

Factors that Led to the State Being Unsuccessful in Addressing the Risk of Covid-19

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Abstract

The COVID-19 pandemic, originating in Wuhan, China, in late 2019, swiftly escalated into a global health crisis by March 2020, severely impacting nations worldwide. The World Health Organization (WHO) faced criticism for delayed responses and underreporting, particularly from China, compounded by geopolitical tensions and funding shortages. This constrained the WHO's ability to effectively manage the pandemic. Additionally, national responses varied significantly, influencing outcomes. Key factors contributing to the state's failure to address COVID-19 effectively include delayed government actions, governance and leadership failures, poor communication, and inadequate economic support. Early and stringent measures, as demonstrated by New Zealand, resulted in better outcomes compared to countries like Italy and the United States, which experienced severe outbreaks due to delayed responses and inconsistent communication. Governance issues, such as the lack of cohesive strategies and leadership coordination, were evident in countries like Indonesia and Japan, leading to inconsistent policy implementation and poor outcomes. Economic support measures played a critical role in public compliance and economic stability. Countries like the UK provided substantial financial aid, yet disparities in support led to ongoing struggles for low-income families. In contrast, countries in the Global South faced significant challenges in providing adequate economic support, exacerbating existing inequalities and complicating pandemic management. Recommendations for future responses include improving targeted health interventions, enhancing community engagement in policy-making, increasing international financial and technical support, and revising global health treaties to ensure equitable resource access. These steps are essential to build more resilient health systems capable of effectively managing future global health crises.

Keywords: COVID-19, Pandemic, States, Response, Factors

1. Introduction

The COVID-19 pandemic emerged as one of the most significant global health crises in recent history, leaving an indelible impact on countries worldwide. [1]. It originated from Wuhan, China, in late 2019, and rapidly spread across the globe, infecting approximately 450 million people and causing 6 million deaths by 2024 [2]. Initially, the disease was referred to as 'Wuhan pneumonia,' before the World Health Organization (WHO) officially declared a pandemic on March 11, 2020 (as shown in Figure 1). By that

time, COVID-19 had spread to 114 countries, resulting in over 118,000 confirmed cases and 4,291 deaths globally. Following the declaration, several measures were taken by the WHO to enhance coordination and communication with health authorities worldwide. It also urged all countries to take aggressive actions to combat the virus's spread. However, the virus continued to mutate until late 2022 when it came under control. It is uncertain whether the regression of the pandemic was spontaneous, the result of a coordinated global response, or a combination of both.

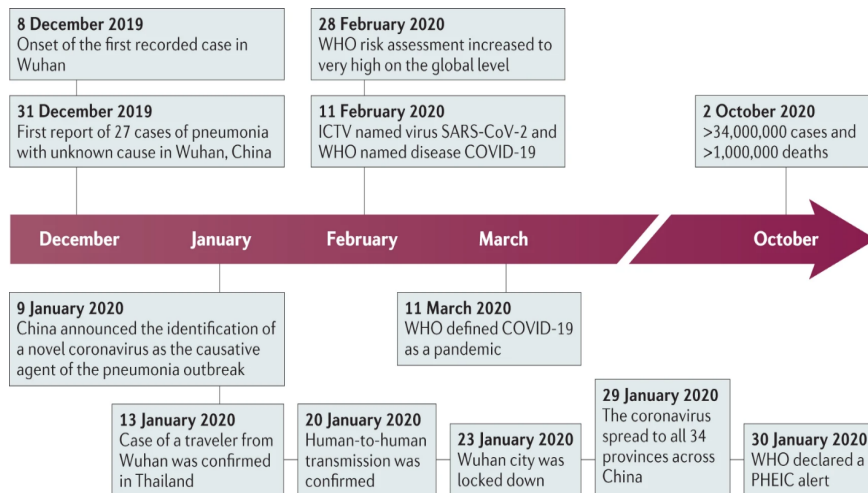


Figure 1: Timeline of Significant Events in the COVID-19 Outbreak from December 2019 to October 2020. Source [5].

There are opinions that the effectiveness in containing the COVID-19 pandemic could have been significantly improved if the WHO had declared it a public health emergency of international concern (PHEIC) much earlier [3]. Critics argue that China misled the WHO by underreporting the extent of community transmission and providing inaccurate figures at the pandemic's onset [4]. Another factor attributed to the delay was geopolitical tensions which undermined its capability to respond swiftly [3]. The WHO faced not only political interference but also funding shortages during the pandemic, which constrained its response capabilities and increased its vulnerability to external influence. For instance, the WHO's COVID-19 Strategic Preparedness and Response Plan (SPRP) for 2020-2021 operated with a budget of \$1.96 billion, less than a quarter of the over \$7.5 billion the US Centers for Disease Control and Prevention (CDC) received in emergency funding through multiple legislative packages over the same period (WHO, n.d.; CDC, n.d.). These, together with the historical precedents, such as the delayed declaration of a PHEIC during the Ebola outbreak in Africa in 2014, further highlight the need for timely action. Hence, increased political support, legal authority, and financial sustainability are needed to enhance the WHO's effectiveness in managing global health crises.

Even after the WHO declared COVID-19 a pandemic, countries differed in implementing airborne mitigation measures promptly, depending on the capability of their health system to respond to the threat, making some states more successful than others [1]. Although, most governments were thrust into a state of emergency, and have taken decisive action to mitigate the public health threat. The varied responses to the pandemic have highlighted significant differences in the capacity of states to manage such a crisis effectively [1,4]. Above all, the extent and duration of the COVID-19 epidemic have demonstrated the inability of the states to prevent or control its spread. Therefore, this essay aims to critically analyze the myriad factors that have contributed to the states' failure and why some are better than others in addressing

the risks posed by COVID-19.

2. Country-Level Factors that Contributed to the Inability to Address the Risk Of Covid-19

2.1 Delay in Government Response

The effectiveness of a state's response to the COVID-19 pandemic is significantly influenced by the timing of the instituted response measures (Salmon et al., 2021). In other words, the earlier a country responds, its pandemic management is more effective. This finding is supported by Zhang & Enns (2022), whose study modeled China's response rate to the pandemic by health outcomes. The study revealed that an early response by one week earlier could have averted 35% of the mortality observed during the first wave of the pandemic. This suggests that optimizing the timing of mitigation strategies could significantly reduce the pandemic's impact.

Despite the virus crossing borders, some states were slow to implement critical measures such as lockdowns, mask mandates, and social distancing guidelines. Countries that delayed their responses experienced more severe outbreaks. Italy, the first European country significantly affected, illustrates the consequences of delayed action. Despite warning signs from the outbreak in Wuhan, Italian authorities imposed a partial lockdown in the province of Lodi in Lombardy only on February 21, 2020, following the confirmation of the first COVID-19 cases in Rome on January 31, 2020. By that time, the virus had reached about ten municipalities and affected approximately 50,000 people [6]. It was not until March 9, 2020, that Italy implemented nationwide restrictions, by which time the virus had already spread widely. The lockdown, which ended on May 4, 2020, saw cumulative incidence (CI) rates in Italian regions ranging from less than 5 cases per 100,000 to over 11 cases per 100,000 inhabitants [6]. This delay resulted in a rapid surge of cases, overwhelming the healthcare system and leading to one of the highest mortality rates in the country.

In contrast, New Zealand provides a case study of how structured leadership and prompt response can effectively manage a pandemic. Under Prime Minister Jacinda Ardern's leadership, the state implemented stringent measures early in the pandemic. On March 25, 2020, New Zealand moved to the highest alert level, imposing a nationwide lockdown as part of the "Elimination Strategy Campaign" when it had only 205 confirmed cases and no deaths. New Zealand was the first country to choose "elimination" as a specific policy response [7]. This strategy involved conducting community risk assessments and implementing targeted interventions based on a four-level alert system as shown in Figure 2. This enabled New Zealand to repeatedly eliminate community virus transmission during the pandemic. Through the

first 18 months of the pandemic, until vaccines became widely available, New Zealand maintained very low COVID-19 mortality rates, and by June 2020, there were no active cases of the virus [7]. These early interventions were pivotal in controlling the outbreak while minimizing economic disruption and have helped New Zealand achieve relative success compared to many other countries in the world [8]. However, Thornton noted evidence of noncompliance, especially at the initial stages when there was limited knowledge about the pandemic, and institutions had to adapt to various operational changes [9]. As the New Zealand COVID-19 Elimination Strategy was fully implemented, involving widespread testing and the use of technology for efficient contact tracing, there was a marked increase in large-scale compliance.

New Zealand COVID-19 Alert Levels Summary

Unite against COVID-19

- The Alert Levels are determined by the Government and specify the public health and social measures to be taken in the fight against COVID-19. Further guidance is available on the [Covid19.govt.nz](https://www.covid19.govt.nz) website.
- The measures may be updated based on new scientific knowledge about COVID-19, information about the effectiveness of control measures in New Zealand and overseas, or the application of Alert Levels at different times (e.g. the application may be different depending on if New Zealand is moving down or up Alert Levels).
- Different parts of the country may be at different Alert Levels. We can move up and down Alert Levels.
- Essential services including supermarkets, health services, emergency services, utilities and goods transport will continue to operate at any level. Employers in those sectors must continue to meet health and safety obligations.
- Restrictions are cumulative (e.g. at Alert Level 4, all restrictions from Alert Levels 1, 2 and 3 apply).

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ELIMINATION STRATEGY – New Zealand is working together to eliminate COVID-19		
Alert Level	Risk Assessment	Range of Measures (can be applied locally or nationally)
Level 4 – Lockdown Likely the disease is not contained	<ul style="list-style-type: none"> Community transmission is occurring. Widespread outbreaks and new clusters. 	<ul style="list-style-type: none"> People instructed to stay at home in their bubble other than for essential personal movement. Safe recreational activity is allowed in local area. Travel is severely limited. All gatherings cancelled and all public venues closed. Businesses closed except for essential services (e.g. supermarkets, pharmacies, clinics, petrol stations) and lifeline utilities. Educational facilities closed. Rationing of supplies and requisitioning of facilities possible. Reprioritisation of healthcare services.
Level 3 – Restrict High risk the disease is not contained	<ul style="list-style-type: none"> Community transmission might be happening. New clusters may emerge but can be controlled through testing and contact tracing. 	<ul style="list-style-type: none"> People instructed to stay home in their bubble other than for essential personal movement - including to go to work, school if they have to, or for local recreation. Physical distancing of two metres outside home (including on public transport), or one metre in controlled environments like schools and workplaces. People must stay within their immediate household bubble, but can expand this to reconnect with close family /whānau, or bring in caregivers, or support isolated people. This extended bubble should remain exclusive. Schools (years 1 to 10) and Early Childhood Education centres can safely open, but with limited capacity. Children should learn at home if possible. People must work from home unless that is not possible. Businesses can open premises, but cannot physically interact with customers. Low risk local recreation activities are allowed. Public venues are closed (e.g. libraries, museums, cinemas, food courts, gyms, pools, playgrounds, markets). Gatherings of up to 10 people are allowed but only for wedding services, funerals and tangihanga. Physical distancing and public health measures must be maintained. Healthcare services use virtual, non-contact consultations where possible. Inter-regional travel is highly limited (e.g. for essential workers, with limited exemptions for others). People at high risk of severe illness (older people and those with existing medical conditions) are encouraged to stay at home where possible, and take additional precautions when leaving home. They may choose to work.
Level 2 – Reduce The disease is contained, but the risk of community transmission remains	<ul style="list-style-type: none"> Household transmission could be occurring. Single or isolated cluster outbreaks. 	<ul style="list-style-type: none"> People can reconnect with friends and family, and socialise in groups of up to 100, go shopping, or travel domestically, if following public health guidance. Keep physical distancing of two metres from people you don't know when out in public or in retail stores. Keep one metre physical distancing in controlled environments like workplaces, where practicable. No more than 100 people at gatherings, including weddings, birthdays and funerals and tangihanga. Businesses can open to the public if following public health guidance including physical distancing and record keeping. Alternative ways of working are encouraged where possible. Hospitality businesses must keep groups of customers separated, seated, and served by a single person. Maximum of 100 people at a time. Sport and recreation activities are allowed, subject to conditions on gatherings, record keeping, and - where practical - physical distancing. Public venues such as museums, libraries and pools can open if they comply with public health measures and ensure 1 metre physical distancing and record keeping. Event facilities, including cinemas, stadiums, concert venues and casinos can have more than 100 people at a time, provided that there are no more than 100 in a defined space, and the groups do not mix. Health and disability care services operate as normally as possible. It is safe to send your children to schools, early learning services and tertiary education. There will be appropriate measures in place. People at higher risk of severe illness from COVID-19 (e.g. those with underlying medical conditions, especially if not well-controlled, and senior) are encouraged to take additional precautions when leaving home. They may work, if they agree with their employer that they can do so safely.
Level 1 – Prepare The disease is contained in New Zealand	<ul style="list-style-type: none"> COVID-19 is uncontrolled overseas. Isolated household transmission could be occurring in New Zealand. 	<ul style="list-style-type: none"> Border entry measures to minimise risk of importing COVID-19 cases. Intensive testing for COVID-19. Rapid contact tracing of any positive case. Self-isolation and quarantine required. Schools and workplaces open, and must operate safely. Physical distancing encouraged. No restrictions on gatherings. Stay home if you're sick, report flu-like symptoms. Wash and dry hands, cough into elbow, don't touch your face. No restrictions on domestic transport - avoid public transport or travel if sick.

Figure 2: New Zealand COVID-19 Elimination Strategy Alert-levels Summary. Source [7]

2.2 Governance and Leadership Failures

Effective pandemic response requires seamless coordination and leadership between the government, and both central and regional health institutions. However, in many countries, the lack of cohesive strategy and governance between these levels of government severely hampered efforts to combat the virus. This is evident in the Ling study which compared states' success in addressing the risk of COVID-19 based on the effectiveness of the coordinated response among countries' health systems that responded within the same time [8]. The study revealed how Vietnam and New Zealand's health system leadership, coupled

with effectiveness of coordination of the response have led to better outcomes. Both countries designed principles contributing to high-level government stringency and health indices and successfully controlled the virus, as shown in Figure 3. As against Indonesia and Japan associated with the low presence of design principles, were deemed the least successful due to the lack of coordinated central leadership. According to the study, different regions in both countries implemented varying policies, leading to inconsistencies in response measures, while the central government of both countries were hesitating to implement strict measures promptly.

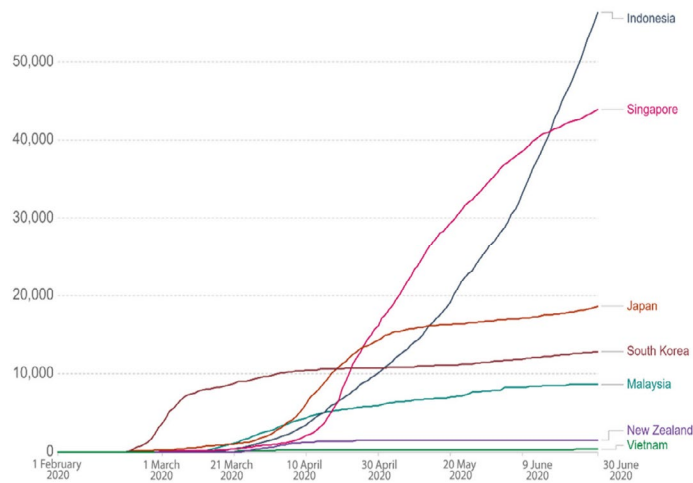


Figure 3: Incidence of COVID-19 by state response between February-June 2020. Source [8].

England has also reformed its health systems in response to COVID-19 by the disbandment of Public Health England (PHE) and its replacement with the UK Health Security Agency (UKHSA) to create more specialized and efficient operations [10]. This is in response to the shortcomings in the agency's (health protection) ability to manage such an unprecedented crisis particularly concerning the lack of capacity to test, monitor, and trace the virus effectively [11]. The remaining health improvement and research functions of PHE were distributed into distinct bodies; the Office for Health Improvement and Disparities (OHID) and the National Institute for Health Research (NIHR) [10]. UKHSA is an executive agency (like PHE), that was specifically designed to bring together expertise in health protection, emergency preparedness, and response. However, this restructuring has faced significant criticisms; Hunter argued that the transition, which occurred suddenly and unexpectedly during the ongoing pandemic, disrupted operations and diverted attention from immediate response efforts [12]. Additionally, creating multiple bodies has introduced new layers of bureaucracy, complicating coordination and communication. Critics also point out that structural changes alone are insufficient to address underlying issues in public health capacity without substantial increases in funding and staffing [13]. Evaluations of the UK's pandemic response, particularly in areas such as vaccine rollout, and test and trace programs, suggest that the reorganization has not led to significant improvements. This is evident by the persistent gaps in COVID-19 vaccine coverage across the existing factors associated with health inequalities. According to the National Audit Office, 2022 Report on the rollout of the COVID-19 vaccination program in England, vaccination rates were lower among socio-economically disadvantaged groups (75% for the most deprived decile compared to 94% for the least deprived) and certain minority ethnic groups (48% for individuals of Chinese origin, 49% for those of Black Caribbean and Black Other origin, versus 86% for the white British group) who had 2 doses of the vaccine by July 2021. These challenges highlight the need for continuous evaluation and adaptation of health system reforms to ensure they effectively address public health

emergencies.

2.3 Lack of Transparency in Communication and Politicization of the Pandemic

Effective communication is fundamental to a robust health system [14]. Clear, consistent, and honest communication builds public trust and ensures compliance with public health measures, which is crucial for managing a pandemic. However, during the COVID-19 pandemic, many governments and health agencies failed to communicate transparently about the risks and uncertainties associated with the virus. This lack of transparency eroded public trust and increased resistance to health directives, significantly hindering efforts to control the spread of the virus.

The United States exemplifies how poor communication exacerbated the public health crisis during the pandemic. The response was marred by conflicting messages from federal and state authorities and inconsistent guidance from health agencies [15]. Discrepancies between data reported by the World Health Organization (WHO) and individual states further fueled confusion. President Trump's downplaying of the virus to present a more favorable situation created additional confusion and undermined public health efforts [3]. Mixed messages from different levels of government, often contradicting health experts, led to widespread non-compliance with health measures, contributing to one of the highest morbidity and mortality rates globally. Haeder & Gollust highlighted that the lack of a unified national strategy and the politicization of health measures, such as mask-wearing and social distancing, eroded public trust and compliance, leading to widespread outbreaks and a high death toll [16].

During the first wave of the pandemic, nearly a quarter of global deaths occurred in the United States [17]. Ker examined the polarization among the US public in two national studies, revealing that participants placed less trust in politicians to handle the pandemic and more trust in medical experts, such as the WHO, and found that rapid spread of misinformation and rumors, especially

through social media, compounded the challenge of effective communication. False claims about the origins of the virus, the efficacy of treatments, and vaccine safety created significant barriers to public compliance with health measures. Furthermore, debates about the pandemic being part of a global vaccine conspiracy and claims that it was created by Bill Gates led to significant public distrust [18]. Increased partisan media facilitated the spread of mistrust among the population, exacerbating the problem [18]. As a result, effective pandemic response efforts were hindered, highlighting the crucial need for accurate and unified public health information. In contrast, countries that acted swiftly and communicated clearly with their populations were generally more successful in controlling the virus. New Zealand exemplifies best practices in this area. The government provided regular, detailed updates on the situation and the measures being taken, ensuring transparency and maintaining public trust [19]. The Ministry of Health, with a high degree of autonomy, along with the COVID-19 Response Minister and the Director-General of Health, were prominent figures in managing and communicating the country's response to the pandemic thereby enabling a coordinated and proactive approach [8].

2.4 Lack of Economic Support/Incentives

The implementation of economic support measures has been essential in mitigating the economic impact of the pandemic and ensuring compliance with public health measures [20]. In other words, the extent to which states have been able to provide economic support and address social inequalities has influenced both public compliance and overall resilience to the pandemic. During the lockdowns, various countries provided financial support to alleviate financial distress, ranging from stimulus payments, unemployment benefits, business grants, and support for healthcare systems. Generally, countries that provided robust economic support to individuals and businesses affected by lockdowns and restrictions saw better compliance with public health measures and reduced economic hardship. For example, the UK implemented several economic stimulus packages, including direct payments to individuals and enhanced unemployment benefits. It spent £180 billion supporting businesses and £129 billion on loans and guarantees since the first lockdown in March 2020, with slight revisions during subsequent COVID-19 waves [21]. The bulk of the support came through the Coronavirus Job Retention Scheme (CJRS/furlough) and the Self-Employment Income Support Scheme (SEISS), while many business support schemes were administered by local authorities, who had some flexibility in determining how to allocate resources [22]. These measures helped stabilize the economy and support households and businesses during periods of reduced economic activity.

However, despite these measures, many low-income families struggled as the assistance did not always match their living costs and needs [21]. Additionally, the urgency to disburse funds quickly led to insufficiently rigorous verification processes, making it easier for fraudulent claims to slip through. Some individuals and businesses made false claims to access financial support schemes,

including exaggerating losses, claiming support for non-existent employees, and misrepresenting business activities to qualify for aid. There is evidence that the pandemic has exacerbated existing inequalities, and financial aid did not sufficiently address this gap in the UK [23]. The pandemic has exposed pre-existing social inequalities, leading to differential impacts on vulnerable populations. Factors such as income, race, ethnicity, occupation, housing, and access to healthcare have all influenced the risk of exposure to the virus and the severity of its outcomes [23]. As a result, UK support programs were beneficial, however, implementing more robust systems for verifying claims and detecting fraud would have reduced the misuse and abuse of the programs.

Additionally, countries in the Global South, such as India and Brazil, struggled to provide insufficient economic support to vulnerable populations, leading to widespread hardship, protests, and compliance with preventive measures [24]. There was evidence suggesting that the lack of comprehensive social safety nets exacerbated existing inequalities and hindered the ability of governments to control the spread of the virus. Additionally, the disparities in the distribution and adequacy of financial support have influenced public compliance with health measures and have impacted the overall resilience of the population to the pandemic [25].

3. Recommendations

Several recommendations can be made to enhance future pandemic responses within and between the states:

1. Recommendation for states to improve in-country future pandemic response:

- Countries should implement more targeted health interventions aimed at vulnerable populations to address disparities in healthcare access and outcomes. This includes providing additional support to low-income communities, ethnic minorities, and those in precarious employment.
- LMICs should consider improving the active engagement of community leaders and representatives in the policy-making process, especially concerning large-scale epidemiological interventions to ensure that interventions are culturally sensitive and equitable. This will help in developing more inclusive health policies that consider the diverse needs of different population groups.

2. Recommendations for global health organizations to improve inter-country response:

- International aid and partnerships with global health organizations like WHO should increase financial and technical support to low-income countries to strengthen their health systems and pandemic preparedness, reducing risks like the vaccine delays seen in Sub-Saharan Africa during COVID-19.
- The INB and World Health Assembly should revise the

pandemic treaty to balance national sovereignty with international obligations, ensuring equitable resource access and addressing the differing needs of low- and high-income countries. The pandemic transcends politics, and true safety is only achieved when everyone is protected.

4. Conclusion

The COVID-19 pandemic exposed global health system weaknesses and areas needing improvement. Failures in communication, geopolitical tensions, and lack of coordination, contributed to states' inability to manage the pandemic effectively. To enhance future pandemic responses, states should adopt a comprehensive approach, depoliticizing health responses, improving communication, addressing socioeconomic disparities, and ensuring equitable resource distribution. These measures will build more resilient health systems for managing future crises [26-42].

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Data Availability Statement

Data sharing is not applicable as no new data were created.

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