

National Government Responses to the COVID-19 Pandemic: An Exploration of Policies, Factors, and Lessons (to be) Learned

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Abstract

This article presents an overview and analysis of key aspects of the policy responses that governments around the world designed and implemented to cope with the COVID-19 pandemic. The article shows the complexities of government action in times of uncertainty, as policymakers had to face an unknown and unfolding crisis for which *a priori* there were no clearly effective tools. It also describes that, despite facing a common virus and associated challenges in health, economic, education, mobility and many other policy sectors, national governments followed a variety of policy paths. The article provides a discussion of factors that seem to have influenced policymakers' decisions for choosing different policy mixes. The article is based on a review of the already extensive and continuously growing literature on policy responses to the pandemic in the Public Policy and Administration fields. While the objective is not to develop a "meta-analysis" or a "systematic literature review", the paper does cover central topics which have been widely discussed in the literature. The article provides a brief account of how the pandemic came about; a discussion about the differences in national governments' policy mixes; an analysis of the most important factors which may help to understand why, despite facing the same complex problem (or set of problems), governments around the world implemented different responses; and a few key lessons that governments could take into account to learn from these terrible years.

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The article is based on a review of the already extensive and continuously growing literature on policy responses to the pandemic in the Public Policy and Administration fields. While the objective is not to develop a “meta-analysis” or a “systematic literature review”, the paper does cover central topics which have been widely discussed in the literature. Given the quantity of publications on the subject and the many topics which have been analysed already, the paper is particularly focused on “cross-cutting” issues: that is questions and factors which may help to understand the overall features of the politico-administrative responses designed and implemented internationally. Therefore, some papers from other fields, which touch on relevant policy or administrative aspects, have also been included.

The COVID-19 pandemic has been an everchanging crisis and scholars have tried to do their best in describing and analysing it. Many academic contributions have been published rapidly to make sense of this unfolding phenomenon. Thus, the empirical information upon which the theoretical propositions have been built have often focused on initial developments and not the whole three years which the pandemic lasted “officially” (according to the World Health Organization’s [WHO] statements; WHO, 2023). While looking at this body of literature has its limitations, it is useful to study the initial government responses both because the amount of analysis is substantive, and because they provide a good idea of how governments tried to cope with the crisis developing policies which in most cases created path dependencies (Yen et al., 2022:779), or were later adjusted on the margins.

The article is organized in four sections after this introduction. There is a brief account of how the pandemic came about. This is followed by a discussion about the differences in national governments’ policy mixes. The article then turns to an analysis of the most important factors which may help to understand why, despite facing the same complex problem (or set of problems), governments around the world implemented different responses. The final section discusses a few key lessons that governments could take into account to learn from these terrible years.

I. From an unknown virus to a complex pandemic

The story is well known but is worth recounting. On December 31 of 2019, the WHO reported the emergence of an unknown virus in the province of Wuhan, China, which seemed to cause severe cases of pneumonia (Stephenson and Withers, 2021:123; The Independent Panel, 2021). The “Severe Acute Respiratory Syndrome Coronavirus 2” (SARS-CoV-2) started spreading in China and, within weeks, the first case in another country was reported (in Thailand, on January 13, 2020). The virus produced a new

disease, the COVID-19, which was declared by the WHO a “public health emergency of international concern” on January 30, 2020, and a “global pandemic” on March 11, 2020. It would take three years for the WHO to officially declare the end of this “global health emergency” on May 5, 2023. By that date the official number of cumulative worldwide cases was 765,222,932. Also, according to official numbers, about seven million people had died from the disease, even though excess mortality information pointed at considerably higher fatality numbers.

The COVID-19 pandemic represented the biggest world crisis in recent decades. As “The Independent Panel” (established by the WHO to provide lessons and advice for future health crises) noted, the “COVID-19 is the 21st century’s Chernobyl moment—not because a disease outbreak is like a nuclear accident, but because it has shown so clearly the gravity of the threat to our health and well-being” (The Independent Panel, 2021:4). The pandemic was labelled a “mega-crisis” (Boin et al., 2021), as it not only had the usual attributes of a crisis (e.g. perception of threat, urgency, and high levels of uncertainty; Boin et al., 2021:5), but also had other significant attributes: it was a “transboundary” crises which posed significant challenges in health, educational, economic and many other social and policy fields (Capano et al., 2022).

For both national policymakers and international experts, coping with the COVID-19 pandemic was not a straightforward task for several reasons. To begin with the obvious, it was a new disease of an unknown nature, and thus it was not easy for any of them to understand what kind of problem (or problems) they were facing. On the one hand, it was apparently clear from the beginning that the virus was related to other “zoonotic diseases” behind recent epidemics, that is infections transmitted from animals to humans (Leach, 2021; The Independent Panel, 2021:19-20). On the other hand, Hu and Liu (2022:5) assert that, “The initial understanding of the COVID-19 virus was inadequate for defining the nature of the problem and figuring out effective ways to tackle it”. Indeed, the virus was so complex that even six months into the pandemic an official at the WHO’s regional office in Asia stated: “we are investigating the extent to which silent spreaders are contributing to COVID-19 transmission” (Kasai, 2020:1). Similarly, other authors flagged how “[t]he epidemiology of COVID-19 is constantly changing” (Tashiro and Saw, 2020:1), which made difficult to calculate how fast and through which mechanisms the virus spread. There were also other difficulties in determining how the virus could affect different populations (e.g. healthy people vs. immunocompromised, or children vs. elderly adults; Tashiro and Shaw, 2020).

In addition to these and many other “unknowns” regarding the virus, scientists and policymakers engaged in several debates about the potential costs and effectiveness of different policy tools. According to Capano and his colleagues (2020:285), “knowledge about the nature of the problem and the best ways to address it was particularly inadequate at the outset”. Because solid scientific evidence was lacking about many aspects, there was much discussion regarding the potential usefulness of various measures. A case in point was the use of masks, which initially was not deemed to be necessary (Greenhalgh et al., 2020). Yet as time passed and more evidence was gathered

about the transmission of the virus, more and more scientists recommended its use, at least as a “precautionary” measure. Indeed, by June 2020 the WHO finally advised the use of masks in public spaces when social distance was not an option. Similarly, there were some arguments inside governments about the potential use of lockdowns, as these could be highly damaging for national economies, as well as dangerous for people who did not live in safe homes (Leach et al., 2020:5). Thus, government responses necessarily had to face the limitations of scientific evidence (Lancaster et al., 2020), while at the same time they had to respond satisfactorily to near to impossible trade-offs among policy values related to public health, human rights, and economic activities.

Last but not least, it was difficult for government officials to know how people would react to both the virus and the policy measures enacted in response to the crisis (Leach, 2020). Beyond the obvious health risks, people also faced new family dynamics (e.g. some parents had to combine working from home with full-time childcare responsibilities). Other people were cut away from friends and families because of lockdown and other social distance mandates. Some faced salary cuts, unemployment, or much longer work shifts (e.g. health workers). Suddenly, people around the world faced all sources of anxiety. As McConnell and Stark (2021:1116) have stated, “[t]he objective impact of COVID-19, combined with the social-psychological trauma of the pandemic, have delivered effects that have previously been reserved for dystopian disaster movies”. All of this happened across societies with varying levels of trust in government (Capano et al., 2020:288; Suzuki and Sakuwa, 2021:56), which raised questions about potential levels of policy compliance and support among populations.

II. One pandemic, many responses

While governments around the world faced the same extraordinary crisis, their responses to the pandemic were not alike. In fact, McConnell and Stark (2021:1116) remark that there has been an “almost bewildering array of responses to a common threat”. Similarly, Tashiro and Shaw (2020:2) say that, “while the pandemic is global, the responses are local”. Indeed, leaving aside several commonalities which could be found across national examples, a detailed look into government responses to the COVID-19 pandemic ultimately shows an infinite variety of policy mixes (Dorlach 2023; Capano et al., 2020; Yen et al., 2022; Dong-Young, 2021; Ramírez et al., 2020; Cheung and van Thiel, 2023a; Hu and Liu, 2022).

The origins of such a diverse number of policy responses clearly lies in the point mentioned previously: the complexity of the problem (or set of problems) brought by the pandemic. Given the difficulty of understanding and reacting to the virus and its effects, governments necessarily had to develop an equally complex “policy mix” (Capano et al., 2022:292). As Table 1 below shows, there was an extensive list of policy tools from which countries “picked and chose” along the way to build their own policy responses.

These and other policy tools were incorporated by national governments in their response policies, but with important differences and nuances which were related to at

Table 1. Sample of policy tools used during the COVID-19 pandemic

<ul style="list-style-type: none"> • Testing • Tracing • Capacity building in the health sector • Hygiene and other information campaigns • General or target emergency subsidies • Business loans • Loan forgiveness • Tax deferrals or tax exemptions 	<ul style="list-style-type: none"> • Quarantines • Border controls • Travel restrictions • Mobility restrictions • Mass gathering restrictions • Lockdowns • <i>Jishuku</i> requests • School closures • Working hour closures • Online school classes • Teleworking • Vaccination
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least four types of logics. First, there were differences in terms of “policy density”, that is the number of tools which were included in the policy mix of national government responses (Knill and Tosun, 2020). Some countries simply decided to use more tools than others (e.g. more health measures, or a broader sum of health and economic measures; Yen et al., 2022). For instance, in a comprehensive study of social policy programs included as part of the government responses to the pandemic, Dorlach (2023:99) shows that, “welfare states in the Global South have used some policy instruments more than others in their pandemic responses”. Other studies found that the number of emergency economic support programs used by Latin American governments varied considerably (Cejudo et al., 2021; Blofield et al., 2023). A similar example can be found when looking at the use of lockdowns across Europe, a tool that Sweden decided not to use as part of its policy mix (Ludvigsson, 2023; Juul et al., 2022).

A second difference in the policy responses to the pandemic is related to “policy intensity” (Knill and Tosun, 2020), that is the degree, depth, or quantity in which policy tools are implemented. Here the differences were obvious both across and within regions. For instance, most Asian countries used test and tracing tools more intensively than Latin American countries or even European ones (Han et al., 2020). But even within the same Asian region, some countries like Taiwan and South Korea implemented test and tracing more actively than others like Japan (Moon et al., 2021). Similarly, while some Latin American countries implemented some kind of “lockdowns”, there were considerable differences in terms of both the duration and degree of enforcement of such measures (Sagripanti and Aguilano, 2022).

A third difference relates to the “combination of tools” each government decided to include in its own policy mix. In this case, partly depending on whether countries decided to pursue a “soft and passive” approach or a “hard and aggressive” one (see Moon, 2020:653), or a “suppression” or “mitigation” approach (Mukaigawara et al., 2022; Kodama et al., 2022), policy packages included different combinations. Many countries opted to broaden the scope of tools to be employed, mixing border controls, health

measures, and economic support programs. Others, like the Mexican government, opted for restricting its response to health measures, leaving aside the other two (Dussauge-Laguna, 2023). Of course, the policy mix also implied variations in terms of policy intensity, as two countries could perhaps use a mixture of health measures and border controls, but with a variety of intensity in each case (e.g. South Korea vs. Japan; Moon et al., 2021; Dong-Young, 2021).

Last but not least, national policy responses also differed “across time”. As Capano et al. (2022:4) have argued, the “coronavirus disease was a creeping crisis which evolved over time—indeed is still evolving”. As a result, how governments used some tools or others, with what intensity, and in which combination depended on the timing of the response in relation to the pandemic’s momentum (Jugl, 2022). For instance, Mukaigawara and colleagues (2022) note that the use of non-pharmaceutical interventions in some countries varied depending on the phase of pandemic and, particularly, the variant of the virus which was dominant at a certain time. While some countries decided to remove almost all restrictions when Omicron appeared, others continued with their “zero COVID-19” strategy (Mukaigawara et al., 2022:890). As Boin and colleagues (2020:4) have stated, governments faced “the challenge of reassessment: recalibrating the policy mix in light of the changing morphology of the crisis: making calls about which measures to retain, relax or discard”. Indeed, the evolution of the pandemic indicators across jurisdictions reflect, at least in part, how national governments were trying to cope and adjusting their responses to the pandemic based on the information they gathered about the disease, other international experiences, and their own country’s conditions (Summers et al., 2020).

III. Understanding varieties of policy responses

Why has there been such a variety of policy responses to the same pandemic across the world? This is, indeed, a complex question which many authors have tried to answer by shedding light on different politico-administrative factors (Capano et al., 2020; Jugl, 2022; Dong-Young, 2021; Ramírez et al., 2020). There has been a whole range of variables under study, with authors pursuing also different research designs to either focus on a nation, a few cases, many international cases, or one region (e.g. Europe). While some authors have persuasively showed that a given factor had an important influence in determining the contents of a policy mix (and perhaps even the outcomes of such policy response), the truth is that for such a complex crisis it would be very difficult to say that one can find a “silver bullet” kind of explanation. In fact, even the idea of exploring a combination of factors (either through regression analysis of some kind or through qualitative comparative analysis methods) should perhaps be seen with a grain of salt, given the multiple issues involved in understanding how countries reacted to the crisis and how successful they were in their responses across time. As Dong-Young (2021:16) has put it, “Countries heralded as very successful in handling with the pandemic at the early phase of the pandemic turned out to be less so or even disastrous at later stages

[...] On the other hand, countries with less successful responses from the beginning of the pandemic proved reasonably successful in turning around outbreaks”.

Despite the previous caveats, a discussion of the factors which have been flagged in the academic literature on pandemic responses may be helpful for at least two reasons: first, to focus on a few key aspects which help assess national experiences in more detail; second, to better understand how each factor may exert influence in coping with a crisis, and thus in informing future government preparedness. Thus, a review of these factors may contribute to discuss how and why governments developed their policy mixes in one way or another, and to think about how such factors may be taken into account in the future.

There is not, of course, a standard list of institutional, policy, or administrative factors to include or ignore. Different authors focus on different topics according to their own research interests or areas of expertise. For instance, Tashiro and Shaw (2020:2) state that: “The specific response against COVID-19 depends on the country’s governance system, regulations/constitutional provision, capacity, the robustness of its health system, and, more importantly, culture and citizens’ behaviour”. Others have focused on administrative capacity (Jugl, 2022; Yen et al., 2022), or the role of leadership (Wilson, 2020); some others have flagged the relevance of ideology or fiscal capacity (Dorlach, 2023), or of political institutions (Greer et al., 2020). Therefore, the selection included here is discretionary to some extent, but in being so it does not differ much from previous works. More importantly, the selection is not random but grounded in both academic articles and international reports, including overviews which have analysed the links between Public Policy and Administration and the COVID-19 pandemic (Weible et al., 2020; Dunlop et al., 2020; McConnell and Stark, 2021). Thus, while the following paragraphs do not provide an exhaustive list of factors, nor do they analyse each one in detail, they seek to show why these have been considered relevant in trying to understand national policy mixes in response to the pandemic.

1. Existing National Conditions

The first factor that constrained (at least to some extent) which policy response was developed in each country was, obviously, the set of existing social, geographical, and administrative conditions. As discussed in the literature, there are many important factors that politicians and policymakers cannot change in the short term. These include relevant aspects about each country’s population, such as its size, geographical distribution, age structure (e.g. proportion of elderly versus younger people), and health conditions (e.g. percentage of people with obesity, diabetes, etc.). Similarly, national governments could not transform overnight the state and reach of their health services, including the number of hospitals and intensive care units, the specialities of medical personnel, etc. The kind of economic activities that predominate in each country are also structurally conditioned (e.g. tourism, agriculture, services). Lastly, each country’s geographical location also matters in terms of which are the neighbouring countries, whether the country is an island or not, etc.

These national features certainly constrained the departing point of national governments when elaborating their response policies, but that does not mean they necessarily play a deterministic role. For instance, most countries do seem to have prioritised vulnerable populations when vaccination started, yet it is unclear the extent to which they paid the same attention to those groups during the initial months of the pandemic. A recent analysis has suggested, for example, that in Sweden care for the elderly arrived “too little too late” (Ludvigsson, 2023:21). Countries with particular geographic conditions (e.g. islands) like Taiwan, New Zealand, and Iceland did recur to border restrictions, although the policy details for each national case varied significantly (Moon et al., 2021; Grout et al., 2023). Similarly, some national governments devised strategies to quickly build capacity across their limited health systems (e.g. Japan), while others basically opted for merely avoiding hospital saturation (e.g. Mexico; Dussauge-Laguna, 2023).

2. Administrative traditions

A related but different factor that is thought to have exerted some influence on the making of national responses is the “administrative tradition” of each country, that is the historical patterns that structure administrative behaviours within the state, as well as exchanges between the latter and other actors (Peters, 2021). For instance, Jugl (2022) finds some evidence about how countries with a more hierarchical administrative tradition (e.g. Napoleonic or Germanic) introduced measures like mandatory closures more quickly than countries from a different tradition. Similarly, Lu and colleagues’ (2020:852) study of the Asian region found that, “well-organized planning and implementation, the early and quick response to virus outbreak, the effective dissemination of information, public support and fully compliance with government’s measures played significant roles in weathering COVID-19 storms”.

However, the empirical experience also shows that countries within the same administrative tradition in many cases followed alternative paths when reacting to the pandemic. For instance, New Zealand’s “elimination” approach could not find a starker contrast than that of the United Kingdom’s initial “herd-immunity approach” (Boin et al., 2020:7). There have been further differences in policy mixes between those two countries (e.g. border controls), as well as among other nations usually included in the “Anglo-American” or “Anglo-Saxon” administrative tradition (e.g. Canada, Australia, United States). Among Asian countries, Chen et al. (2021) found that their national governments implemented different containment strategies. In the case of Latin America, countries deemed to be similar in both socioeconomic conditions and administrative traditions, such as Brazil and Mexico, pursued rather different policies for mitigating the social effects of the pandemic in terms of inequality and poverty (Lustig and Trasberg, 2021).

3. Administrative and institutional capacities

The administrative infrastructure (both governmentwide and in the health policy sector in particular) that countries had in place was clearly a factor that influenced the design

of government responses and the effectiveness of implemented measures (Jugl, 2022). For instance, Yen and colleagues (2022:778) argue that “more-capable states initiated their crisis response faster and mobilized national resources more extensively when the virus risk level was still low”. They also show that “high-capacity states utilize more diverse and complex policy tools” and are more able to “escalate their crisis response to build upon the existing setup”. Similarly, Cejudo and coauthors (2020:7) argue that if governments wanted to provide support to their populations, the kind of administrative capacities available to them (including, among other things, well-functioning information systems about target populations) was essential for securing (or not) outreach and effective implementation. Indeed, much has been said about the installed capacities of countries like Taiwan and South Korea, which allowed them to keep the pandemic to some extent under control, thus minimising human suffering (An and Tang, 2020; Moon, 2020).

While it would be impossible to deny the relevance that administrative capacities (particularly in the health sector) played in the making and subsequent performance of policy responses, there have also been national examples which suggest capacities alone are not enough to explain national reactions (The Independent Panel, 2021:19). Perhaps the clearest cases are those of the United States and Brazil. Despite having extensive emergency preparedness plans and scientific expertise at hand, the American government’s initial response under Trump was mostly failed (Kavanagh and Singh, 2020; Rutledge, 2020). Similarly, while it has been historically considered one of the most capable states in the Latin American region, the Brazilian government’s response to the pandemic under Bolsonaro was a hugely defective one (Peci et al., 2023; Lasco, 2020).

4. Political regimes a): democracies, autocracies, populisms

One of the most controversial debates surrounding government responses to the COVID-19 pandemic has been about the influence exerted by different political regimes (Greer et al., 2020; Cafruny and Talani, 2023; Cepaluni et al., 2021). In the face of an unknown virus, the rapid responses of authoritarian countries through strict lockdowns, some even recurring to coercion (e.g. China or Vietnam; Dong-Young, 2021), seemed to be much more effective than the timid responses of established democracies such as the United Kingdom or the United States (Kavanagh and Singh, 2020). For their part, the populist nature of certain national governments also affected their policy mixes, as some political leaders disregarded scientific advice and carried on with their political activities (Lasco, 2020; Ringe and Rennó, 2023; Bayerlein et al., 2021)

The relationships between political regimes and pandemic responses (and their effectiveness) have, nonetheless, been more complicated than initially expected. As Cheung and van Thiel (2023:15) argue, “Crisis performance is not a matter of regime type in this pandemic [...]: Some democracies have performed well, but others have not, and the same is true for autocracies”. Even within both groups of cases things have evolved across time in contrasting ways: China faced a spiral of contagions in 2022, while the United States gained more control over the pandemic from 2021 thanks to an

active vaccination campaign.

There has also been a variety of policy mixes and social outcomes among populist governments. On the one hand, populists like Bolsonaro in Brazil, Trump in the US, and López-Obrador in México underestimated the gravity of the virus and pursued a rather relaxed approach to facing the pandemic (Lasco, 2020; Rentería and Arellano, 2021). On the other hand, a few populist governments did seem to have followed most policy tools recommended by the WHO, which were the same used by democratic regimes (Ringe and Rennó, 2023).

5. Political regimes b): federalist vs. centralist

The overall governance structure of a country, that is whether a country is based on a federalist or a centralist political system, has also been discussed in the literature as a question that heavily influenced national policy responses (Chattopadhyay et al., 2022; Peters et al., 2021). For some authors, federalism meant increased difficulties for managing the response, as intergovernmental coordination issues emerged between the federal (national) government and subnational (state) governments (Dong-Young, 2021). Moreover, the existence of federal regimes implied that subnational governments could develop their own measures, in accordance with their own conditions and at their own times, thus further complicating the implementation of coordinated nationwide actions (Cejudo et al., 2020). On the contrary, in some cases, like New Zealand, the unitary and centralised nature of the country's political system seems to have facilitated a quick and effective response (Boin et al., 2020:10).

The influence of the federalist/centralist government factor on government responses to the pandemic has been, however, more complex. For instance, Cyr and her colleagues (2021:292) state that “neither federal nor unitary systems have a clear advantage when it comes to reducing COVID-19 mortality rates”. Indeed, there are countries of a centralized nature which nonetheless have highly decentralised decision-making powers on health policy issues (e.g. United Kingdom, Spain, Japan, Italy). This has implied that central governments could mandate certain measures, but also had to listen, negotiate, and coordinate decisions with subnational entities (Chattopadhyay et al., 2022). In other cases, such as in Germany's federalism, there seems to have been some kind of “intergovernmental centralism” to pursue a more coordinated strategy (Dong-Young, 2021). In some other federal systems (e.g. Argentina, Austria), “the federal government played an important role as facilitator and coordinator for marshalling scarce resources to deal with the immediate health emergency and subsequent socioeconomic fallout of the pandemic” (Chattopadhyay et al., 2022:285). In contrast, in countries like Mexico the federal government basically neglected its coordinating role; subnational governments thus mostly had to cope with the pandemic according to their own needs and means (Flamand et al., 2021; Knaul et al., 2021; Hernández and Martínez, 2021).

6. Leadership

One factor that has implicitly appeared both in the previous paragraphs and in the

specialised literature is that of leadership. In an era in which families were isolated and mostly limited their daily lives to their “bubbles”, social attention was focused on getting the latest news about the pandemic. People were eager to learn about how to carry on, thus making the role of leaders particularly relevant. As it usually occurs in times of crisis (Boin and Lodge, 2021), Presidents and Prime Ministers around the world gained a prominent role not only as decision-makers (e.g. guiding the formulation of each government’s policy responses), but also as chief communicators and role models. The pandemic offered some clear examples of how different leadership styles may influence both policy responses and policy outcomes. At one extreme, President Donald Trump displayed all the attributes of a defective leadership style (Rutledge, 2020). He refused to follow the advice of scientific experts, spread conspiracy theories and misinformation about the virus, recommended drugs without any scientific evidence, undermined the institutional resources of health bureaucracies, and continuously denied the severity of the crisis (Lasco, 2020). At the other extreme, Prime Minister Jacinda Ardern of New Zealand played an essential role in both designing and implementing her country’s effective policy response. She skilfully developed a shared mission, tapped into “the best available science and health advice” (Wilson, 2020: 280), provided credible and timely information to the public, used a recognisable “core branding” (“Unite against COVID-19”; Wilson, 2020:284), and provided difficult messages to the people in an empathic way (Wilson, 2020:286).

While these and other cases (e.g. Bolsonaro in Brazil, or López-Obrador in México; Peci et al., 2023) have shown that leadership (or actually the lack of it) matters for crises responses, it remains unclear the extent to which leaders determine both the contents of policy mixes and the results these achieve. For instance, Wilson (2020:280) and Nakamura et al. (2023) see the late Prime Minister Shinzo Abe as an example of poor leadership. Indeed, neither him nor his successors Yoshihide Suga and Fumio Kishida seem to have performed a remarkable role in leading their countries during the pandemic. Yet Japan still managed to develop a relatively effective policy response (Lipscy, 2022), thanks (not only, but certainly in good measure) to the actions of its national bureaucratic apparatus and responsible social behaviour (Dussauge-Laguna, 2023).

7. Learning

The role of learning on its various forms has been pointed out as an important factor that influenced the design of government responses to the pandemic. A first kind of learning, drawing lessons from previous experience (Capano et al., 2020:298), seems to have played a highly relevant role in some Asian countries. For instance, Moon (2020:652) shows how the South Korean government learned from its previous experience with the MERS epidemic in 2015. The country built an autonomous Korean Centre for Disease Control, increased the number of epidemiological surveys, and promoted infectious disease research, all of which provided a valuable infrastructure to face the COVID-19 crisis. A second kind of learning relates to how countries observed what

was happening elsewhere and borrowed ideas or programs. In this case, Maze and Richardson (2020) remark that the New Zealand government was particularly eager in looking at pandemic developments in other countries, both near (e.g. Taiwan) and far (e.g. Italy), when preparing its own crisis response. Lastly, some governments also seem to have learned from their own process of managing the pandemic throughout time. Strategies were adjusted, tools were recalibrated, and policymakers tried to incorporate new information about the disease when making decisions (Mukaigawara et al., 2022).

As in the case of the other factors, learning is key to understanding government responses, yet it remains unclear how much it has influenced (or not) each one of those responses. For instance, Mistur and colleagues (2023:3) have found that, “the emulation of peer countries, particularly neighbouring countries and countries that have similar political systems or languages, drives policy adoption for COVID-19 social distancing policies”. But despite their common histories and connections, Latin American governments did not necessarily look at each other, and actually developed a variety of responses (Cejudo et al., 2021; Blofield et al., 2023). This happened even in areas such as social distancing between neighbouring countries like Argentina and Uruguay (Sagripani and Aquilano, 2022). In other cases, despite having passed through relevant experiences, some governments deliberately decided to focus on “negative lessons” (e.g. they assumed government responses to previous experiences had not been adequate, and thus decided not to follow a similar policy). That was the case of the Mexican government, whose President argued the country had exaggerated its precautionary measures when facing the H1N1 epidemic in 2009 (e.g. the use of masks and the closing of public spaces), and thus decided to implement a different policy.

8. Science and policy relationships

Yet another factor that helps explain how national responses were designed is the way relationships between public officials and scientists are structured in each nation. Given the nature of the crisis, almost all national governments developed close relationships with scientific experts, with many even introducing some form of expert panels to gather scientific information on a regular basis. The UK, for instance, established the “Scientific Advisory Group for Emergency” (SAGE) which included experts from a variety of fields (Cairney, 2021). The case of Sweden was also widely known around the world for giving scientists a strong influence in the government decisions regarding how to cope with the COVID-19 pandemic, which included the idea of maintaining most activities open throughout 2020 while many other countries were entering lockdowns (Dong-Young, 2021). Other countries like Japan and New Zealand also sought information and advice from scientific experts on a regular basis (Dussauge-Laguna, 2023).

However, the relationship between science and policymaking, and the way they influenced pandemic response decisions, has also been debated. One issue is that, as with the case of many scientific topics (McConnell and Stark, 2021), experts have not always agreed upon which evidence to trust, what policy measures to recommend, etc.

In the UK, for instance, the government followed scientific advice “continuously to inform COVID-19 policy” (Cairney, 2021:2), but there were criticisms regarding the lack of engagement of external experts as well as about the politicisation of the scientific advice provided by the SAGE members. In Japan, the role played by scientists was also under scrutiny as they sometimes seemed to play the role of government spokespeople, rather than that of independent experts (Nakamura et al., 2023). In the case of Brazil, there were some organized groups of medical experts that actually endorsed Bolsonaro’s denialist approach to the pandemic (von Bülow and Abers, 2022).

IV. Lessons (to be) learned

While the previous sections show the complexities that lie beneath government responses the COVID-19 pandemic, both in terms of understanding the design and assessing the potential effectiveness of national policies, the literature has also provided some useful ideas about lessons that countries could draw from these years. There are many papers that go into detailed health policy aspects which go beyond the scope of this article (e.g. “back casting to identify gaps and steer resources to future health needs like genetic sequencing”; Kasai, 2020:2). Others suggest important ideas that nonetheless could apply to basically any crisis (e.g. “the pandemic poses the challenge for governments to balance demands for accountability and learning”; Cheung and van Thiel, 2023b:6). However, in between these extremes it is possible to focus the attention on some tentative lessons around the following four topics (see also The Independent Panel, 2021).

1. Pandemic institutional preparedness

As Kvalsvig and Baker (2021: s162) state, “The COVID-19 crisis is a stark reminder of the need to invest in pandemic planning and the associated infrastructure”. Indeed, as it was discussed above, most countries that had invested in refining their epidemic preparedness plans and had developed an institutional infrastructure to face potential crisis could react more rapidly and effectively when the COVID-19 pandemic hit the world (Moon, 2020; An and Tang, 2020). Moreover, it has been shown that the costs associated with any preparedness capacity building exercise will most certainly be lower than the costs countries need to face when an epidemic or pandemic actually happens (The Independent Panel, 2021:17).

Investing in national and subnational pandemic response infrastructure has thus been flagged as the first and most important lesson to be learned. These efforts should follow at least three lines. First, the review and redesign of emergency preparedness plans in such a way that countries have a clear path of action whenever needed. This, however, should be done in a manner that countries may adapt their responses depending on the kind of disease they are facing. For instance, Summers and colleagues (2020:4) remark that, “Taiwan’s pandemic response was largely mapped out through extensive planning as a result of the SARS pandemic in 2003, and was developed in such a way

that it could be adapted to new pathogens”. Each epidemic has been different from the previous one, and thus plans should be designed on the premise that they will need to be adopted depending on the information available about a new disease (Mukaigawara et al., 2022; Kvalsvig and Baker, 2021).

A second line of action is to develop response capacities across various sectors and levels, both within government and in partnership with other actors. This has at least three dimensions. As The Independent Panel (2021:21) has argued, “Pandemic preparedness planning is a core function of governments [...]. It is not a responsibility of the health sector alone.” Therefore, plans and capacities should be built across various government areas. Indeed, as the COVID-19 pandemic has shown, future health crises may also affect education, international mobility, local transportation, etc. Thus, pandemic preparedness capacity building should be done embedded in a governmentwide logic. The case of South Korea has shown, for instance, how crisis response is easier when the central government has the chance to recur to a “network” of actors for conducting certain activities (e.g. test and tracing; Moon, 2020:653). Therefore, while central governments should take the lead in strengthening its capacities, they should also aim to partner with other levels of government, as well as with relevant external actors (e.g. private hospitals, medical associations, research centres) to develop a collaborative pandemic preparedness environment. Last but not least, capacity building should include detailed actions to train and secure qualified personnel is available when needed, as well as to develop and incorporate appropriate technology for each one of the pandemic response areas (Summers et al., 2020; Gorman and Horn, 2020).

The third line of action implies designing and implementing an adequate institutional infrastructure for pandemic preparedness and emergency response. The example of Asian countries (e.g. Taiwan’s Centre for Disease Control) has been commonly cited to suggest the introduction of similar agencies elsewhere. In some cases, authors have argued for developing “stronger public health agencies” (Baker et al., 2020:3). Depending on its own institutional conditions, countries will need to either establish or reinforce existing crisis response areas. Legal authorities to act independently, stable funding to conduct research activities, hiring and retention authorities for securing prepared workforce, and adequate channels for communicating and engaging with relevant decision-making actors and institutions governmentwide should be provided to any agency or set of agencies involved in pandemic response.

2. Coordination and communication strategies

Several analyses have also underlined the relevance that effective coordination and communication have had for responding to the COVID-19 pandemic. As studies on the federalist/centralist responses to the pandemic have shown (Peters et al., 2021; Chattopadhyay et al., 2021), intergovernmental coordination has been the key issue for all national governments regardless of their countries’ regime structure. Similarly, authors have noted that an effective communication strategy was key for “ensuring people understand and trust the messages conveyed by the government to keep the

public safe” (Jamieson, 2021:602), as well as helpful to contain the damage caused by misinformation (Hyland-Wood et al., 2021).

While the presence of good leadership (e.g. someone like former Primer Minister Jacinda Ardern) is very helpful, not all governments can have the luxury of being guided in such an exemplary way during a crisis. Therefore, national governments should revise their coordination procedures, particularly checking for those underlaps, overlaps, or blind spots (Bach and Wegrich, 2019) that negatively affected their responses to the COVID-19 pandemic. Coordination and stewardship from the centre are essential, as the head of state or government is “uniquely positioned to provide inter-sectoral leadership” (Knaul et al., 2021:6). Revised coordination schemes should be produced to secure that national governments can both communicate adequately with subnational ones, and are able to lead joint actions. National governments should also be capable to coordinate and secure support from relevant private and social actors at the subnational level. At the same time, central governments should have in place a good communications team which may help them devise effective communication strategies that update the people on relevant policies (Hu and Liu, 2022), and help government leaders provide clear and tailored messages to each one of the relevant target publics (Hyland et al., 2021).

3. Comprehensive and tailored policy mixes

One of the key lessons to be drawn from the pandemic is that, to face such complex problems, governments need to design and implement equally complex policy mixes. Therefore, while it may only be possible to know the specific contents of such policies once the next crisis or pandemic arrives, it is already clear that government responses will need to have at least two basic qualities. First, policy mixes will need to be “comprehensive” (see, for instance, Sánchez-Talanquer et al., 2021:117; Baker et al., 2020). This means that government responses taking into account only one aspect (e.g. health measures which are not accompanied by economic measures, or the other way around) will not suffice. Nor will it be enough to develop emergency packages focused on one part of the policy, but not its complementary elements or implementing aspects (e.g. increasing income without taking into account the existence of timely information-gathering mechanisms, e.g. Cejudo et al., 2020). Governments will thus need to take a comprehensive look to cover, as much as possible, “all bases” and put in place effective policy mixes.

Second, the design of policy responses will need to be “tailored” to have better social results. The COVID-19 pandemic has affected the whole world, but not everyone has faced the same challenges or impacts. Thus, many authors have flagged the need to develop specific policy measures to take care of each social group (Mukaigawara et al., 2022). For instance, the need to take priority and extra care of vulnerable groups such as the elderly or the immunocompromised has been fairly noted during the current crisis. This should also be considered for future ones. Similarly, the case has been made regarding the need to somehow compensate health workers, who “have

suffered from stress, anxiety, burnout, depression, insomnia and other mental and physical health consequences, both from the risk of infection and from an increased workload” (Mukaigawara et al., 2022:896). But beyond these important social groups, future pandemic response policies should also be tailored to suit the needs of other affected groups: parents that must combine work and care responsibilities; infants that lose their parents because of the crisis; teachers that require additional training or materials to temporarily cope with different teaching environments; immigrants that get caught in transit to their countries; etc.

4. Learning dynamics

According to Boin and colleagues (2020:6), “If there is one lesson public administration researchers may take away from COVID-19, it is the need to learn in an unbiased and unimpeded way from crises and disasters”. Indeed, one of the key topics that cuts across most discussions about the pandemic, in one way or another, is the one regarding learning. On the one hand, some authors have noted how politicians and policymakers have failed to learn from previous epidemics (Leach et al., 2020; The Independent Panel, 2021). On the other hand, the experience of some countries has also shown that learning is both possible and desirable. One important action is to form a commission to study and draw lessons from the recent experience. The South Korean government, for instance, conducted a detailed analysis of the MERS epidemic of 2015; this provided valuable lessons and triggered institutional and policy changes which were key for the government’s quick response to the COVID-19 pandemic (Moon, 2020). Also, it has been mentioned above how the New Zealand government kept looking to other countries while preparing its own policy mix (Mazey and Richardson, 2020).

There are many ways in which governments could and should learn (from previous epidemics, from the COVID-19 pandemic, and from future ones). Task forces or special committees could be established to assess what worked and what did not in the design and implementation of the national response. Literature reviews by researchers in emergency preparedness institutions could be carried out to learn from past epidemics and pandemics (Kvalsvig and Baker, 2021). Study tours could be organized to learn from other nation’s experiences, including both an analysis of previous mistakes and effective measures. More broadly, public organizations should embed certain mechanisms to be ready to seek advice from external experts, revise its own strategies, look at international experiences and, overall, be capable to inform and adjust its crisis responses as needed. In the end, national governments will need to learn how to prepare in advance and “be much more anticipatory rather than reactive” (Mazey and Richardson, 2020:566).

V. Conclusions

This article has explored some of the key public policy and administration topics surrounding the COVID-19 pandemic. After providing an overview of the emergence of the crisis, the article has briefly analysed the complexities faced by national

governments to respond to the pandemic; the various reasons why despite facing a similar crisis each country seems to have chosen to implement different policy mixes; and some general lessons which are being produced on the experience of the past three years. While not exhaustive, the discussion has touched on several cross-cutting issues that have appeared in the vast literature on how governments around the world responded to the crisis.

In the face of the same “transboundary” and “creeping” “mega-crisis”, national governments designed and implemented policies that varied widely in density (e.g. number of tools), intensity (e.g. specific calibrations for each tool), and across time. Different departing conditions and administrative traditions, as well as different institutional, political, policy, and administrative factors have all been identified as key variables for both understanding such variation and explaining levels of success in coping with the pandemic. Unfortunately, and despite the several interesting discussions already provided by the literature, we are still far away from accomplishing either of those objectives.

The WHO’s official declaration about the end of the pandemic, preceded by the very fortunate development and distribution of several effective vaccines against COVID-19, has signalled that the worst is most probably over. However, it would be erroneous (or even dangerous) to think that nothing really happened, or that we are back in “normal” pre-COVID-19 times. The true costs of those three years of pandemic remain unclear in several areas, such as education, economic development, mental health, etc. Furthermore, many things are still unknown about the so-called “long-covid” effects, while at the same time new variants of the virus are constantly emerging. In the forthcoming years, we will thus need more detailed analyses to clearly understand what happened and how public policy and administration factors and strategies matter for responding to (and bouncing back from) pandemics.

Conflict of Interests

The author declares no conflict of interest.

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