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DISASTER MANAGEMENT AND MITIGATION INSTRUMENTS USED IN BRAZIL IN RESPONSE TO THE COVID-19 PANDEMIC

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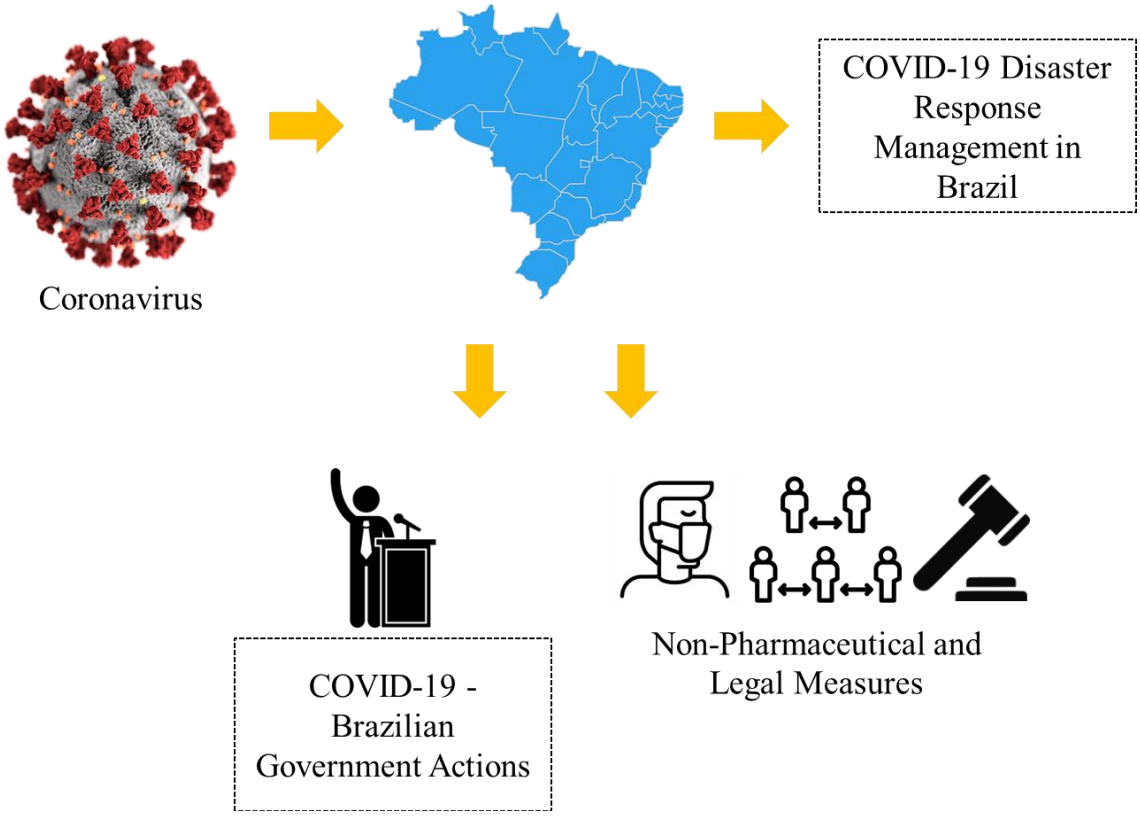
GRAPHICAL ABSTRACT



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Abstract: The seriousness and severity of the COVID-19 pandemic required high quality decision-making and quick, positive actions by different levels of government in Brazil and in other countries. The question is: How did the Brazilian government respond to the crisis caused by COVID-19 pandemic? We explored the theoretical context of the pandemic by using the Sendai framework, to analyze the quantitative aspects of the disease. The analysis was performed as an analytical, descriptive, and systematic study, using bibliographic research covering the period from Jan. 2020 to Apr. 2021. We used the process-tracing method. Brazil reported the first case of COVID-19 in South America, on Feb. 26. Since then, there has been an accelerated spread of the disease in South America. The Brazilian government's responses to the pandemic were characterized by intergovernmental incoordination, caused by the lack of leadership from the federal government, resulting in increased losses in human lives.

Keywords: Disaster management. Mitigation Instruments. Collaborative governance. Governmental actions. Brazilian response to COVID-19.

1 Introduction

Since ancient times, humanity has gone through different disasters, which made them integral to human life. In general, disasters were regional or local and only affected the people of a given geographical region.

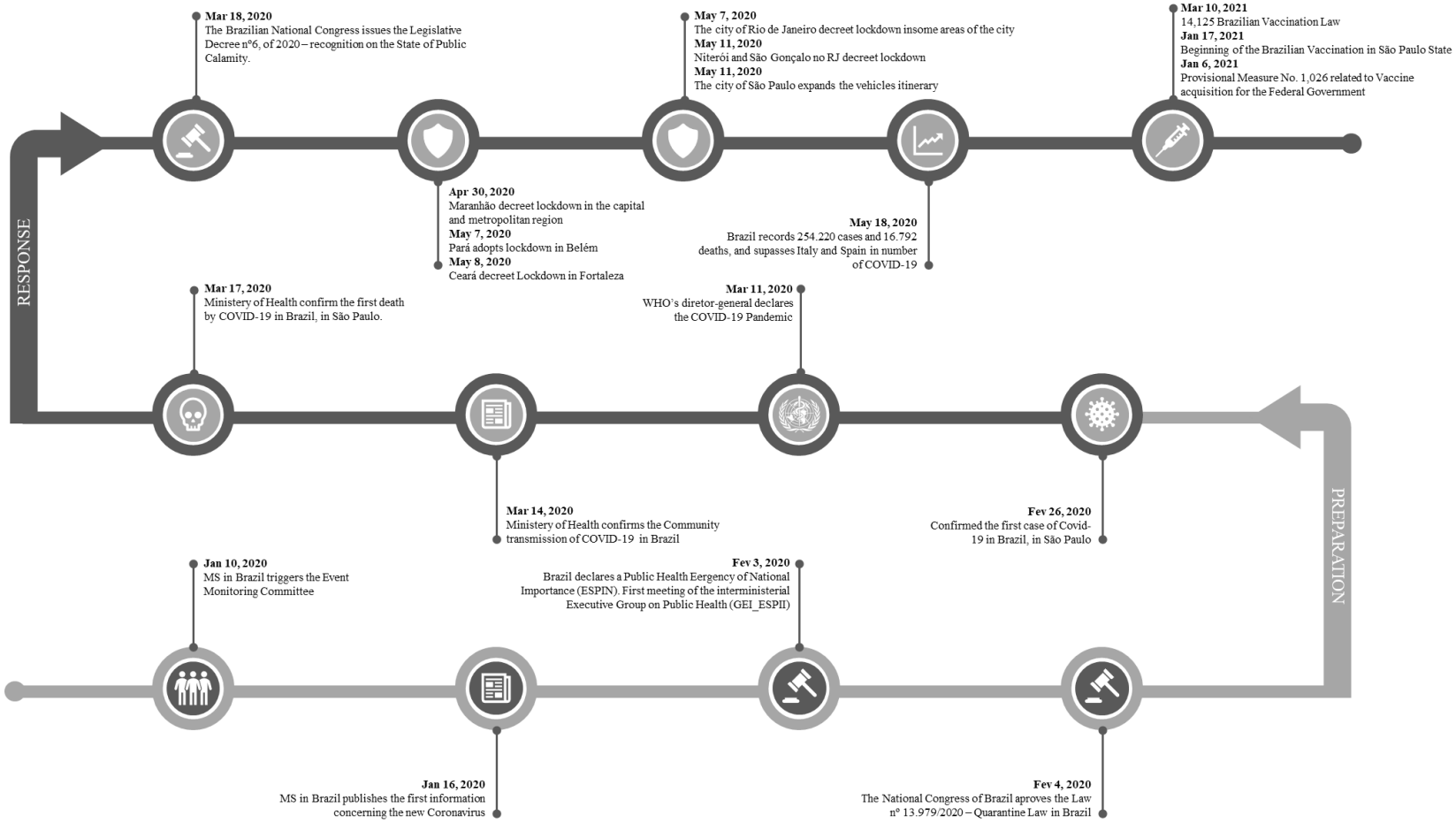
However, there were biological disasters transmitted by viruses, bacteria, parasites, fungi, and insects which caused diseases with serious consequences due to rapid and mass transmission, that became 'pandemic-in-scope'. Those pandemics challenged the geopolitical and geo-economic systems to respond properly and effectively because the pandemics spread rapidly, globally.

The seriousness and severity of the COVID-19 pandemic required high quality decision-making and quick, positive actions by different levels of government in Brazil and in other countries. The question is: How did the Brazilian government respond to the crisis caused by COVID-19 pandemic?

Brazil reported the first case of COVID-19 in South America, on Feb. 26, 2020, according to the Epidemiological Bulletin 05, from the Emergency Operations Center, of the Brazilian Ministry of Health (Ministério da Saúde, 2020e). Subsequently, it rapidly spread throughout the country, which required that the government, at all levels, needed to take decisions and to act quickly. Figure 1 shows the measures initially adopted in Brazil according to the phases of the pandemic disaster cycle.

Figure 1

Timeline of COVID-19' spread in the World and in Brazil, and the adoption of measures until Apr. 2021



Source: Autores, 2020.
Data obtained: WHO. Situation Report; MINISTÉRIO DA SAÚDE; ELSEVIER. SAFETY SCIENCE. BRUIN, Y. B. de ET AL. Initial impacts of global risk mitigation measures taken during the combatting of the COVID-19 pandemic; ACAPS - COVID-19 - Governments measures - 12.05.2020; ACAPS – COVID-19 – Government measures – 26.mar.2020; ACAPS – COVID-19 – Governament measures – Report 1 – 12.mar.2020; ELSEVIER. PDISAS – DJALANTE, R. et al. Building resilience against biological hazards; WHO; WHE, IHM. Guia sobre la Gestión de riesgos ante pandemia.

As of Apr. 11, 2021, Brazilian medical authorities reported 13,373,174 confirmed cases and 348,718 deaths (World Health Organization, 2021).

After WHO (World Health Organization) declared COVID-19 a global pandemic, worldwide governments took measures to curb the spread of the virus, locally and between countries, which included preparedness, mitigation and response measures for international public health emergencies (The Assessment Capacities Project, 2020).

The main non-pharmaceutical measures adopted by countries, which are in accordance with WHO guidelines to contain pandemics: Mobility Restriction, Public Health Measures, Socioeconomic measures, Social Distancing, and Lockdown, according to The Assessment Capacities Project – ACAPS (The Assessment Capacities Project, 2020).

In the case of Social Distancing Measures (MDS)-according to the National Contingency Plan for Human Infection with the New Coronavirus COVID – 19 - studies showed that, when correctly applied, they reduced the transmission speed of the virus and helped the country to manage to structure and to provide proper support for their health care networks. These measures included provision of beds, respirators, personal protective equipment and professionals, in sufficient numbers to be able to care for the increased numbers of patients and to guarantee access and provision of care to them while avoiding the discontinuity of provision of other priority and emergency health services (Ministério da Saúde, 2020h).

These measures have been adopted since the occurrence of the Spanish flu of 1918 and were introduced from the mid-twentieth century, with WHO approval, as being the most appropriate, as long as there is no proof of the effectiveness of pharmaceutical-based interventions. Such measures were previously applied in the H1N1 pandemic and were also recommended for usage in case of the COVID-19 pandemic (Markel et al., 2007).

The quick spreading of a pandemic was revealed with the global outbreak of COVID-19. The World Health Organization (WHO) declared the new coronavirus as a pandemic on Mar. 11, 2020. It emphasized the urgent need for countries to work to develop joint efforts to tackle and minimize the threat of the international spread of the disease (The Assessment Capacities Project, 2020; World Health Organization, 2020c).

To assess the magnitude and impacts of a pandemic, three different scenarios can be used: (1) the optimistic scenario, with a relatively low level of transmissibility and morbidity/mortality and effectiveness treatment; (2) the intermediate scenario; and (3) the pessimistic one, with a high rate of transmissibility and morbidity/mortality and low effectiveness of treatments (Ministério da Saúde, 2010). Pandemics are associated with excess mortality and social, economic, political and cultural disruption. But, on the other hand, one can see it as an opportunity for transformation and scientific development.

In view of technical and scientific studies, which documented the rapidity with which the virus advanced and spread in China, as well as the documentation of cases of COVID-19, among humans, in other countries in Asia and Europe, WHO declared the outbreak of the new coronavirus, a Public Health Emergency of International Importance (ESPII). As stated by art. 12, this was an extraordinary event, which constituted a risk to the public health of other states, due to the international spread of a disease which required a coordinated international response, as maintained by the International Health Regulations (World Health Organization, 2016) - updated in 2016 that was ratified in Brazil, by the National Congress, through Decree No. 395/2009 (Congresso Nacional, 2009).

Due to the severity and rapid expansion of COVID-19 cases in several countries, in all continents and regions of the world, WHO characterized the disease at the pandemic level and established the Strategic Plan for Preparedness and Response COVID-19 (World Health Organization, 2020b).

2 Methodology

The authors explored the theoretical context of the pandemic by using the Sendai framework, to analyze the quantitative aspects of the disease, the response management and mitigation instruments. The authors performed an analytical, descriptive and systematic study, using bibliographic research, based on document analysis of journal article, books, and governmental reports.

Despite difficulties and challenges in obtaining accurate information, due to the novelty of the COVID-19 pandemic, as well as the unavailability and/or outdated information from Brazilian public agencies, data collection was performed with scientific rigor by consulting several recognized databases, such as:

- World Health Organization – WHO (World Health Organization, 2021; World Health Organization, 2020c; World Health Organization, 2016; (World Health Organization, 2020a),
- European Commission – WHO (World Health Organization, 2006),
- United Nations Office for Disaster Risk Reduction – UNDRR (United Nations Office for Disaster Risk Reduction, 2020),
- The Lancet (Anderson et al., 2020; Chu et al., 2020; Editorial, 2020; Nott, 2020; Prem et al., 2020; Sabino et al., 2021),
- Oswaldo Cruz Foundation – FIOCRUZ, Observatory COVID-19 (Fiocruz, 2020),
- Federal University of Pelotas – UFPEL (Universidade Federal de Pelotas, 2020),
- Ministry of Health (Ministério da Saúde, 2010; 2011; 2012; 2020a;b;c;d;e;f;g;i;j;k;l;m;n;o;p;q;r; Ministério da Saúde & Sistema Único de Saúde, 2021),

- State health secretariats of Brazilian governmental entities (Governo do Estado de São Paulo, 2020; Portal da Saúde, 2020; Governo do Pará, 2020; Governo do Estado do Ceará, 2020; Governo do Estado do Amazonas, 2020),
- National Council of Health Secretariats – CONASS (Conselho Nacional de Secretarias de Saúde, 2020),
- Imperial College London (Imperial College London, 2020).

The study adapted the Process Tracing, and the data collection took place through official documents, assessing the impacts and consequences of the actions that culminated in the dissemination of COVID-19 in Brazil, as well as the facts that contributed to the management of the pandemic disaster in the administrative political structure within the scope federal.

Based on Process Tracing, analysis of a single case - the COVID-19 pandemic in Brazil - to examine which public policies adopted failed and not. Process tracing allows us to infer and test the explanation of how the resources and strategies used by the Brazilian federal government affected efforts to deal with the COVID-19 pandemic (George & McKeown, 1985).

It is a qualitative method capable of reconstructing a sequence of events still in progress (Beach & Pedersen, 2013). The narrative of circumstances and documents is the resource to analyze an ongoing phenomenon, as it allows to understand the responses to the pandemic, adopted by the federal government (Abrucio et al., 2020).

Thus, a documentary analysis was carried out (laws of the federal government, states and municipalities and reports from health entities, such as WHO and the Ministry of Health of Brazil), as well as reports, following the steps of the legislation, with an outline temporal (Jan. 2020 to Apr. 2021). According to Abrucio et. al (Abrucio et al., 2020) the reference to the content covered in the press would lose its explanatory capacity without the historical-narrative reference, which presents the trajectory of measures of the federal government, of some world and Brazilian organs, during the pandemic.

Process Tracing was effective in highlighting the causality between the facts and the changes in public policy actions, which took place in the period under study.

3 Theoretical Framework

3.1 The pandemic from the point of view of a disaster and the Sendai framework

As in other types of disasters, in biological pandemic disasters, the phases of prevention, planning and risk reduction are essential, to effectively protect people, communities, countries, reduce the exposure of the most vulnerable groups and strengthen its resilience (United Nations Office for Disaster Risk Reduction, 2015). The COVID-19 pandemic could have serious repercussions on the well-

being of all populations, especially upon those who are most vulnerable (Díaz de León-Martínez et al., 2020).

Natural and technological risks can have consequences that go beyond human experience, such as the global pandemic COVID-19 of 2020, demonstrating the importance of community involvement in decisions before, during and after the occurrence of calamitous events. However, responses to the COVID-19 pandemic are replete with negative examples, considering local reactions to a global catastrophic event. One approach is that trial and error responses had to be prepared abruptly, from top to bottom, without the contribution of the affected communities, without adapting to local circumstances, without relying on networks for exchanging information and jointly generating solutions, previously developed (Shmueli et al., 2020).

The world is in the grips of the COVID-19 pandemic, especially in Brazil, which continues to have increasing infection and death rates. This fact requires disaster management actions to improve national preparedness and coordination of responses now and preparation for the post-disaster rehabilitation, recovery and reconstruction which must be people-centered and involve multisectoral actions, which requires the development, strengthening and implementation of policies, plans and practices consistent with the current local, national and global contexts.

According to Eyerkaufer et al. (2016), the Sendai framework 2015–2030 is one of the benchmarks for disaster risk management. Its objective is to achieve, within the next decade, a substantial reduction of disaster risk, loss of lives, means of subsistence and health, as well as individuals', companies', communities' and countries' economic, physical, social, cultural and environmental assets. Furthermore, it aims at conducting disaster management from a multi-risk and multisectoral approach, covering risks of any intensity, frequency, sudden or of slow evolution and of various origins (United Nations Office for Disaster Risk Reduction, 2015).

According to United Nations Office for Disaster Risk Reduction (2015), disaster risk reduction requires shared responsibilities by central governments, local authorities and other sectors and stakeholders, even though DRM must protect people and their property, their livelihoods and productive assets, including the right to development. Thus, the process requires the whole society's commitment and partnership, in a clear designation of responsibilities between public and private stakeholders.

Intersectoral collaboration is part of the Sendai framework for Disaster Risk Reduction 2015–2030, signed by 187 UN member countries, which deals with a comprehensive preventive approach focused on the people involved with disaster risks, as well as with multiple risk reduction practices and with an inclusive and accessible multiple sector base in order to be efficient and effective (United Nations, International Strategy for Disaster Reduction. The Sendai framework also advocates that it is the governament's responsibility to assume the leadership, regulation and coordination role, in addition

to communicate with all the people involved in the design and implementation of policies, plans and regulations. The public and private sectors, the civil society organizations and the academy should work more closely together and create opportunities for collaboration, and integrate disaster risks into businesses' management practices (United Nations Office for Disaster Risk Reduction, 2015).

According to the Sendai Framework (United Nations Office for Disaster Risk Reduction, 2015), disaster management, in the case of the COVID-19, must be based on the priority of actions, on the responsibilities shared among local and regional governments, on the participation of civil society, universities, the media, companies, professionals and financial institutions in the private sector, international cooperation and in global partnership.

Park and Chung (2021) denote that democratic governments, aware of precedents and about their fate in the elections, are pressured to perform well in crisis management and quickly mobilize public and private means for survival.

3.2 Disaster management

The disaster management, requires planning, coordination and implementation of response actions, which reflect preparedness, prevention and mitigation actions. Involving, the good integration among the phases before, during and after the disaster (pre-disasters, response and post-disasters) directly influence agility, adaptability and alignment - called the triple A in the humanitarian chain (Lee, 2004). The performance of any disaster response depends on the level of preparedness; that is, from the pre-disaster phase, as it is there that the responsibilities of all actors are defined, to create a sense of unity and identification. In this context, the increase in complexity for disaster management needs a greater adaptation of the actors, who must adjust to dynamic situations and, frequently, to not foreseen challenges to the system, that require the use of the three flexibility routes: information, training and governance (Tomasini, 2009; Van Wassenhove, 2006).

In analogy with the current moment, when governments of small and large nations faced the pandemic response phase (SARS-CoV-2), information was considered as one of the key points, in the sense of requiring data, to determine and characterize the factors that could slow or speed up transmission. Thus, the better the data, the higher the quality of the information produced and the more accurate the response to the pandemic, the more effective the assemblage of sufficient data can be done to properly understand the challenges and to build projections to reduce uncertainty in decision-making.

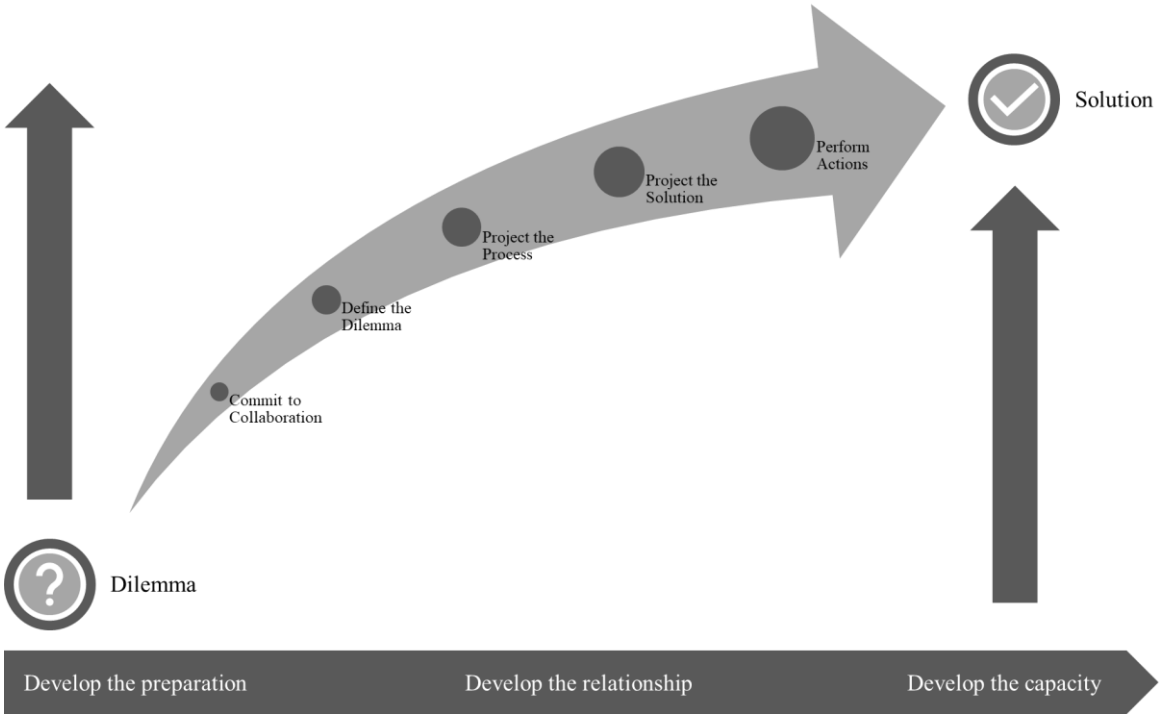
The governance actions are mechanisms of leadership, strategy and control used to, in practice, assess, direct, monitor and identify management failures, aiming to develop and implement public policies and to provide services of social interest, reinforce and communicate key messages and ensure evidence-based actions. The Brazilian Decree no. 9,203, of Nov. 22, 2017 (Brasil, 2017), provides for

public governance policy in the country, which has the following principles: responsiveness, comprehensiveness, reliability, regulatory improvement, accountability and transparency.

The lack of stakeholder compliance with demands for action, requires the development of collaborative governance, which is based on trust among the actors and the consolidation of more cooperative behavior. The increase in confidence and institutional capacity is due to communication, construction, commitment to the process and shared vision (Ansell & Gash, 2008).

Figure 2

Collaborative Governance Model



Source: Adapted from Roberts and Abbott (2019).

Figure 2 Diagram of the inter-relationship, among the dilemma and the actions, which increase confidence and increased institutional capacity to act to 'solve' the problems based upon cooperative, deliberative processes, the appreciative mentality, and the checkpoints.

In a study that was designed to review the process of drafting a pandemic influenza preparedness plan for developing countries that conforms to the International Health Regulations of 2005 and recommendations of the World Health Organization, the authors assumed: "A pandemic caused by a virulent strain could result in millions of deaths. Even a pandemic with low mortality could cause great morbidity and enormous economic losses (Azziz-Baumgartner et al., 2009, p. 189)".

In that context, it was important to explore the dimensions of planning and implementing a pandemic preparedness plan for developing countries (Azziz-Baumgartner et al., 2009), in accordance

with the International Health Regulations (World Health Organization, 2016), which need to be adopted to manage any pandemic. They proposed steps for the elaboration of a pandemic plan that included: evaluate current capacity, recommend improvements to increase capacity, develop operational plans to meet the estimated demands during the pandemic, analyze, test and review plans.

According to the Sendai Framework (United Nations Office for Disaster Risk Reduction, 2019), the Hyogo Framework (United Nations, 2016) and the Sphere Project (Sphere Association, 2018), the preparation phase in anticipation of a disaster is paramount, given that, when properly formulated and implemented, it will improve the quality of public health and mitigate the effects of the emergencies. Therefore, the guidelines contained in the documents on strategic and operational planning, prepared by WHO (World Health Organization, 2006; World Health Organization, 2020b; World Health Organization, 2020a), are directly relevant for COVID-19.

Specifically, in developing countries – as in the case of Brazil – being prepared to face the pandemic was a major challenge that required scarce resources for public health care (Azziz-Baumgartner et al., 2009). Therefore, pandemic, preparedness and response processes must involve all sectors of government and civil society (Ansell & Gash, 2008). The preparation plan should involve decision-makers, technical and medical officials and the main ministries, responsible for the actions to be performed.

The Pandemic Planning Committee (Twyford et al., 2012) (Box 1) composed of stakeholders from the public and private sectors, should be appointed, with the function of technical members to prepare the specific segments of the plan, set deadlines, review policies, should meet regularly, on-line to assess the progress of established actions that are essential for preparing for and managing the pandemic. This assessment should include, among other dimensions, effective and complete access to the national and local infrastructure, to determine the current capacity and to allocate decision-making processes to dynamically respond to new challenges in managing the pandemic (Azziz-Baumgartner et al., 2009).

Box 1

Overview of the stages of a pandemic plan

Steps	**Topics by steps**
Objectives and principles	Preparation goals – General principles of pandemic planning – Risk assessment (national e regional)
Incident management structure	Members and contact – Information lines – Legal background – Decision making process
Surveillance	Assessment of existing surveillance - Recommended improvements - Pre-pandemic surveillance - Surveillance during the pandemic
Communication	Assessment of existing communications - Recommended improvements - Mechanism of frequency and format of messages during each pandemic phase for each audience - Thresholds for transition between messages
Case management	Assessment of current case management - Recommended improvements - Treatment and management guidelines - Spread control between contacts - Infection control guideline
Community Mitigation	Assessment of current community mitigation strategies - Recommended improvements - Criteria for closing schools - Criteria for event cancellation - Measures of social distance
Pharmaceutical interventions (acquisition, storage, distribution and use, including safety and efficacy)	Antivirals - Antibiotics - Vaccines - Recommended improvements
Support of essential services	Capacity assessment of health services - Recommended improvements - Increased capacity of beds, personnel and equipment - Mass screening protocols - Plans for vulnerable and special populations - Plans to support the health team
Agenda to address gaps in knowledge	Assessment of the main existing gaps - Studies during the inter pandemic phases - Protocols for the pandemic phase
Review, test and review plans	External review - Simulation and discussion of ideas - Field exercises - Use of exercise results to review plans

Source: Adapted from Azziz-Baumgartner et al. (2009).

The pandemic's organized management ensures the proper and timely fulfillment of the stages elaborated by the plan designed to slow down the spread of infections of the virus and reduce pressure on the public health system. However, if there is inadequate management, it results in societal insecurity, chaos, fear, and suffering (Azziz-Baumgartner et al., 2009).

In the response situation, at any level of activation, the leader of the Public Health Emergency Operations Center will be able to determine the creation of ad hoc external expert groups to debate specific issues and present subsidies for decision making. These groups can be composed of representatives of scientific societies, class councils, researchers or representatives of the public or private sector, related to the topic of interest (Ministério da Saúde, 2020p). Because structuring an intelligence of risks and vulnerabilities, it will enable the development of the training capacity and

response to potential dangers, rigorously determined (Box 2). This prior intelligence establishes predictive early warning sensors (Leiva et al., 2014).

Box 2

Response level indicators

Response level	**Alert**	**Iminent danger**	**Public health emergency**
Indicator	Risk of Human Infection by the New Coronavirus (COVID-19) elevated and that does not presente suspected cases, as determined by WHO.	Confirmation of a suspected case for human infection with the new coronavirus (COVID-19) in the country.	Local transmission of the first case of Coronavirus (COVID-19), in the national territory, or recognition of the declaration of Public Health Emergency of International Importance (ESPII) by WHO.

Source: Adapted National Contingency Plan for Human Infection with the new Coronavirus (2019-nCoV) (Ministério da Saúde, 2020p).

Moreover, other actions are highlighted as part of the response to the pandemic, as shown in Box 3.

Box 3

Other pandemic response actions

Action	**Importance**
Alert health authorities.	The well-planned public health and emergency response system is capable of responding to a biological threat by limiting and taking the necessary actions to mitigate its effects.
Availability of a regional response unit.	Empower the health units to an emergency response (Fire Brigade, Civil Defense, Health Service).
Effective need for an epidemiological surveillance system.	The real-time disease monitoring system is essential in spontaneous disease outbreaks. The epidemiological surveillance network allows the prevention, detection, treatment, characterization and control of infectious diseases.
Instruct the population on how to act in the event of a threat	The media works with the responsible agencies to disseminate information on what should be done and how to prepare for a contagious outbreak.
Prepare the hospital network in advance	Due to the possibility of a large number of victims, this may lead to the collapse of the hospital network in the affected location, hence the need: (a) to train health professionals for the initial screening of victims, (b) conditions to provide respiratory assistance to a large number of patients, (c) distribution of medications on a large scale, (d) support for vaccination programs, (e) fast and efficient sharing in the communication of suspected cases, (f) use methods to reduce the stress and anxiety of health professionals and workers.

Source: Adapted from Leiva et al. (2014).

Therefore, the response management instruments must be integrated and capable of achieving their objective: facing the COVID-19 pandemic.

4 Results and Discussion

4.1 The Brazilian scenario

According to Alcántara-Ayala et al. (2021, p. 2) "[...] disaster risk is also shaped by the vulnerability of individuals and social groups. In the COVID 19 pandemic everyone is susceptible to the virus, but not everyone is vulnerable in the same way or to the same degree".

These vulnerabilities are emphasized by socially constructed conditions, such as poverty, corruption, inequality, lack of access to health, sanitation and education services, due to the public policy priorities of the governments and authorities of each country. This situation is aggravated in the nations of the South due to low socioeconomic development, which the majority of the population is young (Alcántara-Ayala et al., 2021), i.e., not economically active.

During the pandemic, it was confirmed that vulnerability is also rooted in the mechanisms of corruption. From respirators purchases made irregularly by many governors of Brazilian States with fraudulent and overpriced bids, to field hospitals that have not even been installed.

According to the Epidemiological Bulletin 01, from the Emergency Operations Center, of the Ministry of Health, in the beginning of Jan. 2020, the Event Monitoring Committee was activated and the first official information on the new coronavirus was published (Jan.16, 2020), after the WHO issued the alert that several cases of pneumonia of unknown cause had been detected in Wuhan (China) and identified the new type of coronavirus (Ministério da Saúde, 2020t).

After WHO declared COVID-19 an International Public Health Emergency and confirmed cases in some Asian, Mediterranean and European countries, Brazil held the first meeting of the Interministerial Public Health Executive Group, and through the Ordinance No.188, of Feb. 3, 2020, declared Public Health Emergency of National Importance (Ministério da Saúde, 2020a);(Ministério da Saúde, 2020q).

In view of the fear and concern, caused by the rapid spreading of COVID-19 throughout Asian and European countries, the National Congress of Brazil approved on Feb. 4, 2020, Quarantine Law No.13.979/2020, which specified in general lines, what measures should be taken by the country, to respond to the public health emergency of international importance, resulting from COVID-19. The main measures provided for in art. 3 of the law are: isolation - quarantine - determination and performing examinations, tests and collections of clinical samples, use of vaccines and specific medical treatments - exceptional and temporary restriction of mobility covering ports, highways and airports - exemption from bidding for the acquisition of goods, services and health supplies (Ministério da Saúde, 2020a; Brasil, 2020a).

The first case of COVID-19 was officially confirmed in Brazil at the end of Feb. 2020 in São Paulo, in the state capital (Ministério da Saúde, 2020e).

After WHO declared COVID-19 at the pandemic level, on Mar. 11, the Decree No. 10,277, of Mar. 16, 2020, was published, establishing the Crisis Committee for Supervision of the Impacts of COVID-19. Afterwards, on Mar. 20, the National Congress of Brazil approved the Legislative Decree No. 6, which recognized the 'State of Public Calamity', as a result of the pandemic in Brazil (Brasil, 2020b; Camara dos Deputados, 2020).

The main measures adopted, at the federal level, to face the pandemic are listed in Box 4:

Box 4

Main measures adopted at the federal level to confront COVID-19

Phase	Measures and actions	Type of restriction	Official document	Thematic
RESPONSE	Mobility Restriction	Restriction or prohibition on the entry of foreigners	Ordinance No. 125, of March 19, 2020	Provides for the exceptional and temporary restriction on the entry of foreigners from Argentina, Bolivia, Colombia, French Guiana, Paraguay, Peru and Suriname into the country.
			Ordinance Nº 126, of March 19, 2020* * It was revoked by Ordinance No. 133, dated 3.23.2020. ** ** Revoked by Ordinance No. 152 of 3.30.2020 *** *** Revoked by Ordinance No. 203, dated 3.28.2020.	Provides for the exceptional and temporary restriction on the entry of foreigners from China, the European Union, Iceland, Norway, Switzerland, Great Britain, Northern Ireland, Australia, Japan, Malaysia and Korea.
			Joint Ordinance No. 132, 3.23.2020	Deals with the exceptional and temporary restriction of foreigners from Uruguay entering the country by land, as recommended by ANVISA.
			Ordinance No. 47, 3.26.2020 * * Revoked by Ordinance No. 255, dated 4.24.2020	Provides for the exceptional and temporary restriction on the entry of foreigners into the country by waterway, as recommended by ANVISA

Continuation

RESPONSE	Mobility Restriction	Closure and control of external and internal borders	Provisional Measure No. 925, of 3.20. 2020.	It adopts emergency measures for Brazilian civil aviation.
			Provisional Measure N° 926, of 3.20.2020	Alters art. 1 of Law No. 13,926, of 2.6.2020 - establishes in art. 3rd, VI exceptional and temporary restriction, according to ANVISA's technical recommendation, for highways, ports or airports of: a) entering and leaving the country; and b) interstate and intercity transportation.
		Restrictions or closing of public places and meetings	Normative Instruction No. 19, of 3.12.2020 * * Amended by Normative Instruction No. 20, of 3.13.2020.	Establishes guidelines for federal public bodies and entities, for the need for international travel and for events and meetings, and remote work within the scope of civil servants and civil servants of the Federal Public Administration.
			Normative Instruction No. 21, of 3.16.2020	Amended the IN N° 19, dated 12.03.2020, regarding the total suspension of international travel and national travel and the remote work of civil servants and civil servants of the Federal Public Administration.
	Public Health Measure	General measures	Law No. 13.979, of 2.06.2020- General Quarantine Law.	Defines the general rules of isolation, quarantine and other measures to combat COVID-19.
			National Contingency Plan for Human Infection with the new coronavirus COVID-19, COE / SVS / MS, of 2.20.2020.	It establishes what procedures should be followed in the event of an outbreak and defines the level of response and the command structure corresponding to each level of response.
			Ordinance No. 59, dated 3.20.2020, of the Public Prosecutor's Office.	Establishes the Integrated Office for Monitoring the Epidemic of the Coronavirus-19 (GIAX-COVID 19)
			Interministerial Ordinance No. 7, dated 3.18.2020, from the Ministry of Justice and Public Security and the Ministry of Health.	Provides for measures to deal with the public health emergency by the new coronavirus (COVID-19), to be adopted under the system prison.
			Ordinance No. 467, dated 3.20.2020, of the Ministry of Health.	Establishes the Telemedicine on an exceptional and temporary basis and provides for operationalization and service
			Ordinance No. 4, 3.15.2020 - Ministry of Justice and Public Security - National Penitentiary Department.	Suspends social visits, attorneys' services and escorts of prisoners in custody in the Federal Penitentiaries of the Federal Penitentiary System of the National Penitentiary Department as a means of prevention, control and risk containment of the new coronavirus.
			Brazilian Vaccination Federal Law 14,125 dated 3.10.2021	Provides for civil liability related to adverse post-vaccination events against COVID-19 and for the acquisition and distribution of vaccines by legal entities governed by private law.
			Provisional Measure No. 1,026 dated 1.6.2021	Provides for exceptional measures related to the acquisition of vaccines and the National Plan for Operationalization of Vaccination against COVID-19.
		Testing Measures	Testing Measures Normative Resolution - RN No. 453, dated 3.12.2020, of the National Supplementary Health Agency -ANS.	It establishes the list of procedures and events in supplementary health to regulate mandatory coverage and the use of diagnostic tests for infection with the new coronavirus.
			Resolution No. 348, dated 3.17.2020, of the National Health Surveillance Agency - ANVISA. * See ANVISA Resolutions 776/2020 and 777/2020	Simplifies temporarily and exceptionally, the approval procedures for medicines, biological products and other health products, facilitates the approval of new types of rapid tests COVID-19, intended for professional use and allow faster reading of results. *
		Measures for Hospitals	Law No. 13.979 / 2020 - Art. 4, §§ 1 to 6 * * Amended by MP 926/2020 Provisional Measure 951, dated 4.15.2020	Exemption from bidding for the acquisition of goods, services, including engineering, and health supplies intended to face COVID-19. Authorizes joint public purchases between public entities, for the acquisition of health materials and equipment, to be used in the fight against COVID-19.
			Ordinance No. 561 / GM / MS, 3.26.2020	Authorizes the use of small hospital beds (HPP) for long-term care and made available to the State Regulation Center, and will not be able to provide COVID-19 care.
			Strategy: to diagnose in order to care - Rapid tests	Acquisition and distribution to the public health network of 6.9 million RT-PCR tests (molecular biology) and rapid tests (serology).
			ANVISA Resolution - RDC n° 349, dated 3.19.2020	Defines the extraordinary and temporary criteria and procedures for handling requests for regularization of individual protection equipment, medical equipment such as pulmonary ventilator and other medical devices identified as strategic by Anvisa, by virtue of COVID-19.

Continuation

RESPONSE	Socioeconomic Measure	Measure of economic content	Provisional Measure 924, dated 3.13.2020	It opens extraordinary credit, in favor of the Ministries of Education and Health, in the amount of R $ 5,099,795,979.00 to face COVID-19.
			Ordinance No. 395, dated 3.16.2020	Establishes funds from the Public Health Actions and Services Costing Block - Medium and High Complexity Care Group - MAC, to be made available to the States and the Federal District, destined to actions to confront the Coronavirus -COVID-19.
			Resolution No. 851, dated 3.18.2020	Authorizes the Ministry of Economy to allocate new resources from PDE / 2020, in the amount of up to R $ 5,000,000,000.00 (five billion reais), to financial institutions operating special deposits from FAT, through the execution of the Special Deposit Allocation Term of the FAT - TADE, or the Addendum to the TADE in force, between the Executive Secretariat of CODEFAT and the signatory institution of TADE.
			Decree No. 10,285, dated 3.20.2020	Temporary reduction of IPI rates
			Normative Instruction No. 1,944, 5.4.2020 - Ministry of Economy / Special Secretariat of the Federal Revenue of Brazil.	It regulates customs clearance of imports, as a result of COVID-19, carried out as a priority, to obtain medical and hospital products.
			MP Nº 927, dated 3.22.2020	Provides for labor measures that may be adopted by employers to preserve employment and income and to face the new coronavirus (covid-19).
			MP Nº 958, dated 4.27.2020	2020 Establishes rules for facilitating access to credit and mitigating the economic impacts resulting from the COVID-19 pandemic
			MP Nº 960, dated 4.30.2020	Extends the deadlines for suspension of tax payments provided for in the concessionaire notices of the special drawback regime, which have been extended by one year by the tax authority and have terms in 2020.
			Law Nº 13.995, dated 5.5.2020	Deals with the provision of financial assistance by the Union to « Santa Casa », non-profit philanthropic houses and hospitals that participate in SUS, with the objective of acting in the fight against COVID-19.
			Resolution No. 961, of 5.5.2020	Establishes an exceptional and transitory rule for the payment of FGTS debts in installments.
			Law No. 13,982, of 4.2.2020 * * Regulated by Decree No. 10,316, 4.7.2020	Establishes emergency assistance for people with an income equal to or less than ¼ of the minimum wage for people in situations of social vulnerability resulting from COVID-19.
	Social Distancing Measure	General Measures	Law No. 13,979 / 2020 - Quarantine Law	Establishes the measures to be adopted by the authorities to confront COVID-19, including: isolation, quarantine, mandatory determination of medical examinations, tests, restriction of mobility by road, ports or airports in the country.
	Other measures	Public Administration Measure – Civil Defense	Ordinance No. 743, of March 26, 2020, of the Ministry of Regional Development / Cabinet of the Minister	Establishes a specific rite for the federal recognition of abnormal situations enacted by federated entities, resulting from a disaster related to contamination by the new coronavirus (Covid-19).

Source: Data extracted from the Legislation Portal (Portal da Legislação, 2021).

It is important to note that, in 2009, when the H1N1 - Influenza A pandemic alert occurred, Brazil followed the WHO protocols and published the Brazilian Plan to Cope with an Influenza Pandemic, with the purpose of preparing and responding - before, during and after the pandemic - of a generic character, with essential guidelines for the action of health services (Ministério da Saúde, 2010). It is noteworthy that, in the period between 2009 and 2010, Brazil registered 53,797 confirmed cases and 2,173 H1NI deaths (Ministério da Saúde, 2012).

In the current pandemic, the Federal government, through the Center for Emergency Operations in Public Health-COE-COVID-19, mandated the National Contingency Plan for Human Infection by the new Coronavirus, on Feb. 2020 (Ministério da Saúde, 2020p), in which it defined the level of response and the structure that should correspond to each level of severity of the pandemic based upon the classification tool adopted worldwide, and which served as a model and guidance to the Health Departments of the States, Federal District and Municipalities.

Regarding to the pandemic responses, the prevention phase in Brazil, as well as all other phases of the disaster cycle, are described in the National Civil Protection and Defense Policy, which presents a

disaster governance structure with measures ranging from prevention to the recovery of affected areas, but they are not structured with a focus on health (Rodrigues et al., 2020).

The ability to respond to a biological threat depends on preparedness and response. Therefore, in a biological threat, in this case, COVID-19, it was incumbent upon the Emergency Command Center, to quickly identify the potential risk and to provide rapid responses and precautionary measures of the response units (Leiva et al., 2014).

Box 5

COVID-19 Disaster life cycle *vs* Brazilian actions

COVID-19 Disaster life cycle - Phases	**Criteria defining each phase**
Prevention (Ministério da Saúde, 2020a;b;c;d;e;g;i;l;n)	- Anticipation of vaccination campaigns against H1N1 - Vaccine coverage planning - Health Professionals training for PPE's use - Mapping the population (Family Vulnerability Registration) - Identification of risk subpopulation (Risk stratification) - Approval of the International Health Regulations - Definition of the National Civil Protection and Defense Policy - Development of the Public Health Emergency Response Plan - Development of the Brazilian Plan for preparing to face an Influenza pandemic (2010) - Creation of a law on measures to deal with emergencies resulting from CORONAVIRUS due to the 2019 outbreak (Law number 13,979)
Mitigation (Ministério da Saúde, 2020c;d;e;f;i;j;k)	- Strengthening of Primary Health Care (structure and processes) - Organization of the Regionalized Health Network - Financing based on the population's health needs (not on offer) - Offer professional qualification - Monitoring the population through the Sentinel Surveillance System for Flu Syndrome and Universal Surveillance of Severe Respiratory Flu Syndrome - Sharing all relevant information and building trust and empathy (communication) - Development of a Public-Private partnership: expansion of diagnostic capacity
Preparedness (Ministério da Saúde, 2020a;b;c;f;g;h;j;k)	- Inform the population about the disease and its transmission - Identify risk groups - guidance - Detect rumors and request verification with WHO - Activation of the Public Health Emergency Operations Center to manage the Brazilian Public Health System response - Activation of the interministerial executive group for the Public Health Emergency of National Importance - decree nº 10.2011 - Creation of Field Hospitals for low and medium complexity beds - Mapping of ICU beds in General Hospitals - Training of Health Professionals (mechanical ventilation) - Definition of Protocols: admission criteria, risk stratification and complexity - Acquisition of PPE's and Medical Equipment for critical patients (mainly Respirators) - Implementation of an intersectoral crisis committee - Epidemiological analysis - Dimensioning the workforce - Structure mapping - Definition of flows in the Network - Mass communication - Elaboration of the National Contingency Plan for Human Infection for the new Coronavirus COVID-19 by the Public Health Emergency Operations Center in Feb. 2020 - Training of laboratories in partnership with PAHO and Fiocruz - Use of networks of scientific and specialist societies - Decentralization of the COVID-19 laboratory diagnosis for the 27 Federated Units - Expansion of the offer of laboratory diagnostics within the scope of the Brazilian Public Health System - Formation of public-private partnerships

Continuation

Response (Ministério da Saúde, 2020a;b;c;d;e;f;g;h;j;k;m)	- Organization of the Primary Health Care Network for mild cases and monitoring - Patient transfer system (General Hospitals and Field Hospitals) - Monitoring of Number of Cases and Mortality by COVID - Access to PPE's by Health Professionals - Testing for inpatients (RT-PCR) - Encourage the use of masks - Guide Social Distancing - Guide hand hygiene - Management of Acute Health Condition - Chronic Health Condition Management - Epidemiological monitoring - Mass communication - Support for professionals - Communication regarding the first press conference of the Ministry of Health to inform the situation about the contingency plan and actions - Communication regarding the first suspected case in Brazil in MG - level II imminent danger - Monitoring of public and private hospital beds - Activation of field hospitals - Use of services from private laboratories, the academic sector and mobile laboratories with automated molecular testing systems - Declaration of Community Transmission - Ordinance No. 454 - Collective meetings coordinated by the Presidency of the Republic promoting management by the Incident Command System (ICS) - Follow-up of the Brazilians return operation to Anápolis (GO) air base with 34 people - Suspension of casses - Validation of SARS-CoV-2 laboratory results in one of the three national reference laboratories for Influenza and other respiratory viruses (NIC - National Influenza Center): Fundação Oswaldo Cruz (Fiocruz / RJ); Evandro Chagas Institute (Health Surveillance Secretariat) at Pará state, Adolfo Lutz Institute (São Paulo State Health Secretariat) - Implementation of the Public Health Emergency Operations Center (COE-COVID19) - Foster studies and research - Determination of specific social distance measures were adopted by local managers (states and municipalities), based on their epidemiological and structural realities - Population testing by the rapid molecular method (RT-PCR) - Diagnostic standards, flows and deadlines - Acquisition of vaccines and start of the vaccination campaign
Recovery*	- Resumption of care for chronic diseases - Return to classes - Reactivation of the economy - Population testing (serology - rapid test) - Identification of new users in a chronic condition (direct effects) - Stabilization of the acute chronic condition (indirect effects) - Reprogramming assistance based on the new scenario of the population's health needs (has the profile of my territory changed?)

*This phase represents a suggestion of a projection of the measures to be adopted in the post-disaster, aiming at reconstruction. However, the Brazilian Government has not yet carried out an analysis of this phase.

Additionally, in their response, at any level of activation, the leader of the Public Health Emergency Operations Center should be able to develop ad hoc external expert groups to evaluate specific issues and provide guidance for decision-making. Those groups can be composed of

representatives of scientific societies, class councils, researchers or representatives of the public or private sector, related to the topic of interest (Ministério da Saúde, 2020p).

A strategy for local emergency responses regarding construction of Field Hospitals: temporary structures with the objective of enabling the expansion of beds for critical patients, admitting low/medium infection severity patients. For example, in the city of São Paulo, this type of patients was redirected to Field Hospitals, reducing the pressure for beds in the hospital network.

In view of the political and administrative organization of the Brazilian state - the governmental structure provided for in art. 1 and 18 of FC/1988 - Federative Constitution of Brazil, promulgated in 1988 (Brasil, 1988) -, reaffirmed by the Supreme Federal Court in the decision handed down in the judgment of Direct action of unconstitutionality – 634 (Supremo Tribunal Federal, 1993), in which it safeguarded the autonomy of the other federative entities (States, Federal District and Municipalities), and warned that the head of the Federal Executive should observe the autonomy of local entities, because otherwise, he is facing the principle of separation of powers. However, it did not exempt the executive from his responsibilities, considering that the protection of the right to health is shared among all federal entities.

The COVID-19 pandemic highlights the importance of coordinating efforts by leaders at both the local and global levels. Preparation, response and recovery must be based on science for decision making, seeking to contain the spread of the virus and saving lives (Thomas et al., 2020). However, the contradictions have marked the actions of the Brazilian federal government in response to the pandemic, while the Ministry of Health publishes Ordinance 454, of Mar. 20, 2020, declaring the state of community transmission of the coronavirus, throughout the national territory (Ministério da Saúde, 2020r). The Brazilian president, in his Mar. 24 statement, downplayed the COVID-19 pandemic, attacked the press and criticized restrictive measures, adopted by states and municipalities, to contain the outbreak's progress (DW Brasil, 2020).

The confrontation of the federal government with subnational governments (States and Municipalities) discredited the measures of restriction and generated insecurity in the population. Thus, the sanitary and governmental crises happened together and highlighted the importance of government coordination in public policies to combat the pandemic. In a Brazil, “intergovernmental coordination is crucial since it is difficult to reconcile the coexistence between autonomy and interdependence that shapes federations and their decision-making processes (Pierson, 1995 apud Abrucio et al., 2020, p. 666)”.

As the number of new cases is decreasing in various parts of the country, at the time of writing this article, the need for such coordination is still urgent, so that there are coordinated plans for transitioning to the “new normal”. In this new phase, effective communication will continue to be essential, to ensure that the entire population is fully aware of the importance of following certain rules,

which contribute not only to better control of the pandemic, but also to reduce the chances of panic caused by misinformation. The lack of transparency can quickly produce mistrust, putting into question the ability of governments to manage crises, thus reducing the population's response to governmental initiatives (IPEA, 2020).

Thus, according to art. 23, IV of the Federal Constitution/1988 (Brasil, 1988), the States, the Federal District and the Municipalities have competing competence to legislate on public health and implement more restrictive measures in the fight against the pandemic of COVID-19. Therefore, state and municipal governments can adopt regionalized actions to combat the disease.

Previously, the Federal Court of Justice had confirmed the prevailing jurisprudence of the Court, that the entities of the Federation (Union, States, Federal District and Municipalities), individually or jointly, have joint and several responsibilities in health care, when analyzing the appeal of embargoes of declaration presented by the Union against the decision rendered in the Extraordinary Appeal 855,178 (Supremo Tribunal Federal, 2019).

In general, the Brazilian governmental agencies followed WHO guidelines and adopted, according to local needs, the following measures: social distance, mobility restrictions, public health measures and social and economic measures.

It was found that, in general, the states and municipalities, affected by the pandemic, have declared public calamity, as this situation is essential for the governmental entities to have greater flexibility in the actions to be adopted and implemented in the response to COVID-19, ease in hiring and purchasing goods and services, exempted from the requirements for compliance with fiscal and commitment goals, suspension of the deadline for the transfer of public debt values and obtaining financial assistance from the federal administration. In other words, the recognition of the state of the public calamity prevented managers from being responsible for administrative mismanagement and being limited by the Fiscal Responsibility Law (Brasil, 2000) and the Bidding and Contracts Law (Brasil, 1993).

The recognition of a state of calamity or emergency situation in a disaster, was made based upon an ordinance, upon request from the Chief of the Executive Branch (Governor, Mayor) of the affected federated entity, issued by the Secretariat of Civil Protection and Defense, and must follow certain procedures covered by the Normative Instruction Ministry of Integration, N. 02, of Dec. 20, 2016 (Ministério do Desenvolvimento Regional, 2016).

In the case of the biological disaster of the COVID-19, the Ministry of Regional Development (formerly the Ministry of Integration), the federal agency to which Secretariat of Civil Protection and Defense is linked, issued the Ordinance No.743, of Mar. 26, 2020, establishing specific formalities to simplify and streamline the process of requesting and acknowledging the federal recognition of the state of disaster or emergency (Ministério do Desenvolvimento Regional, 2020).

The actions implemented by the States, referred to non-pharmaceutical measures such as social isolation did not work satisfactorily, considering that the social isolation index in these states and, in general, throughout Brazil, were not being followed by the majority of the population.

To minimize the effects of the pandemic on the most vulnerable populations, the states adopted several social measures, the main ones being: gas supply, suspension of water charges, prohibition of suspension of electricity supply, donation of basic food basket for families and students, distribution of personal hygiene and cleaning kits, emergency co-financing for reception centers for the elderly, installation of temporary accommodations for homeless people.

The states also adopted, as an emergency measure, the construction of Field Hospitals to care for cases of low severity of COVID-19, a strategy used to mitigate the effects of the pandemic on the public health system, with São Paulo being the first state that set up the structure at the Pacaembu Stadium, with a capacity of 200 beds. Other States adopted the same format, such as: Rio de Janeiro, Amazonas, Pará, Ceará and Maranhão.

Another mark of the 2020 year was the decision making by public managers was to perform testing only on symptomatic patients, who had a severe condition for COVID-19, a decision related to the unavailability of test kits on the market and, subsequently, with the scarcity of resources to acquire them. These difficulties prevented the population from being tested on a large-scale, which continues to accelerate the spread of the coronavirus, due to its high degree of transmission.

4.1.1 Navigating the uncharted: final remarks

Brazil did not implement the guidelines of the 58th World Health Assembly and Marco Sendai, as well as not having treated the health area from a strategic perspective, it not been able to manage the preparedness and response phases as the COVID-19 required (Rodrigues et al., 2020).

Even though the measures adopted at the federal level to confront COVID-19, have legal robustness does not necessarily mean its implementation, and disaster governance does not prevent the problem but manages it. Thus, response management tools should be integrated and able to reach their goal: facing the pandemic (Rodrigues et al., 2020).

Even though the Federal Government of Brazil has adopted several legal measures (Box 4) and the Ministry of Health has followed international standards and recommendations in the preparation and response to the pandemic, many difficulties have been revealed for the sustained continuation of the response. Because, despite Brazil being an experienced country in the fight against epidemics (dengue, zika virus, chikungunya, and yellow fever), as well as in prevention campaigns (vaccination against influenza, measles, and rubella) and has a public health network that is a reference worldwide, SUS - Unified Health System (Gragnolati et al., 2013) the response to the pandemic is proving inefficient (Rodrigues et al., 2020).

The COVID-19 vaccination is happening in 228 countries, according to Our World in Data website (Our world in data, 2021), last updated 11 April 2021. In Brazil, it started on January 17th, 2021, and the total number of vaccinations is 26,548,845, this number is composed by the sum of people vaccinated (20,513,828) and people fully vaccinated (6,035,017), corresponding to 9.65% of the population. However, it will still be challenging to deal with the vaccine hesitance movements and the political polarization that it is taking place in relation to vaccination (Guimarães, 2020).

The delays in vaccination leave Brazil's 212,560 residents vulnerable to one of the worst coronavirus outbreaks on the planet. Brazil has tallied 348,718 COVID-19 deaths until Apr. 11, 2021, and vaccinated only 9.65% of its population (Our world in data, 2021).

On the other hand, Israel is a country that stands out with about 61.35% of Israelis already immunized with two doses (Our world in data, 2021).

According to Stargardter (2021, p. 1):

> Brazil's vaccine rollout is just the latest misstep by its Health Ministry, which President [...] has stocked with active-duty and retired military men with little public health experience. Those newcomers failed to grasp how quickly they needed to move to secure supplies amid heated global competition, and the importance of hedging their bets by striking deals with multiple manufacturers, according to interviews with more than a dozen current and former officials, pharmaceutical executives, diplomats and public health experts.

5 Conclusions

Originally, in Brazil, as a whole, non-pharmaceutical interventions were used, such as: social distance, voluntary isolation, wearing of masks, border and school closures, prohibition of public events, confinement of individuals with symptoms and their contacts, in addition to lockdowns (total or partial) of the populations.

According to the report published by researchers at UFPEL - EPICOVID19 (Universidade Federal de Pelotas, 2020), there was an underestimation between the official numbers of those infected with the new coronavirus and the numbers estimated by that research.

Another important point to reflect upon about Brazil's difficulty in containing the spread of the pandemic pertains to the few and inefficient measures that were used to help the most vulnerable populations, as well as the lack of transparent and clear actions to make information available about the adherence of the people to measures of social distancing, restriction of mobility, hygiene and the use of masks.

There must be a clear dialogue between the leaders of the federal entities and civil society to promote the exchange of information, taking of collective actions and engagement in campaigns with community participation, for helping to disseminate knowledge about what the virus is, how people are

infected, whether or not there is clinical and pharmaceutical treatment, what are the non-pharmaceutical measures and the correct measures to be adopted. With this, we seek to enhance the resilience of the communities via greater knowledge about the disease and thus, the collective social engagement, with the objective of awakening the feeling of inclusion in the entire process of responding to and controlling COVID-19.

This pandemic was not a sudden disaster because there were precedents of the dynamics and impacts of COVID-19 in other countries, prior to its spread in Brazil. There was time to develop preventive and mitigation measures. However, Brazilian authorities did not properly, take advantage of that information and did not respond quickly or fully, consequently, many more people were infected and died than would have occurred if more effective action had been taken.

At the beginning of actions and responses to COVID-19, the federal government followed WHO guidelines. However, it failed to fulfill their leadership role, as the pandemic manager, opting to devalue the non-pharmaceutical measures of response to COVID-19. Furthermore, there was the replacement of three ministers of health during the critical period of the pandemic, because they were not in accordance with the guidelines and decisions adopted by the representative of the federal executive branch.

Due to the posture adopted by the highest representative of the Brazilian federal government, in the conduct of public policies and in the actions to contain the dissemination, there was a mismatch between them, with the decisions of the other state and municipal governmental entities, which highlighted the lack of planning (or organization), misalignment, disorientation and dysfunctionality of actions and measures, contributing to the non-adherence to recommended behavior, on the part of the Brazilian population, to coping with COVID-19, demonstrating the lack of collaborative governance, since it did not observe the principles of good public governance provided for in art. 3, of Decree No. 9.203, of Nov. 22, 2017, entitled Governance Policy of the Federal Public Administration (Brasil, 2017).

According to Park and Chung (2021), that cited The Lancet (2020) there is a concern with the performance in the governance of the pandemic by democracies, such as the USA, Brazil and India, where the pandemic demonstrates insufficient government efforts. The authors resorted to McKee, Gugushvili, Koltai and Stuckler (2020) to reinforce that their mediocre performance in combating COVID-19 cast doubt on whether they would respond differently in future pandemics. In these countries, politics prevails over science, lack of transparency, the blurred presence of health officials who can serve as a clear and present control tower and overwhelming populism.

In general, the authors of this paper, documented that the measures adopted by the federal entities and the federal government, in response to the pandemic in Brazil, were confused, disorganized, unstructured, without engagement, irresponsible and without leadership, to fight the disease.

As a contribution of this article is some lessons learned from COVID-19 mismanagement should be used to prepare to respond more effectively and rapidly in future emergency situations. The governmental leaders should incorporate these lessons into the agendas of authorities and Civil Protection and Defense personnel, with the objective of making continuous improvements in policies, procedures, and practices for responding to new challenges. However, the success of such preparations and actions is dependent upon strong political leadership at municipal, state, and federal levels.

Civil Defense and Protection played a supporting role, edited Ordinance MDR No.743, of Mar. 26, 2020 (Ministério do Desenvolvimento Regional, 2020), which simplifies and streamlines the process of federal recognition of calamity and emergency situations of a disease. However, due to its history of acting in disasters and the knowledge of vulnerable communities and areas at risk, the Civil Protection and Defense should have worked with the Ministry of Health, by training actors, disseminating information and governance, strengthening the public power relationship with the population.

Faced with this nefarious scenario, it can be seen that ineffective or superficial plans for adequate assistance in the decision-making processes of technicians and public managers, prevented synchronization of actions in what should have been a collaborative governance system, negatively affected the speed of actions to save lives.

Brazil urgently needs the federal government, in a responsible manner, to exercise the collaborative political governance in the disaster management of COVID-19, and they need to act in accordance with the scientific and technical guidelines of the WHO, the Sendai framework, the scientific bodies/entities of Brazil and of the world, with the objective to recover, strengthen and build resilience (economic, social, health, cultural and educational) to be ready to face the multifaceted and interconnected challenges of a post-pandemic world and a new “normal” Brazil.

As of January 2021, there was an increase in the cases of COVID-19 in Brazil, which had as its epicenter Manaus's city in the State of Amazonas (Sabino et al., 2021), with the emergence of a new strain, which spread to all country (Clarke, 2021).

The vaccine was obtained and distributed in Brazil only after the action of the Government of São Paulo State and other regional governments in Brazil, which mobilized to obtain the vaccine. Specifically, the State of São Paulo, in June 2020, entered into a partnership through the Butantan Institute with the pharmaceutical company Sinovac to develop in Brazil CoronaVac, the main vaccine used in the country (Butantan Institute, 2021).

After many discussions and the negationism of obtaining the vaccine, at the end of January 2021 - after approval by the National Health Surveillance Agency (ANVISA), on January 17, 2021, for the emergency use of the CORONAVAC vaccine and the vaccine AstraZeneca/Oxford (Agência Nacional de Vigilância Sanitária, 2021) - the Federal Government edited the National Plan for Operationalization of

Vaccination against COVID-19, without effectively fulfilling its duty (Ministério da Saúde & Sistema Único de Saúde, 2021).

Despite deciding to obtain vaccines for the population and given the emergence of new strains, worsening and the increase in cases/deaths, and the collapse of hospitals throughout the Brazilian territory, the federal government did not buy them in sufficient numbers and continues fighting public policies of regional and local governments that adopt more restrictive measures of mobility, social isolation, and the wear of masks.

Therefore, the federal government of Brazil has a contradictory and negationist, by not adopting a management and action plan for responding to the COVID-19 pandemic disaster.

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