

Utilizing Evidence-Based Decision Making in Responding Public Health Emergency

Merlyn A. Nachor-Casongsong
 Doctor of Public Administration Student
 National College for Public Administration and Governance
 University of the Philippines

Abstract:-

Aim: The objective of this research is to examine the importance of evidence-based decision-making in managing the public health emergencies. The objective of this study is to examine the efficacy of this approach in enhancing the decision-making process of policymakers, government officials, and medical practitioners in the formulation, execution, and advancement of public health policies and initiatives. The researcher wanted to prove that evidence-based decision-making constitutes a critical element of efficient and effective decision making and represents an effective approach to managing public health crises. It urges decision-makers to give high-quality data and evidence a priority when making decisions before disseminating them to the public.

Methodology: The researcher used the combined approach of Rousseau's Managerial Context of Evidence-Based Decision Making and Briner et al.'s (2013) method of utilizing evidence-based decision-making sources. The researcher used the identified sources of evidence-based decision-making: scientific research findings, professional experience and judgment, stakeholders' values and concerns, and organizational data, facts, and figures by Briner et.al. and made some focus group discussion and semi-structured interview to deepen the understanding on different approaches and responses of different localities and to create a dialogue between the respondents and the researcher.

Results: The results of the study show that the Philippines is unprepared for this type of pandemic, indicating our shortcomings in handling it. The recent pandemic highlighted the nation's insufficiency on medical resources, including to the limited access to medicines, vaccines, and personnel. These factors hinder the ability of the government to effectively manage pandemics. The outcomes of the study underscored the necessity of augmenting financial resources for the advancement of healthcare infrastructure, reassessing the remuneration framework of our public health experts and medical practitioners to incentivize their retention within the nation, and prioritizing and reinforcing vaccine research and facilities in the country. The study also shows that Philippines has a plethora of pandemic-related policies in place to protect and allocate financial resources across various sectors. However, the effectiveness of these policies or regulations is dependent on participation and cooperation of the general public to the government. It is critical to recognize the importance of collaborative efforts among the government, non-

governmental organizations, and private businesses in combating the issue at hand. The mitigation of this pandemic is a shared responsibility, necessitating collaborative efforts as our only chance to overcome this challenge.

Conclusion: The researcher concludes that despite of all the measures implemented by the government to mitigate the spread of the virus it will not have a good result if the people continue to disregard the government's policy and program. Flattening the curve will not be achieved overnight, it more problematic if the people and the communities continue to ignore and disregard the government's order and its call to report accurate information. The inaccuracies in the information lead to more serious problems. Fighting this pandemic is not a sole responsibility of the government leaders, it's a collective responsibility shared by the people in the community and the government. The effectiveness of non-pharmaceutical intervention is dependent on the strictness of the enforcement of the government policy and the participation of the people. In this period, there is a need to forget the issues of politics and concentrate on saving as many lives as possible. Even if the Philippines has pandemic governance laws and policies in place, it will be hard to attain the desired result if we continue to hide the truth. Remember that records and information are important elements in order to properly address and come up with a good master plan for responding to the problem. The researcher concludes that changing cultural and psychological mindsets in an instant is hard, but when our lives and our family's lives are at stake, we need to take the challenge seriously. The pandemic is real, death is everywhere, and the cure is uncertain. Therefore, addressing this pandemic is a collective effort and evidence-based decision making from the government, individuals and to the private companies. It is essential to prioritize health and safety while also rediscovering our core values and ties. Lastly, the task of transitioning from a pandemic to a flexible culture requires everyone's involvement. By rising above the pandemic and rebuilding our lives, we can emerge as a stronger and more resilient nation.

Keywords:- Evidence-based, public health emergencies, pandemic, covid-19.

I. INTRODUCTION

At the start of writing this paper, the researcher noticed that the COVID-19 situation in the Philippines had begun to worsen, with 3,870 cases reported. Furthermore, the disease had spread to 211 countries, affecting 1,490,154 people worldwide. COVID-19 is not the first pandemic that strike mankind. Smallpox, cholera, dengue fever, AIDS, influenza, severe acute respiratory syndrome (SARS), H1N1, and other serious pandemics have occurred in the past. According to Verrikios et al. (2015), the rapid transmission of infectious diseases across borders poses a significant threat to both economic and regional stability. Today, we are dealing with Covid-19, a new coronavirus.

On 31 December 2019, news from China quickly spread, indicating the discovery of the first COVID-19 case in Wuhan, which is believed to be the epicenter of the outbreak. The Chinese leaders tried to control the situation by covering up the information. However, the death of a medical practitioner in Wuhan gave rise to anxiety and started to raise questions, doubts, and concerns across the world, and the virus's cases and fatalities started to increase even outside of China. The documented human-to-human and patient-to-medical staff transmission alarmed the World Health Organization (WHO), which eventually declared COVID-19 a pandemic as it has already affected numerous countries to varying degrees (Herido et al., 2020). The frightening transmission and nonstop increased of the patients in many parts of the world, prompted the WHO to declare public health emergencies. Public health emergencies (Republic Act No. 11332) defined as the occurrence or imminent threat of an illness or health condition caused by the emergence of a novel infectious agent. Time is of the essence during public health emergencies, and prompt decision-making by government leaders is critical due to the urgency of the situation. Government leaders need access to the most precise, reliable, and up-to-date evidence to make the best decisions to protect public health. The complexities and unique characteristics of the COVID-19 data collection process make accurate information and data acquisition difficult. Thus, the government officials double their efforts to ensure the data that they will collected from different reports are reliable and correct. The response process during public health emergencies is often characterized as active and changeable in nature. Therefore, it is imperative to employ evidence-based decision-making that relies on the most reliable information from various sources, as suggested by Briner et al. (2009).

Since vaccines are not be available in the early stages of a new pandemic, the CDC (2019) noted that the main objective of decision-makers in these types of emergencies is to save as many lives as possible. As a result, national and local governments act quickly and base their decisions on the information available. According to Karam (2012), the privatization of the disease has increased the urgency for governments to implement effective control and mitigation strategies. These tactics include facilitating easy and efficient access to testing and results, rigorous contact

tracing, reliable science-based messaging, quarantines, and a sincere commitment to social distancing. In the context of a public health emergency, the consequences of poor decision-making can potentially threaten the well-being of millions of individuals. The seriousness of the matter underscores the significance of making decisions based on evidence, showing effective leadership, and applying timely and appropriate interventions.

Numerous unfavorable outcomes may result from poor decisions, including increased transmission and spread of the disease, overburdened healthcare resources, decreased public trust and compliance, and economic and social repercussions. To address these risks, it is essential to prioritize evidence-based decision-making, rely on scientific expertise, and promote open and effective communication. It is suggested that decision-makers keep a close eye on emerging evidence, consult with subject matter experts, and evaluate the potential consequences of their actions thoroughly. Moreover, it is essential to foster collaboration between government agencies, healthcare professionals, community leaders, and the general public. If the government wanted to save as many lives as possible as a decision-maker, they would not disregard the significance of the information as a crucial factor in ensuring the implementation of the most effective measures to prevent the spread of the virus and save lives.

This study highlights the significance of employing evidence-based decision-making in the context of public health emergencies. The statement underscores the significance of placing value on information and utilizing dependable and punctual data sources to address the requirements of the populace, thereby safeguarding lives and advancing health. Emphasizing evidence-based approaches can enhance the emergency response by the government. In addition, the researcher also looks on how the government applied the surveillance system in order to get the precise information as a requirement before deciding to implement alternative non-pharmaceutical interventions to control the transmission. The researcher also focus on the risk in consistently ignoring the government's call across the nation through various media outlets and social media platforms to ensure that people are aware of the impact of not reporting to the authority, especially those who have direct contact with the suspected infected or those who come from abroad. This step is to ensure that the necessary information is correct. The Philippine government leaders do not want to have and use incomplete information, which is critical when people's lives are at stake. The use of updated information also increases transparency and accountability. Science-based or proven information gives our leaders confidence in their choices and decisions. Allocation of funds will not also be a problem if the information is correct, as it will avoid issues or questions about the wasting of funds and, more importantly, corruption. Evidence-based decision-making is critical for pandemic governance of the country. It lays the groundwork for effective policymaking by promoting transparent and accountable decision-making, optimizing resource allocation, and allowing for adaptability in the face of changing circumstances. Policymakers can make better decisions about public health emergencies like the COVID-

19 pandemic by relying on evidence. This paper begins with a brief summary of COVID-19 and the mortality rate, examines the effectiveness of non-pharmaceutical interventions used by the government to fight the pandemic, assesses the value of evidence-based decision-making, and explains how the national and local governments work together to meet community needs. It also discussed issues related to distribution, cash assistance, and the shortage of medical supplies for frontline personnel. Using document review analysis and EBDM-related readings, the paper also examines early pandemic decision-making scenarios and their impact on community resilience. The conclusion of the paper addresses the role of EBDM in the formulation of public policy and governance arrangements. Websites, newspapers, and literature were just a few of the sources that supported the analysis.

II. OBJECTIVE

Specifically, this study addressed the following questions:

- Identify the government's initiatives and plans for halting the virus's spread and flattening the curve, as well as how evidence sources ensure the accuracy, acceptability, and reliability of the information, which assists decision makers in implementing nonpharmaceutical interventions, surveillance, and case management systems.
- Determine the roles and interactions of the complex web of actors involved in pandemic governance.
- Determine the issues and challenges with the government's response to the public health emergency and provide evidence-based solutions to improve the government's preparedness for similar emergencies in the future.

III. COVID-19 CASES IN THE PHILIPPINES

On 30 January 2020, the Department of Health reported the first case of COVID-19 in the Philippines with a 38-year-old female Chinese national. On 06 March 2020, based on DOH, Philippines has 41 admitted Person Under Investigation (PUIs) and 2 confirmed cases (DOH website). The WHO and the Department of Health (DOH) are in constant communication and coordination regarding the development and spread of Covid-19, as well as the potential risk associated with the outbreak. Due to the large number of unreported cases, the government finds it difficult to gather precise information about the scope and severity of disease transmission in the Philippines during the early stages of a pandemic. However, the Philippines has no way of knowing if a person has been exposed to the virus.

The President of the Philippines opted to postpone the declaration of a public health emergency, citing his evaluation of the situation as not necessitating such declaration. According to the President, arriving at decisions during a public health crisis is a challenging undertaking. Government officials need clear information before making decisions about the total number of infected, the anticipated severity of damages, the rate of transmission, scientific data, and statistical data (Lipsitch et al., 2009). Public health infrastructure, insufficiency of test kits and personal

protective equipment for healthcare workers, social determinants like nutritional status and comorbidities, and most importantly, budgetary provisions are also part of the considerations. The government must also make sure that the necessary supplies and resources are on hand in order to successfully respond to the emergency (Lipsitch et al., 200109).

The occurrence of Code Red sublevel 1 in localized transmission, coupled with sustained community transmission, has worsened the country's situation. The Department of Health (DOH) issued a Code Red alert as a preventive measure to notify various stakeholders, including national and local authorities, as well as public and private healthcare providers. The Department of Health (DOH) has recommended to the President to declare of a State of Public Health Emergency in light of the Code Red alert level 1. The DOH theorizes that managing the situation may become increasingly difficult if the number of infected people continue escalating. Thus, the Proclamation No. 922 was issued by the President to declare a state of public health emergency across the Philippines due to the existing threat posed by COVID-19. The declaration was formulated through a collaborative effort between the Department of Health (DOH) and the World Health Organization (WHO) which was based on facts, statistical figures, comparative reports and recommendations from various governmental organization specially the affected localities.

The Philippine government is compelled to make decisions. In order to justify and guarantee the legitimacy of their decisions, evidence must be accurate and pertinent. Accuracy and reliability are at the core of both the generation and evaluation of evidence. According to Barends et al. (2014), sound judgment decisions should be supported by the best available data and critical thought. Based on the available information, President Duterte issued an executive order on March 12th placing Metro Manila under a "community quarantine" that would last from midnight on March 15 until noon on April 14, 2020, and would cover 16 cities and one municipality (Talabong, 2020). The government has restricted movement within megacities, uniformed personnel and quarantine officers are being stationed at border checkpoints (Tomacruz, 2020).

Actually, the President Rodrigo R. Duterte's community quarantine disapproved by some Filipinos, particularly those affiliated with the opposition. There are concerns that this measure may be a tactic to apply martial law, a claim that the President has consistently denied. It is noteworthy that the primary objective of these measures is to impede the persistent and increasing spread of COVID-19 within the nation. The "Enhanced Community Quarantine" (ECQ) was implemented by the President (Lopez, 2020) as a measure to address the continued increase of transmission. This was deemed necessary due to the inadequate compliance of Filipinos with social distancing protocols, which are crucial in containing the spread of the virus. Accordingly, the government prescribed firmer quarantine procedures, restricting all domestic travel to and from the affected areas, and mandated reduction of staffing levels in governmental establishments. This could potentially have

adverse effects on the economy that heavily relies on the island of Luzon and the metropolitan areas, which contribute approximately 34% of the country's overall output. The government provides regular updates regarding the COVID-19 situation and quarantine measures to address concerns about martial law. The government intends to disseminate scientific data, research findings, and expert opinions to ensure that decisions are grounded in evidence and aligned with public health priorities. Furthermore, the government leaders acknowledge the importance of public engagement, public consultations and online surveys is likely to foster citizen participation in decision-making processes. Enhanced communication strategies are expected to foster greater public support, thereby promoting the implementation of improved measures.

Concerns have been raised about the potential contribution of unreported incidents to the escalation of COVID-19 transmission. Understanding the true scope of the virus's spread and putting appropriate measures in place are critical for accurate data collection and reporting. The COVID-19 situation in the Philippines has been escalating, with unreported incidents increasing exposure and making transmission more difficult to manage. The government has faced difficulties in determining non-pharmaceutical interventions to mitigate the situation. In the current situation, the practice of making decisions based on empirical evidence is critical. Thus, the researcher, sees the need to study the significant impact of disregarding of the information. A thorough analysis of the substantial implications of neglecting information can generate valuable understandings into its effects on the general public, governmental bodies, and business organizations. This paper has the potential to explain the risks and difficulties that can arise when decision makers disregard evidence-based information, which have detrimental effects on the health and wellbeing of the general population. Such an event could result in the dissemination of false information, a lack of clarity, and a decline in community confidence. This may lead to decreased adherence to public health protocols, heightened disease transmission, and an elevated strain on healthcare infrastructure. The use of evidence-based decision making is critical in effectively addressing a variety of challenges.

IV. EVIDENCE-BASED DECISION MAKING THEORY

The Philippines is in crisis. The government leaders started to feel the pressure brought by the pandemic, as the COVID-19 is beginning to take shape and proves the unescapable challenge to be face by our political leaders. Making decision with little information is difficult, by the government leaders need to take that challenge. There's a lot of unanswered questions remain about the accuracy of information flows, the degree of infected, the number of death rate, the sources of transmission, and the effectiveness of non-pharmaceutical interventions in safeguarding the weak. The speed of our economic recovery is uncertain. In short, under circumstances of great uncertainty, government officials must make life-or-death decisions. The majority of decisions made in an emergency are the result of complex

exchanges with occasionally inaccurate or lacking information (Conrado et al., 2016).

According to management principles, decisions are made in a variety of situations. In some situations, decision-makers may have a near-perfect understanding of the circumstances surrounding a choice, but in others, they may lack knowledge. The person making the decision needs to be aware of the situation. Generally speaking, the choice is made in the presence of risk, uncertainty, and certainty. While uncertainty emphasizes that decisions must be made based on insufficient knowledge about projects that do not yet physically exist, certainty refers to a decision-making environment with complete information (Kurahde et al. 2013). The decision-maker is not aware of all options, risks, or the probabilities or effects of each. The unpredictable nature of some significant events or stakes, as well as a dearth of data, have both been linked to uncertainty (Argote, 1982). In a high-risk state, the decision-maker has little knowledge of the options at hand but a good sense of how likely each outcome is. Although the leader is aware of the problem and possible solutions, none of them are guaranteed to be effective (Mifflin, 2020).

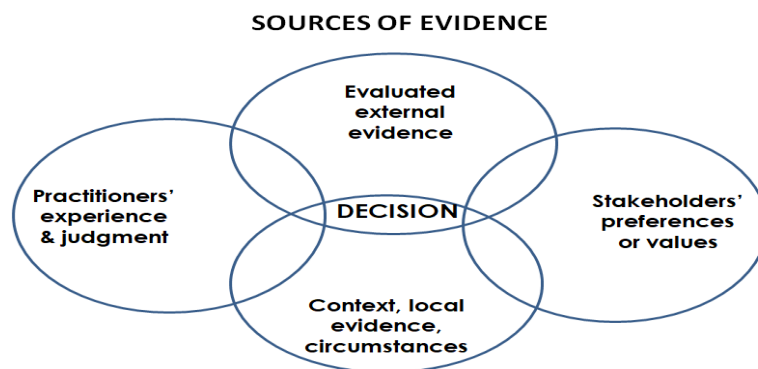
Political issues, communication issues, a lack of situational awareness, a reluctance to consider alternative viewpoints, and, most of the time, hazy lines of authority hindered our government's decision-making. Another difficulty in making decisions in times of crisis is balancing the demands of various stakeholder groups while managing the political pressures that frequently go along with these high stakes' decisions. Decisions are based on reliable information during a pandemic, but during an emergency, information cannot be gathered quickly enough.

No manual exists for managing Covid-19, and there are no tried-and-true procedures for managing this pandemic. Every time there was a public health emergency, our government officials were in a great deal of uncertainty. The biggest challenge for a decision-maker might be determining the best time to act. Despite being aware of the pandemic, our leaders were unable to act in accordance with their predetermined plans. Leaders need to decide quickly, however, information is necessary before making decision. Information gaps are a terrible problem that make leadership difficult. Our economy, job market, and mental health were all made more uncertain by these pandemics. Poor decisions can have dire repercussions. Making the distinction between decisions that must be made quickly or with a high level of time sensitivity and those that must be made within a set amount of time is crucial. It is essential to make sure that accurate data is captured as soon as possible in order to decrease the uploading of inaccurate or inconsistent data. We all know that most people dislike uncertainty. The main goal of an evidence-based approach, according to Engebretsen et al. (2016), is to lessen uncertainty by using standardized methods for evaluating and applying knowledge.

The significance of evidence-based decision making has been recognized worldwide, with many organizations and institutions advocating for its adoption. In health policy

and practice, the World Health Organization (WHO) emphasizes the importance of evidence-based decision making (World Health Organization, n.d.). Similarly, the Cochrane Collaboration, a global network of researchers, promotes the use of systematic reviews of research evidence to inform healthcare decisions (Cochrane, n.d.). Undoubtedly, the utilization of evidence-based decision making is crucial for the effective development of policies across different regions, including public health. The utilization of reliable evidence, such as scientific research, data analysis, and expert opinion, in a methodical manner to guide decision-making processes is referred to as evidence-based practice (Innvaer et al., 2002).

Rousseau (2006), evidence-based decision making (EBDM) is the use and application of the best available research findings in a managerial setting. If decisions are to be based on evidence, there must be frequent collaboration between those who run and manage the pandemic, including its data, and those whose job it is to use analysis to ascertain the program's effectiveness, ways to improve it, and future policy options. Evidence-based practice refers to the use of both professional experience and additional sources of evidence. Results of scientific research, expert knowledge and opinion, stakeholder values and concerns, and organizational data, facts, and figures are for (4) sources of evidence-based decision making according to Briner et al. (2013).



The elements of evidence-based practiced (adopted from Briner et.al. 2009). Briner, R., Denyer, D., and Rousseau, D.M. (2009). Evidence-based management. Concept cleanup time? Academy of Management Perspectives pp. 19-32

Fig. 1: Source of Evidence

The sources of evidence-based decision-making practitioners as stated by Barends et al. (2014) the term "external evidence" referred to as case studies or data from organizations that have a comparable set of problems and solutions. It is also based on academic studies that have been released on what is known and unknown about how to measure innovation, what low innovation might look like and what the results might be, how to boost innovation levels, and what some potential positive and negative effects of these interventions might be. A number of factors make the perspectives and experience of stakeholders—in this case, primarily employers and line managers, but possibly also customers—vital. They might, for instance, have knowledge and evidence about the alleged problem and suggested solutions that cannot be found elsewhere.

To put it another way, an evidence-based method of practice goes far beyond merely urging each practitioner to use more research. A cornerstone of evidence-based practice is the use of trustworthy data to guide judgments. Governments depend on scientific evidence and guidance from public health experts, research institutions, and global organizations like the World Health Organization as external sources of evidence. This evidence is instrumental in shaping policy decisions and interventions. The document includes data relating to the spread of the virus, epidemiological patterns, usefulness of preventive measures, and available alternative treatment. The utilization of

evidence-based decision-making is crucial in ensuring that governmental actions are based on the most reliable and up-to-date information.

A person who uses EBDM based their decisions on a combination of information that can be discovered through research and knowledge they have gained through expertise or experience. Finding the best evidence that is currently available that will be needed to meet the desired needs, critically assessing the evidence that has been discovered, making sure the evidence has been incorporated into an actionable strategy, and, finally, evaluating the results of the chosen decisions and actions. In order to uphold the terms of the social contract between the government and its constituents', elected officials have benefited from the movement for evidence-based decision-making because it has given them the justification to spend their limited resources on purchasing statistically validated proven methods of protecting their respective populations in the face of an existential threat like a pandemic. The public health officials, policymakers, and front-line healthcare workers are essential practitioners whose expertise and judgment are relied upon by governments. These professionals provide their specialized knowledge, experience, and insights to inform the decision-making process. Their ability to assess the feasibility and potential impact of different interventions is attributed to their

practical experience and understanding of regional dynamics.

Brownson et al. (2018) highlight the value of practitioner experience in public health decision-making. This study examines how the knowledge and judgment of practitioners contribute to the selection and implementation of effective interventions. Governments recognize the value of this experiential knowledge and actively solicit practitioner input when formulating pandemic response strategies. In addition, when adapting strategies to local conditions, practitioners' expertise and judgment are equally important. Numerous nations implemented localized lockdowns and specialized interventions during the COVID-19 pandemic based on the knowledge of professionals acquainted with the unique requirements and difficulties of their communities (The Lancet, 2020).

The government's actions are heavily influenced by the local context and conditions. Population densities, healthcare facilities, socioeconomic conditions, cultural norms, and existing public health systems vary by region. Governments must tailor their responses to the specific needs and challenges of their regions, while also taking capacity, resources, and risk factors into account. During the COVID-19 pandemic, Legido-Quigley et al. (2020) stress the need for region-specific strategies. Each region or localities have different needs and capacities, thus, testing, contact tracing, and healthcare resource allocation must take these local factors into account. Galea et al. (2020) underscore the significance of incorporating the local context into the development of a pandemic response plan. It is imperative for governments to incorporate contextual variables into their plans, while simultaneously guaranteeing universal access to healthcare and preventative measures.

For the final source of evidence, which Briner et al. refer to as "stakeholder preferences or value," these stakeholders include members of the public, business executives, community organizations, and healthcare professionals, among others. The incorporation of these varied perspectives can facilitate a comprehensive understanding of societal needs, effective issue resolution, and the development of sound policies. Despite the potential for conflicting interests among stakeholders, it is important for governments to strive for a balance of viewpoints in order to achieve optimal outcomes. Glandon et al. (2020) show how important it is to include stakeholders when making decisions about public health. The research agrees with Gladon et al.'s (2020) notion about the importance of involving community members, healthcare providers, and policymakers in order to find out what needs to be done, build trust, and encourage cooperation. It also makes it more likely that policies and interventions will work when they are put into place. Decisions made during a pandemic will have a significant impact on the resilience of communities as well as the long-term performance of a nation's infrastructure (Withanaarachchi and Setunge, 2014).

Decision-making based on evidence is not a form of compromise, and our nation's leaders cannot simply issue or approve policies and programs without justification.

Evidence-based policies and strategies frequently produce better results, which can increase your credibility and support because: a) policies and programs without it frequently overspend budgets, waste resources, or simply produce unsatisfactory results; b) external decision-makers who approve departmental budgets may not consider departmental requests to be justified if they lack strong evidence; and c) they frequently produce better results, which can boost your credibility and support. Despite the fact that people may not hold the government accountable for bad luck and may not anticipate complete protection from the harm and deaths caused by pandemics, they probably do expect the government to act responsibly and effectively in the event of a pandemic. As a result, the political environment in which the post-crisis political system is embedded is significantly influenced by how well the government responds to a pandemic. A well-prepared government that is capable of acting quickly and responsibly will probably maintain or even increase public support. Local and regional integration can also be aided by government action.

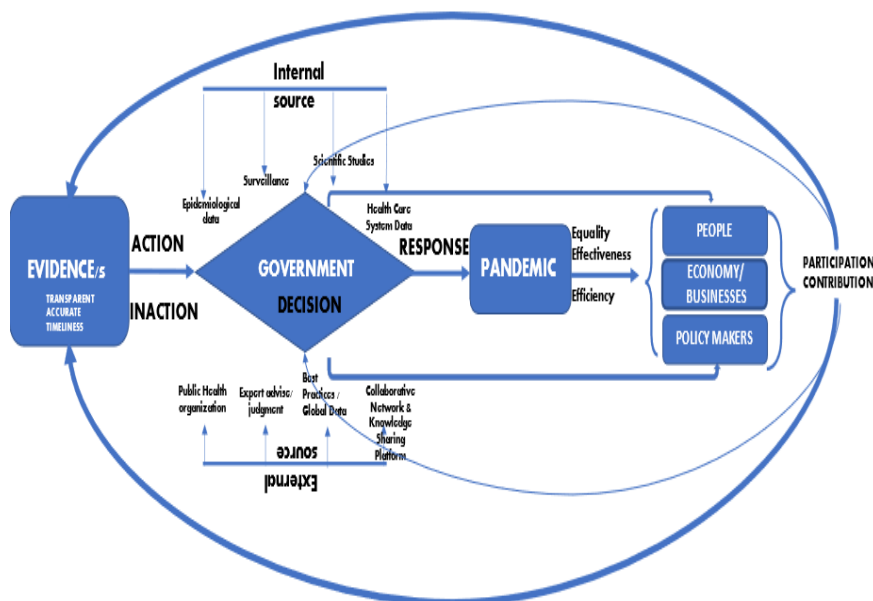
The researcher agreed with the sources of evidence that Barends and groups had found. To obtain the best evidence, which is more transparent, accurate, and current, the researcher suggested that important components be included. So, based on the discussions above, the researcher made a new framework to show how important evidence is when the government has to make decisions about public health emergencies. The researcher created a new framework to demonstrate the significance of evidence when the government must make decisions about public health emergencies based on the discussions above. In order to meet the demands and difficulties of public health emergencies, the framework demonstrates the essential elements of making fact-based decisions. The researcher notes the reasons why the government took a particular action (or inaction) and why it already made a decision (action) on the basis of the data presented. The researcher thinks that categorizing the sources into two are more beneficial and easier to refer into.

The researcher has depicted the significance of the "EVIDENCE" box in the decision-making process of the government with regards to its response to the pandemic. The box emphasizes the need for transparency, accuracy, and timeliness of evidence. The researcher has identified two sources of evidence, namely "INTERNAL SOURCES" and "EXTERNAL SOURCES". The former includes epidemiological data, surveillance data, scientific studies, and data from the healthcare system, while the latter includes public health organizations, expert advice or adjustment, best practices from other countries or global data, and collaborative networks or knowledge sharing. The researcher has highlighted the impact of these sources on the decision-making process of the government towards an equitable, effective, and efficient response to the pandemic for the benefit of the people, economy/businesses, and policy makers.

The interplay between the government and the three distinct entities, namely the public, business executives, and

community organizations, holds significant importance in acquiring precise data and guaranteeing the efficient provision of services amid a pandemic. The interdependent association between the government and its constituents creates a reciprocal communication mechanism that facilitates the acquisition of accurate data, evaluation of policy execution, and enforcement of programs. The "People" or the general populace has the responsibility to furnish the government with prompt and accurate information. By means of unbarred communication channels, people have the responsibility to report suspected cases, exchange information regarding adherence to preventive measures, and offer feedback on the government's response endeavors. The provision of immediate feedback assists the government in obtaining precise information regarding the actual situation on the ground and the efficacy of their interventions. For the "Economy/Businesses" have also the responsibility to furnish information pertaining to the capacity of the

workforce, disruptions in the supply chain, and impacts on the economy. Interacting with corporate leaders enables the government to comprehend the obstacles encountered by diverse industries and make knowledgeable judgments to bolster economic recuperation and alleviate the repercussions on people's means of subsistence. And lastly, "Policy Makers" who are in charge of developing and implementing government policies, play an important role in the interconnection. These authorities must collect precise data and information from both individuals and commercial entities in order to assess the effectiveness of policies and programs. Policymakers can identify any deficiencies where governmental measures may need to be altered or reinforced through constant communication and partnership with the populace and commercial entities. Policymakers can use this feedback to make evidence-based decisions, improve policy implementation, and efficiently allocate resources to address newly emerging needs.



CASONGSONG SOURCES OF EVIDENCE, 2019

Fig. 2: Casongsongs Sources of Evidences, 2019

Furthermore, the government can leverage the involvement of the three aforementioned stakeholders as a "feedback loop" to enhance accountability and transparency. By engaging in inclusive participation of stakeholders during decision-making processes, the government is able to cultivate trust and legitimacy. As a result, this leads to an increased adherence to public health protocols and enhances the involvement of the general public in the comprehensive management of the pandemic. By adopting a collective approach that involves actively seeking input, conducting evaluations, and soliciting reviews from service beneficiaries, the government can obtain reliable data and implement essential amendments to enhance public service delivery. This will help ease the crisis's effects and ensure that their actions are in alignment with the needs and expectations of the public. The feedback loop enables the government to identify gaps, shortcomings, and areas for

improvement, thereby enhancing service delivery and promptly addressing challenges.

Achieving success amidst the pandemic requires effective leadership, strategic planning, and strict compliance with governmental laws and regulations. While there is no guaranteed method to reverse the negative impact of this crisis, it is possible to overcome it with these key factors in place. In order to effectively combat Covid-19, it is imperative that the government receives unwavering support from its citizens. Although there exist numerous laws and legal frameworks for managing public health emergencies, the full cooperation of the populace is crucial.

Nobody fully comprehends how long this pandemic will last or how it will affect the economy and our way of life in the long run. The threat is changing, and our government officials are currently dealing with tremendous pressure. In a world full of uncertainty, effective

governance and arrangements will go a long way. The best course of action for our government leaders in the face of pandemics is to remain focused and make decisions using the "best available information."

V. RESULTS AND DISCUSSION

A. GOVERNMENT RESPONSE/ACTION IN FLATTENING THE CURVE

➤ *Adaptation of Non-Pharmaceuticals Intervention*

To slow the spread of the virus, the Department of Health first used contact tracing. The Philippines' COVID-19 strategy at the time this paper was written focused on population control. The actual number of COVID cases including death seemed to be lower than it appeared to be because of a lack of testing kits and quick case validation. A classification system known as "PUM" for Patient Under Monitoring and "PUI" for Person Under Investigation was proposed by the DOH in this case. People who exhibit flu-like symptoms, such as coughing, fever, and breathing difficulties, are referred to as "Patients Under Investigation" (PUI). Despite the fact that COVID-19 infection affects people, there are no symptoms. Actually, Metro Manila reported more fatalities and cases that tested positive for COVID during this time than the rest of the nation. Only patients who were admitted to the hospital were included in

the data, which also excluded people who would prefer to stay at home despite having the symptoms. The government discovered that this approach is inadequate because it is challenging to monitor and control people.

In order to slow down and lower the frequency of transmission within the community, the government adapted "nonpharmaceutical interventions" (NPIs). NPIs such as social isolation, which were used by the majority of pandemic-affected countries (Ahmed, 2018). Fong et.al. (2020) identified NPIs as additional strategies for reducing pandemic transmission, through isolating sick people, tracking their contacts, quarantining exposed people, dismissing or closing schools, putting workplace precautions in place, such as workplace closures, and avoiding crowding. In order to slow the rate at which outbreaks occur, epidemiologists have publicly advocated for social withdrawal and self-quarantine. This is meant to lessen the impact on hospitals and medical staff who deal with the disease directly by spreading the number of infections over time.

The Department of Health used the "Case Management" which involves early detection and prompt testing to prevent complications, is the current method for combating disease in hospitals.

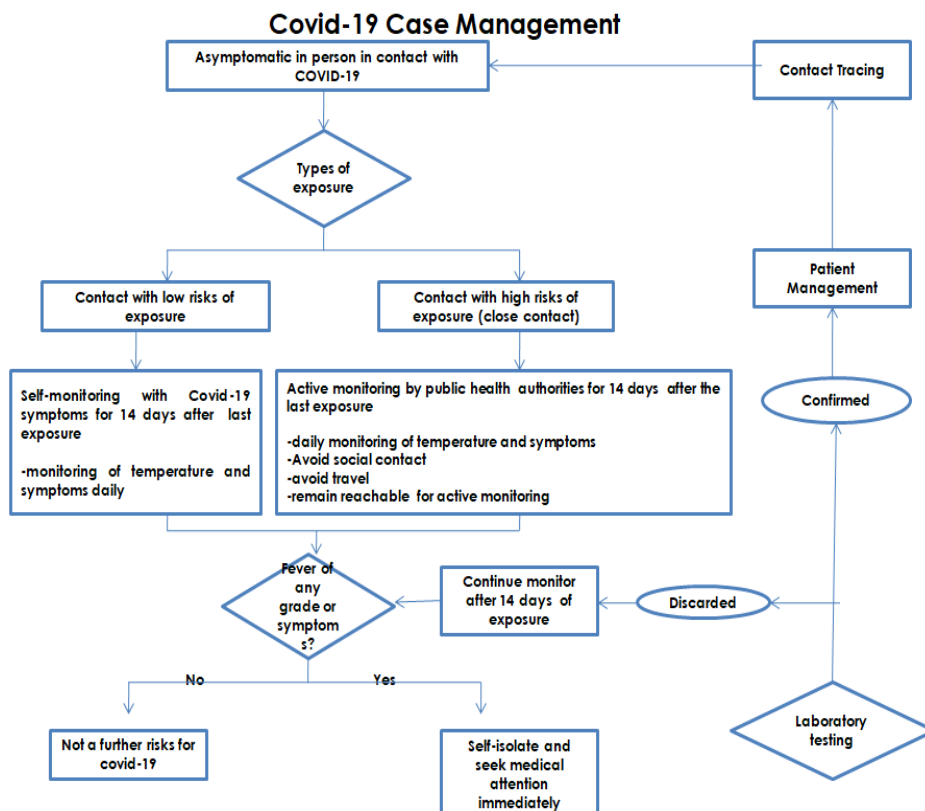


Fig. 3: Covid-19 Case Management

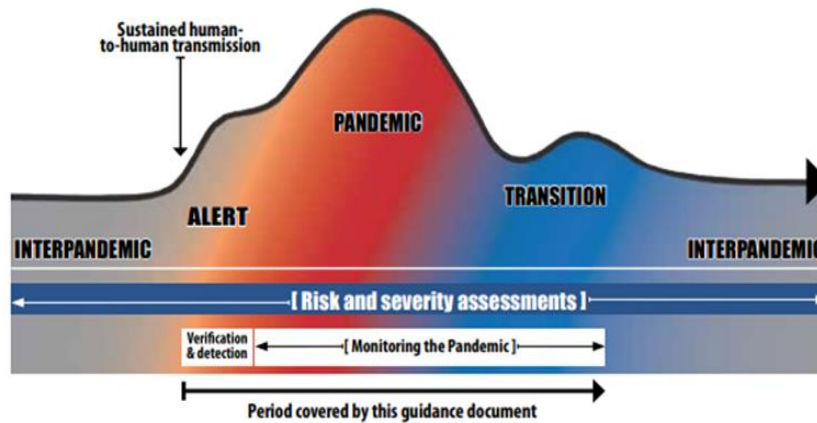
Some nations, including the US, Europe, and Taiwan, have begun utilizing contact tracing and surveillance. WHO urged member states to utilize "surveillance" for the continuous monitoring, collecting, analyzing, and sharing of data to make it easier to come up with and use interventions based on evidence during a pandemic. This guidance covers

surveillance from when sustained human-to-human transmission is found during the alert phase, through the pandemic phase, and into the transition phase (WHO, 2017). The Department of Health (DOH) has sent out more surveillance teams and adopted a surveillance plan in an effort to quickly identify new cases through all available

channels. This includes collaborating with the Philippine National Police, and other governmental organizations to

quickly identify potential contacts of confirmed patients and, if necessary, quarantine them.

Continuum of Pandemic phases and surveillance components



Source: World Health Organization

Fig. 4: Continuum of Pandemic phases and surveillance components

Monitoring, risk and severity assessment, and verification and detection. Before identifying additional cases, either within the initial affected country(s) or elsewhere, verification and detection's goal is to confirm initial reports of sustained human-to-human influenza transmission are the three (3) main surveillance strategies of DOH. In order to support more efficient national and local responses, information from risk and severity assessments will be crucial for policymakers in the affected country to make decisions about pandemic mitigation strategies, for healthcare providers to treat ill patients, and for the general public to reduce their risk of infection and minimize false rumors. Estimating the likelihood of a devastating pandemic will be made easier with an understanding of the disease's transmissibility, severity, and effects. Monitoring can also be used to alter response strategies and spot the emergence of a second wave.

B. ACQUISITION OF TEST KIT AND OTHER MEDICAL SUPPLIES

The testing for COVID-19 is done in a variety of ways by different countries. But each nation has a distinct strategy and policy due to varying supplies, shortages, and priorities. The Department of Health (DOH) acknowledged the difficulty testing kits at the time this paper was being written. The government encourage Filipinos especially those who are medical practitioners to join in the search of the injection or cure for the disease. The National Institute of Health at the University of the Philippines announced they created a testing kit however, at early stages its in the process of validation and the government needs time to train the hospital staff who will administer the testing. As part of the action of LGU especially in Marikina City takes the initiatives in establishing their own local testing units using

test kits from the University of the Philippines. However, the DOH did not immediately approve this due to the need for validation and the need to train hospital staff to perform mass testing. In order to prepare for mass testing, the regime set aside P3.1 billion through Proclamation No. 929 for the purchase of test kits.

While the national government plans the method and mechanism for package distribution, local governments are in charge of feeding the people. The government also provides financial assistance to low-income families affected by the Enhanced Community Quarantine (ECQ) implemented to mitigate the effects of the Corona Virus Disease 2019 (COVID-19) in the country under the Bayanihan to Heal as One Act (RA 11469). This is on top of food rationing. The Social Amelioration Program (SAP) is available to drivers of Public Utility Vehicles (PUVs) such as Taxis, Transport Network Vehicle Services (TNVS), School Transport, Public Utility Jeepneys (PUJ), UV Express (UVE), Public Utility Buses (PUB), Point-to-Point Buses (P2P), and Motorcycle (MC) Taxis. The amount of cash benefits received by tricycle and pedicab drivers from local government funds varies according to city and municipality budgets.

Head of ABS-CBN Data Analytics Edson Guido claims that other countries are experiencing a COVID-19 case doubling rate that is faster or slower than the Philippines. "We see flatter trendlines and slower doubling times for countries that have controlled the spread of COVID-19, such as Singapore, Japan, and South Korea (after its initial surge)," he added. The researcher used the "Baptist Health" graph to explain the flattening of the curve.

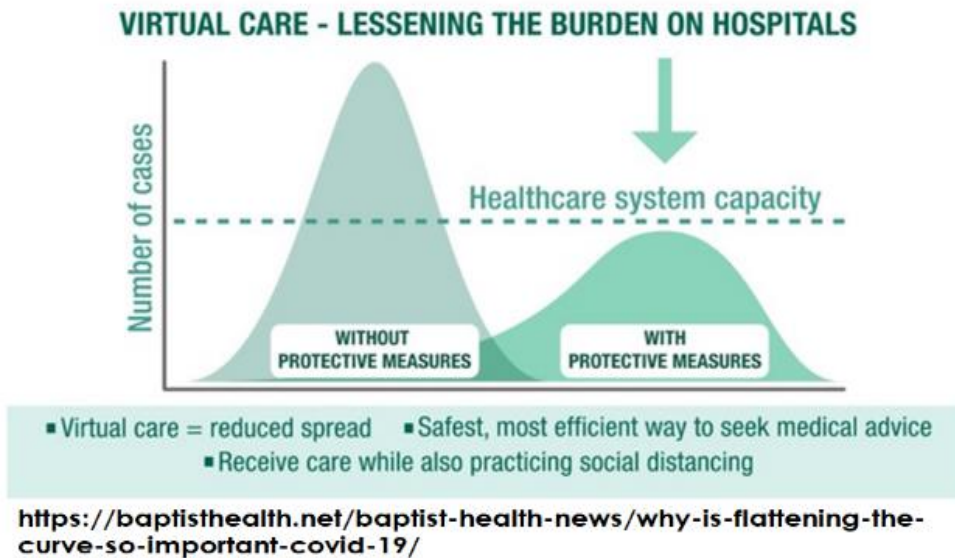


Fig. 5: Virtual Care- Lessening The Burden On Hospitals

The graph displays two curves: one has a vertical peak that predicts the impending onset of a coronavirus outbreak, and the other has a flatter slope that predicts a more gradual rate of infection over time. The graph illustrates how, in the absence of preventative measures like quarantines and social isolation, an epidemic could exceed the healthcare system's ability to care for patients. The healthcare system can control the pandemic because of the preventative measures. The number of new cases rises on both curves over time. More people report having the virus on a given day as the curve rises. The virus is spreading quickly if the curve is steep. A low curve indicates that fewer people are being diagnosed with the illness daily and that the virus is disseminating more slowly. If the rate at which new cases are added is reduced, the limited resources (represented by the dashed line) available to treat them won't run out. Dr. Drew Harris, a population health expert at Thomas Jefferson University, described the process as "flattening the curve," which entails limiting the rate of virus spread so that nearby healthcare providers can continue to provide the crucial services on which everyone depends. By collaborating, hospitals can better meet the rising demand for care and halt the spread of Covid-19 infections. It is essential that we all cooperate. "Flattening the curve" is essential to prevent the coronavirus from escalating out of control and straining our healthcare system. WHO spokesperson Christian Lindmeier stated that the current focus should be on reducing the virus's spread and keeping it as much from spreading as possible because the world's health systems are unable to handle an abrupt, strong, or sudden influx of many cases at once (Meredith, 2020). WHO emphasized the importance of citizens collective action. The curve should be slowed down and spread out as much as possible over time in order to allow the health system to function and the manufacturing of essential medical equipment to continue.

As there is currently no vaccine or specific medication to treat COVID-19, the implementation of social separation and community quarantine in the Philippines is a crucial step in the fight against the disease. To achieve the goal of

flattening the curve, numerous nations have temporarily closed their public schools and instructed their employees to work from home as much as possible. To effectively flatten the curve, it is necessary to collect data and statistics regarding patients, including those who are infected, under investigation, and being monitored. Both public and private hospitals as well as barangays are required to provide this information. The UP Pandemic Response Team has emphasized the significance of such granular data for generating such comprehensive information and analysis. As soon as possible, hospitals must collect crucial data for modeling, such as the number of people tested and recovered, in order to improve the situation analysis and identify areas where a local community quarantine can be implemented. To ensure that decisions are based on the best available science, hospitals and the government must collect and share as much information as possible. Any scientific output must be peer-reviewed in order to increase its accuracy. To facilitate a science-based strategy for combating the COVID-19 pandemic, it is crucial to ensure that all relevant stakeholders have access to government data.

VI. PANDEMIC GOVERNANCE ACTORS AND STAKEHOLDERS IN THE PHILIPPINES

National and local governments play a critical role in pandemic governance during public health emergencies. Governments must use deliberative, collaborative, consensual, and stakeholder-participant strategies to manage public health emergencies. National and local governments necessary must work together to provide critical public services and disseminate vital information. To address the required policies, legislation and programs.

Policies, laws, and initiatives to deal with public health emergencies need capacity, coordination, and cooperation from all stakeholders. Local and national governments can work together to better handle and lessen the effects of public health emergencies.

A. *THE PRESIDENT AND CABINET OFFICIALS (EXECUTIVE DEPARTMENT)*

Risk management and responding to public health emergencies fall under the purview of the national government, which is presided by the President. The Bayanihan Heal as One Act gives the President the authority to exercise whatever is required and appropriate to implement the stated national policy. In the event of a pandemic, the President has been given special authority to implement emergency measures. The President created a tasked force consisting several agencies under executive branch to combat the COVID-19 pandemic. The President implemented a whole-of-government approach to ensure a quick and effective response to the crisis.

During the period of enhanced community quarantine, the Department of Trade and Industry (DTI) is in charge of formulating and enforcing regulations for micro, small, and medium-sized enterprises (MSMEs), as well as continuing to control, monitor, and regulate the prices of basic goods. In charge of upholding law and order and enforcing public health measures like isolation and quarantine are the Philippine National Police, Armed Forces of the Philippines (AFP), Philippine Coast Guard (PCG), and Philippine Navy. Public and private health workers who are exposed to Covid-19 or who become ill or injured while performing their duties in an emergency are also expected to have their medical expenses paid for by the Philippine Health Insurance Corporation (Philhealth). Additionally, overall pandemic preparedness is overseen by the Department of Interior and Local Government (DILG). Its responsibility is to oversee, direct, and enhance local government's capacity to mitigate pandemic risks and respond to them, as well as that of other government organizations directly involved in the management of public health.

B. *DEPARTMENT OF HEALTH (DOH)*

The Department of Health (DOH) and its local counterparts are in charge of disease surveillance and response systems, as well as pandemic management. Coordination, reporting, response execution, data security and confidentiality, and safety precautions for disease surveillance and response personnel are all included in these systems. In order to monitor and report notifiable diseases and health events of public concern, the DOH is also required to publish an official list of disease surveillance and response systems and institutionalized public health information systems.

Furthermore, the DOH must make the inclusion of anti-corruption measures a top priority on its national agenda as the principal organization in charge of promoting health through healthcare services and health-related programs. This involves enlisting representatives and staff from both public and private health institutions to deliver services with the utmost integrity.

C. *INTER-AGENCY TASK FORCE FOR MANAGEMENT OF EMERGING INFECTIOUS DISEASES (IATF-EID)*

The Inter-Agency Task Force (IATF) is a group of government officials and agency leaders who are tasked to monitor, conduct research and assess policies and procedures related to COVID-19. It is expected that this responsibility will persist throughout the duration of the pandemic and quarantine period. The IATF is responsible for disseminating information to the public regarding the proper procedures to be observed during the Enhanced Community Quarantine period in the country.

D. *DEPARTMENT OF SOCIAL AND WELFARE AND DEVELOPMENT (DSWD)*

Pursuant to Republic Act 11469, the Department of Social Welfare and Development was authorized by the President to spearhead the provision of financial assistance to the most severely affected households during the quarantine period, as reported by CNN news in 2020. The Emergency Subsidy Program provides assistance to households that meet certain criteria, including homelessness, unemployment of at least one member, age over 60, single parenthood, disability, pregnancy or nursing, or senior citizenship. The distribution of funds for the emergency subsidy program will be subject to the full control and supervision of the Department of Social Welfare and Development (DSWD) to ensure that the intended beneficiaries receive the subsidies. In addition, the DSWD is also directed to develop plans to expedite the delivery of food aid to the most vulnerable people in various regions.

E. *DEPARTMENT OF TRANSPORTATION (DOTr)*

The Department of Transportation (DOTr) is responsible for overseeing the management of the port and ensuring that the transfer of essential supplies such as food, medicine, and other necessities is conducted without any delays. The President ordered the DOTr to ensure and guarantee that ECQ products and supplies don't run out or arrive too slowly. They are also tasked to issue a policy/regulation to prevent overcrowding in ports and to stop mass public transportation by land, air, and sea.

F. *THE SENATORS AND CONGRESSMEN (LEGISLATIVE DEPARTMENT)*

Both chambers' top priority during the COVID-19 pandemic was to ensure the prompt passage of laws and budgetary appropriations that address the crisis and assist affected sectors. A report by the Philippine News Agency stated that both houses of Congress "prioritized the allocation of funds and programs for the government's COVID-19 response" (Geducos, 2021).

The two chambers have been assigned the responsibility of formulating legislation that addresses the ongoing pandemic and guarantees that the budget is adequate to avoid any delays in acquiring essential medical supplies and vaccines. Given the urgency of the situation, the President has directed them to explore alternative methods of acquiring medical supplies that do not necessitate adherence to the traditional bidding method mandated by Republic Act No. 9184, also known as the "Government Procurement Reform Act." Furthermore, the

legislation stipulated that individual who are suspected of having contracted COVID-19 (PUIs) and those who have had close contact with confirmed cases (PUMs) must be immediately isolated and treated in either public or private healthcare facilities. Furthermore, the National Health Insurance Program of the Philippine Health Insurance Corporation (PhilHealth) will also directed to visit the medical coverage of the people especially the medical professionals that are at risk because of their exposure in the virus.

To ensure the availability of funds, the two chambers also checked the Philippine Disaster Risk Reduction and Management Act of 2010 (Republic Act 10121) to ensure that disaster relief funds are available for local governments to use right away to prepare for and respond to disasters. This policy is advantageous because local governments can allocate 30% of the disaster fund for immediate assistance and 70% for risk reduction. This policy empowers the LGU to use the disaster fund for urgent requirements. The two chambers also focused their attention on RA 11332, which pertains to the Surveillance, Response, and Funding for Notifiable Diseases, Epidemics, and Public Health Events Act, mandating that the state must actively promote, safeguard, and provide education on matters pertaining to health. Also, the Senate and Congress are both responsible for ensuring that assistance and recovery programs are allocated to the most affected sectors in a fair and just manner. They hold hearings and investigations to monitor the implementation of these programs and address any problems or concerns expressed by the public. In a CNN Philippines article, Senate President Vicente Sotto III stated that the way aid is distributed "should be accountable and transparent." He also emphasized the significance of keeping an eye on the execution of the COVID-19 response programs.

G. LOCAL GOVERNMENT OFFICIALS (GOVERNORS, MAYORS, AND BARANGAY CAPTAINS)

Governors, mayors, and barangay captains are required by the Local Government Code of 1991 to direct emergency response during and after pandemics in order to protect their constituents. Section 2 of R.A. 11332 mandates proactive pandemic-related actions from the Department of Health (DOH) and local government units (LGUs). The provision of relief services and assistance by local government representatives is required under Republic Act 10121.

In times of a public health emergency, additional local officials are typically expected to offer their services (Ledesma, 2020). The Bayanihan Heal As One Act (Republic Act 11469) also allows local governments (LGUs) to use more than 5% of their disaster fund with additional funding and support from the national government, allowing them to respond to pandemics and other emergencies more effectively (PNA, 2020). Over-all, local government representatives are essential in addressing pandemics and protecting their constituents, and a number of laws and regulations have been put in place to ensure that they have the authority and resources to do so.

H. CIVIL SOCIETIES AND NON-GOVERNMENT ORGANIZATIONS

Numbers of non-governmental organizations in the Philippines provide complimentary medical services, financial assistance, and urgent public health aid for the less fortunate *kababayans*. Non-governmental organizations (NGOs) are tremendously helpful to the government, mainly in helping coordinate between individuals or groups in need of assistance and government relief activities. Non-governmental organizations (NGOs) are of great importance because of their contributions to civic engagement and development initiatives. The aforementioned change in perspective can be attributed to various factors such as pluralism, civic participation, dissatisfaction with centralized systems, and collaboration among multiple entities (Behera, 2002).

The NGOs helped the government and the communities through the provision of aid, medical aid, and counseling. They also sustain robust community connections and have the ability to engage in negotiations with the government regarding policy issues. A robust civil society can hold the government accountable and necessitate the allocation of public funds towards preparedness measures.

VII. ISSUES AND CHALLENGES

A. TOO MUCH POLITICS IN THE DISTRIBUTION OF RELIEF GOODS

Politicians normally offer assistance during times of crisis, such as natural disasters or pandemics, and unfortunately, they also frequently take advantage of these conditions. During pandemics or natural disasters, it seems to be a race among politicians to bargain support, which some believe provides them with an opportunity to increase their public distinguishability and, theoretically, influence the people in future elections. The heightened participation of elected officials in response to pandemics or natural disasters may result in delicate disharmony and potential favoritism, as supporters of the political party or coalition that secured their election may expect special treatment from said officials. In this situation, people affected by the pandemic frequently expect immediate benefits, prompting political leaders to prioritize symbolic gestures over long-term policy considerations. There have allegedly been instances where politicians attempted to claim ownership of surgical masks and personal protective equipment donations by affixing their names to the boxes. According to my understanding of public administration theories, particularly the Wilsonian paradigm, it is critical for disaster governance to maintain impartiality and independence from political influence and conflict.

Several officials, like Joy Belmonte, the mayor of Quezon City, have underscored the significance of abstaining from favoritism and political bias in the distribution of aid. They have asserted that food packages must be allocated to individuals in need, regardless of their political affiliations. However, there have been reported cases of glitches in the distribution of relief packages, as showed in Barangay 251 in Tondo, Manila, where a public official was obliged to account for a fictitious list of

beneficiaries utilized as the foundation for the distribution of aid packages. To mitigate these concerns, the President has cautioned officials to comply with IATF and government mandates.

B. DISTRIBUTION OF AMELIORATION ASSISTANCE

As per Merez's (2020) it has been reported that the President has announced the allocation of P275 billion by the government to provide aid to disadvantaged households during the Enhanced Community Quarantine (ECQ) duration. Any interruptions in the distribution of assistance can be attributed to unclear procedures and insufficient record-keeping practices regarding the beneficiaries by the respective localities. With this, the President has emphasized the importance of coordination by the people to their locale and the local government to their people to ensure precise recording and identification. It is vital for communities to observe in their local leaders to guarantee unbiased remuneration and to foresee corruption that may arise from discrepancies in official documentation that could be utilized by other government officials as an excuse. Secretary Rolando Bautista has acknowledged the presence of discrepancies in the records. However, efforts are being made to address these discrepancies with the local government (Modesto, 2020).

Reproach has arisen from both the public and certain local government unit officials about the inaccurate guidelines provided by the Department of Social Welfare and Development pertaining to amelioration assistance. This lack of clarity has resulted in significant confusion among the general public. Furthermore, the growing degree of inconsistency results in a rise in the occurrence of objections between the officials of the local government and the beneficiaries. The provision of ambiguous, vague, and disjointed information by the government provokes feelings of apprehension and unease among both the public and those tasked with implementing policies on the field. The Department of Social Welfare and Development (DSWD) was tasked to develop a precise and easily understandable guidelines for both implementers and beneficiaries in order to avoid future problems.

C. LACK OF MEDICAL PERSONNEL

Doctor and nurse turnover rates in the healthcare sector were significantly higher than the industry average in 2012, at 16% and 19%, respectively, according to the Department of Labor and Employment's (DOLE) Industry Career Guide: Health & Wellness. Statistics provide evidence in support of this information. The people who continue to work here are exposed to unreasonable demands, an disproportionate workload, and occasionally inadequate pay. Historically, recent graduates typically begin their careers as volunteers, only few hospitals paying them or giving them an allowance, according to a DOLE document. Contracts for volunteers will depend on the hospital, and then management will decide whether to accept the volunteer as a staff nurse. Although certain hospitals have recruited or are contemplating the recruitment of recent graduates, the remuneration they receive is frequently insufficient. Due to the challenging nature of retaining newly graduated medical professionals or practitioners in this circumstance, their sole

recourse is to depart the nation and pursue job opportunities overseas. The government's recognition of the issue and the necessity to take action was only evident during pandemics. The government has noted a deficiency in readiness, specifically in the realm of human resources and medical infrastructure. In a statement, Gatchalian cited figures from the Department of Health (DOH), which the agency also shared in a Senate public hearing, that the Philippines has a shortage of 8,840 doctors nationwide specifically in far-flung rural areas. (Santos GMA News, 2020). We are currently understaffed, not just RITM, but I think all over the Philippines. Our doctors, nurses, and frontliners are already getting sick according to Doctor Therese Suñe of the Research Institute for Tropical Medicine (RITM) (CNN, 2020).

In response to the inadequacy of healthcare personnel, the Department of Health (DOH) called for volunteers, resulting in 690 individuals from the healthcare sector stepping forward to offer their services to the government. The three designated COVID-19 referral centers, namely the Lung Center of the Philippines in Quezon City, Philippine General Hospital in Manila, and Dr. Jose N. Rodriguez Memorial Hospital in Caloocan City, will be the sites where volunteers will be assigned. Senator Christopher "Bong" Go has made an appeal to the Department of Health (DOH) and the Department of Budget and Management (DBM) to ensure that health workers who volunteered in the battle against COVID-19 receive appropriate compensation (Jaymalin, 2020).

D. LACK OF HOSPITAL FACILITIES AND PPEs

In the height of the pandemic in the Philippines, a notable issue was the inadequacy of healthcare facilities and inadequate medical supplies, such as masks, suits, and protective equipment for both COVID-19 patients and medical staff and volunteers. The insufficiency of medical supplies worsens the vulnerability of healthcare workers to the virus during the provision of medical attention to patients (Cabico, 2020). The provision of personal protective equipment (PPE) is crucial for ensuring the safety of healthcare workers underscored by the Institute of Medicine. Given their crucial role in providing medical treatment to patients and containing the transmission of the virus, it is imperative that medical personnel have access to adequate PPE. The inadequacy of personal protective equipment (PPE) is placing healthcare professionals, such as doctors, nurses, and other frontline workers, in a dangerous situation, potentially leading to a shortage of medical personnel available to attend to patients afflicted with COVID-19. In this battle, healthcare professionals are responsible for administering medical care to patients and reducing the spread of the virus. Due to the surge in demand for personal protective equipment (PPE), prices have significantly risen. The government, under the control of Secretary Carlito Galvez Jr., has procured one million sets of PPE from China. The objective of this procurement is to guarantee the safety and protection of all medical frontliners (Gotinga, 2020).

E. ECONOMIC IMPACT

Pandemics have the potential to inflict harm on the country's economic growth. The COVID-19 pandemic has had a substantial impact on both short-term fiscal shocks and long-term economic growth, according to BSP Governor Benjamin Diokno (CNN News 2020), the Philippine economy is expected to be impacted by the pandemic-induced lockdown until the latter half of 2020, following which a recovery is projected. Due to the adverse impact of the pandemic on both the supply and demand sides, particularly on the tourism industry which was the first to bear the brunt, it is anticipated by experts that the Philippines will require a considerable amount of time to recuperate. The prompt and noticeable aftermaths of pandemics are experienced by various industries such as hotels, airlines, travel agencies, and restaurants. This is due to the restrictions on international travel, heightened media coverage, and government involvements. In 2018, China constituted the second-largest origin of international tourists in the Philippines, thereby making a 1.5% contribution to the country's Gross Domestic Product (GDP). The execution of travel limitations and passenger bans to and from China and South Korea is projected to have adverse impact on airline and tourism income, economic growth, and possibly lead to employment drops.

The COVID-19 pandemic has a big impact on the Philippine economy. According to the Philippine Statistics Authority (PSA) in 2021, the country's gross domestic product (GDP) experienced a contraction of 9.6% in 2020. It is worth to note that the unemployment rates rose from 5.1% in 2019 to 10.4% in 2020. According to the Department of Tourism (DOT) in 2021, the Philippines experienced a decline in both foreign and domestic tourism in 2020. Specifically, there was an 83.97% decrease in foreign guests, while domestic tourism decreased by 71.98%. The hotels, airlines, travel agencies, and restaurants, experienced remarkable fiscal delays due to this circumstance, leading to significant income losses. The COVID-19 pandemic has had a significant adverse effect on the economy of the Philippines. According to the Philippine Statistics Authority (PSA) in 2021, the country's gross domestic product (GDP) experienced a contraction of 9.6% in 2020. Additionally, the pandemic has had a notable impact on the unemployment rates, which rose from 5.1% in 2019 to 10.4% in 2020.

The pandemic has also had an effect on household spending, with panic buying initially driving up costs but ultimately leading to decreased costs due to the unsteady economic environment. The decline in consumption has had a negative impact on small and medium-sized businesses, leading to numerous closures and job losses (NEDA, 2020). The Bayanihan to Recover as One Act (Bayanihan 2) and the implementation of a social amelioration program are just two of the measures the government has put in place to lessen the pandemic's economic impact. Although the pandemic's long-term economic impact is still unknown, recovery is expected to take years (ADB, 2020). A prolonged COVID-19 outbreak, according to the Asian Development Bank (ADB), could cause at least 87,000 Filipinos to lose their jobs and, in the worst case, 252,000 (Sawadjaan, 2020).

108,620 Luzon employees were impacted by the ECQ, which had an impact on 2,317 businesses. The tourism, restaurant, manufacturing, and hotel industries were the most badly affected. 30,796 workers have been impacted by the closure of 600 businesses. The global economy is being harmed by lost production and demand, uprooted families and communities, and hasty government actions, and a full recovery is anticipated to take years.

VIII. CONCLUSIONS

Evidence-based decision making has long been used by the government to raise the standard of services it offers to its constituents. When it comes to making decisions during public health emergencies, scientific knowledge is essential. It should be noted, though, that there are many other factors to take into account when making a decision in addition to the scientific evidence. A necessary first step toward long-term public health action to improve evidence usage is understanding decision-making contexts and barriers to evidence uptake. The government demonstrates that it is impossible to formulate policy or make decisions using trends, intuition, beliefs, or norms. The four evidence-based practices were implemented by the government in an effort to produce more accurate, useful, efficient, and valuable data for gauging COVID-19's immediate and long-term effects. Increased investment in research and dissemination infrastructure, as well as systemic changes, are likely to be required for the implementation of evidence-based management practices. These actions can ensure that a needs-based health care management research program is carried out in a well-coordinated manner and that the outcomes are managed and disseminated in a way that maximizes their uptake. Government leaders are increasingly relying on rigorous evidence to pinpoint policies and programs that are both effective and efficient when dealing with public health emergencies.

Decision-makers must have access to accurate and reliable information in order to effectively combat the pandemic. This information ought to be accurate, current, and supported by unbiased scientific evidence. This guarantees that programs and policies are grounded in fact and targeted at producing beneficial results. It's also critical to remember that making decisions during a pandemic necessitates quick action. This does not imply, however, that hasty decisions or those based on inaccurate or politicized information should be made. To make wise decisions, leaders should give priority to data that is backed by science and focused on results. To sum up, trustworthy and accurate data are crucial for making sensible decisions and creating inclusive regulatory policies and programs to combat the pandemic. To make sure that their decisions are based on factual information and are successful in producing favorable results, government leaders should give priority to science-based and results-oriented information and seek expert advice.

The need to strengthen public health systems in order to better safeguard communities from both natural and man-made threats has been brought to light by recent global infectious disease outbreaks and other catastrophes. Current

governance and funding arrangements may need to be adjusted if a new pandemic breaks out and the world needs to be better equipped to defend itself. Additional investigation into non-pharmaceutical or alternative measures would be required for this rebalancing.

Everyone in the public, private, and civil sectors have a role to play in the coordinated effort to save lives and lessen the harmful effects of Covid-19. The government's call for "stay-at-home" orders affects everyone, not just the underprivileged. Nobody is immune, and if we don't band together, the pandemic's long-term effects will affect us all. Only preventative measures, such as quarantine and widespread use of personal protective equipment like face masks, hand sanitizers, and ventilators, can stop the virus from spreading. They don't work as a panacea. It is possible to isolate infected individuals and stop the spread of the virus by simply identifying them. This virus is extremely contagious, and the number of cases appears to be rising exponentially. The government is devoted to assisting people and ensuring that they have enough food to stay at home. Unfortunately, many people continued to disregard the community's curfew and quarantine rules. If we are sick, we should stay at home to avoid endangering others and to uphold our sense of civic duty. Cooperation is essential during times of crisis; everything has a resolution, so all we need to do is cooperate to win.

The pandemic served as a mirror for people's values because many well-managed businesses prioritized employee health and safety while collaborating and working with clients and customers across borders and along supply chains. People and organizations have demonstrated their resilience and unity in the face of the pandemic by prioritizing health and safety, cooperating across borders, and cooperating across supply chains. Ramon S. Ang, a business tycoon, is a shining example of someone who, in these hard times, prioritizes life over money. The current crisis presents an opportunity to reevaluate the tenets that unite us and pave the way for a more secure, healthy, and sustainable future. Understanding how human well-being and environmental health are intertwined and that we are responsible for both is essential. We have the technology and means to get stronger if we recognize that environmental health and human well-being are two sides of the same coin. We are responsible to the environment in addition to ourselves.

For managing public health emergencies, the Philippines already has a sizable number of laws, policies, and other legal tools, but it is difficult to change cultural and psychological attitudes. However, the ability of Filipinos to accept that pandemics are a fact of life and that something can be done to lessen their effects, prevent and correct mistakes, and recognize the lessons and opportunities that this pandemic brings may not be enough to start the change. This can be accomplished in a number of ways, including the formulation of pandemic governance laws and regulations as well as—and most importantly—their application and observance. Therefore, the challenge of adapting and changing from a pandemic to a flexible culture must be faced by both the government and the Filipino

people. Institutional responses, strategies, and directives are already in place. Following the Covid-19, people have a moral duty to recover from the pandemic and rebuild their lives.

We must unite as Filipino to meet this challenge, despite the fact that the pandemic can be frightening and overwhelming. It is time for us to work together and put our differences aside to stop the pandemic. If we cooperate, we can make a significant contribution to ending the crisis we are presently facing. Each of us as law-abiding citizens, employees, parents, and individuals must accept personal responsibility in order to contribute to the victory in this battle. This requires not only providing our coworkers, neighbors, and loved ones with accurate and reliable information, but also strictly adhering to the laws and rules established by the government. Let's follow the law and support our friends, neighbors, and family by giving them the truth whenever we can.

IX. FUTURE CONSIDERATION

The COVID-19 pandemic has highlighted vulnerabilities within our healthcare system, revealing areas in need of improvement in effectively addressing such challenges. The researcher has identified several factors that should be taken into consideration when preparing for public health emergencies of the magnitude of the Covid-19 pandemic. It is imperative to recognize the significance of seeking additional examination and assessment from other experts and researchers. From a preparedness perspective, it is recommended that the government allocate resources towards strengthening healthcare systems, including hospitals, medical technology, and healthcare personnel. It is advisable for the government to develop clear and concise protocols to enhance coordination among diverse agencies and stakeholders during emergency situations. In the realm of data and information management, it is advisable for the government to allocate resources towards the enhancement and advancement of surveillance systems. This will facilitate timely recognition and management of emerging infectious diseases. It is imperative for the government to ensure transparency in the dissemination of information to the public, encompassing prompt and precise communication.

Finally, the Philippines should allocate funds for the establishment of specialized facilities would augment the nation's capacity to address outbreaks and emerging diseases by expediting the process of diagnosis, monitoring, and response. It is imperative to invest in research and development (R&D) for vaccines targeting emerging diseases. The government also need to enhance the recruitment and promotion processes, as well as provide appropriate compensation to attract and retain qualified healthcare professionals. The road ahead may not be easy, but if the government and the people work together, they can make significant changes. Working together, we can improve the health-care system, improve our readiness and response, and protect the Filipino people's health and welfare. Take advantage of this opportunity to learn, change, and create a better, more stable future for all.

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