



Category: Health Sciences and Medicine

## REVIEW

# Prioritized sectors in the initial government response to face COVID-19. A systematic review

## Sectores priorizados en la respuesta gubernamental inicial para enfrentar el COVID-19. Una revisión sistemática

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### ABSTRACT

**Introduction:** the COVID-19 pandemic, declared by the World Health Organization in March 2020, has unleashed an unprecedented health crisis that has affected all aspects of human life. Governments around the world were forced to respond quickly to mitigate the effects of the spread of the virus, implement containment measures, and support their citizens during this global emergency. This study focuses on analyzing how governments prioritized their actions in different sectors during the initial phase of the pandemic.

**Objective:** identify the prioritized sectors in the first government measures implemented globally to confront the COVID-19 pandemic.

**Method:** this systematic review adheres to the guidelines established in the PRISMA Statement. From an exhaustive search in the Scopus database, a total of 97 scientific articles were identified. After a rigorous evaluation of the inclusion and exclusion criteria, 36 articles were selected that met the specific objectives of the research.

**Results:** the analysis of the selected articles revealed that the government measures adopted to confront the pandemic covered a wide range of human activities. However, an evident prioritization was observed in three specific sectors during the initial stage of the crisis at a global level: Social sector, health sector and economic sector.

**Conclusions:** the analysis of the reviewed literature demonstrates that governments, in their initial response to COVID-19, focused their efforts mainly on three sectors. This prioritization reflects a comprehensive strategy that encompassed containment of the virus, protection of health systems, and support for affected economies and societies.

**Keywords:** Pandemic; COVID-19; Public Politics.

### RESUMEN

**Introducción:** la pandemia del COVID-19, declarada por la Organización Mundial de la Salud en marzo de 2020, ha desatado una crisis sanitaria sin precedentes que ha afectado todos los aspectos de la vida humana. Los gobiernos de todo el mundo se vieron obligados a responder rápidamente para mitigar los efectos de la propagación del virus, implementar medidas de contención y apoyar a sus ciudadanos durante esta emergencia global. Este estudio se enfoca en analizar cómo los gobiernos priorizaron sus acciones en diferentes sectores durante la fase inicial de la pandemia.

**Objetivo:** identificar los sectores priorizados en las primeras medidas gubernamentales implementadas a nivel global para enfrentar la pandemia del COVID-19.

**Método:** esta revisión sistemática se adhiere a los lineamientos establecidos en la Declaración PRISMA. A partir de una búsqueda exhaustiva en la base de datos Scopus, se identificaron un total de 97 artículos científicos. Tras una rigurosa evaluación de los criterios de inclusión y exclusión, se seleccionaron 36 artículos que cumplían con los objetivos específicos de la investigación.

**Resultados:** el análisis de los artículos seleccionados reveló que las medidas gubernamentales adoptadas para enfrentar la pandemia abarcaron una amplia gama de actividades humanas. No obstante, se observó una priorización evidente en tres sectores específicos durante la etapa inicial de la crisis a nivel global: Sector social, sector sanitario y sector económico.

**Conclusiones:** el análisis de la literatura revisada demuestra que los gobiernos, en su respuesta inicial al COVID-19, centraron sus esfuerzos principalmente en tres sectores. Esta priorización refleja una estrategia integral que abarcó la contención del virus, la protección de los sistemas de salud y el soporte a las economías y sociedades afectadas.

**Palabras clave:** Pandemia; COVID-19; Políticas Públicas.

## INTRODUCTION

Throughout its historical trajectory, humanity has experienced notable social adaptations that have allowed it to guarantee, within communities, its survival and evolution until today. However, this process has not been without challenges, since humanity has had to overcome extreme and exceptional situations that have put its own existence at risk.<sup>(1)</sup> A clear example of this was the emergence of the COVID-19 pandemic at the beginning of 2020, which triggered an unprecedented global crisis that resulted in the loss of 6,8 million human lives around the world.<sup>(2)</sup> This crisis revealed the structural deficiencies and limited response capacity of many governments when managing a crisis of such magnitude.<sup>(3)</sup> Faced with this unexpected situation, many state administrations were overwhelmed, especially in the field of public health, where hospital systems were overwhelmed. Furthermore, the crisis spread to other spheres of daily life, acquiring a transversal and multidimensional character.<sup>(4)</sup>

The outbreak of the coronavirus caused a devastating impact on economies and public health systems on a global scale, significantly altering the quality of life of the population.<sup>(5)</sup> It is important to highlight that the government decisions adopted in this crisis context were marked by a high degree of uncertainty.<sup>(6)</sup> However, government responses to the pandemic in various countries were based on a delicate balance between the implementation of rigorous policies and the adoption of economic support measures, with the aim of protecting both public health and economic dynamics.<sup>(7)</sup> In this sense, governments implemented various mechanisms to contain the spread of the virus, including measures such as general immobilization of the population.<sup>(8,9)</sup> The suspension of non-essential activities and the implementation of actions in various sectors, covering productive, economic, social, legal and technological areas.<sup>(10)</sup>

## METHOD

The research we present has allowed us to carry out an analysis of the scientific evidence regarding the proposed topic, which leads us to acquire and implement new knowledge.<sup>(11)</sup> Furthermore, the PRISMA declaration has become an indispensable step in the process, because it provides a series of checkpoints, which allows the sequence of the methodology used to be verified.<sup>(12)</sup>

In this way, the search for information was limited to the Scopus database with the Boolean formulas: national AND defense AND covid-19; national AND security AND covid-19; pandemic AND state AND of AND emergency; national AND defense AND pandemic; national AND security AND pandemic. The time range covered by the search was from 2020 to 2024. Only systematic review articles published in their final version, in English and freely accessible, were included. The search returned a total of ninety-seven (97) documents. After an initial review of the titles and keywords, forty-eight (48) articles were identified directly related to the research topic. Subsequently, a more detailed review of the abstracts was carried out, selecting thirty-nine (39) articles. Finally, thirty-six (36) articles were included in the final work, as they met the established selection criteria and were directly aligned with the research objectives. The detailed analysis of the thirty-six (36) selected articles revealed the existence of a common pattern in the first measures adopted by the different governments against the COVID-19 pandemic. These measures focused on three well-defined sectors: Social sector, health sector and economic sector.

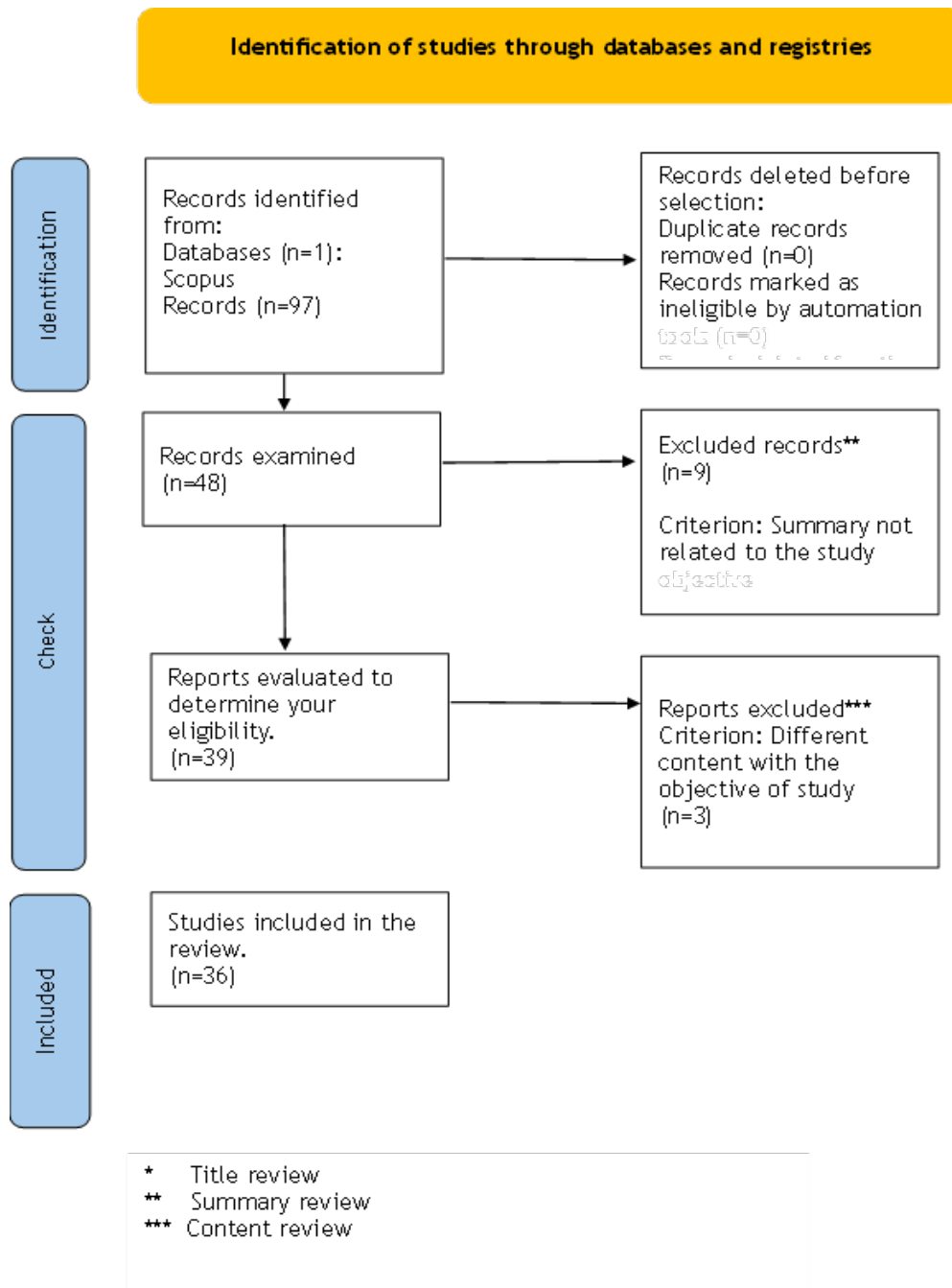


Figure 1. PRISMA Statement

## RESULTS

In line with the stated objectives, this systematic review identified the sectors prioritized in the first measures adopted by governments globally to confront the COVID-19 pandemic. This information can be very useful for designing more effective response strategies to future pandemics and other public health emergencies.

The literature search was performed in the Scopus database using a specific Boolean formula. A total of ninety-seven (97) articles were obtained. After an initial review of the titles, the number was reduced to forty-eight (48) articles. Subsequently, a more detailed review of the summaries and conclusions was carried out to select those that fit the research topic. Thirty-nine (39) articles were determined to meet all inclusion criteria. In the final review phase, three (3) articles were discarded because their content was not directly related to the research objectives. Thus, the final analysis was based on thirty-six (36) articles.

The analysis of the thirty-six (36) selected articles revealed that the first government measures against COVID-19 focused on three prioritized sectors: Social sector, health sector and social sector. It is important to highlight that some articles analyzed addressed the prioritization of one, two or even three sectors, in addition to including other relevant study elements in their analysis.

In addition to the prioritized sectors, the articles examined in this systematic review addressed a wide range of

topics related to the COVID-19 pandemic that could be the subject of future research. These topics include, but are not limited to; Food security in the most vulnerable countries, regions and populations;<sup>(13)</sup> The improvement of public policies;<sup>(14)</sup> The role of the armed forces;<sup>(15)</sup> Governance and health sovereignty;<sup>(16)</sup> Mental health;<sup>(17)</sup> Personal freedoms;<sup>(18,19,20,21,22)</sup> Information quality;<sup>(23,24)</sup> Leadership and academic training of rulers;<sup>(25)</sup> Globalism and nationalism;<sup>(26)</sup> The declaration of States of Emergency,<sup>(27)</sup> among others.

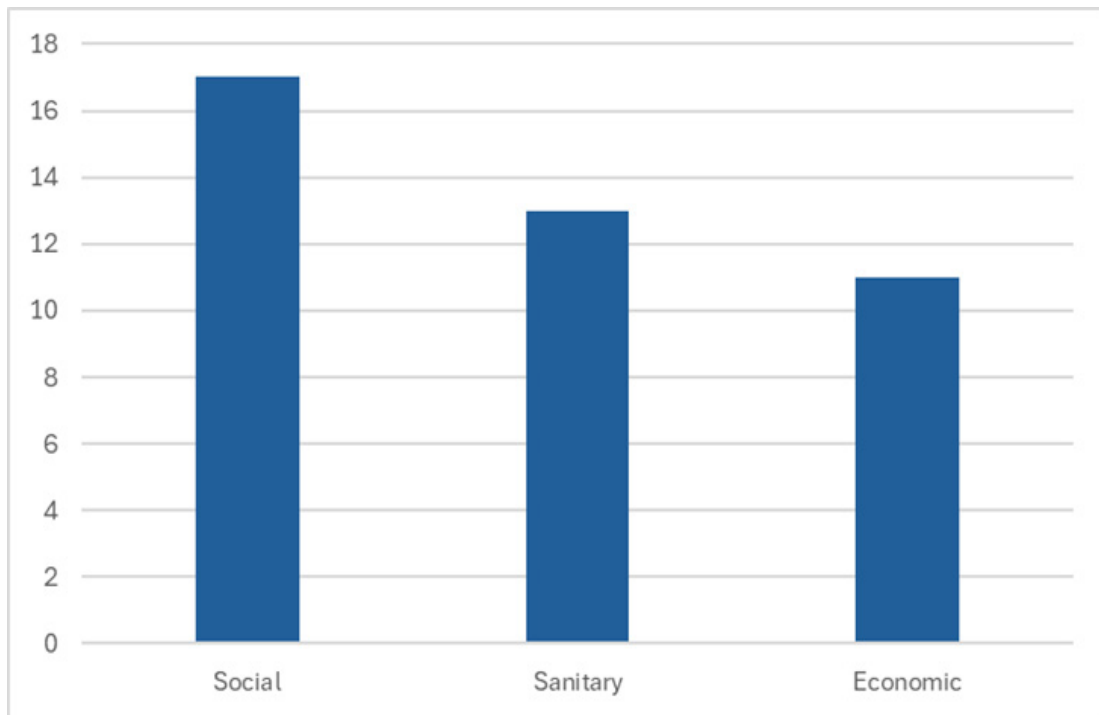
**Items Description**

The geographical coverage of the thirty-six (36) articles selected for this systematic review covers a wide range of countries, with references to sixty-new (69) nations belonging to five (5) continents: Africa, America, Asia, Europe, and Oceania. It should be noted that some of these countries are part of five (5) international communities: the European Union, the Association of Southeast Asian Nations (ASEAN), the Commonwealth of Independent States (CIS), the BRICS bloc and the African Union.

Regarding the thematic approach, the analysis of the selected articles reveals a wide range of government measures and responses implemented to confront the COVID-19 pandemic. However, a clear prioritization is observed in three specific sectors: Seventeen (17) articles focus their analysis on measures adopted in the social sphere, such as social distancing, mobility restrictions, support for vulnerable groups, among others. Thirteen (13) articles emphasize the measures implemented in the health sector, including the strengthening of health systems, increasing hospital capacity, the acquisition of medical equipment, the protection of health workers, among other measures. Finally, eleven (11) articles highlight the measures adopted to mitigate the economic impact of the pandemic, such as subsidies, financial assistance programs, tax deferrals, among others.

**Table 1.** Countries, continents, and communities of countries

Countries	Continents	Communities of countries
China, Italy, Poland, Taiwan, Brazil, United States, Australia, Canada, Finland, France, Germany, Greece, Spain, Sweden, Thailand, United Kingdom, Japan, South Korea, Singapore, Malaysia, India, Indonesia, Bosnia - Herzegovina, Colombia, Estonia, El Salvador, Ghana, Switzerland, Mexico, Netherlands, Vietnam, Portugal, Pakistan, Denmark, South Africa, Afghanistan, Bangladesh, Bhutan, Nepal, Sri Lanka, Peru, Iran, Jordan, Tunisia, Lebanon, Arabia Saudi, Kuwait, Palestine, Libya, Oman, Egypt, Bahrain, Qatar, Algeria, Sudan, Syria, Yemen, Morocco, Djibouti, Maldives, Turkey, Zimbabwe, Jordan, Kosovo, Botswana, Zambia, Ireland, Belgium, Philippines	Africa, America, Asia, Europe, Oceania	Association of Southeast Asian Nations, European Union, BRICS, Andean Community, Commonwealth of Independent States.



**Figure 2.** Number of articles in which the prioritized sectors to confront COVID-19 are analyzed

Table 2. Main measures adopted by prioritized sectors

Social	Sanitary	Economic
Border closure. Restriction on land, air, and sea transportation. Social distancing. Immobilization of the population. Food baskets. Mandatory social quarantine/ Curfew. Voluntary quarantine. Remote work / Teleworking. Closure of public and private premises. Mandatory use of masks. Hygiene recommendations, among others.	Acquisition of medical equipment. Purchase of medicines. Bonus for the health sector. Implementation of quarantine centers. Acquisition of medical ventilators (respirators). Test kits. Protective equipment, among others.	Economic bonds. Suspension of tax collections. Tax incentives. Bank loans with state guarantee. Essential commerce. Austerity measures in the government. Reduction in fuel prices. Low interest loans. Targeted subsidies. Tax Refunds. Online transactions. Reduction of working hours. Economic stimulus for companies, among others.

### Theoretical bases

In most Western countries, during the last decades the New Public Management (NPM) paradigm has predominated, which advocates a State with a small bureaucracy, but that exercises strong regulation and applies firm sanctions to social and economic agents (Roberts, 2020). This paradigm, consolidated since the “Washington Consensus” in the 1980s, is based on the premise that an efficient government is one that minimizes its intervention in the economy and maximizes the efficiency of its internal processes.

However, the COVID-19 pandemic has revealed the limitations of this paradigm for dealing with emergency situations. NPM, by focusing on efficiency and reducing the size of the State, is not designed to respond to scenarios in which the life, health and integrity of the population are threatened. Consequently, the measures adopted by many governments in the context of the pandemic have been reactive and lacking prior planning, which has generated uncertainty, inefficiencies and, in some cases, serious consequences for public health.<sup>(21)</sup>

### DISCUSSION

The analysis of the thirty-six (36) articles selected for this systematic review allows us to discuss several relevant dimensions on the initial government measures in response to COVID-19 and their impact on the prioritized sectors. Below are the main discussions derived from the findings.

#### Social sector

The review of the literature showed that measures in the social sector were the most common among the first government responses. Actions such as border closures, transportation restrictions, social distancing, and mandatory and voluntary quarantines were implemented in many countries to reduce the spread of the virus. These measures, although necessary to control the pandemic, also had significant side effects, such as social isolation, impact on mental health, and economic difficulties for the most vulnerable populations.

#### Sanitary Sector

The pandemic underscored the urgent need to strengthen health systems. Governments focused on the acquisition of medical equipment, medications, and the protection of health workers. However, the review revealed that despite these measures, many health systems were ill-prepared for the magnitude of the crisis. The lack of advance planning and reliance on administrative efficiency, rather than responsiveness, limited the effectiveness of these measures in several contexts.

#### Economic Sector

Economic measures, although essential to mitigate the financial impact of the pandemic, were diverse and sometimes inconsistent. From subsidies and state-guaranteed loans to tax cuts and economic stimulus, governments attempted to cushion the economic blow. However, the effectiveness of these measures varied significantly between countries, depending on the previous strength of their economies and their ability to implement expansionary fiscal policies without compromising long-term economic stability.

#### Limitations of the New Public Management (NPM) Paradigm

The pandemic revealed the limitations of the New Public Management (NPM) paradigm, which promotes the reduction of the size of the State and administrative efficiency. This review confirms that, in the face of a global health emergency, NPM-based policies were not sufficient. The lack of prior planning and the tendency to minimize state intervention generated reactive and, in many cases, inefficient responses. This finding suggests the need to reconsider and adapt public management models to include rapid and effective response capabilities to health emergencies.

#### Emerging themes for Future Research

The articles reviewed also highlight several emerging themes that could be the subject of future research.

These include food security, the improvement of public policies, the role of the armed forces in emergencies, health governance and sovereignty, mental health, personal freedoms, the quality of information, the leadership and training of rulers, and the tensions between globalism and nationalism. The diversity of these topics reflects the complexity and broad impact of the pandemic, suggesting the need for an interdisciplinary and global approach to address future crises.

### Geographic Variability in Response

The geographical coverage of the articles shows wide variability in the government response worldwide. The review of the measures adopted in countries on different continents and international communities indicates that there is no single solution to face pandemics. Cultural, economic, and political differences significantly influenced how each country handled the crisis. This variability highlights the importance of considering local contexts when designing global response strategies and the need for international cooperation to share knowledge and resources.

### CONCLUSIONS

The COVID-19 pandemic burst onto the global stage in an abrupt and unprecedented manner, generating a situation of widespread uncertainty. Many governments were faced with a crisis of unknown magnitude, without adequate crisis management plans to deal with it. This lack of initial preparation led to government measures taken in the early stage of the pandemic being largely based on the experiences of other countries and the limited possibilities of each nation.

Despite the diversity of national contexts and realities, the research identified three sectors as priorities in the government response to the pandemic: the social sector, the health sector and the economic sector. These sectors were considered essential to protect public health, guarantee the survival of the population and mitigate the economic impacts of the crisis. However, within these three identified categories, the intensity and scope of the measures implemented varied significantly between countries. Factors such as the level of economic development, the capacity of the health system, and the sociocultural characteristics of each nation influenced the specificity of the interventions implemented.

The investigation also revealed attention to other relevant aspects. Topics such as food security, the improvement of public policies, the role of the armed forces, governance and health sovereignty, mental health, personal freedoms, the quality of information, leadership and the academic training of rulers, globalism and nationalism, and the declaration of states of emergency were also the subject of analysis and debate.

The experience of the COVID-19 pandemic has made it possible to identify important lessons to improve the management of future crises. Contingency plans, the strengthening of international cooperation, the strengthening of public health systems, social and economic resilience, are some of the aspects that must be considered for further research into a more effective response to future global threats.

### REFERENCES

1. Xie X, Zhang Y, Zhang RJ, Ding Y, Guo Y. Better support for national than local system during the COVID-19 pandemic in China. *Analyses of Social Issues and Public Policy*. 2022 Apr 11;22(1):183-97.
2. Johns Hopkins University. Johns Hopkins University. 2023 [cited 2024 May 30]. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Available from: <https://coronavirus.jhu.edu/map.html>
3. Olimat MS. The Greater Middle East Covid-19 Crisis Management: Challenges and Opportunities. *J Int Womens Stud* [Internet]. 2022 [cited 2024 May 30];23(3):3-24. Available from: <https://vc.bridgew.edu/cgi/viewcontent.cgi?article=2763&context=jjws>
4. Valdez Huarcaya W, Miranda Monzón JA, Napanga Saldaña EO, Driver CR. Impacto de la COVID-19 en la mortalidad en Perú mediante la triangulación de múltiples fuentes de datos. *Revista Panamericana de Salud Pública*. 2022 Jun 3;46:1.
5. Clemente Suárez VJ, Navarro Jiménez E, Moreno Luna L, Saavedra Serrano MC, Jimenez M, Simón JA, et al. The Impact of the COVID-19 Pandemic on Social, Health, and Economy. *Sustainability*. 2021 Jun 2;13(11):6314.
6. Nurmandi A, Zahra A, Congge U. What are the Governmental Response Policies on COVID-19? A Meta-Thematic Analysis of Government Response Policy in the World. *Open Public Health J*. 2022 Mar 14;15(1).
7. Bajra UQ, Aliu F, Aver B, Čadež S. COVID-19 pandemic-related policy stringency and economic decline:



was it really inevitable? *Economic Research-Ekonomska Istraživanja*. 2023 Mar 31;36(1):499-515.

8. Dewi A, Nurmandi A, Rochmawati E, Purnomo EP, Dimas Rizqi M, Azzahra A, et al. Global policy responses to the COVID-19 pandemic: proportionate adaptation and policy experimentation: a study of country policy response variation to the COVID-19 pandemic. *Health Promot Perspect*. 2020 Nov 7;10(4):359-65.

9. Peci A, Avellaneda CN, Suzuki K. Governmental responses to COVID-19 Pandemic. *Revista de Administração Pública*. 2021 Feb;55(1):1-11.

10. Capano G, Howlett M, Jarvis DSL, Ramesh M, Goyal N. Mobilizing Policy (In)Capacity to Fight COVID-19: Understanding Variations in State Responses. *Policy Soc*. 2020 Jul 2;39(3):285-308.

11. Pineda Gea F, Téllez Ramos CM, Gutiérrez Aburto RA. Metodología Aplicada en la Redacción de Trabajos Monográficos de Tipo Revisión Sistemática. *Revista Ciencia y Tecnología El Higo*. 2023 Jun 30;13(1):2-19.

12. Codina L. Revisiones tradicionales, sistemáticas o de alcance: ¿cómo elegir el tipo de revisión de la literatura que corresponde en cada caso? *INFONOMY*. 2023;2(2).

13. Paudel D, Neupane RC, Sigdel S, Poudel P, Khanal AR. COVID-19 Pandemic, Climate Change, and Conflicts on Agriculture: A Trio of Challenges to Global Food Security. *Sustainability*. 2023 May 19;15(10):8280.

14. Osman ND, Hassan FM, Tajudin AA, Ali MNA. COVID-19 as a National Security Issue in Malaysia: A Comparison with the Italian and Australian Perspectives. *Academic Journal of Interdisciplinary Studies*. 2021 Jul 8;10(4):261.

15. Rasevic Z. The resort to military force in the COVID-19 health emergency: A justification. *Revista Científica General José María Córdova*. 2021 Jul 1;19(35):549-69.

16. Harrington J. Indicators, security and sovereignty during COVID-19 in the Global South. *Int J Law Context*. 2021 Jun 10;17(2):249-60.

17. Caponnetto P, Benenati A, Maglia MG. Psychopathological Impact and Resilient Scenarios in Inpatient with Schizophrenia Spectrum Disorders Related to Covid Physical Distancing Policies: A Systematic Review. *Behavioral Sciences*. 2021 Apr 13;11(4):49.

18. Francis L. Negative Freedom in Crisis Times. *Archiv für Rechts- und Sozialphilosophie*. 2021;107(1):79-89.

19. Fusco GG. Lockdown: A Commentary. *Acta Universitatis Lodzensis Folia Iuridica*. 2021 Sep 30;96:59-70.

20. Valutyte R, Jočienė D, Ažubalytė R. Legality of Human Rights Restrictions During the COVID-19 Pandemic Under the European Convention on Human Rights. *Tilburg Law Review*. 2021 Dec 28;26(1):1-15.

21. Seyhan E. Pandemic Powers: Why Human Rights Organizations Should Not Lose Focus on Civil and Political Rights. *J Hum Rights Pract*. 2020 Dec 4;12(2):268-75.

22. Nurkic B. THE RULE OF LAW CRISIS AND SELF-INCURRED IMMATURETY. *Journal of Liberty and International Affairs, Institute for Research and European Studies - Bitola*. 2020;6:67-79.

23. Seddighi H, Salmani I, Seddighi S. Saving Lives and Changing Minds with Twitter in Disasters and Pandemics: A Literature Review. *Journalism and Media*. 2020 Nov 19;1(1):59-77.

24. Lankford AM, Storzieri D, Fitsanakis J. Spies and the Virus: The COVID-19 Pandemic and Intelligence Communication in the United States. *Front Commun (Lausanne)*. 2020 Dec 3;5.

25. Mäntyneva P, Ketonen EL, Hiilamo H. Initial social-policy responses to the COVID-19 pandemic in the Global North - A scoping review. *International Journal of Sociology and Social Policy*. 2023 Dec 18;43(13/14):1-18.

26. Dąbrowska-Kłosińska P. The Protection of Human Rights in Pandemics—Reflections on the Past, Present,

and Future. German Law Journal. 2021 Sep 15;22(6):1028-38.

27. Papamichail A. The Global Politics of Health Security before, during, and after COVID-19. Ethics Int Aff. 2021 Oct 21;35(3):467-81.

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