

## Chapter 13

# COVID-19 has seen three approaches from the perspective of the Brazilian National Civil defense

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### 1 INTRODUCTION

#### 1.1 QUESTIONING

What was the role of the Brazilian National Civil Defense in confronting COVID-19?

#### 1.2 OBJECTIVE

Check, along with the works produced on Civil Defense, the role of the Brazilian National Civil Defense in the fight against COVID-19, seen through three coping approaches.

#### 1.3 WORK RELEVANCE

The relevance of this article lies in the need to check for academic research disclosing the role of the Brazilian National Civil Defense in the face of the occurrence of the COVID-19 pandemic; where the authors based on the coping approaches according to Hoelbriegel (2022).

#### 1.4 JUSTIFICATION

In 2019, the small Chinese city of Wuhan became the epicenter of the new coronavirus pandemic that is shaking the structures of the world as we know it.

The new coronavirus has been named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the scientific community, while the disease associated with this virus has been named COVID-19. Even though coronaviruses are old acquaintances of human beings, it was only at the beginning of the 21st century that they gained notoriety. The viruses of this family were identified for the first time in 1968, when an electronic microscope was able to show their structure, which had as its main characteristic the appearance of the crown of the Sun (also similar to the crowns of kings and queens), hence the name coronavirus (MINISTÉRIO DA SAÚDE, 2020).

The COVID-19 pandemic, a contemporary tribulation, which spread exponentially, added to the lack of knowledge and uncertainties caused by a new disease, with an unknown indication of medical and health protocols, resulting in the need for a very great effort on the part of the nations of the world to learn,

understand and share knowledge scientifically.

According to the Brazilian Classification and Codification of Disasters (COBRADE), COVID-19 is a disaster of natural origin, of the Epidemic subgroup, and the Viral Infectious Diseases type (BRASIL, 2012).

COVID-19 brought with it enormous challenges for the affected nations and, consequently, for the Defense and Civil Security agencies of all countries, including Brazil.

The National Secretariat for Civil Defense and Protection (SEDEC) is the body responsible for coordinating civil protection and defense actions throughout the national territory. Its performance aims to reduce the risks of disasters, in addition to strategically planning prevention, mitigation, preparation, response, and recovery actions against disasters (BRASIL, 2020e).

It is understood that the topic being researched is a pioneer in the large professional area of Civil Defense and may encourage future researchers to be interested in exploring and developing the subject (HOELBRIEGEL, 2022).

## **2 APPROACHES TO FIGHTING COVID-19**

### **2.1 POLEMOLOGICAL APPROACH**

The pomological approach aims to scientifically study conflicts, their functions as a social phenomenon, their causes, and effects, as well as their forms. And crises are defined by threats, uncertainties, and time pressure, so understanding them requires a careful examination of how these variables affect political and economic outcomes (HOELBRIEGEL, 2022).

### **2.2 HEALTH APPROACH**

The COVID-19 pandemic is a disaster of unprecedented proportions with global repercussions (AGARWAL et al., 2020) and the Health approach aims to identify and carefully discuss how the COVID-19 pandemic has impacted the world and Brazil. It will also address how this disaster proved to governments, international organizations, and the scientific community how much humanity is unprepared to deal with crises of such magnitude.

The epidemiological outbreak of COVID-19, according to Hoelbriegel (2022) is a disaster whose coordination was not under the leadership of the National Civil Defense; which should be dealt with by a multidisciplinary committee.

### **2.3 SOCIOECONOMIC APPROACH**

Several countries, including Brazil, initially implemented sanitary measures, including the use of face masks, social distancing rules, and, at certain times, the total closure of non-essential commercial activities (FUNDAÇÃO OSWALDO CRUZ, 2020).

Before man developed a vaccine capable of fighting the new coronavirus, the recommended measures (MINISTÉRIO DA SAÚDE, 2020) were only focused on reducing the infection rate, to mitigate the saturation of public and private health systems. of the countries affected by the pandemic, to avoid its collapse.

The force of a sudden stop in economic activities has the same effect as a natural disaster of great magnitude, therefore, the logic employed was the same used in Civil Defense actions, that is, there is only a disaster if there is a population in a condition of vulnerability exposed to the adverse event (HOELBRIEGEL, 2022).

Some economically more powerful countries suffered the economic and social effects more mildly than those economically more dependent. However, in general, all nations, central or peripheral, had an increase in inflation, interest rates, and unemployment, as well as the impoverishment of their populations. In this way, managing a pandemic cannot be done by facing only one dimension of the problem.

### **3 METHODOLOGY**

An exploratory, documentary, and bibliographic research was carried out within the three visions of coping approaches described in chapter 2, to identify scientific articles that were submitted for bibliometric analysis.

The research was carried out, according to Hoelbriegel (2022), by a systematic review preceded by the search for words, simple or compound, and/or expressions, most representative of the core of the research and their respective thesauri in English. It was carried out both on the Sucupira platform by identifying the keywords of articles, and through thesaurus dictionaries on the Internet. The searched words were: “Civil Defense”, “Natural Disaster”, “Covid-19”, “SARS-CoV-2” and “Coronavirus”. The thesauri identified in English were “Civil Defense”, “Sociology of Disasters”, “Natural Disasters”, “Coronavirus”, “Novel Coronavirus” and “Coronavirus disease”. Thus, these words could be used later in the search engines of the research database.

Then, samples of articles were obtained from the Scopus database (Elsevier), which is one of the largest peer-reviewed databases of abstracts and citations of literature: scientific journals, books, conference proceedings, and industry publications. Currently, the database has more than eighty-two million items, more than seventeen million author profiles, and more than 234,000 books, the first records of which date back to 1788 (ELSEVIER, 2021). The database offers a comprehensive overview of the world's research output in the areas of science, technology, medicine, social sciences, arts, and humanities. The Scopus base provides intelligent native tools to monitor, analyze and visualize surveys.

The research process was divided into two parts. The first focused on the search for the most relevant scientific articles related to the research topic. In this phase, remote analysis techniques available in the researched database were used, based on a specific search of the main descriptors of the study, the search operators (search strings), as follows:

- **Search operators 1:**

( ALL ( "civil defense" ) OR ( "Sociology of Disaster\*" ) OR ( "Natural Disaster\*" ) AND ( covid19 ) OR ( covid-19 ) OR ( "COVID 19" ) OR ( SARS-CoV-2 ) OR ( "coronavirus disease 2019" ) ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) OR LIMIT-TO( DOCTYPE, "re" ) )

- **Search Operators 2:**

( ALL ( "civil defense" ) OR ( "Sociology of Disaster\*" ) OR ( "Natural Disaster\*" ) AND ( covid19 ) OR ( covid-19 ) OR ( "COVID 19" ) OR ( SARS-CoV-2 ) AND ( brazil\* ) )

### 3 DISCUSSION AND RESULTS

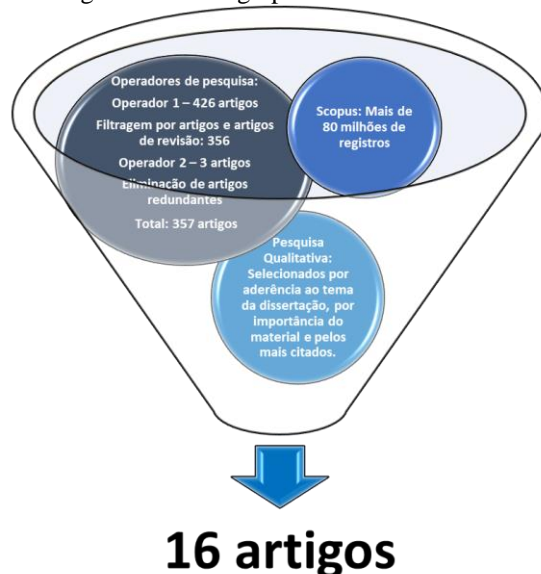
The search process was carried out in May 2021, based on the period between 2017 and 2021, where only articles published in scientific journals were considered, according to search operators 1; later being limited to scientific articles produced in Brazil.

From the first search operation, 426 documents were returned, which were submitted to a filter by type of documents, limiting them to articles and review articles, from which 356 articles were returned; the second search operation returned three articles, of which two articles were repeated in the first search operation. Thus, a total of 357 articles were selected.

These documents were subjected to qualitative analysis to identify those with greater adherence to the approaches defined by the author, and articles that were repeated were excluded, of which 51 articles remained.

Subsequently, these documents were submitted to a more refined qualitative analysis, by reading the documents in their entirety, to select those with greater adherence to the core of the research, as shown in figure 1. Consequently, the articles that did not have the adherence necessary were excluded, and the remaining sixteen were used as a reference in this dissertation, according to Table 1.

Figure 1 - Bibliographic research workflow



Source: Adapted from Hoelbriegel, 2022.

Figure 1 translation:

Qualitative research: Selected by adherence to the theme of the dissertation, by the importance of the material and by the most cited (Pesquisa qualitativa: Selecionados por aderência ao tem da dissertação, por importância do material e pelos mais citados)

Scopus: over 80 million records (Scopus: mais de 80 milhões de registros )

Search Operators

Operator 1 – 426 articles

Filtering by articles and review articles - 356

Operator 2 – 3 articles

Elimination of redundant articles

Total: 357 articles

16 Articles

Table 1 - Results of the bibliometric review

Nº	Authors	Title	DOI
1	Agarwal V., Sharma S., Gupta L., Misra D.P., Davalbhakta S., Agarwal V., Goel A., Aggarwal S.	COVID-19 and Psychological Disaster Preparedness - An Unmet Need	10.1017/dmp.2020.219
2	Al-Marashi I., Causevic A.	NATO and Collective Environmental Security in the MENA: From the Cold War to Covid-19	10.5038/1944-0472.13.4.1804
3	Beretta E.	Inflation soon a consequence of the COVID-19 pandemic? [Inflation bald als Folgeeffekt der COVID-19-Pandemie?]	10.1007/s41025-021-00213-8
4	Bonaccorsi G., Pierri F., Cinelli M., Flori A., Galeazzi A., Porcelli F., Schmidt A.L., Valensise C.M., Scala A., Quattrociochi W., Pammolli F.	Economic and social consequences of human mobility restrictions under COVID-19	10.1073/pnas.2007658117
5	Jowell A., Barry M.	COVID-19: A matter of planetary, not only national health	10.4269/ajtmh.20-0419
6	Lipsy P.Y.	Covid-19 and the politics of crisis	10.1017/S0020818320000375
7	Margherita A., Elia G., Klein M.	Managing the COVID-19 emergency: A coordination framework to enhance response practices and actions	10.1016/j.techfore.2021.120656
8	Matthewman S., Huppatz K.	Sociology of Covid-19	10.1177/1440783320939416
9	Momtazmanesh S., Ochs H.D., Uddin L.Q., Perc M., Routes J.M., Vieira D.N., Al-Herz W., Baris S., Prando C., Rosivall L., Abdul Latiff A.H., Ulrichs T., Roudenok V., Aldave Becerra J.C., Salunke D.B., Goudouris E., Condino-Neto A., Stashchak A., Kryvenko O., Stashchak M., Bondarenko A., Rezaei N.	Altogether to fight COVID-19	10.4269/ajtmh.20-0281
10	Mostafanezhad M.	Covid-19 is an unnatural disaster: Hope in revelatory moments of crisis	10.1080/14616688.2020.1763446
11	Murdoch D.R., French N.P.	COVID-19: Another infectious disease emerging at the animal-human interface	<a href="https://journal.nzma.org.nz/journal-articles/covid-19-another-infectious-disease-emerging-at-the-animal-human-interface">https://journal.nzma.org.nz/journal-articles/covid-19-another-infectious-disease-emerging-at-the-animal-human-interface</a>
12	Qian X., Ren R., Wang Y., Guo Y., Fang J., Wu Z.-D., Liu P.-L., Han T.-R.	Fighting against the common enemy of COVID-19: A practice of building a community with a shared future for mankind	10.1186/s40249-020-00650-1
13	Reddin K., Bang H., Miles L.	Evaluating simulations as preparation for health crises like CoVID-19: Insights on incorporating simulation exercises for effective response	10.1016/j.ijdr.2021.102245
14	Rodrigues K.F., Carpes M.M., Raffagnato C.G.	Disaster preparedness and response in brazil in the face of the COVID-19 pandemic [Preparação e resposta a desastres do brasil na pandemia da COVID-19] [Preparación y respuesta a desastres de brasil en la pandemia de COVID-19]	10.1590/0034-761220200291x
15	Selleck P., Barnard R.	The 1918 Spanish influenza pandemic: Plus ça change, plus c'est la même chose	10.1071/ma20049
16	Sohrabi C., Alsafi Z., O'Neill N., Khan M., Kerwan A., Al-Jabir A., Iosifidis C., Agha R.	World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19)	10.1016/j.jisu.2020.02.034

#### 4 FINAL CONSIDERATIONS

As in other countries, due to the typical conduct of health events, such as the pandemic of COVID-19, where there was only a healthy view of the problem, in Brazil, there were mistakes in the actions to confront the pandemic, resulting from the lack of balance between socioeconomic and health measures. First, very radical measures of social isolation were implemented initially in central countries and followed by peripheral countries, but with economic and social consequences of different proportions among nations. Second, because there are structural differences between the public health systems of the countries, and how their populations relate to these, added to the logistical and financial mobilization capacity of specialized beds in the face of the pandemic.

Without the correct balance between the isolation measures that directly impact the economies of the states, the cause-and-effect relationship existing between the addressed dimensions, such as increased inflation, economic recession, high-interest rates, paralysis of economic activities, mass layoffs, and impoverishment of people have affected and still affect the financial capacity of the countries to face the pandemic and, therefore, the research and development capacity, which are part of the scope of the health approach that promotes the technical and scientific interventions, so necessary in the learning curve of how to deal with a new disease.

The fact is that the economic and health dimensions go hand in hand and need to be explored in a multidisciplinary way, with the adoption of technical-scientific committees that holistically address the risks involved in dealing with a health crisis of global proportions, having the ability to balance mitigating actions for health with maintaining the economic health of nations.

The pandemic, still in course, has evidenced a greater need for integration among the various governmental and power spheres of nations, as well as it has become clear that the crisis caused by a biological natural disaster such as the COVID-19 pandemic should have been conducted by a technical-scientific committee, composed of several multidisciplinary bodies managed by the protection and civil defense agencies, however, the participation of the Brazilian National Civil Defense did not play a preponderant role in facing the COVID-19 pandemic.

A good governance model can be made with the concrete involvement of the Brazilian National Civil Defense in the coordination of a Crisis Cabinet at the national level, through a multidisciplinary approach and the use of data analysis tools to guide the decisions of the technical-scientific committees in facing the pandemic of COVID-19, regarding the macro-strategic actions of the State.

Thus, it would be important that the World Health Organization recommend the creation of a global governance model to guide nations in facing similar situations shortly, since this will certainly not be the last time that humanity will face a pandemic.

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