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META ANALYSIS

What are the Governmental Response Policies on COVID-19? A Meta-Thematic Analysis of Government Response Policy in the World

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Abstract:

This paper aims to review numerous scientific papers on watershed governance published in globally recognized journals. Moreover, the overview article in this report is intended to conceptualize a study on COVID-19 government policy, which is explained by the following questions: (1) What are government policy answers on the relation and clustering of issues? (2) In the current government policy on COVID-19, what is the dominant issue? The results of the analysis of research papers show that the handling of COVID-19 around the world takes on "measures" or tactical policies with nine (9) dominant forms. The willingness of bureaucratized departments of public health to adapt to an outbreak helps state-of-the-art biomedical research and epidemiology to form policies. Each policy action entails insecurity and typically a great deal.

Keywords: COVID-19, Policy, Responses, Effective, Measures, Economic policy.

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1. INTRODUCTION

Facing the COVID-19 pandemic, the current and prospective government policies that often have incomplete or no information at all are still being created by policymakers [1]. In the context of the current COVID-19 pandemic, all governments in the world have been continuing public policy experimentation or disproportionate policy responses [2, 3]. In the preliminary work on policy studies, disproportionate policy responses are termed as policy overreaction. Once created, the policy tools menu, which consists of specific mechanisms to alter or organize people's behavior that is overly objective and perceived, produces social cost [4]. The ability of bureaucratized public health departments to respond to a pandemic means that the cutting-edge findings of biomedical sciences and epidemiology have a strong chance of shaping policy [5]. The fundamental issue of whether particular policy responses are proportionate to the nature of a policy problem and the related costs has since spread to other policy fields [6].

Our results showed that many countries need help in achieving these capacities and increased assistance as a global priority intervention to increase the protection of health [7]. Governments may overreact to unclear or ambiguous signals. Firstly, exposure to a question almost always takes a "valuable

room on the agenda, and there can be an adverse impact that inadvertently prioritizes issues. The same degree of signal strength at a time when the agenda is crowded with fewer issues leads to behavior when the public agenda is not congested. The threshold itself is also dependent. Third, signals typically do not perceive themselves. The problem can all be addressed by interest groups, policymakers, think tanks, elected leaders, and mobilized people. Due to its electoral alliance, one party can be more sensitive to a problem than another; the governing party is more prone to mobilization [8].

This imbalance is expected to affect the costs and benefits of policy action. Costs and benefits are, of course, the market portfolio of economic analysts. After the beginning of the policy review in the 1960s, the costs and benefits of particular policy actions have also provided rich information to political scientists [9]. Every policy decision involves uncertainty, and usually lots of it. Most information, as almost everybody understands, is uncertain [10]. It is, therefore, crucial to understand what health-related information is available online. While timely and accurate health information is present online, misinformation and rumors seem equally so [11]. COVID-19 has quickly spread, with a growing number of infected patients worldwide and uncertain about the future development of the disease [12].

In this article, we seek to explore the variability of prominent government response policy on COVID-19 in policy research. Thus, recent work has been done on identifying

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policy research thematic trends in different journals. However, the most unexplored part is its new challenges in the pandemic policy. This article has been systematically outlined into introduction, method, findings: thematic, relationship among the thematic cluster, Government Policy Responses on COVID-19, and policy measures.

2. METHODS

We used the Scopus search engine between August and September 2020 to identify the broad literature mentioning any policy research related to applying a certain theory. Scopus is one of the most extensive citations and abstract databases of peer-reviewed literature, such as scientific journals [13]. The initial search identifies publications related to policy researches in their titles, abstracts, or keywords: (“covid”OR”coronavirus”) AND (“government response policy”).

This study aims to review various scientific articles discussing watershed governance that have been published in

reputable international journals. In addition, the review article in this study is directed at conceptualizing the study of government policy on COVID-19, which is explained through the following questions, namely [1]: What is the relationship and clustering of themes in government policy response [2]? What is the dominant theme in current government policy on COVID-19? These questions are explained based on the topic of study, framework, and previous research findings indexed in the Scopus database. Articles are reviewed in this study through the following stages [1]: article search and [2] topic mapping.

Articles were searched for through the following stages. First, article identification was carried out. This was done using the Scopus database. Furthermore, during this stage, the keywords (“covid”OR”coronavirus”) AND (“government response policy”) were inputted into the article search Scopus database. There are 142 documents related to these topics. After reviewing all documents, the eligible 40 documents cover government response policy on COVID-19 all over the world, as shown in Fig. (1) below.

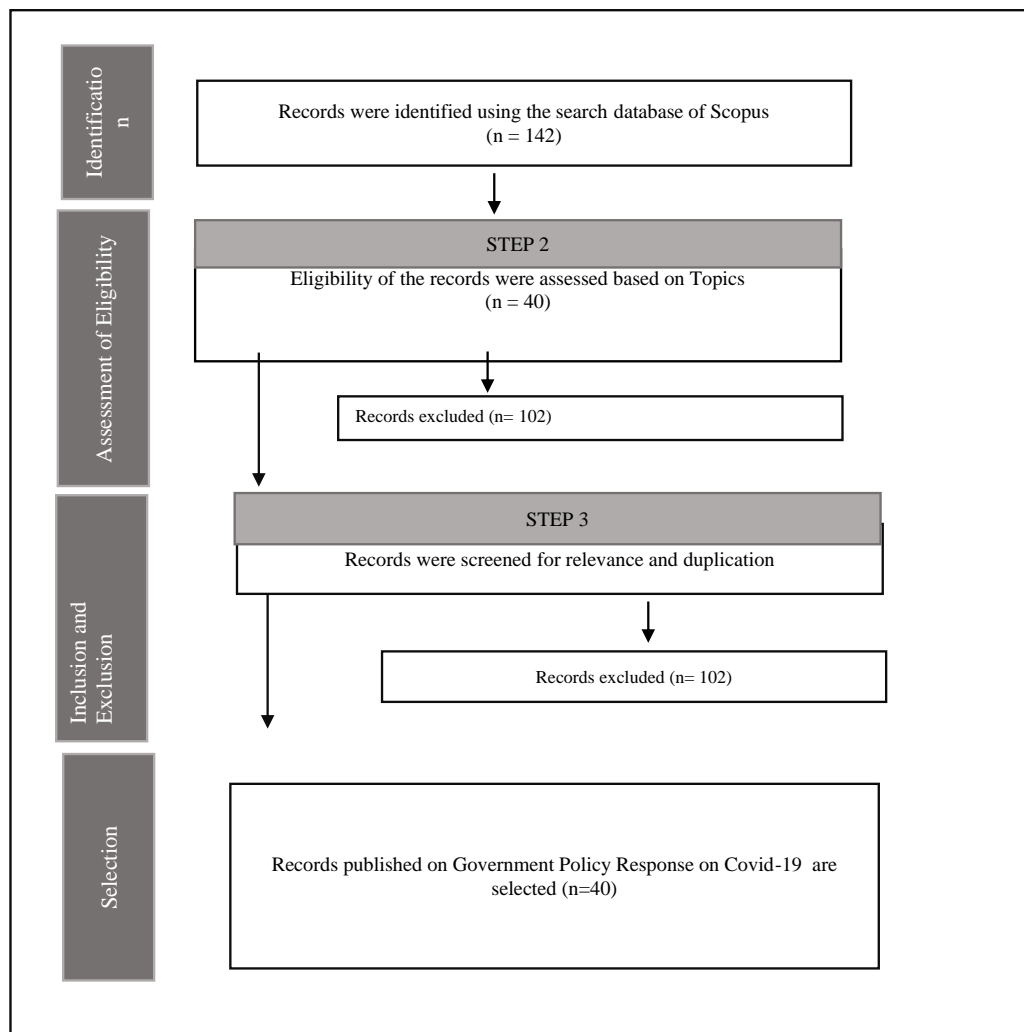


Fig. (1). Stages in searching and selection of articles.

The mapping stages in this study were carried out through the following process. First, the full-text articles were imported into the VOSviewer and NVivo 12 plus software. This process was carried out to obtain clusters of data and to visualize the networking of the study theme. Meanwhile, the Nvivo 12 plus software was used to input the topic of study, the relationship between the study themes, and their mapping, based on the focus of each article analyzed. Second, the articles were managed in the Nvivo 12 plus software by classifying them based on their author, year, journal, and publisher’s name. Furthermore, this classification was carried out using the NVivo 12 plus database import feature.

The stages of data analysis and conceptualization review the article, resulting in data that can be used to answer the study questions. Moreover, at this stage, data analysis is focused on cluster analysis, dominant topics, linkage of themes, and mapping of watershed governance study topics, based on the 40 articles analyzed.

3. RESULTS

Screened results at the end of each search iteration were saved into separate marked lists. The Scopus was used to visualize outputs and categorize and rank results. The extracted data were imported and cleaned into VOSviewer – a program visualization data to establish and view network maps based on collected data (Pan, Yan, Cui, & Hua, 2018), as shown in Table 1 below.

Based on cluster analysis, there are four (4) clusters

discussed from a paper on government policy on COVID-19, namely, cluster 1 relating to the country, government response, viruses, spread, and time, as shown in Table 1 above and Fig. (2) below. Meanwhile, cluster 2 consists of five items that relate to COVID-19 in China, where the COVID-19 originated. Cluster 3 focuses more on policy and cluster 4 on outbreaks.

Table 1. Cluster analysis.

Cluster 1 (9 items)	Country, COVID-19, government response, measure, person, spread, study, time, virus
Cluster 2 (5 items)	China, government, pandemic, paper, response
Cluster 3 (1 items)	Policy
Cluster 4 (1 items)	Outbreak

Furthermore, using Nvivo, a hierarchical chart is found, as shown in Fig. (3). Most of the content is on health policy and public health. At the governmental level, what is discussed is the response, measures, and systems.

At a conceptual level [3,4,14,15], policy underreaction is described as “a systematically sluggish or insufficient policymakers’ response to increased danger or opportunity or no response at all.” If policy deprivation continues for a long time [1], there is a negative policy bubble. Similarly, overreactions in policy are ‘policies which impose objective and/or social costs without producing compensatory objective and/or perceived benefits’ [4]. Again, the idea of overinvestment “calls for government spending in a single policy instrument to surpass its instrumental value for the achievement of a policy target” [16].

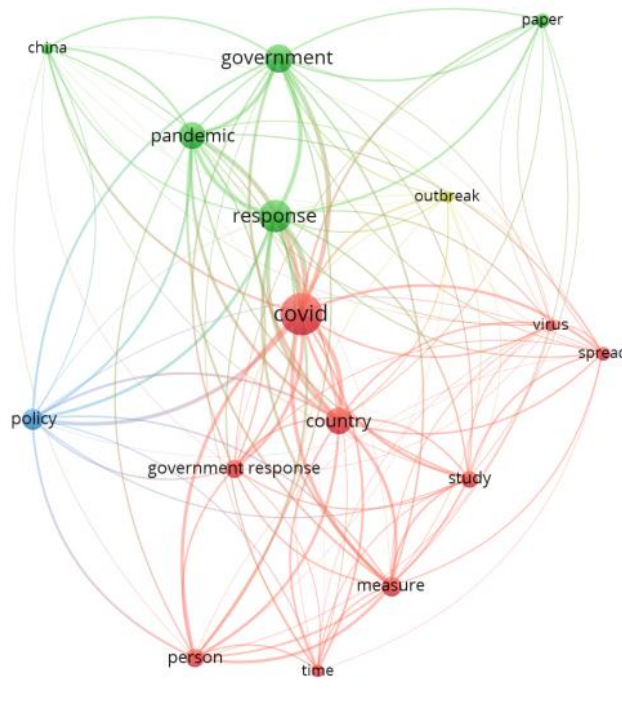


Fig. (2). Visualization of themes.

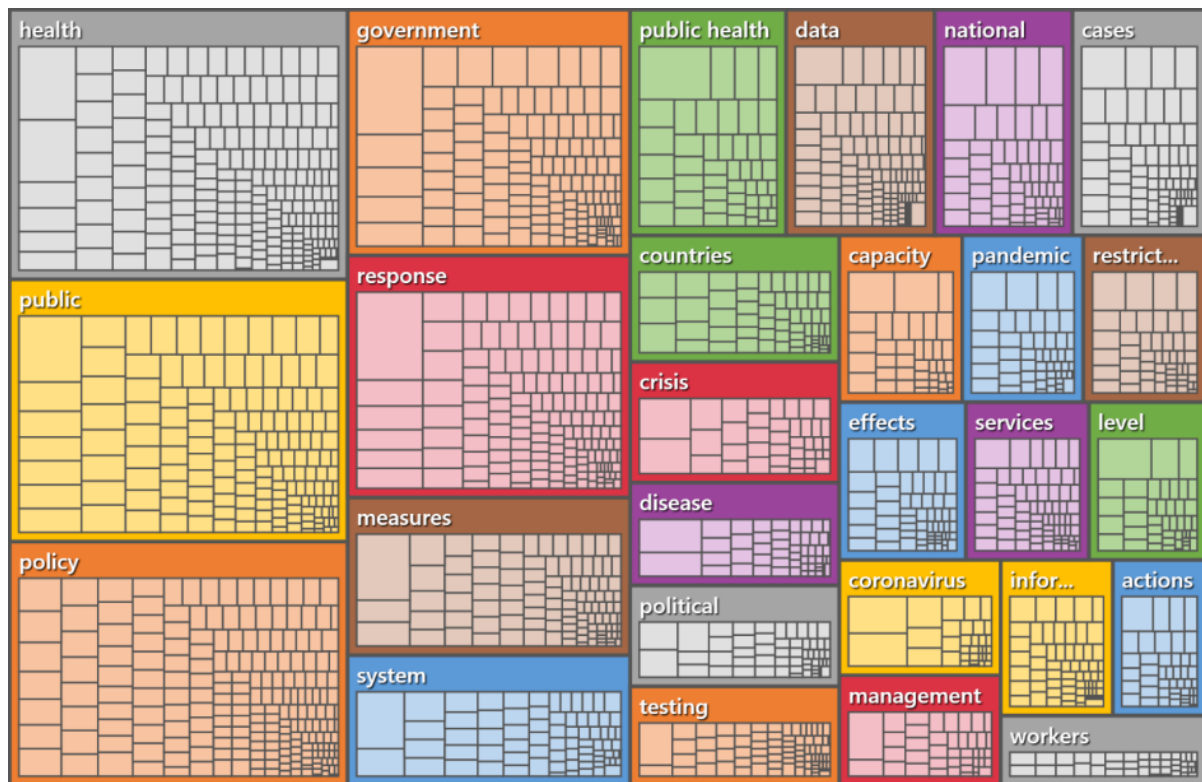


Fig. (3). Hierarchy Chart of Themes.

Disproportionate response to signals implies substantial difficulty in relating policy outputs to informational inputs [10]. Three components of disproportionate responses are the inevitable balancing mechanism between many problems, to recognize and interpret the problem of choice by decision-makers the process of weighing up the qualities that characterize the issue and the option of competing solutions.

The first is in the operationalization of disproportionate policy responses. While existing studies like those mentioned above put forward rich and nuanced ways to measure policy (dis)proportionality, there is a need for a more systematic measurement strategy that is more parsimonious, intersubjective, and is suitable for large-n comparative research. Indeed, existing studies are based on single cases or small-n studies and frequently use secondary literature as the main source of empirical evidence. The second gap concerns the political determinants of the accuracy of risk estimation by policymakers.

The content analysis in Table 2 above shows that the correlation between "policy" and "government" and "government" and measures "has a high correlation. The other interesting findings found that policy, government, action, and capacity were dominant variables in handling the dynamically changing COVID-19 pandemic in the world. The results of the analysis of research papers showed that the handling of COVID-19 around the world takes on "measures" or tactical policies with nine [9] dominant forms, which are described in the next section.

Table 2. Content relations.

Code A	Code B	Pearson correlation coefficient
Policy	Government	0,815794
Measures	Government	0,757718
Government	Actions	0,74199
Policy	Measures	0,73014
Policy	Actions	0,696608
Government	Capacity	0,654872
Capacity	Actions	0,651784
Measures	Capacity	0,65077
Measures	Actions	0,623223
Policy	Capacity	0,612385

3.1. COVID-19 Crisis and Government Response Policy

A pandemic is defined as "an epidemic occurring over a very wide area, crossing international boundaries, and usually affecting a large number of people" [17, 18]. Pandemics can cause sudden, widespread morbidity and mortality as well as social, political, and economic disruption [19]. Many of these countries are in areas with high spark risk, particularly in Central and West Africa, and thus may remain vulnerable and require significant international assistance during a pandemic. Other environmental and population trends that could increase the severity of pandemics include the persistence of slums, unresponsive health systems, higher prevalence of comorbidities, weaker sanitation, and aging populations [20]; (UNDESA 2015).

Pandemic preparedness and response interventions can be classified by their timing with respect to the pandemic occurrence, the pre-pandemic period, the spark period, and the spread period [19]. Political instability, weak public administration, inadequate public health services, and gaps in fundamental outbreak detection and response systems can affect poorly prepared countries [19]. Logically, well-prepared countries have effective governance structures, strong economies, and sufficient health sector expenditure. In responding to the COVID-19 crisis, some measures include school closures, restrictions on travel, bans on public gatherings and emergency spending in education, new forms of social service delivery, and other initiatives to prevent the spread of the virus with variation and the level of adoption.

The content analysis found eight [8] main government policy responses, namely budgetary policies, control policies, containment policies, disproportionate policies, economic policies, health policies, fiscal policies, and mitigation policies, as shown in Fig. (4).

3.1.1. Economic Policy

The economic policy consists of monetary policy and fiscal policy. New Zealand government has two fiscal policies: first, the government's first package of proposals included a permanent boost in income support of \$25 per week for people who are unemployed; and secondly, the COVID-19 activities were added to existing programs; current services were not cut in order to accommodate the Covid response [21]. The Bank of Ghana has already implemented a range of constructive monetary policy initiatives in accordance with the Ministry of Finance and its medium-term fiscal policy priorities, and foreign organizations have provided financial assistance to alleviate the short-term economic impacts of the coronavirus outbreak [22]. It documented the median age of the population, the number of hospital beds per capita, the gross domestic product (GDP) per capita, and the number of total cases, which were all substantially linked to the degree of the country's economic policy responses [23].

3.1.2. Control Policy

Policymakers and the public are rapidly responding and implementing the solutions that need to be pursued in real-time and the measures that are more or less effective [24]. In summary, our results offer additional information that may educate policymakers about the timing of the implementation and elimination of various non-pharmaceutical interventions, NPIs [25]. Countries such as Italy, the USA, Spain, and France, with the most advanced health care systems, have failed in controlling the infection, possibly due to a lack of social distancing [26]. Take the United States, where Donald Trump

is only now acknowledging the seriousness of the pandemic after weeks of claiming fears were exaggerated. Until recently, his government put more money into shielding the oil industry than providing adequate testing kits. In Italy's early stages, the COVID-19 crisis looked nothing like a crisis. The initial state-of-emergency declarations were met by skepticism by both the public and many others in policy circles, even though several scientists had been warning of the potential for a catastrophe for weeks. Indeed, in late February, some notable Italian politicians engaged in public handshaking in Milan to point out that the economy should not panic and stop because of the virus. Based on rational choice, governments are mainly interested in maximizing their time in office, the logic of political survival that is famously established [27].

3.1.3. Containment Policy

In Japan and South Korea, general satisfaction with the two governments' reaction to the pandemic differs significantly relative to that of the people of other countries' response to their governments [28]. To successfully deal with the crisis, the Indonesian government needs to develop effective containment measures as well as effective stimulus and aid packages for impacted citizens and enterprises without threatening the financial system [29]. The study discussed people's support for containment strategies, questions about the effects of COVID-19, and confidence in information sources. People were largely pleased with their government's answer to the pandemic; nevertheless, the degree of support varied across countries and policy steps [30].

3.1.4. Disproportionate Policy

In brief, a policy solution for COVID-19 is proportionate whether there is a 'match' (or balance) between its costs and the gains gained from it, as well as between policy ends and means [15]. The present research suggests that economic conditions, along with public demand, concentrated events, and strategic factors, can lead policymakers to opt for premature or excessive policy action [23]. This study showed that more than half of the countries in its data collection of 117 countries were disproportional in the Pandemic Policy Response to COVID-19 [23].

3.1.5. Effective Health Policy

Long-term health challenges will emerge as a consequence of the pandemic. What would this do for the future of health policy? Is the Affordable Care Act (ACA) to be amended? Would it be replaced by a national health care plan, such as "The Medicare for All" [31]? As a result, as mentioned above, the country boasts nine ministers responsible for different aspects of health policy [32].

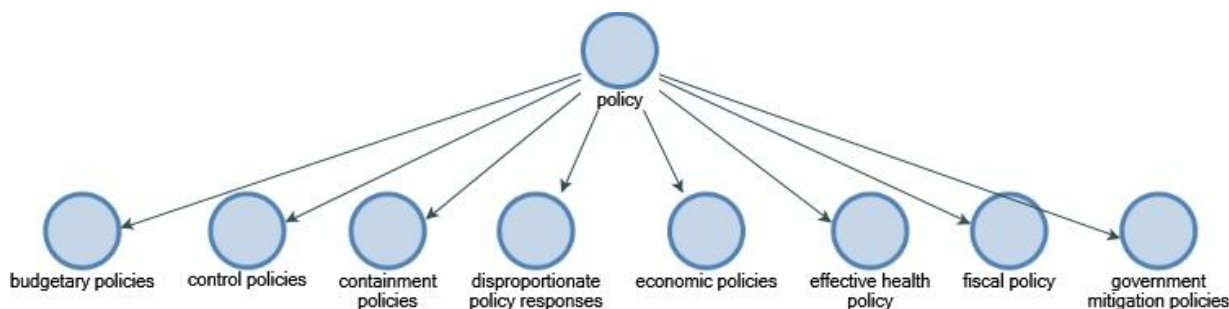


Fig. (4). Government policy responses on COVID-19.

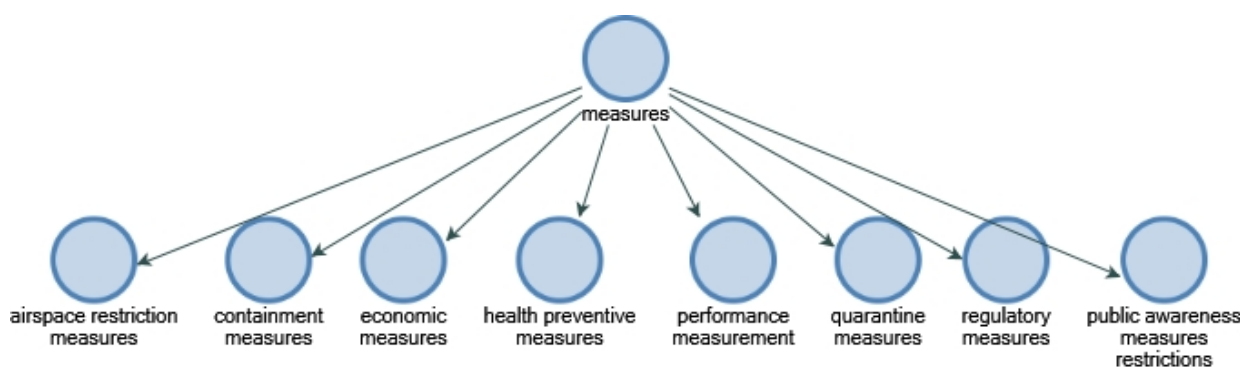


Fig. (5). Policy measures on COVID-19.

3.1.6. Mitigation Policy

Disease-related text mining researches with respect to their application can be divided into four primary groups as follows: a. Outbreak monitoring and prediction; b. Infodemic and misinformation detection; c. Social/public concern detection; d. Control Disease Centers response analyzing [33].

4. MEASURES

There are nine measures applied by the government in the world: (1) the mitigation and containment and the economic measures; (2) physical measures, assessing mobility and some possible determinants of it; (3) the health system response [34]; (4) airspace restriction measures [35]; (5) public awareness measures [36]; (6) quarantine measures [37]; (7) regulatory measures [38]; and performance measures [39], as shown in Fig. (5). Latin American countries introduced stringent measures of containment and mitigation and the scale-up of health system capacities. Pre-pandemic conditions that characterize these countries (high informal employment and social inequalities) have undermined the effectiveness of the countries' responses to the pandemic [34]. The COVID-19 pandemic records the severity of "lockdown style" restrictions, which largely limit people's conduct [37]. Denmark adopted a kind of suppression strategy that included social distancing, lockdown, and screening of people with mild symptoms [35].

In Latin America, the government's responses to contain

and mitigate the spread together with economic measures have affected the COVID-19 health outcomes [34].

4.1. Mitigation and Containment Measures

Some of the government's guidelines have focused on targeted non-pharmaceutical measures in a manner that is least harmful to society. Finland adopted the textbook-style "Test, Trace, Isolate and Treat" thinking, but it did so in a more flexible way, and Italy's stringent responses were a reflection not necessarily of its higher preparedness [36]. Data in Table 3 below reveals the rank of policy content, namely first rank preventive measures, which are the most common policy in the world, consisting of physical distancing, containment, compliance, social, policies, social distancing, social distancing measures, containment measures, physical distancing, social distancing policies, containment and mitigation with policy actions public events, internal movement, internal movement limits, gatherings of more than ten, requirements to stay at home, workplace closure, school closure, public gatherings, stay at home requirement, home orders, mass gatherings, ban on gatherings, ban on public events, public events ban, bans on the public, bans on public events, closure of schools, international travel, public transport, home order, and public events bans. The second rank of policy content issue is RESPIRATORY SYNDROME which reveals the main problem of the COVID-19 pandemic in the world.

Table 3. Topic coherence.

S.no	Topic	Keywords	Coherence	Freq.	Cases	% Cases
1	STAY AT HOME INTERNAL	STAY; INTERNAL; MOVEMENT; GATHERINGS; HOME; CLOSURE; EVENTS; LIMITS; BAN; SCHOOL; SCHOOLS; STAY AT HOME; PUBLIC EVENTS; INTERNAL MOVEMENT; INTERNAL MOVEMENT LIMITS; GATHERINGS OF MORE THAN TEN; REQUIREMENTS TO STAY AT HOME; WORKPLACE CLOSURE; SCHOOL CLOSURE; PUBLIC GATHERINGS; STAY AT HOME REQUIREMENT; HOME ORDERS; MASS GATHERINGS; BAN ON GATHERINGS; BAN ON PUBLIC EVENTS; PUBLIC EVENTS BAN; BANS ON PUBLIC; BANS ON PUBLIC EVENTS; CLOSURE OF SCHOOLS; INTERNATIONAL TRAVEL; PUBLIC TRANSPORT; HOME ORDER; PUBLIC EVENTS BANS;	0,519	1370	90	89,11%
2	RESPIRATORY SYNDROME	SYNDROME; RESPIRATORY; ACUTE; SEVERE; SARS; COV; CAUSED; RESPIRATORY SYNDROME; RESPIRATORY SYNDROME CORONAVIRUS; MIDDLE EAST RESPIRATORY SYNDROME; SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS; TRANSMISSION OF SARS; MIDDLE EAST; MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS; INTRODUCING AND LIFTING;	0,514	661	71	70,30%
3	PROTECTIVE EQUIPMENT	EQUIPMENT; PROTECTIVE; PERSONAL; MEDICAL; SUPPLIES; CARE; WORKERS; ACCESS; HEALTHCARE; PROTECTIVE EQUIPMENT; PERSONAL PROTECTIVE EQUIPMENT; HEALTHCARE WORKERS; HEALTH CARE; MEDICAL EQUIPMENT; MEDICAL SUPPLIES; ACCESS TO HEALTHCARE; HEALTH WORKERS; PROTECTIVE SUITS; HEALTH CARE WORKERS; HEALTHCARE RESOURCES;	0,355	729	86	85,15%
4	CONFIRMED CASES NUMBER	CASES; NUMBER; DEATHS; COUNTRIES; RATE; CONFIRMED; CONFIRMED CASES; NUMBER OF CASES; CASES AND DEATHS; RMED CASES; NUMBER OF DEATHS; EUROPEAN COUNTRIES; NUMBER OF COVID;	0,339	2476	96	95,05%
5	SOCIAL DISTANCING MEASURES	MEASURES; DISTANCING; CONTAINMENT; COMPLIANCE; SOCIAL; POLICIES; SOCIAL DISTANCING; SOCIAL DISTANCING MEASURES; CONTAINMENT MEASURES; PHYSICAL DISTANCING; SOCIAL DISTANCING POLICIES; CONTAINMENT AND MITIGATION;	0,327	1674	98	97,03%
6	TERM IMPLICATIONS ECONOMIC SHOCKS	TERM; ECONOMIC; LONG; ECONOMY; ECONOMIC SHOCKS; TERM IMPLICATIONS; TERM FISCAL; ECONOMIC IMPACTS; TERM ECONOMIC; ECONOMIC RECOVERY; FISCAL SUSTAINABILITY; SHORT TERM; ECONOMIC AND SOCIAL; ECONOMIC DEVELOPMENT; ECONOMIC RESILIENCE; TERM FISCAL SUSTAINABILITY; IMPACTS OF THE CORONAVIRUS; ECONOMIC ACTIVITY; GLOBAL ECONOMY; ECONOMIC CRISIS; ECONOMIC GROWTH; ECONOMIC IMPACT; HEALTH AND ECONOMIC; LONG TERM; SUPPORT ECONOMIC; TERM SUSTAINABILITY;	0,319	885	79	78,22%
7	CRISIS MANAGEMENT	CRISIS; MANAGEMENT; GOVERNANCE; CRISIS MANAGEMENT; HEALTH CRISIS; EMERGENCY AND CRISIS MANAGEMENT; PUBLIC HEALTH CRISIS; CRISIS MANAGEMENT CAPABILITIES; EMERGENCY MANAGEMENT; MANAGEMENT SYSTEM; DISTRIBUTED COGNITION; MANAGEMENT OF THE CRISIS; PATIENT MANAGEMENT;	0,289	600	73	72,28%
8	INFECTIOUS DISEASE WUHAN	WUHAN; DISEASE; JANUARY; CONTROL; INFECTIOUS DISEASE; DISEASE CONTROL; REST OF CHINA; CORONAVIRUS DISEASE; DISEASE CONTROL AND PREVENTION; ALERT LEVEL; HUBEI PROVINCE;	0,280	522	77	76,24%
9	BIG DATA	DATA; BIG DATA; DATA COLLECTION; DATA ANALYSIS; PUBLIC DATA; DATA QUALITY; PUBLIC ORGANISATIONS; LEVEL DATA; RESEARCH ASSISTANTS; WORLD IN DATA; POLICY ACTIONS;	0,272	751	72	71,29%

Source: Analysis with Wordstat software.

4.2. The Economic Measures

The slowdown has put significant strain on local and national businesses with demand-side policies and supply-side policies [40]. On the supply side, some countries have been on a shift as governments have created new grant programs specifically for businesses that have been affected by

shutdowns. Egypt's reaction to the pandemic would dramatically decrease Egypt's fiscal space, as expanded spending and debt service commitments are not covered by the levying of the corona tax on salaries and wages [41]. Indonesian government's economic policy responses have been directed at stabilising the ship, meeting both the needs of the

disadvantaged and the potentially poor (vulnerable) classes [42].

CONCLUSION

In the context of the current COVID-19 pandemic, all governments in the world have been continuing public policy experimentation or disproportionate policy responses. The ability of bureaucratized public health departments to respond to a pandemic means that the cutting-edge findings of biomedical sciences and epidemiology have a strong chance of shaping policy. Every policy decision involves uncertainty, and usually lots of it. Most information, as almost everybody understands, is uncertain. It is crucial to understand what health-related information is available online. While timely and accurate health information is present online, misinformation and rumours seem to be equally so. The disease has quickly spread, with a growing number of infected patients worldwide, and it is uncertain about the future development of the diseases [12]. It is important to understand the full range of health information available online and the costs and benefits of particular policy actions. The problems can all be addressed by interest groups, policymakers, think tanks, elected leaders, and mobilized people. This imbalance is expected to affect the costs, benefits, and costs of policy action. The research shows that many countries need help in achieving these capacities and increased assistance as a global priority intervention.

In this article, we seek to explore the variability of prominent government response policy on COVID-19 in policy research. The Scopus search engine was used between August and September 2020 to identify the broad literature mentioning any policy research related to applying a certain theory. This study aims to review various scientific articles discussing watershed governance that have been published in reputable international journals. We ask the following questions: What is the relationship and clustering of themes in government policy response? What is the dominant theme in current government policy on COVID-19? The questions are explained based on the topic of study, framework, and previous research findings indexed in the Scopus database.

CONSENT FOR PUBLICATION

Not applicable.

STANDARDS OF REPORTING

PRISMA guidelines and methodologies were followed for this study.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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Declared none.

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