had a limited timeframe of effective protection lasting about six months. Consequently, an additional follow-up ‘booster’ dose would be required to ‘reboot’ Pfizer-BioNTech’s vaccine to the original effective protection level, at best, or close enough to the level reached under the primary vaccination series. When the general public was starting to warm-up to this surprising revelation, surprising because Pfizer-BioNTech the developer, FDA the regulatory vaccine approval authority, CDC the national disease control and preventive authority to approve population inoculations, and also the WHO, the global influencer health and safety authority, all seem to have inadvertently ‘avoided’ declaring this fact prior to rolling out vaccinations to the global general public in December 2020. The term ‘avoided’ is used because it is assumed that these national and global regulators would (should) have properly evaluated the totality of effectiveness of the vaccine (performance and timeframe) with the given appropriate and sufficient information from the vaccine developer, and therefore should have been aware of this critical and crucial issue. If they had not, did they have the right to issue mandatory inoculations of the vaccine to the general public? Is this the political culture of a democratic or an authoritarian government system?

This issue of questionable institutional and organizational reliability and credibility was further reinforced when six months later, in March 2022, Pfizer-BioNTech announced that the first booster dose in fact also only had 4 – 6 months of effective protection and therefore a second ‘booster’ dose would be required to again ‘reboot’ the effective rate of protection. Applications for both booster doses by Pfizer-BioNTech were made to the FDA and were approved within a

very short time despite knowing that the second booster dose had a limited effective protection timeframe of only 4 – 6 months also. Pfizer-BioNTech's issues with effective protection timeframe for its vaccine were soon followed by the other newly developed Covid-19 vaccines in the United States, namely Moderna and Johnson & Johnson. Soon, the limited timeframe of effective protection was also revealed for all Covid-19 vaccines.

Essentially, the pharmaceutical solution, in the form of the newly developed Covid-19 vaccines, fell short of expectations in terms of being able to deliver a sustainable solution of effective protection. The key word is 'sustainable'. A six months effective protection period is not impressive. Requiring two booster doses per 12 months period after the primary vaccination series is not impressive. Any prospect of a speedy Covid-19 endemic is waning rapidly, just like the waning of the effective protection level of its vaccines. The kick-off towards the endemic requires about 75% of a sustainable infection-free population. This cannot be achieved if the population needs to be vaccinated every 4 - 6 months. Coupled with the declining credibility of the vaccines, along with the reliability of oversight by the regulators, the image of the 'elusive butterfly' comes to mind when referring to the Covid-19 endemic. However, in addition to the limited period of effective protection of the vaccines, there is another key factor contributing to the elusiveness in achieving the Covid-19 endemic status, namely the impact of reopening for tourism and global business. This means that not only will there be unsustainable effective protection against infections and serious illnesses domestically, but now also the inflow of infection risks from abroad due to the globalization factor.

On April 27, 2022, Dr. Anthony Fauci, the U.S.'s chief medical advisor, announced that the United States was now entering the "transitional phase" of a "controlled pandemic" in an interview with the Washington Post¹. Fauci clarified that this "transition phase" was somewhere better than Covid-19's pandemic status but still short of the endemic status and enumerated several reasons for this rationalization based on the reliability and effectiveness of the vaccines currently available.

- 1) There still does not exist any vaccine that is 100% effective in protecting against getting infected by Covid-19 and this includes its numerous mutations to date.
- 2) These vaccines only give a high level of effective protection from serious illness and the probability of death.
- 3) The development of all current vaccines was based on the virus strain emerging from Wuhan, China at the original outbreak, and while they were highly effective in protecting

¹ Alice Park. The U.S. Is in a 'Controlled Pandemic' Phase of COVID-19. But What Does That Mean? TIME. April 29, 2022
<https://time.com/6172048/covid-19-controlled-pandemic-endemic/>

against serious illness and death from that strain the effectiveness of these vaccines has waned as newer coronavirus mutations emerge. The past three years have already clearly demonstrated that Covid-19 continues to mutate from the Alpha to the Beta, Gamma, Delta, and now the Omicron variant with more likely to follow.

- 4) With each mutation, Covid-19 seems to become more transmissible and infect more easily and more quickly, along with signs of increased resistance to the existing vaccines thereby making them less effective.
- 5) Future mutations could make Covid-19 more virulent causing more serious illness, and fatalities in addition to being more transmissible. In this event, existing vaccines along with other drug treatments might provide ineffective or insignificant protection.
- 6) Finally, after three years of multiple mutations and variants, vaccine developers/scientists still don't have an effective formula to fully protect against getting infected with COVID-19. They are still looking for the answers to i) how to prevent getting infected, and ii) the level of immunity required to protect against serious illness.²

The logic of Fauci's rationalization and enumeration of the shortfalls of existing vaccines, particularly regarding the lack of sustainable effectiveness of protection presents a strong and valid argument against any imminent Covid-19 endemic.

B. The opening-up of borders to visitors and tourists

Following the launching of widespread vaccinations beginning in 2021, many nations, particularly in the European zone were already planning to open their borders around mid-2022, especially for visitors and tourists to jump-start their economy. By early 2022, some nations were already talking about and preparing for the imminent Covid-19 endemic. However, this optimism was not shared by the WHO whose official position still considers Covid-19 as a pandemic as re-enforced by Michael Ryan, the WHO Health Emergencies Programme Director, stating "I certainly do not believe we've reached anything close to an endemic situation with this virus." He considers that COVID-19 could still continue to trigger large outbreaks around the globe. This sentiment was also expressed by Maria Van Kerkhove, WHO's COVID-19 Technical Leader, who pointed out that the virus continued to circulate at a high level globally, causing "huge amounts of death and devastation", and also that the world is "still in the middle of this pandemic. We all wish that we weren't. But we are not in an endemic stage,".³

² Alice Park. The U.S. Is in a 'Controlled Pandemic' Phase of COVID-19. But What Does That Mean? TIME. April 29, 2022
<https://time.com/6172048/covid-19-controlled-pandemic-endemic/>

³ Aljazeera. WHO warns coronavirus is far from settling into endemic situation. April 14, 2022.

It has already been established and demonstrated during the past three years from 2020 to 2022 that the key contributory factor to the globalization of the Covid-19 pandemic was the global mobility of humans. In terms of the concentration of human mobility, the key roots of infection transmission have been, and will continue to be, the globalized tourism industry. This was why the first action of all nations was to close borders to tourism immediately following the outbreak of the coronavirus in Wuhan, China. During the first two years of the Covid-19 pandemic (2020 – 2021), the tourism industry was put on 'hold' by most nations closing doors to any foreign entry, as well as imposing strict controls on the re-entry of their citizens and residents. Needless to say, the suspension of foreign tourism has had a major negative impact on the economy of most nations where the tourism industry represents a significant share of their national income. The tourism industry is a crucial focal point on which several other industries and services heavily rely, such as the airline industry, the hotel industry, the domestic transportation industry, the local handicrafts and souvenirs industry, the food and beverage industries, as well as commercial businesses and services such as restaurants, entertainment venues, shopping centers, and department stores, etc. These disruptions to national economies have put significant pressure on governments to reopen borders to tourism as soon as possible (ASAP) along with commercial trade and businesses for non-tourism industries to initiate the 'rebooting' of the national economy.

Therefore despite the warnings from the WHO, many nations, particularly from the European region, started planning to open up their country by the first quarter of 2022 to foreign visitors and tourists. Tourism was the fast track to the much-needed cash flow. However, this began with a 'soft opening' due to the still pandemic status, so most nations set conditions for cross-border entry requiring a selection or combination of protective measures such as proof of completing the primary vaccination protocols, mandatory testing prior to boarding planes (48 hours), mandatory testing on arrival at airports, wearing masks on planes, quarantines, etc. On April 27, 2022, European Commission President Ursula von der Leyen stated that Europe was "entering a new phase of the pandemic, as we move from emergency mode to a more sustainable management of COVID-19," and declared an end to the coronavirus emergency status reasoning that previous pressures on hospitals and healthcare facilities had declined so that member nations can drop certain restrictions. Her announcement fell short of specifically declaring an end to the pandemic status, with the reminder that "...we must remain vigilant. Infection numbers are still high in the EU and many people are still dying from COVID-19 worldwide."⁴ This was the signal for the opening up of Europe to visitors and more importantly to rebooting the tourism industry. The opening up of European borders was done within a very short period of time since

WHO official says COVID is still capable of causing huge epidemics.

<https://www.aljazeera.com/news/2022/4/14/coronavirus-far-from-becoming-endemic-says-who>

⁴ Carlo Martuscelli. EU ends emergency phase of coronavirus pandemic

April 27, 2022. POLITICO

<https://www.politico.eu/article/eu-ends-emergency-phase-of-coronavirus-pandemic/>

60% of all European nations,⁵ were members of the Schengen states consisting of 27 European nations who share a borderless status. This means that all its 27 member countries and those non-members representing the rest of the world, can enter this zone and travel between and among all these member nations without any immigration or border controls as long as they possess a valid Schengen visa. However, in addition to these Schengen states opening up to the world for visitors and tourists, it also means increasing the risk of imported cross border Covid-19 transmissions from the whole world.

How great is this risk? According to the United Nations World Tourism Organization (UNWTO) foreign tourist arrivals into the European Union alone in 2019 (pre-Covid-19 period), numbered about 746 million, which in 2021 was only about 301 million, a reduction of about 60 percent.⁶ The 2022 estimate for international tourist arrivals were estimated at around 50% of the 2019 pre-Covid-19 pandemic level or about 360 – 370 million arrivals. Traditionally, about 75% of these visitors and tourists originate from within the European Union with about 25% from non-EU nations⁷. Of the non-EU nations, about 40 – 50%, (or 11 – 12% of the grand total) are estimated to come from the Asian region led by Chinese tourists. In terms of exposure to Covid-19 risk in 2022, this could be categorized as 270 million visitors and tourists from EU nations (75%) and considered as low risk, and the remaining 90 million visitors and tourists outside the EU (25%) with infection risk ranging between moderate to high depending on the origin. Needless to say, the variable factors determining the level of infection risk (the first step toward serious illness and death) is i) the current level of up-to-date effective vaccination coverage (primary series + booster) and the practice of social distancing protocols in the European host nations, and ii) the current level of effective vaccination coverage (primary series + booster) and the practice of social distancing protocols in the inbound non-European nations. Against this scenario and outcome lies the level of probability for Europe to attain Covid-19 endemic in the near future.

By the third quarter of 2022, many of these controls and restrictions were soon lifted after it was discovered that the Omicron variant generally did not cause serious illness or deaths and was rapidly replacing the more deadly Delta variant. Eventually, many nations allowed entry without proof of vaccination, the need for testing either prior to travel or on arrival, as well as removing quarantine requirements. However, following the Chinese government's sudden and unexpected phasing out of the stringent 'zero infection' policy at the end of 2022, there was a rapid exodus of Chinese residents (local and foreign) outbounds to world destinations. This was following the three years imposition of travel suspension or restriction enforced since the Covid-19 outbreak in December 2019. Italy was the first European nation to be faced with this infection risk issue

⁵ The 27 Schengen countries are Austria, Belgium, Czech Republic, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland.

⁶ UNWTO. Global and regional tourism performance
<https://www.unwto.org/tourism-data/global-and-regional-tourism-performance>

⁷ European Travel Commission (ETC). <https://etc-corporate.org/european-tourism-key-figures/>

from Chinese visitors and tourists. On December 26, 2022, two flights arrived from China at Milan's Malpensa airport. One was from Beijing and the other from Shanghai. According to the Lombardy region's health chief Guido Bertolaso, on one flight, 35 out of a total of 92 passengers (38%) tested positive for Covid-19. On the other flight, 62 passengers out of 120 (52%) were similarly infected.⁸ Italy, which was the worst hit nation outside of China by the Covid-19 in February 2020 was now also the first nation to impose mandatory testing on arrival for visitors and tourists from China by a declaration of the Minister of Health on December 28, 2022.⁹ Italy's policy regarding controls on tourists and visitors from China was soon followed by several other EU nations such as Cyprus, France, Germany, Greece, Italy, Latvia, the Netherlands, Portugal, Spain, UK and Sweden. These controls revived and re-enforced the earlier travel controls and restrictions such as pre-departure test requirement, mandatory vaccination of crew members, mandatory or random testing of arriving passengers, wearing a mask onboard flights, frequent cleaning of aircraft, provide a negative test result prior to departure or proof of completing the primary series vaccination. Not all these controls were applied but selected according to the situation of each nation. It should be clearly emphasized, that these measures were not directed specifically at the Chinese people, but at anyone, of any nationality, including Europeans, who traveled from China.¹⁰

Europe was not the only region to revive these travel restrictions and conditions with regard to inbound visitors and tourists from China. Similar actions and conditions were also re-introduced selectively by several nations in other regions also, such as Japan, South Korea, Indonesia, Malaysia, India, the United States, Canada, Qatar, Morocco, and Australia. These Covid-19 related conditions include submitting a negative PCR test within 48 hours prior to departure and/or compulsory COVID-19 rapid tests on arrival.¹¹ Some nations such as Thailand, Hong Kong, and Singapore did not differentiate tourists from China but if and when requested, all nationalities have to show a negative PCR test within 48 hours prior to departure, but without any testing on arrival. These nations among several others also were able to do this because they had reached a high level of primary vaccination series completion as well as follow-up booster doses. Also, these countries still continued to follow the strict Covid-19 pandemic protocols, especially with regard to social distancing, wearing masks in public and enclosed areas, and frequent sanitization

⁸ Isabel Keane. Half of the passengers on 2 flights from China had COVID: report

New York Post. December 28, 2022

<https://nypost.com/2022/12/28/half-of-the-passengers-on-2-flights-from-china-had-covid/>

⁹ Italy imposes mandatory Covid tests for travellers from China

CNBC. December 28 2022

<https://www.cnn.com/2022/12/28/italy-imposes-mandatory-covid-tests-for-travellers-from-china.html>

¹⁰ China resumes international travel: Which countries are introducing new COVID restrictions?

Euronews. Travel. January 2, 2023.

<https://www.euronews.com/travel/2023/01/12/china-resumes-international-travel-which-countries-are-introducing-new-covid-restrictions>

¹¹ Aljazeera. Growing list of countries imposing COVID rules on China arrivals. December 29, 2022.

https://www.aljazeera.com/news/2022/12/29/countries-imposing-covid-rules-for-travellers-from-china?traffic_source=KeepReading

of hands in public. These nations generally also shared the same high-power distance and collectivist cultures so were well disciplined in ‘doing the right thing’ for the community’s good (these cultural dimensions are discussed in further detail in Part Three entitled ‘ Cultural issues and influences on national leadership and behavioral responses). By opening their borders to visitors and tourists, these nations depend on the general public in supporting, promoting, and rebooting the tourism industry, both upstream and downstream, for the much-needed revenue and cash flow. For these nations, tourism is the well-established ‘cash cow’, which can revive and sustain the livelihood and financial well-being of tens of millions of people. The focus of concern for these controls was to protect the local community from getting infected by visitors and tourists. Most importantly, these three nations among several others had very good and reliable healthcare services and facilities at private hospitals with international standards capable of catering to foreign tourist patients should they get seriously ill.

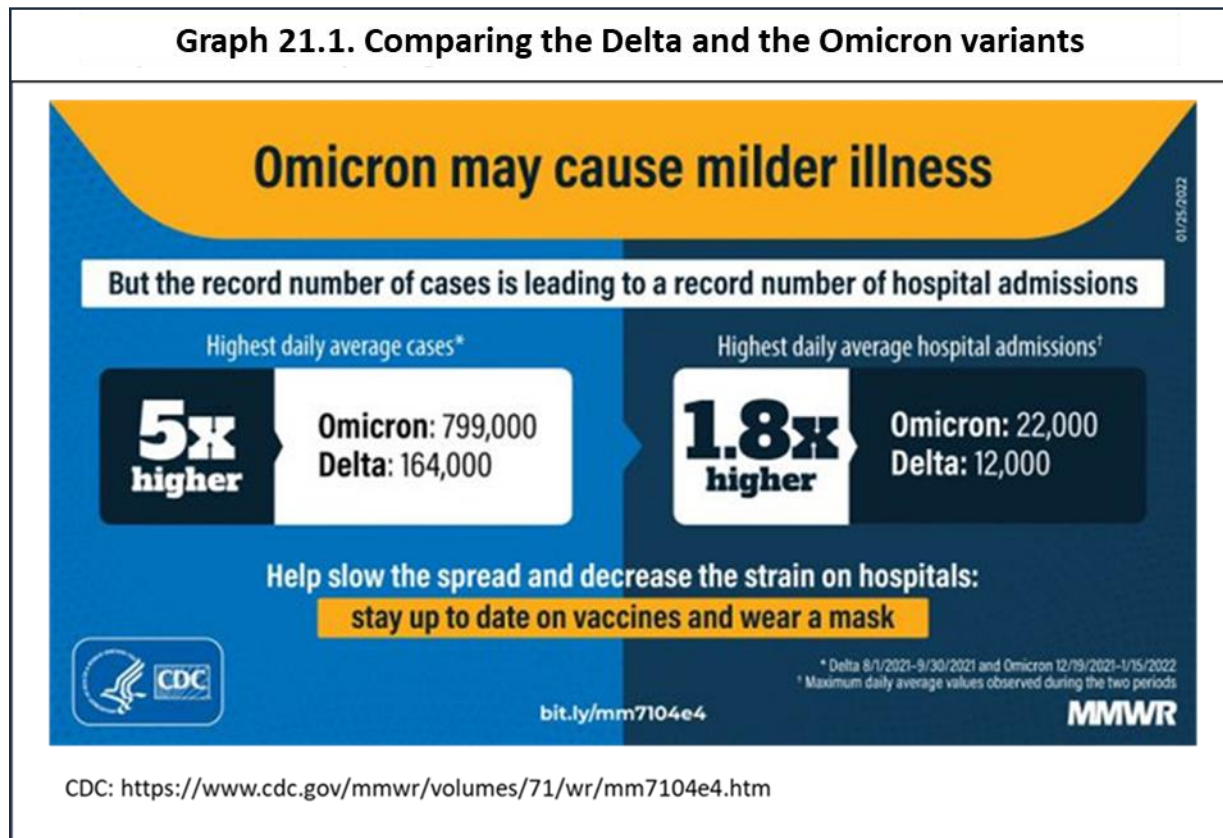
C. Mother Nature gives a ‘temporary’ reprieve with the Omicron variant.

The new Covid-19 variant was first detected in Botswana, Africa, and was subsequently reported to the WHO by the Network for Genomics Surveillance in South Africa on 24 November 2021. On November 26, 2021, the WHO designated the new variant as “Omicron” and categorized it as a “variant of concern (VOC)” as was done with previous variants. The WHO warned that based on data received the Omicron was spreading faster and is more contagious than any previous variants. More importantly, the WHO indicated that compared to the previous Delta variant, the Omicron variant seemed to undergo increased mutations as well as being less susceptible to vaccines. This was clearly demonstrated by Omicron’s rapid dominance of Covid-19 cases in the United States replacing the Delta. This Omicron variant was discovered in the United States on December 1, 2021, in Atlanta, Georgia, and during the first week, Omicron accounted for about 1% of new cases. By December 11, 2021, Omicron’s infection cases in the United States jumped to 12.6% and to 73.2% a week later by December 18, 2021, reducing the Delta variant cases to only 26.6% total cases.¹² By January 15, 2022, the Omicron variant dominated the United States at 99.5 percent.¹³ The CDC carried out a study comparing the Omicron with all previous Covid-19 variants using data from three surveillance systems to assess U.S. disease related to COVID-19 from December 1, 2020–January 15, 2022. The study indicated that while Omicron generated the highest reported numbers of COVID-19 cases, the “ disease severity indicators, including length of stay, ICU admission, and death, were lower than during previous pandemic peaks.”. The ratio of hospitalization to infection cases was significantly lower for Omicron when compared to the

¹² Travis Caldwell and Claire Colbert . Omicron is now the dominant strain of coronavirus in the US, according to the CDC
CNN. December 21, 2021
<https://edition.cnn.com/2021/12/20/health/us-coronavirus-monday/index.html>

¹³ CDC. First confirmed case of Omicron variant detected in the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2021. Accessed January 10, 2022. <https://www.cdc.gov/media/releases/2021/s1201-omicron-variant.html>

previous Delta variant. A comparative analysis between the Delta and the Omicron variants was posted by the CDC under its Morbidity and Mortality Weekly Report (MMWR) on January 25, 2022. Even though the absolute figure for hospitalizations was higher for the Omicron variant, on a pro-rata basis, this was really significantly less than for the Delta variant as shown in the comparative Graph 21.1.¹⁴



Graph 21.1. demonstrated CDC’s findings which indicated that the 164,000 infection cases with the Delta variant, resulted in 12,000 hospitalizations, or 7.32 percent, compared to the Omicron variant, which had 799,000 cases and resulted in 22,000 hospitalizations, representing 2.75% of infection cases, or about one-third rate compared to the Delta variant. CDC’s findings corresponded with the earlier assessment in South Africa which indicated that the Omicron variant generally causes less severe illness than previous variants.¹⁵ Nevertheless (critically important), it should be emphasized that serious illness and risk of death do exist for people who

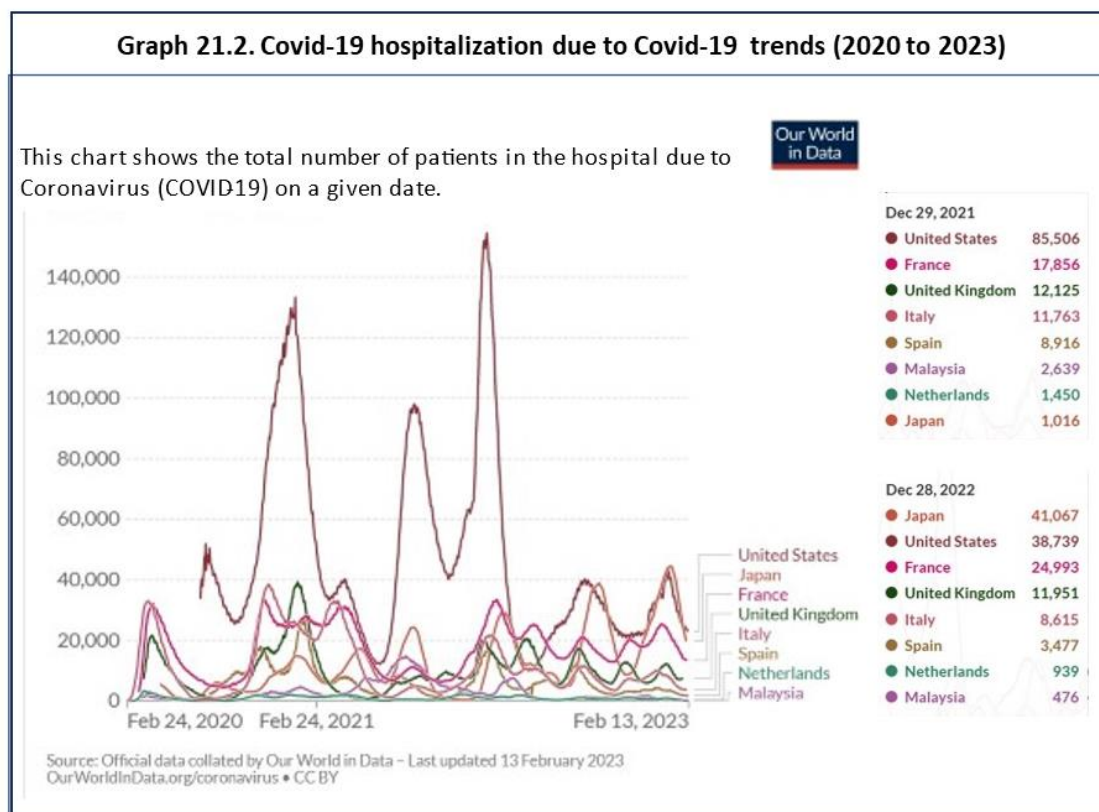
¹⁴ Iuliano AD, Brunkard JM, Boehmer TK, et al. Trends in Disease Severity and Health Care Utilization During the Early Omicron Variant Period Compared with Previous SARS-CoV-2 High Transmission Periods — United States, December 2020–January 2022. MMWR Morb Mortal Wkly Rep 2022;71:146–152. DOI: <http://dx.doi.org/10.15585/mmwr.mm7104e4>

CDC. January 28, 2022. <https://www.cdc.gov/mmwr/volumes/71/wr/mm7104e4.htm>

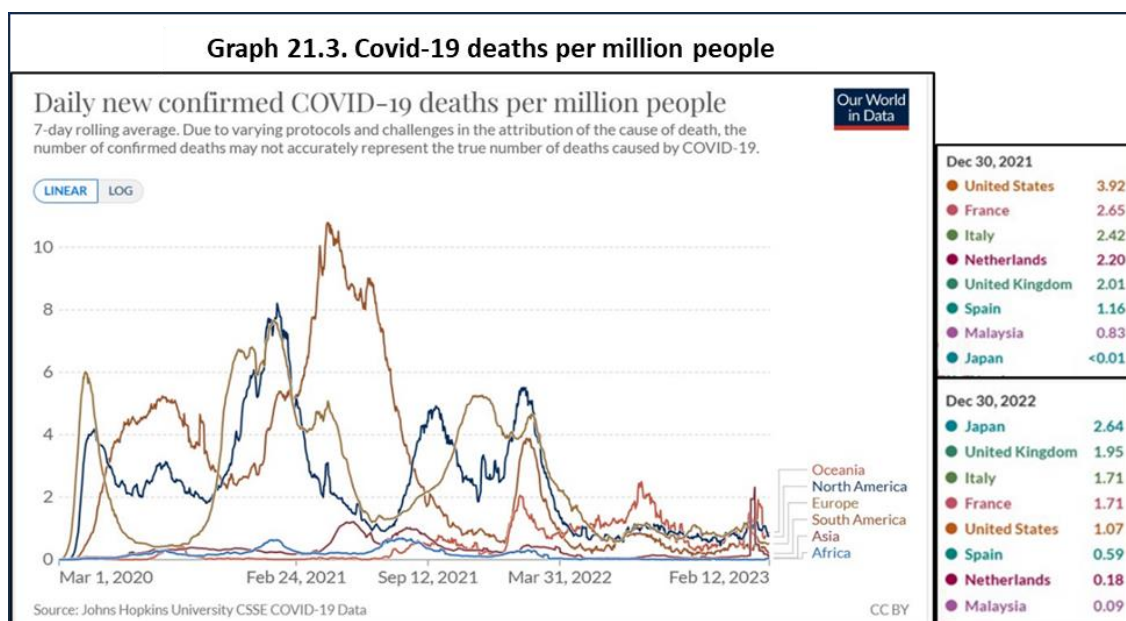
¹⁵ Wolter N, Jassat W, Walaza S, et al. Early assessment of the clinical severity of the SARS-CoV-2 omicron variant in South Africa: a data linkage study. Lancet 2022;399:437–46. doi:10.1016/S0140-6736(22)00017-4. pmid:35065011

are severely immune compromised or predisposed, as well as people with underlying medical problems such as cancer and are on chemotherapy, organ transplant recipients, and those with chronic lung diseases or if they're not vaccinated. The latest data from the CDC also indicated that hospitalizations for those unvaccinated were 16 times higher compared with those who were vaccinated.¹⁶

It would seem that Mother Nature may have given Mankind a 'temporary' reprieve from the deadly impacts of Covid-19 through the Omicron mutation. At a time when the credibility, reliability, safety, and effectiveness of Covid-19 vaccines were rapidly declining, Covid-19 underwent another mutation. While previous variants of the coronavirus up to, and including the Delta variant seem to demonstrate tendencies to become more deadly and cause serious illness, the Omicron variant seemed to have made a 'u-turn' by inflicting less serious illness and fatalities by comparison. The declines in serious illness resulted in declines in hospitalizations, and deaths as indicated in Graphs 21.2 and 21.3. below.



¹⁶ Will Stone. Why omicron is crushing hospitals — even though cases are often milder than delta
NPR. January 29, 2022
<https://www.npr.org/sections/health-shots/2022/01/29/1075871661/omicron-symptoms-treatment-hospital>



Consequently, many people in the western world mainly in the Americas and European regions were able to deduce that the Omicron variant offered a safer and more reliable option for getting immunity naturally, instead of the still questionable pharmaceutical-based vaccines. There is no challenge to the fact that natural immunity through infection is the oldest, and most test-proven method of building immunity against the coronavirus, or any virus infections in the history of life on the planet. Obviously modern technology should theoretically be able to create a more effective and durable solution to Covid-19. Unfortunately, in reality, current vaccines have not achieved a satisfactorily high level of sustainable and effective full protection against either infection, serious illness, or death. The Omicron variant seemed to offer a unique and temporary window for the 'anti-vaxxers, the undecided, and those who believe in the herd immunity concept' to get natural immunity through infection. Social distancing and protective measures became lax in order to facilitate natural immunity through infection. Again, this is not an option for those who are severely immunocompromised or with underlying medical problems where vaccination is the best option, despite the waning effectiveness over time and the need for booster doses.

As a result, there was most likely a surge of infections from the Omicron variant in the Americas and European regions. However, in terms of statistics, such a surge of infections would probably not all be registered. Being less serious, and not requiring hospitalization, most infected people would merely stay home and self-cure as they would for a case of the flu without bothering to report to the authorities. In most of these nations, the Covid-19 self-test kits were available either for free or easily purchased at pharmacies and convenience stores. Anyone who tested positive and not being seriously ill would normally not go to a hospital but would self-isolate and self-treat at home. Based on the CDC indicator in the graph above, it means less than 3% of those infected would report to hospitals and be registered accordingly. As for the rest, it is most likely

that most of those infected would not take the time or effort to be registered or recorded in the national statistics and therefore would be excluded from the national statistics. This means that it is possible, and probable that tens of millions of infected cases were excluded from the national as well as regional, and global statistics.

With regard to people purposely getting infected in order to acquire natural immunity and avoid getting vaccinated, the WHO, along with most national CDCs and health authorities would discourage people from this course of action because there is always the risk regarding how the infection could affect a person. The vaccine, despite its limitations, does have an element of prediction and control, especially with regard to the high-risk and vulnerable populations. However, this option probably would not have emerged or become so popular and widespread had there been transparency and credibility on the part of the vaccine developers and the FDA. Also, if the Omicron variant was as virulent and deadly as the Delta, this natural immunity option would probably not have been considered. Of course, there is always the possibility for the next coronavirus variant to be a mutation that combines the highly contagious element of the Omicron plus the serious illness and deadly elements of the Delta. Obviously, for such a variant, natural immunity would be a 'no-no!'.

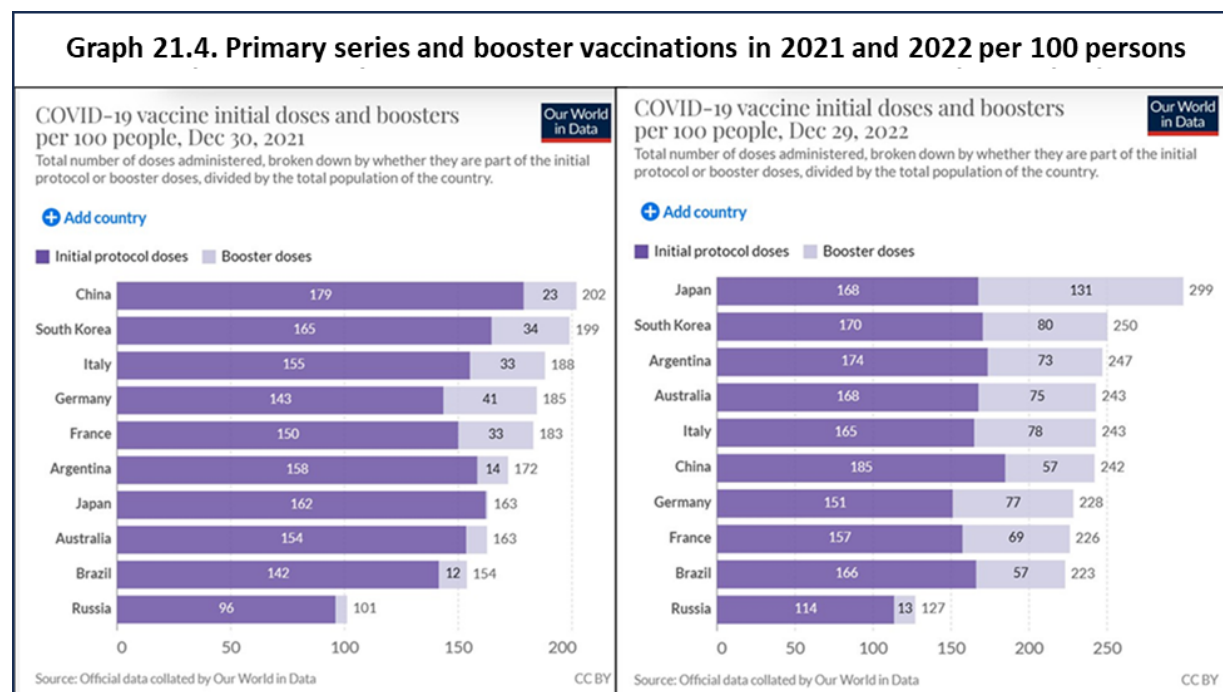
Since its emergence in November 2021, Omicron has gone through many mutations with the current being designated the XBB.1.5 which is described by Maria Van Kerkhove, WHO's technical lead on COVID-19, as the "most transmissible subvariant detected yet". Also referred to as the Kraken, this mutation has developed strong immune evasive properties compared with previous Omicron sub-lineages.¹⁷ This means the reduction of protection under current vaccines. The next variant following Omicron may go one way or the other. It could either reinforce the current variant with a continued decline in serious illness and deaths and transition towards the endemic or it could make another "u-turn" and cause more serious illness and higher risk of death.

C. Misleading level of Covid-19 vaccine protection

The previous section highlighted the limited timeframe of the effective protection period of 5 – 6 months for both the primary vaccination protocols and the subsequent booster shots (therefore requiring two doses of each per year). All vaccination statistics give the status of primary vaccination series by a country giving the impression that country X has 60% of its population completing the primary series. These statistics started from the roll-out of vaccinations beginning in 2021. They also indicate that by the following year 2022, the level of the population 'fully' vaccinated increased to 70 percent. This data can give a misleading impression of the level of the population *currently* under effective protection of the vaccine. The

¹⁷ Usaid Siddiqui. What do we know about new COVID variant XBB.1.5?
Aljazeera. January 14, 2023
<https://www.aljazeera.com/news/2023/1/14/what-is-the-new-covid-variant-xbb-1-5>

data given represents the cumulative number of the population who have undergone the primary vaccination protocol since the initial roll-out in January 2021. However, this data does not indicate the 'current' level of effective fully vaccinated percentage of the population. Due to the need for additional 'booster' doses to sustain the effective protection of the primary vaccination series, means that any person who completed the primary series during the first half of 2021, and did not get inoculated with the first 'booster' dose by the beginning of 2022, is no longer considered to be effectively protected. Similarly, those who completed the primary series by the end of 2021, and did not get inoculated with the first 'booster' dose by mid-2022 are also no longer under effective protection. Therefore, as long as the 'booster' doses at the end of 2021 plus for the year 2022 do not match the number of primary series percentage of the population, the real level of the population under effective protection of vaccines will subsequently decline, just like the waning of the vaccine' effective rate of protection. The following Graph 21.4. indicates the number of primary vaccination doses and 'booster' doses for selected nations per 100 people. It should be noted that the primary vaccination protocol requires two doses per person. Subsequently, this must be followed by one 'booster' dose is required per person every 5 to 6 months, so essentially also two booster doses per 12 months period.



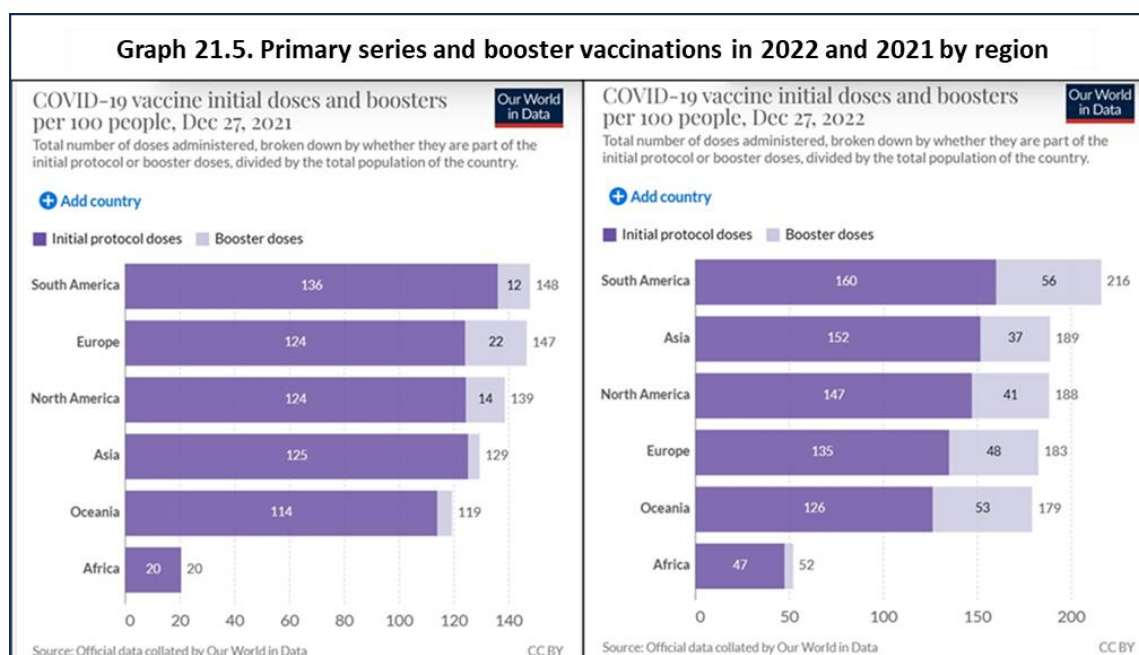
Graph 21.4. above indicate the levels of primary vaccination doses per 100 people in 2021 and 2022, for the selected populations under study. To better understand these figures, the primary vaccination protocol consists of two doses per person, therefore the total doses per 100 people are divided by two to represent the number of people completing the primary vaccination protocols (two doses per person), i.e. for China, the 179 doses/100 people represent potentially 89 people completing the primary series (two doses) with one person waiting for the second final

dose. This method of calculation assumes the ‘ideal’ situation where those who were inoculated would intend to complete the primary protocol with two-doses. The timeframe for completing both primary doses is usually 2 – 3 months based on the interim period between the two doses being 1 – 2 months (four to eight weeks). Since the vaccine’s effective protection period following completion of the primary series ranges from 4 to 6 months, an additional ‘booster’ dose would be required after that period. Since this additional ‘booster’ dose also has a limited effective protection period ranging from 4 to 6 months, it is logical that a second additional ‘booster’ dose would be required also to sustain the effective protection period for a 12-month period/cycle. Based on these effective protection periods, all those who completed the primary series in 2021 must take two additional ‘booster doses each to get effective protection until the end of 2022. If the required number of booster shots is not carried out, then the level of effective protection will decline at the end of 2022. If this continues into 2023, then the level of effective protection will continue to decline accordingly.

The Table above highlights the difference between the effective level of protection at the time of vaccination and the eventual status of effective protection 5 to 6 months later. Therefore, statistics and Graphs showing the percentage of a nation’s population having completed the primary protocols are just a statistical history, not reflecting the actual status of vaccination protection at a given time 6 to 12 months later.

These primary vaccination protocol percentages are only meaningful for only the first year of inoculations. Failures to match the primary vaccination protocol figures with equal numbers of booster shots these percentage of inoculation rates are redundant and misleading and gives a false sense of safety and protection. Of course, natural immunisation through infections is another option, but the volumes need to be extremely high. (This would work under the Omicron variant, but would be deadly during the Delta variant).

The following Graph 21.5. indicate the levels of primary vaccination doses per 100 people in 2021 and 2022, globally and divided by regions. With regard to these regional figures, it should be noted that the regional figures do not mean that every nation within the region achieves this level of vaccination doses. Some will be higher, while others would be lower. Needless to say, the level of primary vaccination administered by each nation would also depend on its financial resources to purchase and other aspects influencing its economic status and culture with regards to prioritizing vaccines. For many nations, there is a great dependency on donated vaccines received to initiate and continue the rolling-out of vaccinations. Also, as fate would have it, high population numbers, and low financial resources are most common in under-developed low-income nations. This would impact on the ability to vaccinate their population. Compare the challenges to Ethiopia with a population of 120.3 million (est.2022) and Switzerland with 8.7 million (est. 2022). Compare also the difference in their financial resources to roll-out nationwide vaccinations.



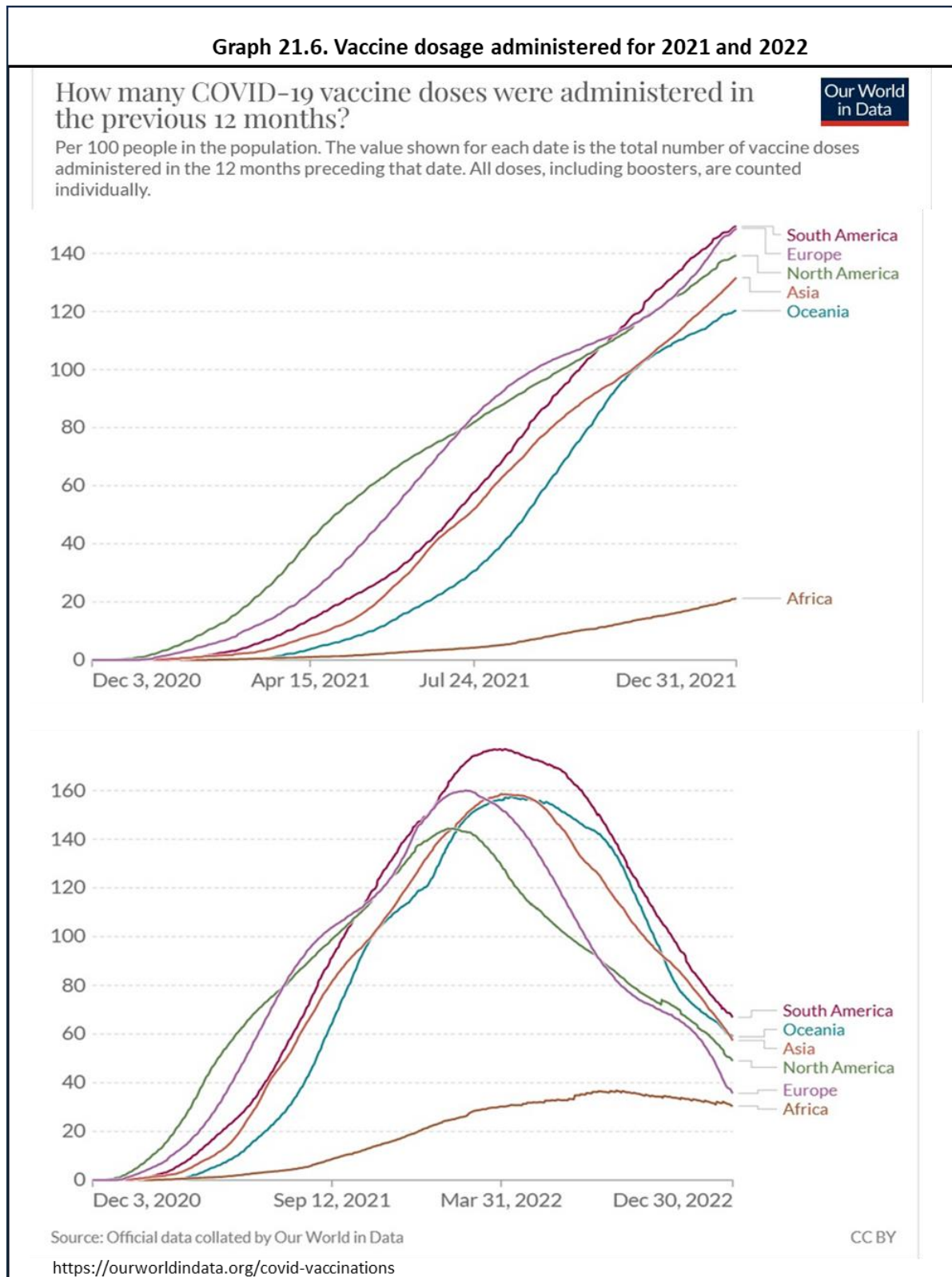
The same logic and principles regarding the significant shortfall in promoting people to get additional ‘booster’ doses would result in a significant decline in effective protection coverage through vaccinations, is also applicable at the global regional levels as well. Since booster doses only give the original effective protection for 5 to 6 months, it means that two booster doses would be needed each year. Therefore booster doses should be at least match the accumulated number of doses for the primary vaccination protocols. The above Graph 21.5. indicates that booster doses were well below the required rate to maintain the protection level initiated by the primary vaccination protocols in the various global regions. Therefore the accumulated number of primary vaccination protocols for each region should not be viewed as the status of protection levels, at the end of each year. Without subsequent matching in booster doses (two per year per person) the effective rate of protection would be significantly lower each year.

In fact, even the rolling out of the primary vaccination protocol in the various regions was greatly reduced in 2022 compared to 2021. For example, the European region registered the accumulation of 124 doses per 100 people in 2021. One year later, at the end of 2022, this accumulated rate increased to only 135 doses per 100 people, an increase of only 8 per 100 people (8%). On the same basis, the North American region increased only by 18% and the Asian region by 21 percent. The greatest increase was in the African region which increased from 20 per 100 in 2021 to 47 per 100 in 2022, an increase of 135 percent. During 2022, even though there were much greater increases for additional ‘booster’ doses per 100 people in 2022, the accumulative figure was still very low compared to the accumulated total number of doses per 100 who have completed the primary vaccination protocol. The ‘booster’ doses were still well below the required number to sustain the effective protection of the primary series completed.

For example, in the case for the Oceania region, there were 114 doses per 100 people under the primary vaccination protocol as of the end of December 2021. This should have been matched in the following year, 2022, with 114 doses of booster shots per 100 people (12-month period of protection requires two 'booster' doses per person). Instead, there were only 56 boosted per 100 people equivalent to only about 46% of those who completed the primary series were boosted. Similarly in the South American region, there were 136 doses of primary vaccination protocols per 100 people in 2021 against which there were only 56 'booster' doses per 100 people administered, or about 41% received booster shots in the following year 2022. Using the same formula for calculations, the subsequent booster dose rate was 38% for the Asian region and 33% for the North American region. The lowest rate was in the European region with only 30 percent. None of the regions reached even 50% of the primary protocol doses of the previous year. The level of people boosted in the African region was negligible since this region was still trying to continue the roll-out of the primary vaccination series. In fact, both the African and Asian regions still have a long way to go in continuing with the primary series to reach the minimum target goal of 70% of the population before they can seriously consider the additional 'booster' doses. So far, there are just not enough vaccines donated to them to even just complete the primary protocol.

There are many theories regarding the root causes for the steep declines in vaccinations for both primary protocols and 'booster' doses. First, the growing mistrust and reliance on the Covid-19 vaccines and their developers have strengthened the "anti-vaxxers" movement with the conversion of many of the 'undecided' population. Second, the declining credibility and perceived lack of governance and transparency of government regulators such as the FDA, CDCs, as well as various health authorities in evaluating, approving, and advocating these vaccines. The fact that these vaccines and government regulators were approved and promoted by the WHO globally did not improve the credibility of those associated with these vaccines and probably did not do much good for the image of the WHO either. Third, the knowledge that the Omicron variant did not cause serious illness and therefore had a lower risk of death than the previous Delta variant probably also contributed to the discontinuation of many to get inoculated, either to start or to continue with the primary protocol, or to start or continue with getting the additional 'booster' dose(s) after completion of the primary protocols. This element of the Omicron variant has been discussed above in more detail. Fourth, in view of the low risk of serious illness and death caused by the Omicron variant, many sought to get 'natural immunity' through being infected by the Omicron. Obviously, this was the oldest, most proven method of getting immunity known to Man. The previous section already discussed the issue of natural immunization versus vaccination. Both have limited effective protection timeframes. Studies are still being made comparing the durability of both methods. Preliminary estimates put natural immunity at around 3- 4 months, while vaccinations, including booster doses, are at about 5 – 6 months. Both do not give sustainable protection against serious illness and death. However, from the practical aspect, it's probably better to get booster doses without interrupting the lifestyle than getting infected and staying home for a week or more after each infection. No effort is made to prioritize or establish a hierarchy for these four theories, but just to establish the fact all four combined, contributed to the rapid decline in vaccinations for both the

primary protocol and 'boosters' during 2022 as indicated in Graph 21.6. comparing vaccinations in 2021 and 2022 given below.



The decline in vaccinations, both for primary series and additional ‘boosters’ started during the first quarter of 2022 beginning with the North American region in January 2022, followed by the European region in February, and by March all the other regions followed suit. Declines in vaccination administrations for both primary series and ‘boosters’ continue through the end of 2022 for both the global regional and national levels as seen in Graph 5.9. above. The exception is the African region which was somewhat desperately trying to maintain the vaccination rolling-out process and the drop was probably due to the lack of or decline in vaccine donations from the more wealthy nations.

However, as indicated and discussed earlier in this section, these declines in vaccinations, for both the primary protocols and ‘booster doses during 2022 also saw concurrent significant declines in both hospitalizations and deaths. It should be clearly stated that the declines in hospitalizations and deaths were not significantly due to the protection of vaccines (since effective protection from those already vaccinated was already waning in efficiency, and there were very few new vaccinations administered in 2022). The term ‘concurrent’ is used since it was most likely due to Mother nature replacing the deadly Delta variant with the more ‘homo friendly’ Omicron variant. Had the situation been reversed, namely that first there was the Omicron in 2021, and then was replaced by the Delta in 2022, the results would have been a different story. The graphs for hospitalization and deaths would most likely have been reversed. The point is this could still happen. The next variant could very well turn out to be more deadly than the Omicron variant, and even, the Delta variant. This could lead to a human disaster with so few people being immunized due to a lack of vaccination. The decline in vaccinating the human race increases the risk of the Covid -19 pandemic becoming worse and more protracted. At this time, human behavior with regard to vaccinations and getting effective sustainable protection is like playing Russian roulette. Eventually, the bullet will be fired.

As long as there exists no sustainable effective protection against getting infected, as long as there are large numbers of the global population still exposed to the risk of continually getting infected, and as long as herd immunity has not been achieved through vaccinations, the virus will continue to exist and spread. Unprotected humans will continue to act as host bodies for the virus to infect, and mutate into new variants that could be more contagious, instigating more serious illnesses and deaths, not to mention being more resistant to existing vaccines. Under these circumstances, there cannot be any serious consideration in declaring the Covid-19 endemic at the time.

D. WHO declares an end to the Covid-19 emergency.

It was not until the following year, on May 5, 2023, that WHO Director-General Tedros Adhanom Ghebreyesus declared an end to Covid-19 global health emergency of international concern based on the recommendation of the COVID-19 Emergency Committee. In making the declaration the WHO Director reminded the world that, “It is still killing and it is still changing. The risk remains of new variants emerging that cause new surges in cases and deaths.”¹⁸

¹⁸ WHO chief declares end to COVID-19 as a global health emergency
UN News. May 5, 2023. <https://news.un.org/en/story/2023/05/1136367>

Noticeable in this declaration was the absence of the word 'pandemic'. Since the declaration of Covid-19 as a global pandemic, on March 11, 2020, by the WHO, for over 3 years, it has been referred to globally as the Covid-19 pandemic, not as a 'health emergency'. Now, in declaring an end, the expression used was 'health emergency'. The interpretation would be an end to the 'emergency' status, but not actually an end to the 'pandemic' status'. So, does this declaration qualify for the status of 'endemic?'



Camilla Slok
Ph.D.



Jaakko Turunen
PhD (Pol.Sci.)



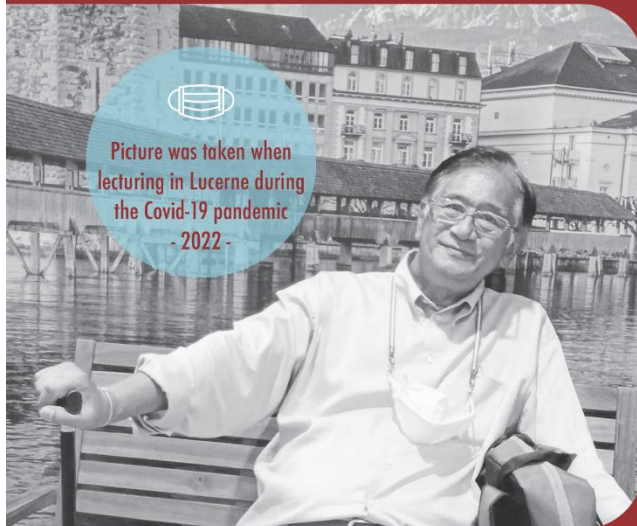
Alessio Panza
MD. MPH. DTM&H



Marina Cavallari
MA



Charles-Amaury Queller
MA



Picture was taken when
lecturing in Lucerne during
the Covid-19 pandemic
- 2022 -

Sukhavichai Dhanasundara MA

PROFESSIONAL CAREER

Over 30 years with a state enterprise, multinational and publicly listed companies, in finance, industrial real estate, and industry.

- Faculty lecturer, guest lecturer, & visiting professor at Universities and Business Schools in Thailand, Switzerland, Germany, Eire, Denmark & Scotland
- Lecturing MBA programs for over 25 years

*"Globalisation and change
are intertwined . . .
as is also Man to
his environment"*

Chapter 21

THE ELUSIVE ENDEMIC

A. Shortfalls in the long-awaited pharmaceutical solution – Covid-19 vaccines

The first year of the Covid-19 outbreak and pandemic in December 2019 through 2020 relied solely on human-based non-pharmaceutical initiatives, centering on social distancing behaviors. The arrival of the pharmaceutical solution through various newly developed vaccines followed by the launching of vaccinations worldwide a year later beginning in December 2021 and still continuing through 2023, was considered a blessing of modern-day technology, and the signal for imminent Covid-19 endemic. However, in September 2021, nine months after the roll-out of vaccinations Pfizer-BioNTech was the first vaccine developer to reveal that its vaccine had a limited timeframe of effective protection lasting about six months. Consequently, an additional follow-up ‘booster’ dose would be required to ‘reboot’ Pfizer-BioNTech’s vaccine to the original effective protection level, at best, or close enough to the level reached under the primary vaccination series. When the general public was starting to warm-up to this surprising revelation, surprising because Pfizer-BioNTech the developer, FDA the regulatory vaccine approval authority, CDC the national disease control and preventive authority to approve population inoculations, and also the WHO, the global influencer health and safety authority, all seem to have inadvertently ‘avoided’ declaring this fact prior to rolling out vaccinations to the global general public in December 2020. The term ‘avoided’ is used because it is assumed that these national and global regulators would (should) have properly evaluated the totality of effectiveness of the vaccine (performance and timeframe) with the given appropriate and sufficient information from the vaccine developer, and therefore should have been aware of this critical and crucial issue. If they had not, did they have the right to issue mandatory inoculations of the vaccine to the general public? Is this the political culture of a democratic or an authoritarian government system?

This issue of questionable institutional and organizational reliability and credibility was further reinforced when six months later, in March 2022, Pfizer-BioNTech announced that the first booster dose in fact also only had 4 – 6 months of effective protection and therefore a second ‘booster’ dose would be required to again ‘reboot’ the effective rate of protection. Applications for both booster doses by Pfizer-BioNTech were made to the FDA and were approved within a

very short time despite knowing that the second booster dose had a limited effective protection timeframe of only 4 – 6 months also. Pfizer-BioNTech's issues with effective protection timeframe for its vaccine were soon followed by the other newly developed Covid-19 vaccines in the United States, namely Moderna and Johnson & Johnson. Soon, the limited timeframe of effective protection was also revealed for all Covid-19 vaccines.

Essentially, the pharmaceutical solution, in the form of the newly developed Covid-19 vaccines, fell short of expectations in terms of being able to deliver a sustainable solution of effective protection. The key word is 'sustainable'. A six months effective protection period is not impressive. Requiring two booster doses per 12 months period after the primary vaccination series is not impressive. Any prospect of a speedy Covid-19 endemic is waning rapidly, just like the waning of the effective protection level of its vaccines. The kick-off towards the endemic requires about 75% of a sustainable infection-free population. This cannot be achieved if the population needs to be vaccinated every 4 - 6 months. Coupled with the declining credibility of the vaccines, along with the reliability of oversight by the regulators, the image of the 'elusive butterfly' comes to mind when referring to the Covid-19 endemic. However, in addition to the limited period of effective protection of the vaccines, there is another key factor contributing to the elusiveness in achieving the Covid-19 endemic status, namely the impact of reopening for tourism and global business. This means that not only will there be unsustainable effective protection against infections and serious illnesses domestically, but now also the inflow of infection risks from abroad due to the globalization factor.

On April 27, 2022, Dr. Anthony Fauci, the U.S.'s chief medical advisor, announced that the United States was now entering the "transitional phase" of a "controlled pandemic" in an interview with the Washington Post¹. Fauci clarified that this "transition phase" was somewhere better than Covid-19's pandemic status but still short of the endemic status and enumerated several reasons for this rationalization based on the reliability and effectiveness of the vaccines currently available.

- 1) There still does not exist any vaccine that is 100% effective in protecting against getting infected by Covid-19 and this includes its numerous mutations to date.
- 2) These vaccines only give a high level of effective protection from serious illness and the probability of death.
- 3) The development of all current vaccines was based on the virus strain emerging from Wuhan, China at the original outbreak, and while they were highly effective in protecting

¹ Alice Park. The U.S. Is in a 'Controlled Pandemic' Phase of COVID-19. But What Does That Mean? TIME. April 29, 2022
<https://time.com/6172048/covid-19-controlled-pandemic-endemic/>

against serious illness and death from that strain the effectiveness of these vaccines has waned as newer coronavirus mutations emerge. The past three years have already clearly demonstrated that Covid-19 continues to mutate from the Alpha to the Beta, Gamma, Delta, and now the Omicron variant with more likely to follow.

- 4) With each mutation, Covid-19 seems to become more transmissible and infect more easily and more quickly, along with signs of increased resistance to the existing vaccines thereby making them less effective.
- 5) Future mutations could make Covid-19 more virulent causing more serious illness, and fatalities in addition to being more transmissible. In this event, existing vaccines along with other drug treatments might provide ineffective or insignificant protection.
- 6) Finally, after three years of multiple mutations and variants, vaccine developers/scientists still don't have an effective formula to fully protect against getting infected with COVID-19. They are still looking for the answers to i) how to prevent getting infected, and ii) the level of immunity required to protect against serious illness.²

The logic of Fauci's rationalization and enumeration of the shortfalls of existing vaccines, particularly regarding the lack of sustainable effectiveness of protection presents a strong and valid argument against any imminent Covid-19 endemic.

B. The opening-up of borders to visitors and tourists

Following the launching of widespread vaccinations beginning in 2021, many nations, particularly in the European zone were already planning to open their borders around mid-2022, especially for visitors and tourists to jump-start their economy. By early 2022, some nations were already talking about and preparing for the imminent Covid-19 endemic. However, this optimism was not shared by the WHO whose official position still considers Covid-19 as a pandemic as re-enforced by Michael Ryan, the WHO Health Emergencies Programme Director, stating "I certainly do not believe we've reached anything close to an endemic situation with this virus." He considers that COVID-19 could still continue to trigger large outbreaks around the globe. This sentiment was also expressed by Maria Van Kerkhove, WHO's COVID-19 Technical Leader, who pointed out that the virus continued to circulate at a high level globally, causing "huge amounts of death and devastation", and also that the world is "still in the middle of this pandemic. We all wish that we weren't. But we are not in an endemic stage,".³

² Alice Park. The U.S. Is in a 'Controlled Pandemic' Phase of COVID-19. But What Does That Mean? TIME. April 29, 2022
<https://time.com/6172048/covid-19-controlled-pandemic-endemic/>

³ Aljazeera. WHO warns coronavirus is far from settling into endemic situation. April 14, 2022.

It has already been established and demonstrated during the past three years from 2020 to 2022 that the key contributory factor to the globalization of the Covid-19 pandemic was the global mobility of humans. In terms of the concentration of human mobility, the key roots of infection transmission have been, and will continue to be, the globalized tourism industry. This was why the first action of all nations was to close borders to tourism immediately following the outbreak of the coronavirus in Wuhan, China. During the first two years of the Covid-19 pandemic (2020 – 2021), the tourism industry was put on ‘hold’ by most nations closing doors to any foreign entry, as well as imposing strict controls on the re-entry of their citizens and residents. Needless to say, the suspension of foreign tourism has had a major negative impact on the economy of most nations where the tourism industry represents a significant share of their national income. The tourism industry is a crucial focal point on which several other industries and services heavily rely, such as the airline industry, the hotel industry, the domestic transportation industry, the local handicrafts and souvenirs industry, the food and beverage industries, as well as commercial businesses and services such as restaurants, entertainment venues, shopping centers, and department stores, etc. These disruptions to national economies have put significant pressure on governments to reopen borders to tourism as soon as possible (ASAP) along with commercial trade and businesses for non-tourism industries to initiate the ‘rebooting’ of the national economy.

Therefore despite the warnings from the WHO, many nations, particularly from the European region, started planning to open up their country by the first quarter of 2022 to foreign visitors and tourists. Tourism was the fast track to the much-needed cash flow. However, this began with a ‘soft opening’ due to the still pandemic status, so most nations set conditions for cross-border entry requiring a selection or combination of protective measures such as proof of completing the primary vaccination protocols, mandatory testing prior to boarding planes (48 hours), mandatory testing on arrival at airports, wearing masks on planes, quarantines, etc. On April 27, 2022, European Commission President Ursula von der Leyen stated that Europe was “entering a new phase of the pandemic, as we move from emergency mode to a more sustainable management of COVID-19,” and declared an end to the coronavirus emergency status reasoning that previous pressures on hospitals and healthcare facilities had declined so that member nations can drop certain restrictions. Her announcement fell short of specifically declaring an end to the pandemic status, with the reminder that “...we must remain vigilant. Infection numbers are still high in the EU and many people are still dying from COVID-19 worldwide.”⁴ This was the signal for the opening up of Europe to visitors and more importantly to rebooting the tourism industry. The opening up of European borders was done within a very short period of time since

WHO official says COVID is still capable of causing huge epidemics.

<https://www.aljazeera.com/news/2022/4/14/coronavirus-far-from-becoming-endemic-says-who>

⁴ Carlo Martuscelli. EU ends emergency phase of coronavirus pandemic

April 27, 2022. POLITICO

<https://www.politico.eu/article/eu-ends-emergency-phase-of-coronavirus-pandemic/>

60% of all European nations,⁵ were members of the Schengen states consisting of 27 European nations who share a borderless status. This means that all its 27 member countries and those non-members representing the rest of the world, can enter this zone and travel between and among all these member nations without any immigration or border controls as long as they possess a valid Schengen visa. However, in addition to these Schengen states opening up to the world for visitors and tourists, it also means increasing the risk of imported cross border Covid-19 transmissions from the whole world.

How great is this risk? According to the United Nations World Tourism Organization (UNWTO) foreign tourist arrivals into the European Union alone in 2019 (pre-Covid-19 period), numbered about 746 million, which in 2021 was only about 301 million, a reduction of about 60 percent.⁶ The 2022 estimate for international tourist arrivals were estimated at around 50% of the 2019 pre-Covid-19 pandemic level or about 360 – 370 million arrivals. Traditionally, about 75% of these visitors and tourists originate from within the European Union with about 25% from non-EU nations⁷. Of the non-EU nations, about 40 – 50%, (or 11 – 12% of the grand total) are estimated to come from the Asian region led by Chinese tourists. In terms of exposure to Covid-19 risk in 2022, this could be categorized as 270 million visitors and tourists from EU nations (75%) and considered as low risk, and the remaining 90 million visitors and tourists outside the EU (25%) with infection risk ranging between moderate to high depending on the origin. Needless to say, the variable factors determining the level of infection risk (the first step toward serious illness and death) is i) the current level of up-to-date effective vaccination coverage (primary series + booster) and the practice of social distancing protocols in the European host nations, and ii) the current level of effective vaccination coverage (primary series + booster) and the practice of social distancing protocols in the inbound non- European nations. Against this scenario and outcome lies the level of probability for Europe to attain Covid-19 endemic in the near future.

By the third quarter of 2022, many of these controls and restrictions were soon lifted after it was discovered that the Omicron variant generally did not cause serious illness or deaths and was rapidly replacing the more deadly Delta variant. Eventually, many nations allowed entry without proof of vaccination, the need for testing either prior to travel or on arrival, as well as removing quarantine requirements. However, following the Chinese government's sudden and unexpected phasing out of the stringent 'zero infection' policy at the end of 2022, there was a rapid exodus of Chinese residents (local and foreign) outbounds to world destinations. This was following the three years imposition of travel suspension or restriction enforced since the Covid-19 outbreak in December 2019. Italy was the first European nation to be faced with this infection risk issue

⁵ The 27 Schengen countries are Austria, Belgium, Czech Republic, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland.

⁶ UNWTO. Global and regional tourism performance
<https://www.unwto.org/tourism-data/global-and-regional-tourism-performance>

⁷ European Travel Commission (ETC). <https://etc-corporate.org/european-tourism-key-figures/>

from Chinese visitors and tourists. On December 26, 2022, two flights arrived from China at Milan's Malpensa airport. One was from Beijing and the other from Shanghai. According to the Lombardy region's health chief Guido Bertolaso, on one flight, 35 out of a total of 92 passengers (38%) tested positive for Covid-19. On the other flight, 62 passengers out of 120 (52%) were similarly infected.⁸ Italy, which was the worst hit nation outside of China by the Covid-19 in February 2020 was now also the first nation to impose mandatory testing on arrival for visitors and tourists from China by a declaration of the Minister of Health on December 28, 2022.⁹ Italy's policy regarding controls on tourists and visitors from China was soon followed by several other EU nations such as Cyprus, France, Germany, Greece, Italy, Latvia, the Netherlands, Portugal, Spain, UK and Sweden. These controls revived and re-enforced the earlier travel controls and restrictions such as pre-departure test requirement, mandatory vaccination of crew members, mandatory or random testing of arriving passengers, wearing a mask onboard flights, frequent cleaning of aircraft, provide a negative test result prior to departure or proof of completing the primary series vaccination. Not all these controls were applied but selected according to the situation of each nation. It should be clearly emphasized, that these measures were not directed specifically at the Chinese people, but at anyone, of any nationality, including Europeans, who traveled from China.¹⁰

Europe was not the only region to revive these travel restrictions and conditions with regard to inbound visitors and tourists from China. Similar actions and conditions were also re-introduced selectively by several nations in other regions also, such as Japan, South Korea, Indonesia, Malaysia, India, the United States, Canada, Qatar, Morocco, and Australia. These Covid-19 related conditions include submitting a negative PCR test within 48 hours prior to departure and/or compulsory COVID-19 rapid tests on arrival.¹¹ Some nations such as Thailand, Hong Kong, and Singapore did not differentiate tourists from China but if and when requested, all nationalities have to show a negative PCR test within 48 hours prior to departure, but without any testing on arrival. These nations among several others also were able to do this because they had reached a high level of primary vaccination series completion as well as follow-up booster doses. Also, these countries still continued to follow the strict Covid-19 pandemic protocols, especially with regard to social distancing, wearing masks in public and enclosed areas, and frequent sanitization

⁸ Isabel Keane. Half of the passengers on 2 flights from China had COVID: report

New York Post. December 28, 2022

<https://nypost.com/2022/12/28/half-of-the-passengers-on-2-flights-from-china-had-covid/>

⁹ Italy imposes mandatory Covid tests for travellers from China

CNBC. December 28 2022

<https://www.cnn.com/2022/12/28/italy-imposes-mandatory-covid-tests-for-travellers-from-china.html>

¹⁰ China resumes international travel: Which countries are introducing new COVID restrictions?

Euronews. Travel. January 2, 2023.

<https://www.euronews.com/travel/2023/01/12/china-resumes-international-travel-which-countries-are-introducing-new-covid-restrictions>

¹¹ Aljazeera. Growing list of countries imposing COVID rules on China arrivals. December 29, 2022.

https://www.aljazeera.com/news/2022/12/29/countries-imposing-covid-rules-for-travellers-from-china?traffic_source=KeepReading

of hands in public. These nations generally also shared the same high-power distance and collectivist cultures so were well disciplined in ‘doing the right thing’ for the community’s good (these cultural dimensions are discussed in further detail in Part Three entitled ‘ Cultural issues and influences on national leadership and behavioral responses). By opening their borders to visitors and tourists, these nations depend on the general public in supporting, promoting, and rebooting the tourism industry, both upstream and downstream, for the much-needed revenue and cash flow. For these nations, tourism is the well-established ‘cash cow’, which can revive and sustain the livelihood and financial well-being of tens of millions of people. The focus of concern for these controls was to protect the local community from getting infected by visitors and tourists. Most importantly, these three nations among several others had very good and reliable healthcare services and facilities at private hospitals with international standards capable of catering to foreign tourist patients should they get seriously ill.

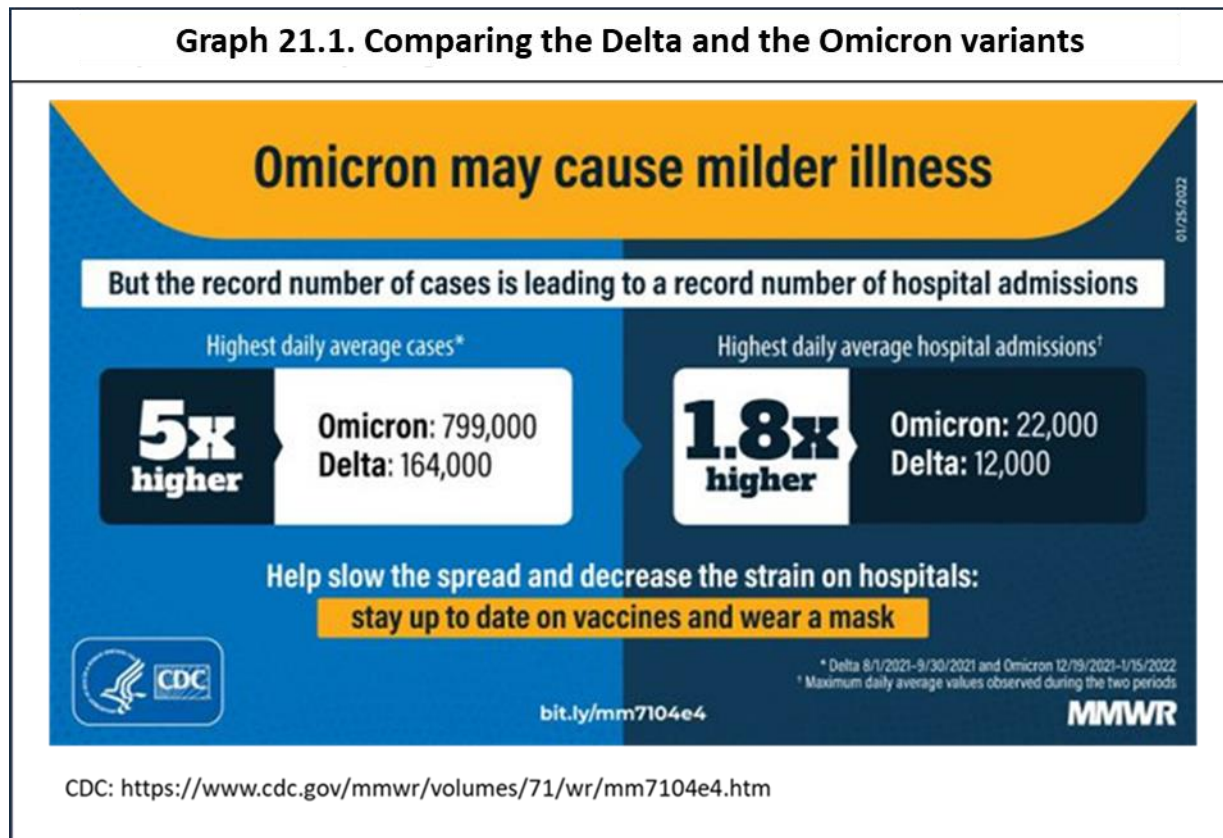
C. Mother Nature gives a ‘temporary’ reprieve with the Omicron variant.

The new Covid-19 variant was first detected in Botswana, Africa, and was subsequently reported to the WHO by the Network for Genomics Surveillance in South Africa on 24 November 2021. On November 26, 2021, the WHO designated the new variant as “Omicron” and categorized it as a “variant of concern (VOC)” as was done with previous variants. The WHO warned that based on data received the Omicron was spreading faster and is more contagious than any previous variants. More importantly, the WHO indicated that compared to the previous Delta variant, the Omicron variant seemed to undergo increased mutations as well as being less susceptible to vaccines. This was clearly demonstrated by Omicron’s rapid dominance of Covid-19 cases in the United States replacing the Delta. This Omicron variant was discovered in the United States on December 1, 2021, in Atlanta, Georgia, and during the first week, Omicron accounted for about 1% of new cases. By December 11, 2021, Omicron’s infection cases in the United States jumped to 12.6% and to 73.2% a week later by December 18, 2021, reducing the Delta variant cases to only 26.6% total cases.¹² By January 15, 2022, the Omicron variant dominated the United States at 99.5 percent.¹³ The CDC carried out a study comparing the Omicron with all previous Covid-19 variants using data from three surveillance systems to assess U.S. disease related to COVID-19 from December 1, 2020–January 15, 2022. The study indicated that while Omicron generated the highest reported numbers of COVID-19 cases, the “ disease severity indicators, including length of stay, ICU admission, and death, were lower than during previous pandemic peaks.”. The ratio of hospitalization to infection cases was significantly lower for Omicron when compared to the

¹² Travis Caldwell and Claire Colbert . Omicron is now the dominant strain of coronavirus in the US, according to the CDC
CNN. December 21, 2021
<https://edition.cnn.com/2021/12/20/health/us-coronavirus-monday/index.html>

¹³ CDC. First confirmed case of Omicron variant detected in the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2021. Accessed January 10, 2022. <https://www.cdc.gov/media/releases/2021/s1201-omicron-variant.html>

previous Delta variant. A comparative analysis between the Delta and the Omicron variants was posted by the CDC under its Morbidity and Mortality Weekly Report (MMWR) on January 25, 2022. Even though the absolute figure for hospitalizations was higher for the Omicron variant, on a pro-rata basis, this was really significantly less than for the Delta variant as shown in the comparative Graph 21.1.¹⁴



Graph 21.1. demonstrated CDC’s findings which indicated that the 164,000 infection cases with the Delta variant, resulted in 12,000 hospitalizations, or 7.32 percent, compared to the Omicron variant, which had 799,000 cases and resulted in 22,000 hospitalizations, representing 2.75% of infection cases, or about one-third rate compared to the Delta variant. CDC’s findings corresponded with the earlier assessment in South Africa which indicated that the Omicron variant generally causes less severe illness than previous variants.¹⁵ Nevertheless (critically important), it should be emphasized that serious illness and risk of death do exist for people who

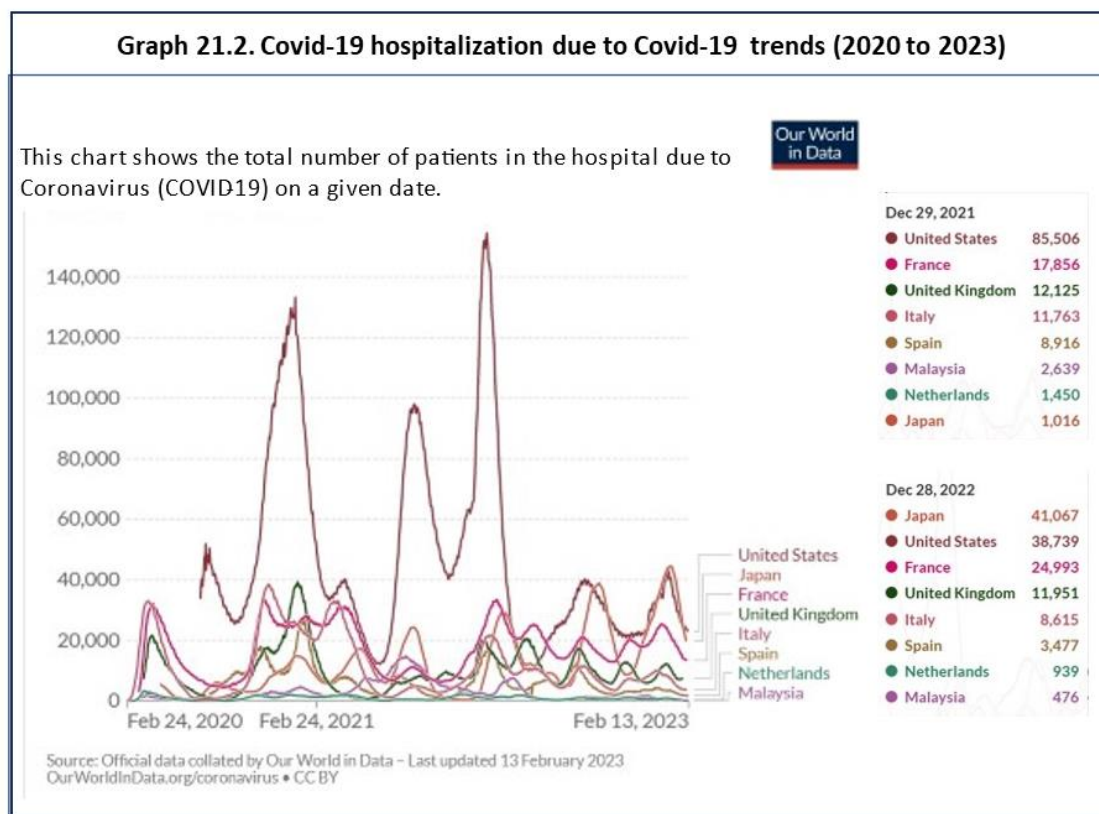
¹⁴ Iuliano AD, Brunkard JM, Boehmer TK, et al. Trends in Disease Severity and Health Care Utilization During the Early Omicron Variant Period Compared with Previous SARS-CoV-2 High Transmission Periods — United States, December 2020–January 2022. MMWR Morb Mortal Wkly Rep 2022;71:146–152. DOI: <http://dx.doi.org/10.15585/mmwr.mm7104e4>

CDC. January 28, 2022. <https://www.cdc.gov/mmwr/volumes/71/wr/mm7104e4.htm>

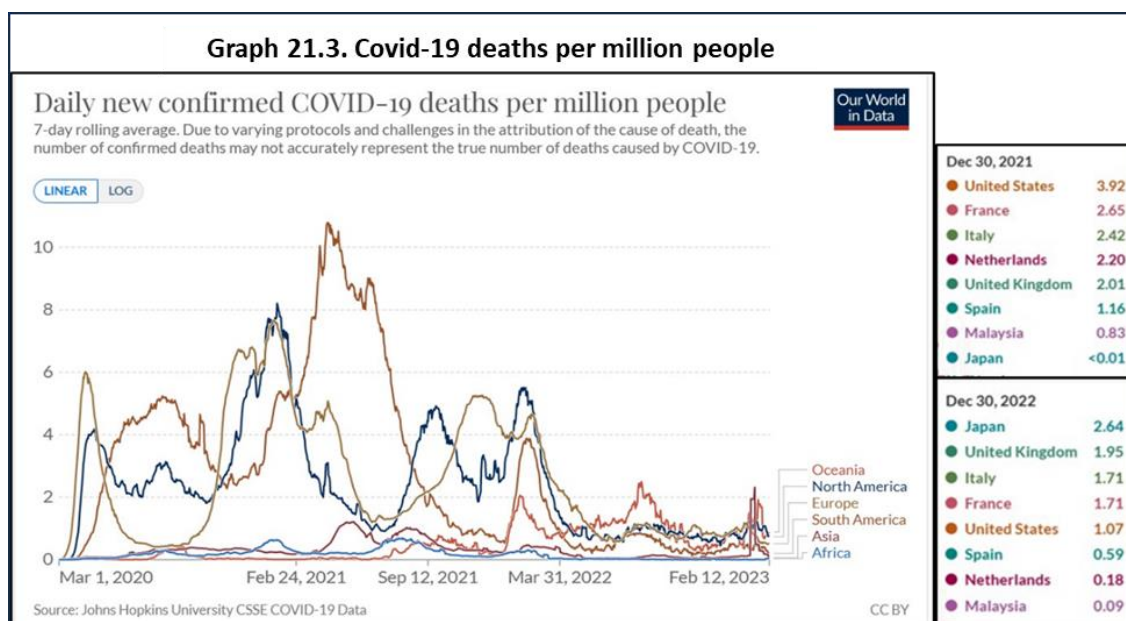
¹⁵ Wolter N, Jassat W, Walaza S, et al. Early assessment of the clinical severity of the SARS-CoV-2 omicron variant in South Africa: a data linkage study. Lancet 2022;399:437–46. doi:10.1016/S0140-6736(22)00017-4. pmid:35065011

are severely immune compromised or predisposed, as well as people with underlying medical problems such as cancer and are on chemotherapy, organ transplant recipients, and those with chronic lung diseases or if they're not vaccinated. The latest data from the CDC also indicated that hospitalizations for those unvaccinated were 16 times higher compared with those who were vaccinated.¹⁶

It would seem that Mother Nature may have given Mankind a 'temporary' reprieve from the deadly impacts of Covid-19 through the Omicron mutation. At a time when the credibility, reliability, safety, and effectiveness of Covid-19 vaccines were rapidly declining, Covid-19 underwent another mutation. While previous variants of the coronavirus up to, and including the Delta variant seem to demonstrate tendencies to become more deadly and cause serious illness, the Omicron variant seemed to have made a 'u-turn' by inflicting less serious illness and fatalities by comparison. The declines in serious illness resulted in declines in hospitalizations, and deaths as indicated in Graphs 21.2 and 21.3. below.



¹⁶ Will Stone. Why omicron is crushing hospitals — even though cases are often milder than delta
NPR. January 29, 2022
<https://www.npr.org/sections/health-shots/2022/01/29/1075871661/omicron-symptoms-treatment-hospital>



Consequently, many people in the western world mainly in the Americas and European regions were able to deduce that the Omicron variant offered a safer and more reliable option for getting immunity naturally, instead of the still questionable pharmaceutical-based vaccines. There is no challenge to the fact that natural immunity through infection is the oldest, and most test-proven method of building immunity against the coronavirus, or any virus infections in the history of life on the planet. Obviously modern technology should theoretically be able to create a more effective and durable solution to Covid-19. Unfortunately, in reality, current vaccines have not achieved a satisfactorily high level of sustainable and effective full protection against either infection, serious illness, or death. The Omicron variant seemed to offer a unique and temporary window for the 'anti-vaxxers, the undecided, and those who believe in the herd immunity concept' to get natural immunity through infection. Social distancing and protective measures became lax in order to facilitate natural immunity through infection. Again, this is not an option for those who are severely immunocompromised or with underlying medical problems where vaccination is the best option, despite the waning effectiveness over time and the need for booster doses.

As a result, there was most likely a surge of infections from the Omicron variant in the Americas and European regions. However, in terms of statistics, such a surge of infections would probably not all be registered. Being less serious, and not requiring hospitalization, most infected people would merely stay home and self-cure as they would for a case of the flu without bothering to report to the authorities. In most of these nations, the Covid-19 self-test kits were available either for free or easily purchased at pharmacies and convenience stores. Anyone who tested positive and not being seriously ill would normally not go to a hospital but would self-isolate and self-treat at home. Based on the CDC indicator in the graph above, it means less than 3% of those infected would report to hospitals and be registered accordingly. As for the rest, it is most likely

that most of those infected would not take the time or effort to be registered or recorded in the national statistics and therefore would be excluded from the national statistics. This means that it is possible, and probable that tens of millions of infected cases were excluded from the national as well as regional, and global statistics.

With regard to people purposely getting infected in order to acquire natural immunity and avoid getting vaccinated, the WHO, along with most national CDCs and health authorities would discourage people from this course of action because there is always the risk regarding how the infection could affect a person. The vaccine, despite its limitations, does have an element of prediction and control, especially with regard to the high-risk and vulnerable populations. However, this option probably would not have emerged or become so popular and widespread had there been transparency and credibility on the part of the vaccine developers and the FDA. Also, if the Omicron variant was as virulent and deadly as the Delta, this natural immunity option would probably not have been considered. Of course, there is always the possibility for the next coronavirus variant to be a mutation that combines the highly contagious element of the Omicron plus the serious illness and deadly elements of the Delta. Obviously, for such a variant, natural immunity would be a 'no-no!'.

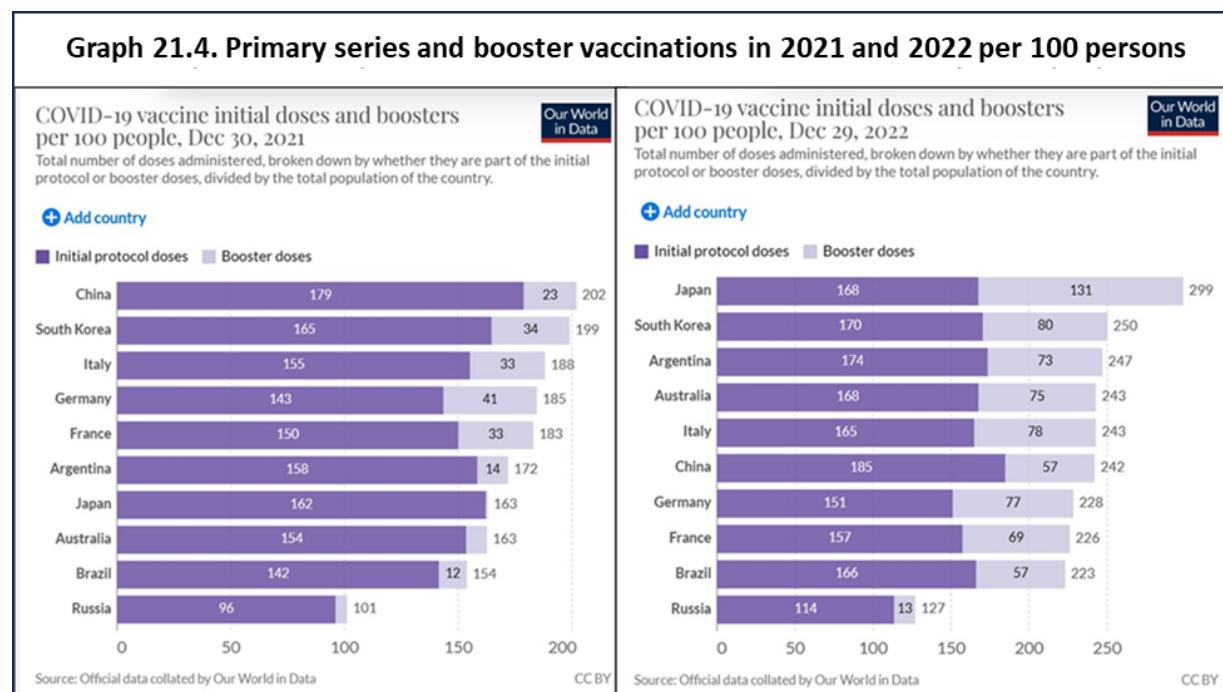
Since its emergence in November 2021, Omicron has gone through many mutations with the current being designated the XBB.1.5 which is described by Maria Van Kerkhove, WHO's technical lead on COVID-19, as the "most transmissible subvariant detected yet". Also referred to as the Kraken, this mutation has developed strong immune evasive properties compared with previous Omicron sub-lineages.¹⁷ This means the reduction of protection under current vaccines. The next variant following Omicron may go one way or the other. It could either reinforce the current variant with a continued decline in serious illness and deaths and transition towards the endemic or it could make another "u-turn" and cause more serious illness and higher risk of death.

C. Misleading level of Covid-19 vaccine protection

The previous section highlighted the limited timeframe of the effective protection period of 5 – 6 months for both the primary vaccination protocols and the subsequent booster shots (therefore requiring two doses of each per year). All vaccination statistics give the status of primary vaccination series by a country giving the impression that country X has 60% of its population completing the primary series. These statistics started from the roll-out of vaccinations beginning in 2021. They also indicate that by the following year 2022, the level of the population 'fully' vaccinated increased to 70 percent. This data can give a misleading impression of the level of the population *currently* under effective protection of the vaccine. The

¹⁷ Usaid Siddiqui. What do we know about new COVID variant XBB.1.5?
Aljazeera. January 14, 2023
<https://www.aljazeera.com/news/2023/1/14/what-is-the-new-covid-variant-xbb-1-5>

data given represents the cumulative number of the population who have undergone the primary vaccination protocol since the initial roll-out in January 2021. However, this data does not indicate the 'current' level of effective fully vaccinated percentage of the population. Due to the need for additional 'booster' doses to sustain the effective protection of the primary vaccination series, means that any person who completed the primary series during the first half of 2021, and did not get inoculated with the first 'booster' dose by the beginning of 2022, is no longer considered to be effectively protected. Similarly, those who completed the primary series by the end of 2021, and did not get inoculated with the first 'booster' dose by mid-2022 are also no longer under effective protection. Therefore, as long as the 'booster' doses at the end of 2021 plus for the year 2022 do not match the number of primary series percentage of the population, the real level of the population under effective protection of vaccines will subsequently decline, just like the waning of the vaccine' effective rate of protection. The following Graph 21.4. indicates the number of primary vaccination doses and 'booster' doses for selected nations per 100 people. It should be noted that the primary vaccination protocol requires two doses per person. Subsequently, this must be followed by one 'booster' dose is required per person every 5 to 6 months, so essentially also two booster doses per 12 months period.



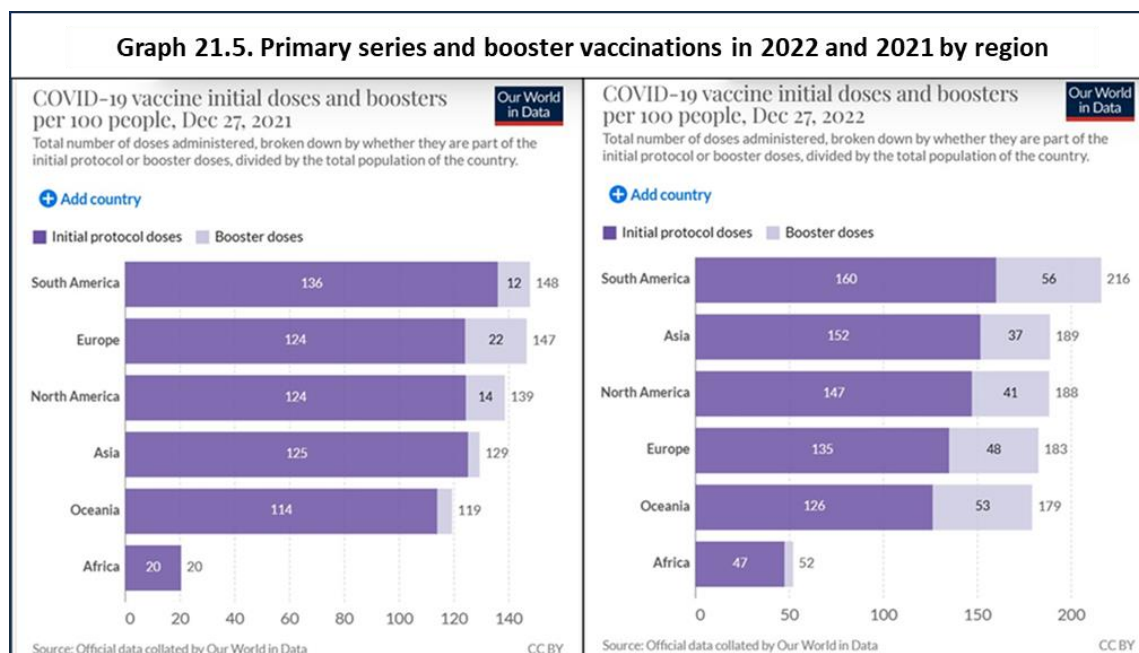
Graph 21.4. above indicate the levels of primary vaccination doses per 100 people in 2021 and 2022, for the selected populations under study. To better understand these figures, the primary vaccination protocol consists of two doses per person, therefore the total doses per 100 people are divided by two to represent the number of people completing the primary vaccination protocols (two doses per person), i.e. for China, the 179 doses/100 people represent potentially 89 people completing the primary series (two doses) with one person waiting for the second final

dose. This method of calculation assumes the ‘ideal’ situation where those who were inoculated would intend to complete the primary protocol with two-doses. The timeframe for completing both primary doses is usually 2 – 3 months based on the interim period between the two doses being 1 – 2 months (four to eight weeks). Since the vaccine’s effective protection period following completion of the primary series ranges from 4 to 6 months, an additional ‘booster’ dose would be required after that period. Since this additional ‘booster’ dose also has a limited effective protection period ranging from 4 to 6 months, it is logical that a second additional ‘booster’ dose would be required also to sustain the effective protection period for a 12-month period/cycle. Based on these effective protection periods, all those who completed the primary series in 2021 must take two additional ‘booster doses each to get effective protection until the end of 2022. If the required number of booster shots is not carried out, then the level of effective protection will decline at the end of 2022. If this continues into 2023, then the level of effective protection will continue to decline accordingly.

The Table above highlights the difference between the effective level of protection at the time of vaccination and the eventual status of effective protection 5 to 6 months later. Therefore, statistics and Graphs showing the percentage of a nation’s population having completed the primary protocols are just a statistical history, not reflecting the actual status of vaccination protection at a given time 6 to 12 months later.

These primary vaccination protocol percentages are only meaningful for only the first year of inoculations. Failures to match the primary vaccination protocol figures with equal numbers of booster shots these percentage of inoculation rates are redundant and misleading and gives a false sense of safety and protection. Of course, natural immunisation through infections is another option, but the volumes need to be extremely high. (This would work under the Omicron variant, but would be deadly during the Delta variant).

The following Graph 21.5. indicate the levels of primary vaccination doses per 100 people in 2021 and 2022, globally and divided by regions. With regard to these regional figures, it should be noted that the regional figures do not mean that every nation within the region achieves this level of vaccination doses. Some will be higher, while others would be lower. Needless to say, the level of primary vaccination administered by each nation would also depend on its financial resources to purchase and other aspects influencing its economic status and culture with regards to prioritizing vaccines. For many nations, there is a great dependency on donated vaccines received to initiate and continue the rolling-out of vaccinations. Also, as fate would have it, high population numbers, and low financial resources are most common in under-developed low-income nations. This would impact on the ability to vaccinate their population. Compare the challenges to Ethiopia with a population of 120.3 million (est.2022) and Switzerland with 8.7 million (est. 2022). Compare also the difference in their financial resources to roll-out nationwide vaccinations.



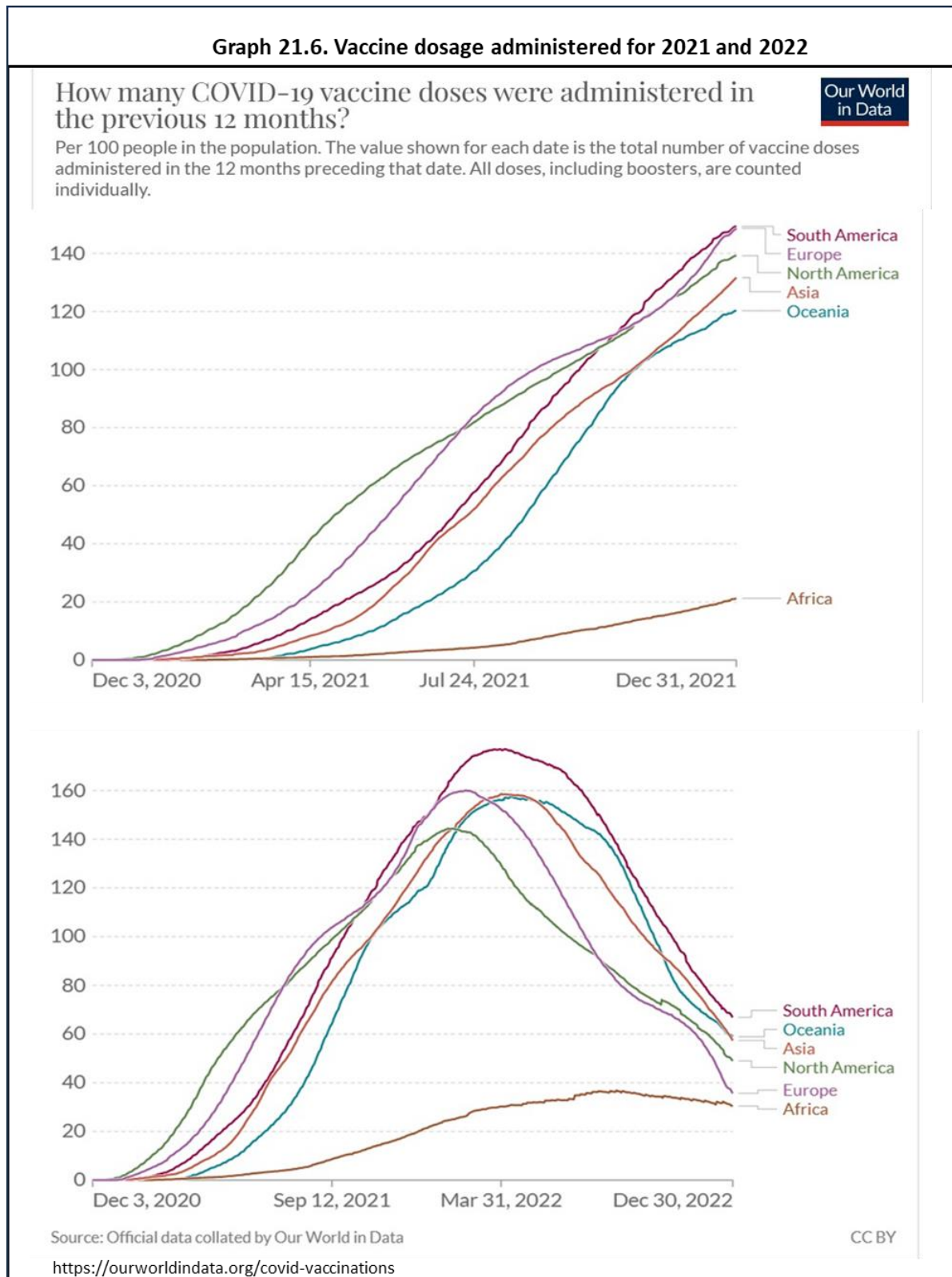
The same logic and principles regarding the significant shortfall in promoting people to get additional ‘booster’ doses would result in a significant decline in effective protection coverage through vaccinations, is also applicable at the global regional levels as well. Since booster doses only give the original effective protection for 5 to 6 months, it means that two booster doses would be needed each year. Therefore booster doses should be at least match the accumulated number of doses for the primary vaccination protocols. The above Graph 21.5. indicates that booster doses were well below the required rate to maintain the protection level initiated by the primary vaccination protocols in the various global regions. Therefore the accumulated number of primary vaccination protocols for each region should not be viewed as the status of protection levels, at the end of each year. Without subsequent matching in booster doses (two per year per person) the effective rate of protection would be significantly lower each year.

In fact, even the rolling out of the primary vaccination protocol in the various regions was greatly reduced in 2022 compared to 2021. For example, the European region registered the accumulation of 124 doses per 100 people in 2021. One year later, at the end of 2022, this accumulated rate increased to only 135 doses per 100 people, an increase of only 8 per 100 people (8%). On the same basis, the North American region increased only by 18% and the Asian region by 21 percent. The greatest increase was in the African region which increased from 20 per 100 in 2021 to 47 per 100 in 2022, an increase of 135 percent. During 2022, even though there were much greater increases for additional ‘booster’ doses per 100 people in 2022, the accumulative figure was still very low compared to the accumulated total number of doses per 100 who have completed the primary vaccination protocol. The ‘booster’ doses were still well below the required number to sustain the effective protection of the primary series completed.

For example, in the case for the Oceania region, there were 114 doses per 100 people under the primary vaccination protocol as of the end of December 2021. This should have been matched in the following year, 2022, with 114 doses of booster shots per 100 people (12-month period of protection requires two 'booster' doses per person). Instead, there were only 56 boosted per 100 people equivalent to only about 46% of those who completed the primary series were boosted. Similarly in the South American region, there were 136 doses of primary vaccination protocols per 100 people in 2021 against which there were only 56 'booster' doses per 100 people administered, or about 41% received booster shots in the following year 2022. Using the same formula for calculations, the subsequent booster dose rate was 38% for the Asian region and 33% for the North American region. The lowest rate was in the European region with only 30 percent. None of the regions reached even 50% of the primary protocol doses of the previous year. The level of people boosted in the African region was negligible since this region was still trying to continue the roll-out of the primary vaccination series. In fact, both the African and Asian regions still have a long way to go in continuing with the primary series to reach the minimum target goal of 70% of the population before they can seriously consider the additional 'booster' doses. So far, there are just not enough vaccines donated to them to even just complete the primary protocol.

There are many theories regarding the root causes for the steep declines in vaccinations for both primary protocols and 'booster' doses. First, the growing mistrust and reliance on the Covid-19 vaccines and their developers have strengthened the "anti-vaxxers" movement with the conversion of many of the 'undecided' population. Second, the declining credibility and perceived lack of governance and transparency of government regulators such as the FDA, CDCs, as well as various health authorities in evaluating, approving, and advocating these vaccines. The fact that these vaccines and government regulators were approved and promoted by the WHO globally did not improve the credibility of those associated with these vaccines and probably did not do much good for the image of the WHO either. Third, the knowledge that the Omicron variant did not cause serious illness and therefore had a lower risk of death than the previous Delta variant probably also contributed to the discontinuation of many to get inoculated, either to start or to continue with the primary protocol, or to start or continue with getting the additional 'booster' dose(s) after completion of the primary protocols. This element of the Omicron variant has been discussed above in more detail. Fourth, in view of the low risk of serious illness and death caused by the Omicron variant, many sought to get 'natural immunity' through being infected by the Omicron. Obviously, this was the oldest, most proven method of getting immunity known to Man. The previous section already discussed the issue of natural immunization versus vaccination. Both have limited effective protection timeframes. Studies are still being made comparing the durability of both methods. Preliminary estimates put natural immunity at around 3- 4 months, while vaccinations, including booster doses, are at about 5 – 6 months. Both do not give sustainable protection against serious illness and death. However, from the practical aspect, it's probably better to get booster doses without interrupting the lifestyle than getting infected and staying home for a week or more after each infection. No effort is made to prioritize or establish a hierarchy for these four theories, but just to establish the fact all four combined, contributed to the rapid decline in vaccinations for both the

primary protocol and 'boosters' during 2022 as indicated in Graph 21.6. comparing vaccinations in 2021 and 2022 given below.



The decline in vaccinations, both for primary series and additional ‘boosters’ started during the first quarter of 2022 beginning with the North American region in January 2022, followed by the European region in February, and by March all the other regions followed suit. Declines in vaccination administrations for both primary series and ‘boosters’ continue through the end of 2022 for both the global regional and national levels as seen in Graph 5.9. above. The exception is the African region which was somewhat desperately trying to maintain the vaccination rolling-out process and the drop was probably due to the lack of or decline in vaccine donations from the more wealthy nations.

However, as indicated and discussed earlier in this section, these declines in vaccinations, for both the primary protocols and ‘booster doses during 2022 also saw concurrent significant declines in both hospitalizations and deaths. It should be clearly stated that the declines in hospitalizations and deaths were not significantly due to the protection of vaccines (since effective protection from those already vaccinated was already waning in efficiency, and there were very few new vaccinations administered in 2022). The term ‘concurrent’ is used since it was most likely due to Mother nature replacing the deadly Delta variant with the more ‘homo friendly’ Omicron variant. Had the situation been reversed, namely that first there was the Omicron in 2021, and then was replaced by the Delta in 2022, the results would have been a different story. The graphs for hospitalization and deaths would most likely have been reversed. The point is this could still happen. The next variant could very well turn out to be more deadly than the Omicron variant, and even, the Delta variant. This could lead to a human disaster with so few people being immunized due to a lack of vaccination. The decline in vaccinating the human race increases the risk of the Covid -19 pandemic becoming worse and more protracted. At this time, human behavior with regard to vaccinations and getting effective sustainable protection is like playing Russian roulette. Eventually, the bullet will be fired.

As long as there exists no sustainable effective protection against getting infected, as long as there are large numbers of the global population still exposed to the risk of continually getting infected, and as long as herd immunity has not been achieved through vaccinations, the virus will continue to exist and spread. Unprotected humans will continue to act as host bodies for the virus to infect, and mutate into new variants that could be more contagious, instigating more serious illnesses and deaths, not to mention being more resistant to existing vaccines. Under these circumstances, there cannot be any serious consideration in declaring the Covid-19 endemic at the time.

D. WHO declares an end to the Covid-19 emergency.

It was not until the following year, on May 5, 2023, that WHO Director-General Tedros Adhanom Ghebreyesus declared an end to Covid-19 global health emergency of international concern based on the recommendation of the COVID-19 Emergency Committee. In making the declaration the WHO Director reminded the world that, “It is still killing and it is still changing. The risk remains of new variants emerging that cause new surges in cases and deaths.”¹⁸

¹⁸ WHO chief declares end to COVID-19 as a global health emergency
UN News. May 5, 2023. <https://news.un.org/en/story/2023/05/1136367>

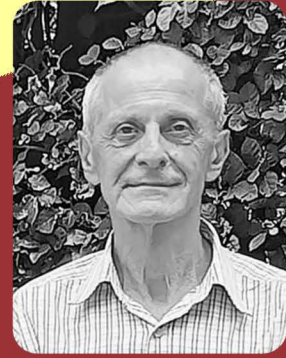
Noticeable in this declaration was the absence of the word 'pandemic'. Since the declaration of Covid-19 as a global pandemic, on March 11, 2020, by the WHO, for over 3 years, it has been referred to globally as the Covid-19 pandemic, not as a 'health emergency'. Now, in declaring an end, the expression used was 'health emergency'. The interpretation would be an end to the 'emergency' status, but not actually an end to the 'pandemic' status'. So, does this declaration qualify for the status of 'endemic?'



Camilla Sløk
Ph.D.



Jaakko Turunen
PhD (Pol.Sci.)



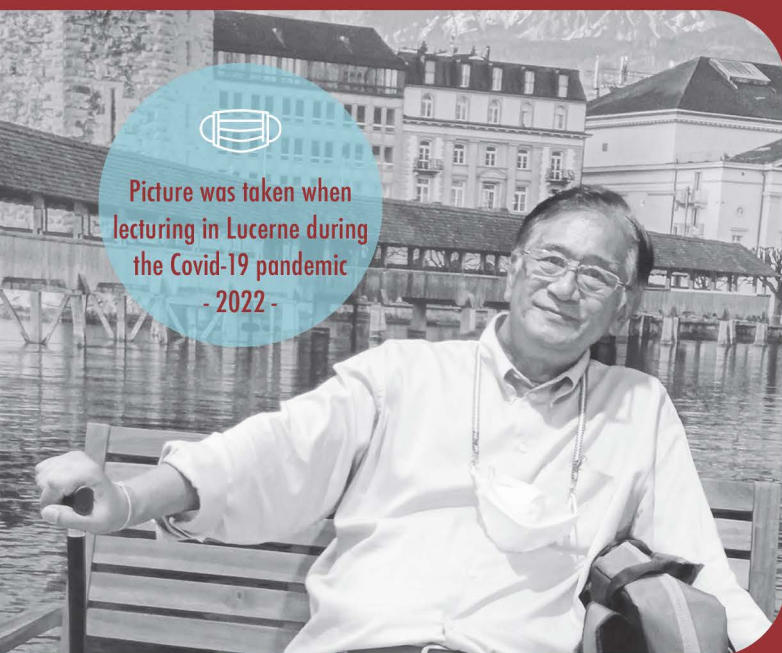
Alessio Panza
MD. MPH. DTM&H



Marina Cavallari
MA



Charles-Amaury Queller
MA



Picture was taken when
lecturing in Lucerne during
the Covid-19 pandemic
- 2022 -

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*“Globalisation and change
are intertwined . . .
. . .as is also Man to
his environment”*