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UNIVERSITY OF GHANA, LEGON

LEGON CENTRE FOR INTERNATIONAL AFFAIRS AND DIPLOMACY (LECIAD)

MANAGING COVID-19 PANDEMIC IN WEST AFRICA: THE CASE OF GHANA

BY

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DECLARATION

I Catherine Deynu hereby declare that except for reference to published works and materials related to my topic, which have been duly acknowledged and referenced, this thesis is an original work written by me, under the supervision of Dr. Daniel Dramani Kipo- Sunyehzi, Professor Ayaga A. Bawah, and Dr. Adriana A. E. Biney. I wish to declare that this work has not been presented in part or in whole to any other degree-awarding institution or university. All sources are referenced and cited in the bibliography.

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DEDICATION

This work is dedicated to God Almighty and also to my Father Mr. Cordjaice Adafleagbe. I also wish to lay this work in memory of all COVID-19 victims and all individual institutions and agencies who worked tirelessly towards the containment of COVID-19 in West Africa.

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ABSTRACT

The COVID-19 pandemic posed a significant threat to global human security, although West Africa, which was once expected to be particularly vulnerable, had very low results. This study investigates the management of COVID-19 in West Africa, with Ghana as a case study, considering international health legislation and widely known pandemic response methods.

The study employs a qualitative research design guided by strategic management theory in a post-pandemic, non-ergodic context, as well as the human security framework in consultation with the securitization theory. Data were gathered through eight key informant interviews and thirty-two in-depth interviews with individuals directly involved in or knowledgeable about pandemic management. The analysis focuses on how COVID-19 affects survival, livelihoods, mobility, and institutional capability.

The findings show that COVID-19 had significant consequences on the subregion, causing economic disruption, increased morbidity and mortality risks, and travel restrictions. In response, governments used a combination of political leadership, public health education, treatment and isolation facilities, monitoring and contact tracing systems, border controls, lockdowns, and health-system strengthening measures. The study further discovers that global health governance remains fragmented, with the International Health Regulations serving primarily as a normative framework rather than a legally enforceable regime, placing a significant burden on state adaptive ability.

Governance and coordination difficulties, vaccination challenges, and financial constraints were all significant barriers to effective pandemic management. The study indicates that adaptive governance, contextualised implementation of international principles, and regional cooperation were critical in managing the epidemic in West Africa. It suggests deepening preparedness frameworks, improving accountability, and fortifying the resilience of the health system in order to handle future public health emergencies.

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ABBREVIATIONS

ACEA	Automobile Manufacturers Association
AU	Africa Union
CDC	Centre for Disease Control and Prevention
COMESA	Common Market for Eastern and Southern Africa
CSO	Civil Society Organization
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EU	European Union
EVD	Ebola Virus Disease
GHS	Ghana Health Service
IDI	In-Depth Interview
IHR	International Health Regulations
IMF	International Monetary Fund
IMIA	International Medical Informatics Association
IPA	Interpretative Phenomenological Analysis
KII	Key Informant Interview
MoH	Ministry of Health
NCCE	National Commission for Civic Education
NGO	Non-Governmental Organization
PCR	Polymerase Chain Reaction
PHEIC	Public Health Emergency of International Concern

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PPE	Personal Protective Equipment
SADC	Southern African Development Community
SARS	Severe Acute Respiratory Syndrome
UN	United Nations
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNMEER	United Nations Mission for Ebola Emergency Response
UNHCR	United Nations High Commissioner for Refugees
UNWTO	United Nations World Tourism Organisation
WAHO	West Africa Health Organisation
WHO	World Health Organization
WTTC	World Travel & Tourism Council

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Pandemics have had a dramatic impact on communities and civilizations throughout history, but they have been shockingly understudied in behavioural social science and medical areas grounded in social studies. Pandemics are key events that characterize the course of human existence in West Africa, serving as both the birth of human societies and possible harbingers of humanity's end (Barr et al., 2008).

Historically, West Africa has had pandemics like prior plagues, such as the Athenian epidemic in 430 BC, the Antonine Virus of 165-180 AD, and the long-lasting impact of the Justinian plague from the 6th century to the mid-16th century. Recent epidemics like Cholera (1817-1860), Influenza (2009), SARS (2002), and Ebola infections (2014) have left lasting scars on the region. The Justinian plague, which originated in Egypt between 541 and 543, raced over the Roman Empire, killing an estimated 100 million people. Similarly, the Black Death pandemic, which originated in East Asia and spread to Europe between 1347 and 1351, claimed the lives of 200 million people (Zietz and Dunkelberg, 2004). An epidemic that originated in China's Yunnan province witnessed a concentration of cases in the Democratic Republic of the Congo in the nineteenth century (Glatter & Finkelman, 2020). The World Health Organization (WHO) has classed pandemics as reemerging infectious illnesses since the 1990s. To fight these epidemics, WHO has reacted with international health regulations, establishing an international structure to treat infectious illnesses. In accordance with this method, WHO has developed a plague vaccine target product profile (TPP) to guide vaccine development (Davies, 2008; Yu, 2008).

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In addition to historical pandemics, diseases like Cholera, originating in Asia and spreading globally in the 18th and 19th centuries, have significantly impacted West Africa. The extensive cholera outbreak that started in Indonesia in 1961 became endemic worldwide, leading to major epidemics in Zimbabwe in 2008, Sierra Leone in 2012, South Sudan, and Ghana in 2014 (Sefa et al., 2010). The toll of Cholera has been immense, with an estimated four million infections annually between 2008 and 2012, resulting in 95,000 deaths (Ali et al., 2015).

Beyond Cholera, Influenza infections have marked significant chapters in the history of pandemics. The Russian Flu in 1889-1893 claimed an estimated one million lives globally. The Spanish flu in 1918 infected 500 million people and resulted in 50 million deaths worldwide (Johnson & Mueller, 2002). Subsequent outbreaks, including the Asian flu in 1957-1959 and the avian influenza in Hong Kong in 1997, continued to pose threats. The avian influenza, detected in 17 countries and affecting humans, aquatic birds, and domestic poultry, reported 861 human cases with a case fatality rate of 53% as of October 2020 (WHO, 2020).

The recurring emergence and spread of infectious diseases with pandemic potential underline the need for robust management strategies (Piret & Boivin, 2021). Before 1960, responses to pandemics were often emergency-driven, leading to the establishment of the International Sanitary Regulations, later renamed the International Health Regulations (IHRs) by WHO in 2005. These regulations have played a crucial role in shaping the international public health response to pandemics, providing a framework for managing global health crises

In the context of West Africa, pandemics have historically posed significant challenges, with notable instances like the Ebola outbreak in 2013, which claimed 11,000 lives and marked a crucial point in the region's history (WHO, 2015). More recently, the COVID-19 pandemic, originating

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in China in 2019, has had a profound impact globally, emerging as a significant threat to international security (Wang et al., 2020).

The COVID-19 pandemic is characterized by its swift global spread, surpassing the impact of war, genocide, and terrorism combined, highlighting the interconnectedness of the modern world (Saunders-Hastings & Krewski, 2016). With its declaration as a pandemic by the World Health Organization (WHO) on March 11, 2020, COVID-19 has tested the preparedness and response mechanisms of nations worldwide (Wang et al., 2020).

The implications of COVID-19 extend beyond mortality rates, affecting societies and economies. Lockdowns and extreme social distancing measures have led to increased stress, anxiety, and depression in populations, particularly in Italy, Spain, and the United Kingdom (Codagnone et al., 2020). The economic fallout has resulted in widespread employment displacement, with significant impacts on various sectors (Polyakova et al., 2020).

While many countries globally faced severe consequences, West Africa, projected to be one of the hardest-hit regions, has shown relative resilience. The region's response to the COVID-19 pandemic is influenced by lessons learned from managing the West Africa Ebola epidemic, where challenges included a lack of resources, inadequate health infrastructure, and delayed international response (Lone & Ahmad, 2020).

Contrary to predictions, as of March 2022, West Africa accounted for a small percentage of global COVID-19 cases, with 2.62% of infections reported in Africa. The region's ability to navigate the pandemic is shaped by its socio-economic context, healthcare infrastructure, and lessons learned from previous health crises (WHO, 2022).

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The unique challenges faced by West Africa, combined with the global impact of COVID-19, underscore the need for a nuanced understanding of the region's management strategies. Exploring the region's response to COVID-19 offers valuable insights into the dynamics of pandemic management in resource-constrained settings. This study aims to delve into the strategies employed by West African nations in managing the COVID-19 pandemic, considering their unique contextual factors and the lessons drawn from previous health crises. Through a comprehensive examination of these aspects, the research seeks to contribute to the broader discourse on pandemic management, offering insights that can inform future strategies and policies, particularly in regions facing similar challenges.

The international fight against COVID-19 is taking place against a rich tapestry of past pandemics and epidemics that have influenced the world and, more especially, the West African sub-regions. The vast representation of literature on the issue exposes various techniques and approaches used by many countries and areas in the face of contagious diseases, providing a reservoir of vital lessons for the present global health crisis.

Yan et al. (2020) dive into the historical panorama of pandemics, emphasizing that COVID-19 is part of a continuum of infectious disease problems that mankind has faced throughout history. The literature highlights the intricacies and subtleties associated with handling pandemics, each of which presents new difficulties to society and healthcare systems, by reviewing reactions to previous outbreaks such as the Spanish Flu, Plagues, SARS, and Ebola.

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In the face of these hurdles, the global community has shown an ability to develop and adapt, building on the experiences and lessons of previous pandemics. According to Yan et al. (2020), different nations and regions have used a variety of approaches, exhibiting both parallels and

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differences in pandemic management. Yan et al. (2020) contribute to a better understanding of this variability by showing how some methods have emerged as recurring patterns in the community response to infectious disease outbreaks.

Sharma et al. (2021) add to this narrative by underlining the significance of understanding pandemics holistically. They think that during the early phases of a new epidemic, the world learns from previous pandemics. This preliminary step of learning entails researching previous events in order to have a more thorough grasp of the present pandemic's dynamics. Such an approach leads to the creation of long-term solutions that are guided by previous achievements and failures. The literature, in essence, emphasizes the cyclical character of pandemic management, in which past experiences influence modern actions, enabling a constant cycle of learning and adaptation in the face of developing infectious diseases. In the ongoing struggle against COVID-19, the significant insights gained from previous pandemics serve as a compass directing the globe toward more effective, informed, and sustainable solutions.

The management of the COVID-19 pandemic in West Africa has been a multidimensional problem, requiring the use of international health standards and technical recommendations established by the World Health Organization (WHO). Governments moved quickly by establishing emergency regulations and deploying a variety of public health measures to halt the virus's spread (United Nations High Commission for Refugees (UNHCR), 2020).

The World Health Organization's International Health Regulations played a critical role in directing response activities, stressing tactics like hand cleanliness, social separation, and mask use. The adoption of emergency laws enabled governments to successfully implement these restrictions. Public health efforts included a wide range of actions, from contact tracing to isolation

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and quarantine, community confinement, national lockdowns, and travel restrictions. Additionally, social meetings were restricted to reduce the risk of transmission (UNHCR, 2020).

Responses to the pandemic differed among African nations in the larger context. When the number of incidents was modest, there were restrained reactions, but as the problem progressed, more harsh measures were used. South Africa, in particular, stood out for its early and comprehensive mass testing program, which appeared to help "flatten the curve." The strategy taken by the country might serve as a paradigm for successful COVID-19 management (Dzinamarira et al., 2020).

In Mali, a country severely devastated by the pandemic, guidelines for integrated case management in health settings were implemented based on the experiences of other afflicted nations. Mali's reaction included airport inspections, public education, and the shutdown of airports and schools on March 19, as well as limits on gatherings (Dzinamarira et al., 2020; Beseny & Kármán, 2020).

Through the National Health Security Agency (ANSS), the Ministry of Health and Public Hygiene of Guinea established a system for controlling air, sea, and land transport flow, monitoring, and communicating COVID-19 prevention methods. The health authorities have also made available a national repository on the overall management of COVID-19 and, with the assistance of partners, have trained health care providers from the various epidemiological treatment centres that have been established across the country since the outbreak of the Ebola virus (Gholizadeh et al., 2021 Ahanhanzo et al., 2021).

The World Health Organization (WHO) standards and instructions affected the handling of the COVID-19 epidemic in West Africa, highlighting the worldwide reliance on international health norms (Gholizadeh, 2021). The WHO's International Health Regulations (IHR) play a critical role in determining the policies and methods used by West African states to combat viral transmission

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(Stuckelberger & Urbina, 2020). This highlights the region's incorporation of international health frameworks into its response, emphasizing the collaborative and interconnected character of efforts to manage the pandemic's difficulties.

West African countries, including Ghana, implemented a comprehensive plan based on WHO guidelines. The introduction of social distancing measures, together with the closure of international borders, was a critical component of this approach to both limit the admission of new cases and confine the virus inside national boundaries (Taboe et al., 2020). Simultaneously, an emphasis on personal hygiene practices, such as mandated facemask use, regular handwashing, and widespread use of hand sanitizers, became critical in limiting viral transmission (Sebeelo, 2023). This diverse reaction demonstrated a dedication to WHO principles in creating a united front against the epidemic.

In West Africa, particularly in Ghana, public health education played a pivotal role in addressing the challenges posed by COVID-19. Notably, the president took an active role in regularly communicating with the public, providing crucial information about the risks associated with the virus and outlining preventive measures (Antwi-Boasiako Nyarkoh, 2021). This proactive communication approach was designed to elevate public awareness, promote a deeper understanding of the situation, and encourage adherence to recommended health protocols. The engagement sought to empower the population with the knowledge needed to navigate the complexities of the pandemic and foster a collective commitment to health-conscious practices (Adjin-Tettey, 2021).

To combat the spread of COVID-19 in West Africa, comprehensive restrictions were implemented, including the prohibition of public meetings such as religious services, weddings,

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parties, funerals, and other social activities. Given the proven proof that the virus is communicable through human respiratory droplets (Bonnet et al., 2021), these limits were imposed as a proactive effort to reduce interpersonal transmission. The focus of these tactics was to dramatically limit social contacts, recognizing their critical role in the virus's propagation dynamics. West African countries tried to reduce COVID-19 community-level transmission by restricting meetings and events where the virus may possibly spread. This strategy emphasized the significance of taking severe preventative measures to limit the pandemic's impact on public health.

Certain West African countries, notably Ghana, used partial lockdowns in particular metropolitan areas in response to isolated outbreaks and as an extra step to slow the virus's spread. Curfews were implemented over the sub-region at the same time, as part of a larger plan to limit movement and contacts, particularly during times of increased infection risk (Afriyie et al., 2020). These coordinated activities demonstrate West Africa's adaptive and dynamic approach to pandemic management. Countries in the region have shown a willingness to incorporate international principles, leverage public health education campaigns, and deploy a variety of restrictive measures. This diverse plan illustrates the region's resilience and capacity to tackle the complexities of the COVID-19 problem.

In the context of Ghana specifically, the early phase of the COVID-19 pandemic response was hailed as one of the best in Africa (Agyemang et al., 2021). The government of Ghana's approach was structured around five objectives: the aim to curtail the importation of cases; identify and contain them; care for the sick; cushion the impact of COVID-19 on Ghana's economic and social life and boost domestic production as a means of deepening self-reliance. All borders including air, land, and sea were closed, and contact tracing and management of cases at designated centres coupled with partial lockdowns were enforced followed by mass vaccination of citizens. All these

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measures coupled with the universal standard precautions were put in place to manage the pandemic in Ghana.

This context sets the setting for a detailed assessment of COVID-19 management in West Africa, stressing the various techniques used by states in response to the epidemic. The study aims to investigate the effectiveness of these interventions while taking into account differences in socioeconomic circumstances, healthcare infrastructure, and other contextual aspects. The project intends to give insights that might improve future pandemic management efforts in the area by drawing on experiences from West African countries. The research hopes to contribute to the conversation on public health crisis management in West Africa and abroad by thoroughly investigating these processes.

1.2 Statement of the Problem

The global society, including West Africa and Ghana, has been coping with the tremendous problems posed by the COVID-19 pandemic, a catastrophe of unprecedented scope with multiple effects on states worldwide (Kumar et al., 2021). To grasp and confront this problem, it is critical to draw experiences from previous pandemics, such as the Ebola outbreak in West Africa, which provide useful lessons in epidemic management and response (Liu et al., 2020; Brown et al., 2017; Sharma & Cappell, 2015). Despite earlier forecasts showing catastrophic effects for West Africa, the actual impact of COVID-19 appears to be less dramatic when compared to more developed locations (Moore et al., 2017).

The pandemic management environment in West Africa, particularly Ghana, has been characterized by unique obstacles, including claims of corruption, violations of COVID-19 norms, and major gaps between planning and implementation (Arkorful et al., 2021). The worldwide

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response to the pandemic included the rapid implementation of measures developed from prior epidemic experiences, including disease spread management, guaranteeing food security by supporting the food value chain, and improving global healthcare quality (Adler et al., 2021; Ma et al., 2021). The World Health Organization (WHO) stood in the vanguard of this worldwide reaction, declaring the pandemic a global health emergency and laying out swift countermeasures (Verma, 2020).

The purpose of this research is to investigate the complicated dynamics of pandemic management in West Africa, moving from worldwide examples to the specific situation of Ghana. The WHO instructions issued to its member nations were founded in the International Health Regulations (IHR), which mandated the organization to declare a pandemic a public health emergency (Jee, 2020). Total lockdowns, international border closures, and the required use of personal protective equipment (PPE) such as facemasks to prevent viral transmission were among the suggested measures (Koh et al., 2020).

Collaboration between the WHO, the Centers for Disease Control and Prevention (CDC) Africa, the West African Health Organization (WAHO), and the Economic Community of West African States (ECOWAS) has been critical in determining the response to the COVID-19 pandemic in Sub-Saharan Africa, notably in West Africa (Engel & Herpolsheimer, 2021). While global guidelines served as a bedrock, regional groups customized their policies to the particular dynamics of West Africa, resulting in partial lockdowns, border closures, and limits on public gatherings (Anjorin, 2020). Despite having fewer cases and deaths, West African countries adapted global recommendations to their own circumstances, displaying a sophisticated approach to pandemic management.

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The duration and kind of limitations differed in West Africa from those in European nations, where death rates were greater (Zanker et al., 2020). In this global environment, the WHO's International Health Regulations (IHR) were crucial in directing states in their preparation for and response to pandemics. Ghana developed a National Health Care Programme under the National Health Care Act of 1992, a constitutional provision that empowers government authorities to launch programs to provide covered care during epidemics (Danso et al., 2020; Kanmiki et al., 2020).

However, the success of these interventions in West Africa, notably in Ghana, was impacted by a number of factors, including resource availability, the specific setting of the pandemic, and each country's unique dynamics (Hervie et al., 2022). While global and regional organizations provided guidance, practical implementation and modification of these measures at the country level presented obstacles. Understanding how these worldwide and regional principles were turned into effective, context-appropriate action within the sub-region, with a special focus on Ghana, is the intricacy of administering COVID-19 in West Africa.

Key setbacks were finance, a lack of health infrastructure, resource limits, and the need for a personalized strategy that takes into account West Africa's socioeconomic and cultural setting (Anjorin, 2020; Zanker et al., 2020). Furthermore, Ghana's use of methods comparable to those used in other West African nations but with slight changes raises concerns regarding the influence of these differences on pandemic management.

In the face of management interventions, Quakyi et al. (2021) argue that policymakers' reactive approach, insufficient data collection, uneven health system supplies, poor public example, and an information vacuum generated by poor risk communication combined with political involvement with illness management have exacerbated the gap between planning and practice. Even though

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West Africa was not the most struck by COVID-19, it is relevant for academic purposes to investigate how it fared in managing the COVID-19 pandemic amongst all of these problems.

The purpose of this research is to look into the international rules employed by Ghana and the West African sub-region to enforce IHR implementation during COVID-19. Understanding how governmental entities in West Africa, notably Ghana, applied IHR and international COVID-19 norms can give insights into the region's pandemic response. This inquiry is critical for academic purposes because it provides a full insight into how the area negotiated the complexity of COVID-19 administration in the face of opposition and criticism.

The purpose of this study is to look into the complexities of how global and regional standards, notably those developed by the WHO and adopted by organizations like WAHO and ECOWAS, affected the creation and implementation of COVID-19 management strategies in West Africa, with Ghana serving as a focus point. The study aims to give significant insights into future pandemic preparedness and response methods by studying contextual subtleties, socioeconomic considerations, and each nation's adaptive potential. Furthermore, the research will look at the gaps between the planned and actual execution of policies, giving light on the efficiency of governance structures and the difficulties in bridging the gap between global principles and local reality.

This complicated issue necessitates a thorough evaluation of the pandemic management environment. The overriding issue is figuring out how global metrics based on the WHO's IHR were translated into local contexts, notably in West Africa and, more specifically, Ghana. The disparity in reactions, as well as the difficulties encountered throughout the translation process, demand an in-depth investigation to inform future pandemic planning and response tactics. This

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study aims to provide insight into the complexities of turning international recommendations into effective, context-appropriate action at the global and local levels.

1.3 Research Objectives

The main objective of this study is to explore the extent to which West Africa, specifically Ghana, has effectively managed the COVID-19 pandemic using international regulations and internationally accepted COVID-19 protocols. Specifically, the study seeks to:

1. Ascertain the threats posed by the COVID-19 pandemic in West Africa.
2. Find out how West Africa and Ghana managed the COVID-19 pandemic as a threat to human life and security.
3. Understand the kind of international policies and resources that were deployed in the management of COVID-19 in Ghana.
4. Determine the dynamics and challenges of COVID-19 management in Ghana.

1.4 Research Questions

The major research question of this study is: How have West African States, specifically Ghana, managed the COVID-19 pandemic through the implementation of international regulations and internationally accepted COVID-19 protocols?

Thus, the specific questions to help answer the major research question include the following:

1. What are the threats posed by the COVID-19 pandemic in West Africa?
2. How did West Africa and Ghana manage COVID-19 as a threat to human life and security?

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3. What international policies and resources were deployed in the management of COVID-19 in Ghana?
4. What were the dynamics and challenges of COVID-19 management in Ghana?

1.5 Significance of the Study

This study is relevant in three main ways. It will hopefully contribute to literature, policy, and practice.

West Africa's postcolonial states have not experienced any security threat or major pandemic apart from the Ebola epidemic, which caught both governments, institutions, and individuals unprepared. As a result, there is a paucity of literature as far as the management of pandemics in West Africa is concerned. Specifically, as a novel phenomenon, the literature on COVID-19 across the globe is currently under development. This study, therefore, contributes immensely to the literature on the management of pandemics in West Africa and specifically the West-African perspective with regard to the management of COVID-19. Future researchers, academics, and students of international relations and international health management will, therefore, find this study a worthwhile reference material.

With the inception of the COVID-19 pandemic with its devastating social and economic impacts (Gondwe, 2020), there were fears of West African countries undergoing a deadlier situation than what had been experienced during the Ebola outbreak. This is apparent mainly because, as a developing region, West Africa faced numerous structural challenges that often undermined the effective and efficient response mechanism required against a pandemic such as COVID-19. These challenges include inadequate health infrastructure, logistics, human and financial resources, and poor health systems (Gilson et al., 2020). In the absence or inadequacy of these facilities, managing

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the disease becomes very challenging (Dagba et al., 2021). There is therefore a clear need for effective policies both at the national and regional levels to respond to future pandemics in West Africa. The findings of the study would hopefully guide government officials, government organizations, and relevant sub-regional organizations to formulate appropriate policies that will help West Africa to be ready to respond effectively to future pandemics, if any should occur.

This research would hopefully help to identify best practices that should be implemented in managing diseases that are internationally spread (pandemics), should they occur in the future. Secondly, the findings of this study may serve as a guiding material for international donors and donor organizations across the globe to ensure that funds meant for international health management are well managed for their intended purpose.

1.6 Scope of Work

The study explores the management of the COVID-19 Pandemic in West Africa. It then narrows to Ghana's management of COVID-19 as a case study. Specific focus on how government organizations and government officials implemented international regulations and internationally accepted COVID-19 protocols towards the management of COVID-19 in Ghana from the period of March 2020 to January 2023. The study emphasizes management in terms of measures taken, international policies and resources used in the prevention and treatment of cases, and the impacts and challenges encountered within the period.

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1.7 Organisation of the Study (Chapters)

This study or research work is divided into eight chapters.

Chapter one consists of the general introduction of the study.

Chapter two covers an extensive literature review and the theoretical framework.

Chapter three covers the research methodology.

Chapter four is the Presentation of field data on the demography and background of the participants in the research setting

Chapter five is the Presentation of field data on research question/objective 1.

Chapter six is the Presentation of field data on research question/objective 2.

Chapter seven is the Presentation of field data on research question/objective 3.

Chapter eight is the Presentation of field data on research question/objective 4.

Chapter nine is the summary of findings, conclusions, and recommendations.

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on the review of relevant literature in line with the objectives of the study. The literature review provides a critical look at the existing literature on COVID-19. It begins with the theoretical framework which is comprised of the conceptual review (the concept of human security) and one other theory namely Strategic Management Theory in a Post-Pandemic and Non-Ergodic World, and finally the empirical review.

2.1 Theoretical Framework

This study adopted the concept of Human Security and the Strategic Management Theory in a Post-Pandemic and Non-Ergodic World. Strategic Management Theory offers a complete framework for examining, interpreting, and directing COVID-19 management in West Africa. Its versatility, emphasis on long-term planning, emphasis on efficient resource usage, risk management, inclusion of global and local viewpoints, promotion of organizational learning, governance concerns, and support for multi-stakeholder cooperation make it a relevant and important theoretical framework for study in this setting. Using strategic management theory allows the researcher to dive deeply into the problems and opportunities that West African nations and organizations have as they traverse the aftermath of the epidemic and try to effectively tackle COVID-19. The outcomes of such research can help shape policy choices, organizational tactics, and future preparation activities for dealing with infectious disease epidemics.

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2.2 The Concept of Human Security

According to Copenhagen school theories, security issues arise when a particular issue is presented as posing an existential threat to some objects, a threat to be dealt with immediately with extraordinary measures (Diskaya, 2013). The theory demonstrates how the conceptualization of security has been expanded to include human security and the process of how to securitize an issue in health, it further necessitates the emergency powers or authority of a state to ensure social order and public compliance to implement a swift pandemic response. The most important thing about it is that it necessitates securitizing health as a security threat. To respond to the COVID-19 emergency, laws were passed in Ghana and based on the legal framework, restrictions and lockdowns were announced in specific areas of the country.

This study utilized Human security as part of the theoretical framework in its analysis. The concept of human security is associated with the 1994 Human Development Report. United Nations Development Programme (UNDP, 1994). The United Nations Development Programme (UNDP) defines human security as safeguarding people against illnesses, starvation, oppression, and other chronic risks, as well as from unexpected and detrimental disturbances to the pattern of human everyday life (UNDP 1994).

According to Dwinantoaji and Sumarni (2020), human security brings together the 'human elements' of security, rights, and development. As such, it is an interdisciplinary concept that displays the following characteristics: people-centred, multi-sectoral, comprehensive, context-specific, and prevention-oriented. As a people-centred concept, human security places the individual at the 'centre of analysis' (Cesarec, Mikac & Spevec, 2020). Consequently, it considers a broad range of conditions that threaten survival, livelihood, and dignity, and identifies the

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threshold below which human life is intolerably threatened. Human security is also based on a multi-sectoral understanding of insecurities. Therefore, human security entails a broadened understanding of threats and includes causes of insecurity relating for instance to economic, food, health, environmental, personal, community, and political security (Dwinantoaji & Sumarni, 2020).

Human Security is a paradigm shift that focuses primarily on the security of persons inside a state, as opposed to the protection of state borders or territory. The scope of global security is broadened to encompass threats to economic security, which needs an assured basic income for individuals, typically through productive and remunerative employment; food security, which relies on both physical and economic access to basic food; health security, which tries to ensure a minimal level of protection from illnesses; and environmental security, which supports the protection of people from the short and long term ravages of nature and deterioration of the natural environment (UNDP, 1994). Human security also seeks to safeguard persons against physical harm, whether perpetrated by foreign or domestic actors.

The "freedom from desire method" is one of the primary techniques that guarantee the practicability of Human Security the most. It contends that the risks agenda should be expanded to include hunger, illnesses, and natural catastrophes since they are inseparable in tackling the source of human insecurity (Tadbakhsh, 2007) and kill many more people than war, genocide, and terrorism combined. Human security requires finding a compromise between the power of the state and the freedom of the person, according to Dorn (2001).

According to Fukuda-Parr and Messineo (2012), the human security concept incorporates the totality of human rights, stressing the fulfillment of fundamental requirements and the pursuit of

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political and social freedom, including 'freedom from fear' and 'freedom from want.' The major focus of security policy is on the most important goal of all: the protection of human life. This method stands out by emphasizing the person over the state.

Human security is a comprehensive analytical instrument that encompasses economic, food, health, environmental, personal, communal, and political security elements (Liotta & Owen, 2006; Lonergan, 2000). The fundamental subject is the protection of persons, despite the fact that it covers a wide range of topics. This approach broadens the sources of insecurity to encompass challenges to socioeconomic and political situations, as well as food, health, the environment, community, and personal safety (Jolly & Ray, 2006).

In 1994, the Global Human Development Report (HDR) challenged the conventional narrow interpretation of security, which primarily focused on the security of nation-states. It advocated for an expanded perspective that incorporates the safety of individuals and groups from threats such as hunger, disease, and political instability. The HDR identified seven core elements constituting the basic needs of human security: economic, food, health, environmental, personal, community, and political security (Jolly & Ray, 2006).

Jolly and Ray (2006). Economic security requirements include guaranteed basic income, employment, and access to social safety nets. Access to basic nutrition and a dependable food supply simplify food security. Access to potable water, a secure living environment, health services, family planning, and information for a healthy life are all components of health security. Pollution prevention, resource conservation, and natural disaster protection are all aspects of environmental security. Community security includes the preservation of culture, language, and values, as well as the prevention of ethnic prejudice and disputes. Political security is concerned

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with ensuring human rights, well-being, and protection against political oppression (Jolly & Ray, 2006).

Health security is inextricably related to overall security, particularly in the context of globalization. Human and animal movement across borders, along with lifestyle changes, leads to the fast spread of pandemics, posing a danger to global health security (Dwinantoaji & Sumarni, 2020). COVID-19, as a worldwide pandemic, poses a significant threat to human life, well-being, and dignity, putting human security at risk. The pandemic response is positioned within a human security paradigm, with the goal of protecting human life, particularly vulnerable groups, and maintaining freedom from want and fear at the local and national levels (Dwinantoaji & Sumarni, 2020).

Despite the obvious interdependence of the seven pillars of human security, our major focus is the direct linkage of COVID-19 with human security. This all-encompassing viewpoint provides a comprehensive framework for recognizing and tackling the complex issues caused by the epidemic in West Africa. Given the pandemic's complex ramifications, successful interventions must consider economic, health, and social dimensions, aligning with the key pillars of human security theory. This theoretical framework, based on human security concepts, provides a guide for comprehending and negotiating the complexity of COVID-19 management. It underlines the interconnectedness of many security aspects and the critical need of prioritizing individual well-being and protection against numerous dangers.

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Literature has shown how COVID-19 has disturbed people's earnings and currency flows, harmed lives, and aggravated West Africa's health crises and infrastructure. Concerns about food security

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in the region have also been expressed (Gummerson 2021; Asante & Mills 2020; Baud et al., 2020; Buonsenso et al., 2020).

Human Security has been critiqued or challenged for a variety of reasons. Most experts on human security agree that the notion is imprecise and, as a result, it should not be recognized as an effective examination of security issues in International Relations (Chandler, 2008; Owen, 2004). Despite the critiques levied against the Human Security concept, it is nonetheless deemed appropriate for investigation in this specific research. This is because it fits the topic perfectly by assisting in analysing, comprehending, and appreciating how all the components of human security in the entire sub-region of West Africa, especially Ghana, are greatly impacted by the growing health risks or threats, with a focus on COVID-19. For instance, the COVID-19 pandemic makes it difficult for humans to achieve their fundamental necessities. Because the government's primary focus has been on COVID-19 patients within the country, the pandemic has deprived individuals in developing nations, especially the most vulnerable, of government attention for their fundamental necessities. This assists in focusing the study on both state-centred and people-centred security. Ultimately, it promotes and elicits more people-centred policy solutions.

2.2.1 Strategic Management Theory in a Post-Pandemic and Non-Ergodic World

According to Hitt et al (2020), the Strategic Management Theory was originally used by Meyer et al. (1990) to explain how firms or organizations are strategically managed through crises when organizational environments undergo cataclysmic upheavals. These upheavals refer to changes that are so sudden and profound that they alter the trajectory of entire industries, overwhelm the adaptive capacities of resilient organizations, and exceed the comprehension of seasoned managers (Hitt et al, 2020).

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The post-pandemic world as used in this theory refers to domestic as well as international political, social and economic scenarios of nation-states after the impact of COVID-19. Also, the non-ergodic world, as used in this theory, refers to the changes that are expected to take place within and among nation-states across the globe due to the disruptions that occurred because of the COVID-19 pandemic.

Strategic Management Theory's flexibility is a significant strength, which is critical in the dynamic and uncertain post-pandemic world. The theory emphasizes the importance of constant strategy assessment, review, and change, which aligns well with the unpredictable character of non-ergodic situations (John & Thakur, 2023). Adopting a long-term perspective becomes critical in the aftermath of a pandemic since short-term disruptions can have long-term consequences. Long-term goals and sustainability strategies contribute to organizational resilience and recovery (Raduan et al., 2009).

Strategic Management Theory emphasizes efficient resource allocation, which becomes more important in a post-pandemic context when resources may be more scarce. The approach directs businesses' resource allocation and usage to optimize capabilities in the face of uncertainty (Shimizu & Hitt, 2004). Given the inherent risks and uncertainties in post-pandemic contexts, Strategic Management must place a premium on risk assessment and mitigation. Proactive risk identification and mitigation are consistent with the theory's concepts, while recognizing unanticipated problems (Xie et al., 2021).

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The theory acknowledges the interrelated nature of global and local viewpoints, which is especially important in a society dealing with global concerns such as pandemics. Strategies must be responsive to both international and local settings, noting global events' reciprocal implications

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(Stahl et al., 2017). In the post-pandemic ecology, when adaptive techniques are critical, learning from experiences is critical. Strategic management encourages firms to participate in continuous learning, learning from both successes and mistakes to inform future plans (Crossan & Berdrow, 2003).

Strategic Management Theory, by emphasizing the importance of governance in decision-making, becomes relevant in the post-pandemic context. Effective and ethical governance is critical for a company's capacity to handle obstacles and achieve stakeholder confidence (Settembre-Blundo et al., 2021). Strategic Management Theory emphasizes collaboration with multiple stakeholders, which is critical in a post-pandemic society when societal and economic dynamics may have transformed. Collaboration with governments, communities, and other organizations has become critical for long-term success (Haqi et al., 2022). Strategic Management emphasizes environmental scanning and analysis, as well as constant monitoring of external elements. Staying tuned in to changes in the corporate environment is crucial for educated decision-making in a post-pandemic future (Édes, 2021).

Due to its complete structure, this theory is well-suited to support the idea of human security in the research on controlling COVID-19 in West Africa. Strategic Management's agility corresponds with the pandemic's complex and growing issues. Its emphasis on long-term vision, effective resource allocation, risk management, and governance connects with the many facets of human security, which include economic, health, and social dimensions. Furthermore, the theory's emphasis on cooperation and environmental scanning corresponds to the interrelated and dynamic character of managing COVID-19 in a unique context like the West African sub-region.

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In this study, the Strategic Management Theory is extended to explain how nations must design ways to deal with short-term discontinuities and high uncertainty to survive the continuing COVID-19 pandemic. After the pandemic subsides, longer-term strategy changes may be required to manage the competitive landscape resulting from technical, socio-political, and institutional shifts in the "New Normal" (Ahlstrom et al., 2020).

As a result of the pandemic shock, this New Normal is unlikely to be a static equilibrium. With the current crisis functioning as a tipping point, the socioeconomic climate will alter. This study requires the adoption of the Strategic Management Theory in a Post-Pandemic and Non-Ergodic World because, because of the pandemic (COVID-19), nations are struggling to live amidst economic upheavals and severe uncertainty. Even if the epidemic has subsided, the economy of states needs longer-term strategy reforms to manage the competitive terrain of the "New Normal," which has arisen from technical, socio-political, and institutional shifts. The most relevant assumption of Strategic Management Theory that is significant to this study is the postulation that if nation-states need to put in place longer-term strategy reforms, they will be able to manage their economies out of the negative impact of the COVID-19 pandemic. This study thus utilizes the Strategic Management Theory in a Post-Pandemic and Non-Ergodic World to examine pandemic management in West Africa, with a particular emphasis on COVID-19 management in Ghana.

The Strategic Management Theory has been criticised by scholars such as Cameron (2019) and Katsanos (2019) who argued that it is difficult for strategic management to be done well, high levels of investment is required in order to get more benefit than cost from an effective strategic management process (Cameron, 2019; Katsanos, 2019 cited in Simpson et al., 2020).In addition to this argument, another critique of Strategic Management Theory was by Llopis (2019) who also

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argued that the ability of strategic management to achieve its goal is sceptical because it is difficult to set strategies that will accurately anticipate an unknown future. As a result, a strategy may limit a country's ability to respond to a changing environment when countries make future decisions based on current data or current phenomena (Llopis, 2019 cited in Simpson et al., 2020).

In line with the above argument, the critiques of Strategic Management Theory mean that it will be difficult for nation-states to adopt effective strategies that will help them manage their economies out of the negative impact of the COVID-19 pandemic mainly because it takes a considerably long time for strategies to be effective. Also, critiques are of the view that it will be difficult for nation-states to adopt effective strategies that will help them manage their economies out of the negative impact of the COVID-19 pandemic because of the uncertainties of the future since strategies may limit nation-states from responding to challenges in the Post-Pandemic and Non-Ergodic World effectively (Cameron, 2019; Katsanos, 2019; Llopis, 2019 cited in Simpson et al., 2020).

Irrespective of the above criticism, the Strategic Management Theory in a Post-Pandemic and Non-Ergodic World is relevant to this study because it enables the researcher to adequately investigate how West African states and specifically Ghana has been able to alleviate the impact of the COVID-19 pandemic on its economy amidst the infrastructural and other resource constraints. Although critiques claim that current strategies adopted cannot fully deal with future challenges; as a result, it will be difficult for nation-states like Ghana and other West African countries to adopt strategies to manage their economies out of the negative impact of the COVID-19 pandemic, it is important to state that nation-states are governed in a vacuum. All countries across the globe are governed by policies and decisions. These policies and decisions stem largely from strategies.

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As a result, the assumption of Strategic Management Theory, nation-states need to put in place longer-term strategy reforms to be able to manage their economies out of the negative impact of the COVID-19 pandemic in the Post-Pandemic and Non-Ergodic World, is very relevant to this study, and this assumption guides the researcher to achieve the objectives of the study.

2.3 Situating the Study in Relation to Securitisation Theory

Securitisation theory, which was most famously developed by the Copenhagen School in the writings of Barry Buzan, Ole Waever, and Jaap de Wilde, has grown to be a significant framework for examining how problems are turned into security issues (Stritzel, 2014). The concept of the speech act is central to the theory, in which political authorities characterise a situation as an existential threat to a valued referent object, such as the state or society, to justify extreme measures outside of normal democratic procedures (Herţa, 2017). Securitisation theory has been used to explain emergency governance, border closures, suspension of civil liberties, and the employment of military or coercive enforcement measures in the context of pandemics and epidemics (McInnes & Rushton, 2013).

The theory has been applied by different scholars to examine health emergencies, claiming that the securitisation of sickness facilitates quick resource mobilisation and increased political attention (Enemark, 2017). Critics of securitisation theory warn, however, that its focus on exclusivity and elite discourse frequently ignores structural weaknesses, daily human experiences, and long-term societal repercussions. Furthermore, securitisation frequently favours state-centric issues, which may mask how crises impact social stability, livelihoods, healthcare access, and food security, especially in developing nations (Hendricks, 2018).

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While the study acknowledges that elements of securitisation, such as emergency declarations, lockdowns, and extraordinary governance measures, were evident in Ghana's COVID-19 response, it deliberately situates its analysis within the broader human security paradigm, rather than using securitisation theory as its primary analytical framework. According to the United Nations Development Programme (UNDP) 1994 report, human security promotes freedom from fear, freedom from want, and dignity in daily life while moving the reference object of security from the state to the individual (Dalby, 2013).

The study's emphasis on lived experiences, socioeconomic vulnerabilities, healthcare capability, and governance difficulties in West Africa informs the decision to prioritise human security. This study focuses on how COVID-19 affected survival, livelihoods, mobility, and well-being, as well as how states and institutions responded to these multifaceted concerns, rather than on elite speaking acts and the justification of extraordinary measures. The research is better positioned to capture the intricate and interwoven realities of pandemic management in Ghana and the larger West African subregion by using a human security framework.

Therefore, this research remains grounded in human security to more truly portray the social, economic, and institutional aspects of COVID-19 as experienced by afflicted populations, even though securitisation theory is acknowledged as a pertinent and prominent paradigm in pandemic studies.

2.4 Conceptual Framework

The conceptual framework that underpins this research presents COVID-19 as a multifaceted and complex threat to human security, influenced and mediated by institutional capabilities,

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governance frameworks, and international health standards. It offers an analytical framework for investigating how pandemic-related dangers are understood, handled, and operationalised in interconnected global, national, and local governance contexts, notably in West Africa and Ghana.

Contemporary studies increasingly acknowledge that pandemics encompass broader disruptions to livelihoods, social stability, mobility, and access to key services (Kumar, 2022). According to this perspective, COVID-19 is seen as a human security issue that concurrently affects social protection, economic security, health security, and freedom of travel. The human security paradigm, which prioritises defence against serious and widespread threats to human existence, dignity, and well-being, is consistent with this strategy (Commission on Human Security, 2003).

The concept places a strong emphasis on how governance responses mediate these dangers. It is believed that managing a pandemic is a multidimensional process that involves national policy development, local execution, and international guidance. Globally, tools like the International Health Regulations (IHR) offer procedural and normative guidance for response, surveillance, and readiness (Gostin et al., 2020). Governments at the national level convert these standards into emergency laws, public health initiatives, and coordinating systems. Institutional capability, public communication systems, sociocultural dynamics, and resource availability all influence local implementation (van Wyk & Reddy, 2022).

While securitisation theory has had an impact on explaining how health crises are portrayed as existential risks requiring extraordinary measures, this approach does not use securitisation as its primary analytical framework (Wæver, 2011; Buzan & Hansen, 2010). Instead, findings from securitisation debates are appreciated to the extent that they provide light on emergency decision-making and unusual governance practices, rather than elite speaking acts or security

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exceptionalism. The approach prioritises the real impacts of pandemic governance on populations rather than just the rhetorical fabrication of threat by emphasising human security (McInnes & Rushton, 2013).

Additionally, a framework acknowledges that governance responses are not isolated. The formulation and execution of policies are mediated by contextual factors, including public trust, misinformation, infrastructure limitations, and socioeconomic disparities. These elements are especially important in low- and middle-income settings, where resource constraints and institutional instability greatly influence the results of crisis management (Moon et al., 2015).

Methodologically, the framework supports the use of a qualitative research methodology that can examine institutional relationships, governance procedures, and policy justifications. The model guides the analysis of how pandemic management plans are perceived, operationalized, and coordinated across governance levels, as well as how these processes connect to more general human security concerns, rather than evaluating efficacy or results.

Overall, this conceptual framework offers a coherent analytical method for investigating COVID-19 management as a governance and human security issue, incorporating international norms, national decision-making, and contextual implementation dynamics into a cohesive interpretive structure. The framework is depicted in Figure 2.1.

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Figure 2. 1Conceptual Framework of the Study Developed by the Research

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2.5 Empirical Review

2.5.1 Pandemics in the World

Throughout history, intermittent outbreaks of infectious illnesses have had dramatic and enduring consequences on society. These events have profoundly influenced the economic, political, and social aspects of human civilization, and their effects have frequently lasted for centuries. Epidemic outbreaks have shaped some of the fundamental principles of contemporary medicine, compelling the scientific community to develop epidemiology, prevention, immunisation, and antimicrobial treatments (Damir, 2019). Included among these historical pandemics are the Black Death, Cholera, Influenza, and SARS. In the years 541 and 543, an Egyptian-originated plague ravaged the Roman empire, claiming 100 million lives (Cunha & Cunha, 2008).

The Athenian plague is a historically documented event that occurred during the Peloponnesian War, which was fought between the city-states of Athens and Sparta, between 430 and 26 B.C. Ethiopia was the source of the Athenian plague, which then spread to Egypt and Greece. The plague's initial symptoms included headaches, conjunctivitis, a rash that covered the body, and fever. The victims would then cough up blood and experience excruciating stomach cramps, followed by vomiting and "ineffective retching" attacks. Generally, infected individuals would perish on the seventh or eighth day. Those who survived this phase could be left with permanent partial paralysis, amnesia, or blindness (Damir, 2019).

Hippocrates is believed to have been a contemporary of the Athens plague and may have even treated the afflicted as a young physician, but he did not leave any accounts of the pandemic (Yapijakis, 2009). A second outbreak that occurred a few centuries later was documented and recorded by physicians of the time. The pandemic was referred to as the Antonine Plague of 165–

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180 AD. Smallpox is believed to have caused the Antonine plague in the Roman Empire during the reign of Marcus Aurelius (161–180 A.D.) (Fears, 2004). It was carried into the Empire by troops returning from Seleucia, and before it subsided, Asia Minor, Egypt, Greece, and Italy were all impacted. Unlike the plague of Athens, which impacted a geographically confined area, the Antonine disease spread over the large expanse of the Roman Empire, since the Empire was an economically and politically connected, coherent civilization encompassing huge portions of the country (Saez, 2016). In certain regions, the pandemic wiped out up to one-third of the population and devastated the Roman army, ultimately taking the life of Marcus Aurelius (Sabbatani & Fiorino, 2009).

Furthermore, the Hong Kong Flu pandemic was the twentieth century's third most significant influenza pandemic. It is hypothesized that the H3N2 virus developed from the H2N2 virus that caused the Asian flu epidemic. The H3N2 virus included a modified form of the HA antigen seen in H2N2, but it maintained the same N2 antigen. The sporadic nature of the global effect of the Hong Kong Flu pandemic is considered to have been caused by the preceding development of immunity to the N2 antigen as a result of the Asian Flu epidemic. In contrast to the Spanish Flu pandemic, the H3N2 virus was more aggressive toward those aged 65 years and older (Kilbourne, 2006).

On 13 July 1968, the first record of the epidemic in Hong Kong occurred. By the end of July 1968, Vietnam and Singapore had reported widespread outbreaks. By September 1968, the influenza pandemic had spread to India, the Philippines, northern Australia, and Europe. In the same month, returning Vietnam War troops introduced the virus to California, although it did not become prevalent in the United States until December 1968. In 1969, it reached Japan, Africa, and South

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America. The outbreak in Hong Kong, where the population density is approximately 500 people per acre, reached its peak intensity in two weeks and lasted a total of six weeks, from July to December 1968; however, the peak number of deaths worldwide from this virus occurred much later, in December 1968 and January 1969. At that point, public health alerts and viral descriptions had been published in scientific and medical publications, (Kilbourne, 2006).

2.5.2 Small Pox Outbreak in Yugoslavia (1972)

Another deadly pandemic in the world has been smallpox, which started in 1972. Smallpox was a highly infectious illness for which Edward Jenner produced the first vaccine in 1798. It was a highly infectious disease caused by the Variola virus with conspicuous skin eruptions (pustules) and a 30% fatality rate. It may have caused hundreds of millions of deaths over the twentieth century alone. Smallpox was eliminated within a decade of initiating global eradication because of the well-coordinated worldwide effort that began in 1967 under the leadership of Donald Henderson (Tarantola, 2016).

The smallpox outbreak in the former Yugoslavia in 1972 was far from an epidemic, much alone a pandemic, but it exemplified the difficulties involved with a swiftly spreading, highly infectious sickness in the contemporary world. It began with a pilgrim returning from the Middle East who suffered a fever and rashes. Since a case of smallpox had not been reported in the region for more than 30 years, clinicians failed to appropriately diagnose the sickness, resulting in nine healthcare professionals being infected among the 38 cases caused by the index case and the first fatality (Ilic & Ilic, 2017).

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At the time, socialist Yugoslavia proclaimed martial law and mandated revaccination. Entire communities and villages were walled off (cordon sanitaire is a measure of putting entire geographic regions in quarantine). Approximately 10,000 people who may have had contact with the sick were placed in quarantine. All non-essential travel was halted, and borders were shut down. The whole population of Yugoslavia was revaccinated within two weeks (about 18 million people at the time). 175 cases were documented during the pandemic, including 35 fatalities. The sickness, however, was eliminated and society was restored to normal within two months (Ilic & Ilic, 2017) due to a rapid and overwhelming reaction.

2.5.3 SARS

SARS (severe acute respiratory syndrome) was the first pandemic of the twenty-first century to get widespread media coverage. It was caused by the SARS Coronavirus (SARS-CoV) and began in China, affecting less than 10,000 people, primarily in China and Hong Kong, but also in other countries, including 251 instances in Canada (Toronto) (Smith, 2006). The severity of respiratory symptoms and around 10% death rate prompted a worldwide public health issue. The outbreak was controlled by mid-2003 because of the global vigilance of public health systems (WHO, 2003). This outbreak was among the first acute outbreaks in which mental health aspects were studied during and after the outbreak in various parts of the world and societies, yielding valuable information on the effects of an acute infectious outbreak on affected individuals, families, and entire communities, as well as the mental health issues facing healthcare providers (Maunder, 2009). During the SARS pandemic, researchers gained great insights into the mental health of patients in isolation, survivors of severe sickness, and the psychological consequences of interacting with such individuals.

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2.5.4 The Swine flu

The 2009 H1N1 pandemic was a recurrence of the 1918 "Spanish flu" pandemic, although with far less devastation. It was informally known as "swine flu" because it was believed to be an assortment of bird, pig, and human flu viruses (Trifonov et al, 2009). It began in April 2009 in Mexico and reached pandemic proportions within weeks (McNei, 2009). Towards the end of the year, it began to diminish, and by May 2010, it was proclaimed ended. It infected more than 10 percent of the world population (less than anticipated), with an estimated death toll between 20,000 and over 500,000. (Dawood et al., 2012). Although its fatality rate was eventually lower than that of seasonal influenza, at the time it was viewed as a significant concern due to the fact that it disproportionately afflicted previously healthy young individuals and frequently led to serious respiratory impairment. In addition to the "cytokine storm" relevant to the 1918 H1N1 pandemic, probably, older people's immunity to a comparable H1N1 outbreak in the 1970s explains this phenomenon (Nguyen-Van-Tam, 2010).

This pandemic also led to the collection and analysis of valuable data regarding the mental health aspects of the outbreak. It was one of the first pandemics for which policy reports addressed mental health as a component of preparedness and mitigation measures. This pandemic of H1N1 was significant for the difference between public opinion and the public health measures proposed and implemented by WHO and national health organizations. The general public's reaction to the WHO's announcements and warnings was one of fear, but it swiftly morphed into resentment and scepticism when the outbreak's original dire prognosis failed to materialize (Garske, et al., 2009).

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2.5.5 COVID- 19 Pandemic

Coronavirus disease 2019 (COVID-19) is an infectious illness caused by a novel member of the SARS-COV family of coronaviruses. In late 2019 in Hubei Province, China, the worldwide COVID-19 pandemic began as a localized epidemic of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), (Gupta & Guizani, 2020). More than 160 million people have been infected with COVID-19, and it has been linked to more than 3.5 million fatalities worldwide (Brian et al., 2021). The worldwide pandemic posed a challenge to all of the world's health systems, placing a strain on facilities, medical equipment supplies, and physicians. In addition, public health officials were tasked with monitoring disease transmission, developing projections for numerous pandemic waves, and distributing available immunizations to communities. The scientific process unfolded in real-time as if it were a reality television show, posing a challenge for policymakers and individuals alike to respond to ever-changing recommendations from public health authorities and mitigation plans.

Most COVID-19-infected persons will experience mild to moderate respiratory disease and may recover without specific treatment. People who are older or who have underlying health conditions such as diabetes, cardiovascular disease, cancer, or chronic respiratory illness are more prone to develop serious illnesses. Intensifying education on the disease's mechanism of transmission and symptoms is a crucial method for containing and slowing its spread. Protect yourself and others against illness by routinely using an alcohol-based hand sanitiser or washing your hands and avoiding touching your face (Afriyie et al., 2020).

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2.5.6 The Threats Posed by the COVID-19 Pandemic in Africa

Dayour et al., (2020) discovered from their study that the pandemic had a significant impact on not only everyday life but also on the hospitality and tourism industry, which willy-nilly depends on the free movement of people to places and face-to-face interactions. Some of the restrictions enacted and enforced by the government to curb the spread of the virus, especially the closure of the country's borders put a strain on the operations and revenue generation amongst transportation firms and accommodation facilities because inbound visitors could not come into the country. However, in-country, food, and beverages (F&B) facilities, transportation services (airlines and commercial cars), and accommodation were still in operation, though under prescribed protocols as stated above (Gursoy & Chi, 2020). This section outlines how the various subsectors involved in the study were affected differently by these restrictions because of the pandemic. The Travel and Transport (T&T) firms suffered sudden cancellations of bookings for international trips, depletion of contingency funds, and sharp drops in revenue, leading to other challenges of defaulting on the payment of salaries and pension contributions, and lay-offs (Suk & Kim, 2021).

Similarly, the accommodation subsector suffered a shutdown of some facilities, a drop in room occupancy rate, and attrition in revenues. Most customers who patronise these service providers are inbound tourists and business travellers who come from outside the country; thus, the border closures and restrictions on large public gatherings, deprived hotels and T&Ts of their major patrons. Likewise, souvenir shop vendors who depend largely on the customer base of major attractions (that were temporarily shut down) around which they are located were also affected badly by the outbreak in terms of revenue generation (Dayour et al., 2020).

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In Ghana, Asante and Mills (2020) revealed the Socio-Economic Impact of COVID-19 on marketplaces in Ghana. According to them, Economic hardship came because of the effect of the management strategies adopted in Ghana to curb the spread of the disease. Markets were closed for disinfections and fumigations; social distancing was strictly enforced in markets to minimize physical interactions and impositions of lockdowns in some parts of Accra and Kumasi which have restricted some traders from carrying out their economic activities (Asante & Mills, 2020). These activities led to economic threats such as inflation and high cost of living since there is excess demand over supply for some essential goods and services since some suppliers are restricted by law from operations. They also noted the that closure of the border has led to a shortage of supply of some food items imported from other neighbouring countries since most of Ghana's market heavily relies on international markets. This has led to hikes in the prices of those items in the Ghanaian market. The traders also complained of low patronage in the market since the lockdowns led to a ditch in their revenue as compared to what they gained before COVID-19 (Asante & Mills, 2020). The measures posed food security since access to affordable and quality food became difficult because people in lockdown areas were asked to patronize their neighbourhood markets and intercity travel was banned. The restriction by COVID-19 affected the sales of traders and the purchasing power of consumers exacerbating the overall economic condition in West Africa (Asante & Mills, 2020).

2.6 Managing Pandemics

Detecting the spread of infection in pandemics allows health systems and governments to implement timely public health interventions. The term 'epidemic intelligence' refers to "all the

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activities related to early identification of potential health threats, their verification, assessment, and investigation to recommend public health measures to control them" (Gabarron et al., 2021).

2.6.1 Managing COVID-19 across the globe

Throughout the COVID-19 pandemic, health information systems performed vital roles in assisting doctors with patient management, healthcare managers with resource management, and public health authorities with population management (Kamazim et al., 2020). The editors of the International Medical Informatics Association (IMIA) Yearbook selected "Managing Pandemics with Health Informatics" as the topic for this year's publication [3-Reference to YB Editorial document]. This special section of the Yearbook examines the different ways in which informatics contributed to pandemic response efforts across global health systems, particularly public health authorities and healthcare delivery organizations that were at the forefront of the fight against SARS-CoV-2.

Contact tracing

Tracing contacts is the process of locating individuals having a history of exposure to sick persons (Chamola et al., 2020). Contact tracing, a key tool for outbreak management, is a labour-intensive procedure involving the identification and retrieval of information on persons who may have had contact with an infected person. Due to the rate and quantity of new COVID-19 infections, hospitals, public health agencies, and governments were compelled to adapt and create new digital contact tracing tools. Apple Inc. and Google LLC collaborated to build a Bluetooth smartphone solution with privacy at the forefront. Countries such as Germany, Italy, and the United Kingdom have adopted this solution (WHO, 2019). South Korea improved its contact tracking methods to

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incorporate card transactions, closed-circuit television, global positioning systems, and medical information to identify and verify the movement of every individual (You, 2021). The National Centre for Infectious Diseases in Singapore, Singapore's national COVID-19 screening referral centre, compared a wearable real-time locating system (RTLS) tag and contact-based tracing app to traditional electronic health record (EHR) methods, demonstrating increased sensitivity of the RTLS-based system in identifying provider-contact events within their facility, while acknowledging the difficulty of implementing similar technology in a community setting (Basit et al., 2021). Taiwan utilized its national immigration and customs and health insurance databases to identify persons at risk owing to recent travel to "hotspots." After identifying these individuals, Taiwan placed them in quarantine and tracked their mobile devices to ensure that they complied with the quarantine (Yeh & Cheng, 2020).

2.6.2 Challenges Encountered in COVID-19 management across the globe.

Lack of strategy and data harmonization: In nations such as the United States, where COVID-19 public health initiatives lack centralization and harmonization efforts to battle the virus mostly failed, resulting in some of the highest COVID-19 infection rates in the world (Post et al. 2020). At the start of the pandemic, there was widespread disagreement regarding which date should be attributed to a COVID-19 test (e.g., the onset of symptoms, the date the specimen was obtained, the date the test was run, and the date the results were reported), with dates frequently spanning a range of weeks, making interpretation difficult or impossible (Landman, 2020). Even nine months into the pandemic, there is still no global standard to ensure that COVID-19 data are reported similarly (Basit et al., 2021). In the absence of standardized data reporting, public officials are unable to respond to or follow situations.

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Lack of skilled workforce: Requesting COVID-19 data involves both infectious disease and informatics expertise. As expected, lack of awareness of available data and processes resulted in demands at many levels of government (federal, state, and local levels) that were sometimes confusing and inconsistent - adding to the data-gathering effort at the frontlines, which needed a large staff during the epidemic (Arvisais-Anhalt et al., 2021). The effects of a lack of discipline and precision in data requests were best exemplified by the White House Corona Task Force leader's data request to hospitals (Post et al., 2020). This request did not account for the fact that an academic medical facility or laboratory may simultaneously serve as a reference laboratory, resulting in duplicate reporting of tests that were difficult or impossible to adjudicate after the data were submitted.

Failing information systems: Greenberg et al., (2020) pointed out that entities requiring COVID-19 data reporting commonly seek a variety of forms across multiple time periods and dates, which can impose a major reporting burden on healthcare organizations. Add to this the fact that the automation, integration, and interoperability of electronic systems that are accessible to public health departments, both at the municipal and state levels, significantly differ due to the great variety of public health information technology infrastructures and their capabilities. Moreover, health department infrastructures (at least in the United States) are typically obsolete and unreliable. The health department in Dallas County (where the authors reside) restricted access to its information systems throughout the day to lessen user load on an otherwise unstable system (Girdhar, et al., 2020).

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Reporting Errors, Delays, and Misrepresentations: Due to reporting delays and inaccuracies in attributing all COVID-related deaths to the virus, the number of COVID-related deaths in the

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United States likely hit 100,000 three weeks before the official milestone (Dixon & Holmes, 2021). The Centre for Disease Control and Prevention (CDC) confused the results of polymerase chain reaction (PCR) tests, which test for the presence of the virus, and antibody tests, which test for previous infections, resulting in an inaccurate timeline of infections and an overestimation of testing capabilities (Dreher, 2020). Texas, Virginia, and Vermont were accused of inflating the size of their testing programmes by falsifying their statistics (Baker, 2020). Georgia, a state in the United States, showed COVID-19 data in a graph that falsely implied that the number of cases was declining. In the lack of uniform definitions, there are a variety of methods for calculating positivity rates that provide varying results (Bhaska, Bradley & Adisesh, 2020). Intentional or unintended misrepresentations further impeded the capacity to appropriately analyse data.

Distressing, however, are data reporting delays. When a pandemic surges, reporting delays result in an overestimation of the real illness prevalence, which impairs the ability to predict the disease's spread or come back. In the absence of positive test findings, an analysis may suggest that the illness is spreading at a different rate than is the case. Calculating the effective reproduction number based on data with missing findings may imply a transmission rate that would eradicate the illness, but incorporating all test results may lead to the conclusion that the disease is increasing and result in erroneous policy choices (Anhalt et al., 2021).

2.6.3 African Union's Response to COVID-19

The Africa Union (AU) has taken strong measures to coordinate continental efforts to mitigate the effects of the pandemic. The grim forecasts and warnings that Africa might be the epicentre of the epidemic prompted regional authorities to make efforts that have altered the narrative and debunked the likelihood that millions of people would die because of the outbreak (Oloruntoba,

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2021). Although it is too soon to make conclusions about the pandemic's consequences on Africa, the existing statistics depict a comparatively better picture than anticipated in terms of infections, recoveries, and fatalities. Regional pandemic management strategies might have played a significant influence in minimising the consequences of COVID-19.

The AU's leadership has significantly helped the coordination of the continental response to the pandemic. Moussa Faki Mahamat, the chairman of the African Union Commission, launched the Continental Solidarity Anti-COVID-19 Fund on March 26, 2020 (AU 2020). Cyril Ramaphosa, president of South Africa and chairman of the African Union, mobilised the whole continent to react correctly (Oloruntoba, 2021). Ramaphosa asked the public and commercial sectors to donate to the Continental Solidarity Anti-COVID Fund in light of the limited amount of funds available for public services in Africa. The purpose of the fund was to avoid transmission and social damage, as well as to implement cross-cutting interventions (prevention campaigns, supply chain management), and provide economic assistance to vulnerable people (Africa News Agency 2020). It was also earmarked for the purchase of necessary equipment and medications for the treatment of COVID-19. A multi-stakeholder approach to regionalism is shown by the engagement of the commercial sector throughout the continent via the AfroChampions Initiative.

In addition to mobilising resources from inside the continent, the African Union (AU) has collaborated with the United Nations Economic Commission for Africa (UNECA) to garner assistance from international development agencies such as the International Monetary Fund (IMF) and the World Bank (Williams, 2020). Ramaphosa appointed Ngozi Okonjo-Iweala, Donald Kaberuka, Tidjane Thiam, and Trevor Manuel as Special Envoys of the African Union to garner international support for Africa's efforts to address the economic challenges resulting from the

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pandemic (Oloruntoba, 2021). This is because African countries will require enormous resources to manage their economies during and after the pandemic (AU 2020). Africa's Ministers of Finance, cognizant of the possible economic repercussions of COVID-19, have tried to seek foreign help. According to Phumla Williams (2020, p.3), "International institutions such as the G20 and the European Union have contributed financial assistance to the Africa Joint Continental Strategy for COVID-19 to deliver a complete economic stimulus for Africa." The monies have been utilised to assist member nations in managing different pandemic issues. The Special Envoys designated by President Cyril Ramaphosa assisted in negotiating debt relief for impoverished African nations, which resulted in an IMF debt moratorium for some of them. Notably, the participation of non-state actors, such as the business sector, in the reaction to COVID-19 is compatible with the New Regionalism concept of regional integration (Medinilla et al. 2020).

These continental efforts are significant because they provide a greater voice than individual nations can muster. In addition, a regional approach to resource management might offer greater procedures for accountability and transparency than the national level. Due to the pervasive corruption of national bureaucracies in Africa, Kaplan (2006) contends that the RECs may offer a more efficient means of managing resources and aiding socio-economic growth in Africa. Without these externally mobilised and regionally coordinated resources, several African nations would lack the means to combat the pandemic.

Africa's Centres for Disease Control (Africa CDC)

The Centres for Disease Control and Prevention (CDC) has been at the forefront of providing technical assistance and mobilising national health institutions across the continent to design appropriate responses, thereby contributing to the continent's relative success in reducing the

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number of deaths caused by the pandemic (Oloruntoba, 2021). According to its website, the Africa CDC was established by the 26th Ordinary Assembly of Heads of State and Government in January 2016 and officially launched in January 2017 to strengthen "the capacity and capability of Africa's public health institutions and partnerships to detect and respond quickly and effectively to disease threats and outbreaks, based on data-driven interventions and programmes" (Africa CDC 2020). The CDC was established as a result of the African Union's earlier responses to previous outbreaks such as SARS and Ebola (UNECA 2020). This enabled the African CDC to develop the ability and confidence necessary to react to the coronavirus.

The Africa CDC created the Africa Task Force on Novel Coronavirus as early as the first week of February 2020 in preparation for the pandemic. In the months that followed, the Africa CDC, in conjunction with other African stakeholders, fulfilled the following responsibilities:

Information and transmission of data. The CDC has been releasing daily updates on global infection, recovery, and mortality rates. On a continent where access to data remains a key obstacle, the CDC's information has offered a chance to better organise the response to the pandemic. Additionally, the Africa CDC has released a Social Media Support Kit for COVID-19. As part of its awareness activities, the organisation hosts weekly webinars for the African medical community about COVID-19.

Training and capacity-building: Across the continent, the CDC has provided a series of training seminars for health workers and lawmakers. Since its inception, it has played a crucial role in enhancing testing capabilities throughout the continent by giving necessary equipment to 48 African nations. Similarly, the CDC offers modules and curricula that help with capacity-building and training. According to Wetzel (2020), the training provided by the Africa CDC has permitted

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a fast expansion of testing and diagnostic capability, from just two nations in early February to 43 countries by May 2020. Small nations on the continent would be unable to provide this sort of training otherwise. This is another rationale for using a regional strategy for pandemic management (Girdhar et al., 2020).

Collaboration with regional and international organisations: The pandemic's global scope necessitates cooperation and networking with several organisations. The CDC has been aggressive in establishing cooperation with the WHO, appropriate AU organisations, and Regional Economic Communities (RECs). Through existing cooperation with the WHO, the CDC has been collecting data on the pandemic's status, progress in the development of vaccinations, and preventative measures. It also collaborates with the AU in a number of areas, including procurement. The AU and Africa CDC started the partnership to accelerate COVID-19 Testing: Trace, Test, and Track in the second part of April 2020. (CDC-T3). Several participants in this programme are collaborating to support the creation of storage and distribution hubs throughout Africa. In addition, the CDC-T3 mandates the pooled buying of diagnostics materials. In addition, the CDC is collaborating with Regional Coordination Centres (RCC) in five African areas in order to network with national health systems. ECOWAS, COMESA, SADC, ECCAS, and EAC are among them (Medinilla et al. 2020). In addition, the World Bank has contributed USD 250 million so that the Africa CDC may immediately mobilise its infrastructure and networks to combat the spread of the COVID-19 virus (Wetzel 2020).

Oloruntoba (2021) reported that without these regional measures, the pandemic may have caused more devastation in Africa. In contrast to Latin America, where a regional office of the Centres for Disease Control was founded in Brazil in October 2020 (Centre for Disease Control and

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Prevention 2020), the Africa CDC has operated for decades. The relative success in dealing with the pandemic in Africa may be attributed to the lessons learned from controlling earlier epidemics and the collaboration with other organisations on regional and global levels.

2.7 Managing COVID-19 in West Africa

Africa made measures to reduce the effects of the pandemic prior to the 14 February 2020 announcement of the first case in Egypt. Numerous African nations and regional organisations reacted swiftly by organising resources to combat the spread, building on their knowledge of controlling earlier epidemics. As part of pan-African, sub-regional, and country-specific preparation programmes for epidemics, institutions and procedures were formed (Massinga et al., 2020). On January 27, 2020, for instance, the Africa Centre for Disease Control activated its emergency operations centre for COVID-19 to coordinate efforts at multiple levels, including regional structures such as the Economic Community of West African States (ECOWAS) and the agencies of the various national governments. This may explain in part why Africa has not had comparable infection and mortality rates as other regions of the globe (Ahanhanzo et al., 2021).

On February 27, 2020, the first case of COVID-19 in West Africa was reported in Lagos, Nigeria (Martinez-Alvarez et al., 2020). Other nations in the area started to report instances shortly afterward. As of 14 March 2021, there were 412178 confirmed cases and 5363 fatalities in the area, for a case fatality rate of 1.3%. (West Africa Health Organisation (WAHO), 2020). Two weeks following the announcement of COVID-19 as a public health emergency of international concern on 30 January 2020, the health ministers of all 15 ECOWAS member states convened in Bamako, Mali, to agree on a single regional strategy for responding to the virus (WAHO, 2020). To protect the ECOWAS population, the ministers resolved to immediately strengthen critical

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national capacities for diagnosing and managing cases, including infrastructure issues for quarantine or self-isolation and intensive care unit facilities, as well as implementing robust measures to ensure the availability of critical medical supplies, such as laboratory materials and personal protective equipment (PPE), in the region. In addition to these direct public health actions, governments also implemented indirect remedies, such as those designed to address the pandemic's non-public health collateral impacts. Among these solutions include the creation of social safety nets, travel limitations, and the shutdown of schools (Massinga Loembé et al., 2020).

Following the meeting of the ECOWAS health ministers, monies were mobilised by the ECOWAS commission, WAHO, and the different ECOWAS member states. Donations and loan instruments were used to raise the necessary capital. Approximately $158 billion has been mobilised by ECOWAS members as of 28 February 2021, of which 87.8 percent was via country-specific activities and 12.2 percent was through multi-country initiatives. Through its commission and WAHO, ECOWAS mobilised approximately $45.5 million from partners (German Federal Ministry for Economic Cooperation and Development, African Development Bank, Agence Francaise de Développement, European Union, United States Agency for International Development, and World Bank Group), in addition to about $400,000 in donations from the regional body's staff. A portion of this cash has been utilised to acquire medical supplies for ECOWAS member nations. An additional commodity purchase order is in the works. Countries also received monetary and in-kind gifts from local organisations and people resident inside their borders, in addition to the foreign monies mobilised (Ahanhanzo et al., 2021).

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2.8 International Health Regulation (IHR)

The International Health Regulations, enacted in 2005 by Resolution WHA58 of the fifty-eighth World Health Assembly. This is the legal framework that, among other things, sets national core competencies, including at ports of entry, for the management of prospective or actual public health events of national or worldwide importance and associated processes. The IHR is intended to preserve human rights and achieve a greater degree of global health security in response to public health threats while avoiding unwarranted restrictions on international mobility and commerce. It has been observed, however, that IHR does not play a role in reacting to infectious illnesses, since nations' IHR breaches increased in the face of the COVID-19 crisis and WHO does not undertake IHR management and oversight adequately (Sohn et al., 2021).

After reports of a novel coronavirus emerged in January, the WHO advised the usual precautions for travellers and consistently recommended against any travel or trade restrictions on China. The WHO Director General issued Temporary Recommendations under the IHR (2005) after declaring a public health emergency of international concern (PHEIC) on 30 January, again not recommending travel or trade restrictions, although urging measures to prevent international spread as well as secondary transmission. 7 Updated guidance in late February continued to recommend against restrictions, except perhaps in very limited circumstances. Most of this advice has been provided not in formal Temporary Recommendations but in other guidance documents, the legal status of which is somewhat unclear (WHO, 2020). The Temporary Recommendations issued on January 30 remained in place until the end of April when new recommendations were issued. The new Temporary Recommendations continued to recommend ‘appropriate travel measures’ such as entry and exit screening, and that states should ‘review travel and trade measures

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based on regular risk assessments, transmission patterns at origin and destination, cost-benefit analysis, the evolution of the pandemic, and new knowledge of COVID-19'.

The WHO's hesitance to recommend any restrictions on international travel or trade may be understandable, given the available evidence on their impact, and a long history of such measures being taken with little or no scientific justification—with travel bans during the 2014– 2016 Ebola virus outbreak being just one recent, notable example (Tejpar & Hoffman, 2017; Pattani, 2015). Nevertheless, not introducing potentially effective travel restrictions at the earliest stages is contrary to the goal of the IHR (2005) to prevent the spread of public health threats. Scientifically, the best opportunity to prevent the spread of disease is at the beginning of the epidemic curve.

2.8.1 WHOs Response to COVID-19 across the Globe

The COVID-19 virus was declared by the World Health Organization (WHO) as a public health emergency of international concern on the 30th of January, 2020. On the 11th of March, 2020, COVID-19 was declared by the World Health Organization (WHO) as a global pandemic. The first COVID-19 case was founded in Wuhan, the province of Hubei in December 2019 in China. COVID-19 has spread to all continents across the world, apart from North Korea and Turkmenistan, all countries have documented confirmed cases with a spiral increase in COVID-19-related mortality and excess overall mortality compared to previous years (Bamgboye et al., 2021).

The deadly virus (COVID-19) has spread rapidly throughout the globe. Available antiviral medications seem not to be working and the number of deaths from the virus continues to soar. Italy at the time has become one of the major epicentres of the outbreak. As of March 21, 2020, a total of 48,452 cases with 3,770 associated deaths were recorded. Countries all over the world have

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closed their entry points (borders), enforced strict social isolation and quarantine procedures, and increased testing for the virus. Travel has almost ceased worldwide. Businesses all over the world have shut down, and economies all over are almost collapsing. Yet it seems the virus continues to spread, and healthcare systems are being overwhelmed, (Anesthesia & Anelgesia, 2020). Since its emergence in December 2019, SARS-CoV-2 has caused over 170 million cases of coronavirus disease, and 3.5 million deaths were recorded worldwide, (Patel et al., 2021).

In response to the COVID-19 epidemic, the World Health Organization (WHO) and other organisations, including the G7, G20, and the World Trade Organization, have urged for a coordinated worldwide response. There is an immediate need for more effective measures to safeguard the most vulnerable, including the elderly and those with pre-existing health conditions, as well as healthcare staff, who are often exposed and important to the response (Larionova & Kirton, 2020). On March 19, 2020, the regional WHO directors of Africa, Europe, and the Western Pacific unified in their pleas for collaboration to combat the epidemic successfully. Considering this, the following actions were required (Cai et al., 2021).

Some of these actions included communicating and coordinating reactions to ensure that measures implemented by one country do not impede the response of other countries; continuing to encourage the reaction with resources, demonstrating solidarity, including everyone, and supporting the most vulnerable; and encouraging communities and segments of society to get involved and promoting a comprehensive government response (Comfort et al., 2020).

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For WHO to declare a PHEIC, the requirements specified in Annex 2 of the IHR must be met (WHO, 2005). This covers the evaluation of the infectious diseases' worldwide transmission risk and its impact on travel and commerce. WHO determines a PHEIC after carefully evaluating

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whether the reported event has a major public health effect, is unique or unexpected, has a considerable risk of worldwide spread, and has a significant danger of international travel or trade restrictions, given that many instances of infectious illness occur during outbreaks and are reported to WHO each year. A 15-member IHR COVID-19 European Commission (EC) has been established. The WHO Director-General can make the final declaration of PHEIC based on recommendations from the European Commission, information submitted by affected nations, and statistics on the danger of worldwide transmission and the issue of travel or trade restrictions (Phelan et al., 2020).

Upon declaration of PHEIC, the WHO's principal objective is to limit the worldwide spread of infectious illness as much as possible and to help the afflicted country's response, while avoiding undue trade restrictions. IHR specifies the further actions to be followed when WHO designates a PHEIC: (Article 13 Public Health Response).

As specified in the IHR, following the declaration of PHEIC, WHO takes different steps to globally coordinate the required assistance to end the PHEIC status as quickly as feasible. WHO hosted the Global Research and Innovation Forum: Towards a Research Roadmap for COVID-19 on February 11-12, 2020. The event was attended by specialists from the WHO Research and Development (R&D) Blueprint, including Youngmee Jee, a member of the WHO IHR emergency committee for COVID-19, as well as members of the Worldwide Research Collaboration for Infectious Disease Preparedness and key global sponsors (WHO, 2020). The convening of a COVID-19 R&D meeting shortly after the PHEIC declaration demonstrated the significance of R&D in the response to emerging infectious diseases. The forum identified eight urgent research goals in addition to mid-term and long-term research priorities in areas such as clinical

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management, epidemiology, diagnostics, vaccine development, infection control, therapeutics, and infection control. Korea should actively engage in the immediate, medium and long-term COVID-19 priorities jointly driven by WHO and its global partners in order to provide findings that can be used to establish an effective global response to COVID-19 (Norton et al., 2020).

Upon learning of the coronavirus pandemic, the WHO convened world-class virologists and disease control specialists through physical and virtual platforms to investigate the likely sources of the virus, develop containment strategies, and establish research objectives. More than 40 guideline papers have been published on the WHO's website (9), giving governments, hospitals, health professionals, members of the public, and others with thorough, evidence-based recommendations. More than one million health professionals have been taught through courses. WHO/Europe has released a behavioural insights tool for quick, flexible, and cost-effective COVID-19-related responses in order to assist nations in listening to and understanding their populations and ensuring that their COVID-19-related actions are relevant and actionable (Söderlund-Venermo et al, 2022; Dagens et al., 2020).

In addition, on March 13, the WHO, the UN Foundation, and partners launched a first-of-its-kind COVID-19 Solidarity Response Fund, which will go towards actions outlined in the COVID-19 Strategic Preparedness and Response Plan to enable all countries – and especially those most vulnerable and at-risk, and with the weakest health systems – to prepare for and respond to the COVID-19 crisis, including rapidly detecting cases, stopping transmission of the virus, and caring for those infected (Norihito & Haruhito, 2020).

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2.6 Impact of the COVID-19 Pandemic on the Global Economy

Social isolation has been selected as the most effective defensive method against the COVID-19 pandemic due to the absence of a definite treatment approach (Basit et al., 2021). However, the requirement for social separation has caused governments throughout the world to implement lockdowns, which has had a devastating impact on the global economy (Izumi et al., 2020). All non-essential services have been shut down, resulting in massive supply chain disruptions across almost all industrial sectors and placing billions of people at risk of losing their jobs.

In addition, the fast spread of COVID-19 has compelled countries to restrict the trade of most products across international boundaries, threatening the stability of international trade flows. In the next 18 to 24 months, JPMorgan Chase & Co. predicts that the COVID-19 pandemic has the potential to cause a worldwide economic decline of more than $5.5 trillion (Goodman, 2020). In this part, we study the effects of the COVID-19 pandemic on the economy by analysing its effects on several economic sectors in depth.

The Automotive Industry

To limit the epidemic, numerous governments have enacted rigorous lockdown measures, which have caused significant manufacturing interruptions in the automobile sector. As social separation is imposed and individuals are expected to remain in their homes, car usage, both public and private transport, has decreased globally. Currently, only vehicles affiliated with critical services are in operation.

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Relevant Statistics

January 2020 sales year-over-year (YoY) for the auto sector in China decreased by 18 percent. Despite control measures, this percentage increased to 79.1% in February 2020, the worst YoY decline the Chinese car sector has ever faced (Sun, Goh, and Sarkar, 2020).

The year-over-year sales of passenger automobiles and commercial vehicles in India decreased by 52 percent and 89 percent, respectively, in March 2020, as dealers were compelled to close their showrooms to comply with government regulations designed to prevent the spread of COVID-19 (Panday, 2020)

As of April 13, 2020, the European Automobile Manufacturers Association (ACEA) estimates that the combined production losses in the European Union (EU) and the United Kingdom exceed 1.9 million automobiles. Additionally, more than 1,1 million individuals have been negatively impacted by factory closures (ACEA, 2020).

The COVID-19 epidemic in the United States has prompted most manufacturers, including General Motors, Fiat, Ford, and many more, to cease production (Szymkowski, 2020). According to projections given by the Alliance for Automotive Innovation on March 26, 2020, 93% of all vehicle assembly factories in the United States were forced to close (Alliance for Automotive Innovation, 2020).

The Aviation Industry

The aviation sector has been severely impacted by the COVID-19 outbreak. International and domestic passenger flight restrictions have been imposed by the affected countries, which encompass nearly every nation. The only functioning airways assist cargo and freight planes with vital supply lines.

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Relevant statistics

According to a report issued by the International Air Transport Association (IATA), the worldwide demand for air travel climbed by just 2.4% in January 2020, the smallest year-over-year rise in the past decade (IATA, 2020). However, the most significant interruption to travel demand occurred between March 24 and 30, 2020, when the reported number of operational flights plunged to 280,000, a substantial reduction from the 780,000 flights reported for the same time in 2019. (Ovaska et al., 2020). According to the most current IATA projections, the global aviation sector is on course to lose up to 314 billion dollars in revenue because of the COVID-19 disaster (IATA, 2020).

As airline services are temporarily halted, there is less need for the acquisition of new aircraft. The total number of orders for aircraft declined from 1858 in 2018 to 235 in 2020. (Kenkel & Cyien, 2020). The World Travel & Tourism Council (WTTC) estimates that the COVID-19 pandemic might result in the global layoff of around 50 million tourism industry workers.

According to data from the United Nations World Tourism Organisation (UNWTO), international tourist visits might decline by up to 30 percent in 2020, resulting in a loss of $300-$450 billion in international tourism receipts (ITRs) (UNWTO, 2020).

Tourism Industry

The worldwide tourist industry, which accounts for roughly 10% of global GDP, has suffered significant issues in the aftermath of the COVID-19 epidemic, making it one of the most negatively impacted industries (Sultana et al., 2020). The consequences go beyond previous pandemic crises,

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necessitating immediate attention and robust contingency planning by policymakers and practitioners (Škare, 2021).

The COVID-19 epidemic has had long-term severe consequences for the tourism sector and the worldwide economy. According to the United Nations World Tourism Organization (UNWTO), an estimated 1.1 billion international visitor visits will be lost, resulting in a financial loss of US$ 910 to 1.1 trillion in export earnings and the loss of 100-120 million jobs (Kumudumali, 2020). This sharp drop in company activity in the tourist sector has resulted in widespread job losses and a significant number of individuals becoming unemployed for an extended length of time. The pandemic's health and economic crises has created unprecedented hurdles in the tourist sector. Travel restrictions, airline cancellations, and frequency reductions have drastically decreased the provision of local and international travel services. The negative consequences have reverberated across the global economy, with the tourist industry serving as a barometer of these issues (Salehnia et al., 2020).

The empirical assessment of controlling COVID-19 in West Africa finds comparable issues in the tourist sector. The region, like the rest of the world, has battled with the pandemic's massive economic and health-related implications. West African nations have seen a dramatic reduction in tourist arrivals as a result of COVID-19 interrupting international travel and imposing limitations (Ayiine-Etigo & Amankwah-Amoah, 2021). The economic consequences are particularly severe, with revenue losses affecting the GDP of West African countries. The tourist industry, which is important to these nations' economies, has suffered as a result of decreased travel demand and increasing uncertainty. Jobs in the industry have been significantly impacted, with many people facing unemployment or extended periods of redundancy (Aduhene & Osei-Assibey, 2021).

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Efforts to revitalize the West African tourist sector should include attempts to restore passenger trust as well as health and safety precautions. Collaborative activities at the regional and worldwide levels can contribute in the development of cohesive answers to the tourist industry's difficulties. Furthermore, economic diversification outside tourism may be investigated to improve resilience in the event of future crises (Nhamo et al., 2020). The empirical study of COVID-19 management in West Africa, with a emphasis on the tourist sector, highlights the critical need for specific interventions. Learning from the worldwide effects, officials in the area may develop effective measures to address the pandemic's economic and health difficulties. Tourism, being a major component of West Africa's economy, necessitates concerted efforts to rebuild and adapt to the post-pandemic landscape. More research on the phenomena is needed to aid with legislative recommendations to revive the business.

Health and Medical Industry

The COVID-19 pandemic has had a significant influence on worldwide healthcare systems, posing unprecedented problems and stresses. The healthcare industry, unlike many other businesses affected by lockdowns and travel restrictions, remains vibrant, although its capacities are severely challenged (Hockaday, 2020). Hospitals throughout the world are struggling with a lack of critical resources such as ventilators, intensive care units (ICUs), and personal protective equipment (PPE) needed to treat COVID-19 patients. Because of the exponential rise in COVID-19 cases, even the most developed countries are on the verge of healthcare system collapse (Hockaday, 2020; Yamaguchi & Kageyama, 2020).

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The financial impact on worldwide hospitals and healthcare institutions is disastrous, with the American Hospital Association estimating a stunning $202.6 billion in lost income for American

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healthcare systems, with a monthly average of $50.7 billion (Kaye et al., 2021). The unexpected nature of the epidemic has provided significant hurdles, stretching healthcare systems throughout the world to their breaking point. Disparities in impact are visible between countries, as seen by country-specific death rates. The United Kingdom has the greatest mortality rate as of September 2020, closely followed by the Netherlands. Despite having a significant number of cases, Canada has a comparatively low death rate of 2.46%, with Australia having the lowest fatality rate (Shrestha et al., 2020).

The pandemic has produced a global economic catastrophe that has affected nearly every industry, including healthcare. This crisis has exposed flaws in healthcare systems, including physical and emotional strain among healthcare personnel, as well as deficiencies in buildings and infrastructure (Almurisi et al., 2020).

Healthcare institutions are treading unknown territory as they deal with the pandemic's never-ending demands. Hospitals are facing essential medical equipment and protective gear shortages, which have been worsened by the quick and overwhelming increase in COVID-19 cases. The impact on healthcare systems is not only costly; it also affects the physical and emotional health of healthcare personnel who are in the vanguard of the virus's fight. Burnout, emotional weariness, and trauma are among the problems that healthcare personnel experience (Almurisi et al., 2020).

The economic impact on the healthcare industry is significant and diverse. The startling estimate of lost income by the American Hospital Association highlights the financial strains faced by healthcare systems, a pattern that is expected to be replicated internationally. The financial burden is attributable not only to the direct expenditures of treating COVID-19 patients but also to the

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suspension of elective treatments and non-urgent medical services, both of which generate major income for healthcare providers (Kaye et al., 2021).

Apart from the financial repercussions, the pandemic has shown flaws and deficiencies in healthcare infrastructure. Critical resource shortages, like as ventilators and ICUs, emphasize the importance of strategic planning and resource allocation. The geographical variation in mortality rates highlights the intricate interaction of factors impacting the efficiency of healthcare solutions in various countries (Yamaguchi & Kageyama, 2020).

The COVID-19 pandemic has shown the vulnerability of global healthcare systems, according to reviewed studies above. Hospitals and healthcare providers encounter a variety of issues, including resource limitations, worker pressure, and structural shortcomings. As the globe grapples with the pandemic's current and possible future waves, smart investments and changes in healthcare infrastructure, staff support, and crisis management are critical. The lessons learnt from this crisis should act as a stimulus for increasing global healthcare resilience and readiness for future difficulties, which will need more research into the health deficits in West Africa that must be addressed with alacrity.

Food Industry

In comparison to other sectors, the food business has been hit relatively lightly by the COVID-19 pandemic, owing to the perception of food as an important item, which has allowed food supply networks to survive. The United Nations Food and Agriculture Organization (FAO) estimates a large increase in packaged food demand in the post-COVID-19 months (FAO, 2020). However, this tenacity does not indicate that the sector has escaped undamaged. While basic food supply systems remain operational, restaurants, cafés, bars, and other luxury food service providers have

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faced shutdowns. Furthermore, grocery shops and supermarkets, which are critical components of the food supply chain, are having difficulty supplying increased demand owing to phenomena such as "panic shopping" and extensive food stockpiling (Almeida et al., 2020).

The COVID-19 pandemic has underscored the essential nature of the food industry, as reflected in the sustained functionality of core food supply systems. Despite the challenges faced by various food service providers, the overarching demand for food has remained robust, with packaged food witnessing a notable surge in consumption. The Food and Agriculture Organization (FAO) of the United Nations attests to this trend, emphasizing the pivotal role of food as a vital commodity (FAO, 2020).

However, the pandemic's impact on the food business is uneven, with restaurants, cafés, bars, and luxury food services facing a disproportionate share of the burden. These in-person dining restaurants have encountered closures and operational limitations, resulting in financial difficulty and, in some cases, liquidation. The forced shutdowns have had an impact not just on enterprises, but also on the job environment in these industries (Almeida et al., 2020).

Furthermore, according to Almeida et al. (2020), the COVID-19 interruption extends to the retail side of the food supply chain. Grocery shops and supermarkets, which are key components in ensuring a consistent food supply for the population, have faced difficulty in meeting increased demand. These difficulties have been worsened by the phenomena of "panic purchasing" and the prevalent practice of food hoarding. Supply chains were stressed as consumers hurried to grab vital commodities, resulting in temporary shortages and logistical challenges.

To summarize, while the food business has demonstrated resilience in the face of the COVID-19 pandemic, the problems are significant. The disparity in effects across business categories, along with interruptions in the retail supply chain, underlines the pandemic's multifaceted effects on the

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larger food ecosystem. The FAO's findings offer useful insights into changes in consumer behavior and the industry's reaction, highlighting the varied character of the difficulties faced by the ongoing global health crisis (Almeida et al., 2020; FAO, 2020).

Telecommunication industry

The COVID-19 epidemic has had a wide-ranging influence on the telecommunications sector. Many telecommunications service providers (TSPs) and internet service providers (ISPs) have reported a significant spike in traffic volume, which they ascribe to government-imposed lockdowns. These restrictions pushed educational institutions to transition to online teaching platforms, and corporations to support remote labor, resulting in widespread use of large-scale network bandwidth (Deloitte, 2020).

Despite the increase in demand for communication services, the pandemic has not spared the business. A considerable number of TSPs and ISPs have seen their stock prices fall sharply in recent months, mirroring the issues encountered by numerous industrial sectors. According to a detailed assessment of share prices undertaken by Global Data on some of the world's most successful TSPs (Globaldata, 2020), share prices of telecom giants such as AT&T, China Telecom, and Telefonica fell by more than 20% between January 1st and March 25th, 2020.

The COVID-19-induced interruptions have had an impact on the telecoms business in both good and bad ways. On the plus side, the increase in traffic volume emphasizes the important importance of telecom services in enabling distant work and online education during lockdowns. However, the epidemic has created new obstacles, notably in the financial sector, as indicated by huge stock price drops experienced by major TSPs. These changes highlight the deep relationship between

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the global health crisis and the telecommunications business, stressing the sector's need for adaptation and resilience (Deloitte, 2020; Globaldata, 2020).

Mitigating/Managing the Effect of the Pandemic

To safeguard the lives of people their livelihood and their health, International Health Organizations and other localised health authorities have outlined some precautions for people to follow. COVID-19 at the initial stages did not have an eminent vaccine or cure hence these precautions were to help ensure human security by limiting the rate of infections and exposure to all the risks of the pandemic. These coping mechanisms demonstrate what was done to prioritize human lives during the pandemic (Sohrabi et al., 2020; Sehularo et al., 2021)

During the height of the pandemic, operators' coping techniques involve safety procedures aimed at preventing the spread of the virus and measures to keep their companies afloat. Concerned about the propagation of the virus and to comply with government safety regulations and operational requirements, all operators implemented the suggested measures to halt its spread during the occurrence phase. At this time, operators were more alert and concerned about the possibility of getting the virus, according to the guidelines established by specialists and government agencies. Health-related precautions implemented by operators included but were not limited to, temperature checks at facilities before admission, handwashing, educational posters on COVID-19, the wearing of nose masks, the use of alcohol-based hand sanitizers, and keeping social distance (Okafor et al., 2022).

According to Gursoy et al. (2020), clients anticipate such safety precautions from restaurants and hotels. In addition, hotel owners prohibited walk-in customers, increased cutlery disinfection,

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thoroughly cleaned rooms after an hour of checkouts, utilized disposable equipment, decongested personnel through layoffs and shifts, and utilized take-out services, among other measures. It was also noteworthy to notice that some companies prepared posters and fliers in partnership with government policy-implementing organizations, such as the GHS, to aid in the pandemic battle.

Many Organisations and firms utilized a variety of methods to enhance their firms as a coping technique. It was also evident that operators employed many coping mechanisms to fight the pandemic's impact on their enterprises. These were classified as marketing, alternative services, government assistance, cost reduction, and other personal convictions. Some operators, for instance, diversified their services to places that were more resistant to the pandemic's effects. These findings are consistent with those of Hong et al. (2012), who discovered that to mitigate the effects of a crisis, SMEs focused on cost reduction and shifting their target market. Tour companies, for instance, now provide birth certificate and passport processing services in Ghana, where applications may be filed online. Some operators informed potential clients that they were still in operation through aggressive social media advertising on platforms such as WhatsApp and Facebook. Social media marketing appears to be utilized by the vast majority.

As the majority of enterprises saw considerable income declines, government aid was seen as an effective coping technique (Foo et al., 2020). Some businesses, for instance, requested tax exemptions, exemptions from pension contribution requirements, and stimulus packages to bolster their operations. In addition, the government of Ghana issued energy and water refunds in an effort to alleviate the burden placed on its citizens and companies as a result of the pandemic. Consequently, this assistance has assisted in keeping small businesses afloat. This supports He and Harris's (2020) assertion that governments throughout the world have enacted economic aid

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packages to alleviate the looming strain on enterprises, particularly the most vulnerable ones, such as small tourist and hospitality businesses. Consequently, these measures should encourage businesses to maintain ethical business operations in accordance with their corporate social responsibility commitments to diverse stakeholders. In addition, the majority of businesses have implemented or are implementing cost-cutting measures such as layoffs, termination of casual workers and contract staff, reduced remunerations, retention of skeletal employees, engagement of employees without salaries for the period, mandatory annual leaves, and total shutdowns (see Gossling et al., 2020).

2.7. Identification of research gaps from literature review

As discussed in this literature, a significant amount of research has been carried out on the management of pandemics across the globe. The review of literature, however, showed that little has been explored on the management of pandemics in West Africa, specifically Ghana. There is a paucity of literature on the implementation of the International Health Regulations in the management of pandemics in the West African sub-region.

Although the extant literature on COVID-19 and epidemic management offers comprehensive descriptive assessments of institutional structures, policy initiatives, and public health responses, a closer examination exposes several analytical and contextual shortcomings. Biomedical and epidemiological perspectives have dominated a significant amount of early and current research, with a primary focus on infection rates, death data, transmission patterns, and clinical interventions. Although these studies are essential for comprehending the medical aspects of the pandemic, they sometimes downplay the wider social, political, and economic ramifications that

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characterise pandemics as intricate challenges to human security, especially in low- and middle-income areas like West Africa.

Furthermore, a substantial amount of research looks at COVID-19 responses from the perspective of global governance or international policy, highlighting the function of organisations like the World Health Organisation, the International Health Regulations (IHR), and transnational coordination mechanisms (Gostin et al., 2020). These studies tend to regard national and sub-national contexts as essentially homogeneous recipients of international norms, even though they offer insightful information about global health architecture. This approach often disregards the way sociocultural dynamics, inadequate health systems, informal governance structures, and local political economies affect the practical application of international norms, especially in West African governments.

National policy responses like lockdowns, border closures, emergency laws, and vaccination programs have started to be documented in country-specific case studies, including new research on Ghana and other African nations (Asante & Mills, 2020). Nevertheless, many of these studies continue to be primarily descriptive, concentrating on the policies that were implemented rather than critically examining the decision-making process, the coordination of institutions during times of crisis, and the experiences of common people with these interventions. Consequently, mainstream pandemic study does not adequately incorporate local lived experiences, particularly those of casual labourers, vulnerable people, and periphery communities.

Understanding the relationship between national decision-making, local reality during health emergencies, and international health governance is severely hampered by the fragmentation of the literature. Specifically, little qualitative research has been done on how COVID-19 was

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perceived and handled as a multifaceted danger that included social cohesiveness, economic survival, mobility, and institutional legitimacy in addition to health risks. In the West African setting, where structural vulnerabilities and past governance issues exacerbate the consequences of pandemics for human security, the lack of an integrative analysis is particularly noticeable.

These constitute the major research gap, which the qualitative exploratory case study addressed. This study attempts to address these limitations by looking beyond solely descriptive and biological reports and critically examining COVID-19 as a threat to human security in West Africa, utilising Ghana as a case study. The study offers an analytical and context-sensitive viewpoint that is mainly lacking in previous research by qualitatively examining policy responses, institutional coordination, resource mobilisation, and stakeholder experiences. It contributes to literature by emphasising how pandemics are experienced, governed, and challenged within unique sociopolitical and economic contexts, resulting in a more comprehensive knowledge of pandemic management in the Global South.

The findings of the study provide insights to fill the literature gap and thereby contribute new knowledge to the world of academia and beyond. It promotes the extent to which individual countries within West Africa could enhance their strategies toward effectively tackling or managing pandemics through the implementation of the IHR and other related international protocols.

2.8 Chapter Summary

Chapter Two focused on the review of relevant literature in line with the objectives of the study. The literature review provided a critical look at the existing literature on COVID-19. It was divided

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into two broad categories: the first category gave an account of pandemics in the world, and the second category revealed the relevant literature on COVID-19 and its management, which constitutes the main focus of the research on managing the COVID-19 pandemic in West Africa, the case of Ghana. The existing gaps that this study filled were also identified in this chapter. Before the empirical review, the chapter first and foremost started with the theoretical review. The next chapter, Chapter 3, focused on the research methodology.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the methodology used to collect and analyse the required data for this study. The chapter starts with the research philosophy and paradigm, the rationale for the choice of the research paradigm. It continues with the research approach, design, sources of data; population of the study, sampling technique, sample size, methods of data collection, analysis and ethical issues associated with it.

3.1 Research Philosophy and Paradigm

Research philosophy simply refers to belief systems and assumptions about knowledge and how researchers construct that knowledge. According to Žukauskas et al. (2018), a research philosophy can be explained as a researcher's knowledge and insight that are born out of an intellectual activity. Since research philosophies stem from systems of beliefs and assumptions, it means that different researchers may have different assumptions about the nature of truth and knowledge and its acquisition. In the scholarly works of many authors, four primary categories of research philosophies have been identified and discussed. These include the positivist research philosophy, the interpretivist research philosophy, the pragmatist research philosophy and realistic research philosophy (Hitchcock & Hughes, 2002; cited in Žukauskas et al., 2018).

According to Gliner et al. (2016), a research paradigm helps a researcher to clearly define the research philosophy that he or she adopts for a particular study. In other words, the research paradigm helps the researcher to think about the entire research, the accomplishing process, and the method of implementation (Gliner et al., 2016). Similarly, Rehman and Alharthi (2016)

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explained that a research paradigm enables researchers to understand and articulate beliefs about the nature of reality, what can be known about it, and how the researcher goes about attaining this knowledge. Specifically, Rehman and Alharthi (2016) assert that a research paradigm "is a fundamental belief system and theoretical framework with assumptions about ontology, epistemology, methodology, and methods" (Rehman & Alharthi, 2016, p.1).

As explained by Rehman and Alharthi (2016), ontology involves the science or theory of being and what constitutes reality. It concerns whether social reality exists independently, devoid of any human understanding and interpretation. Moon and Blackman (2017) also explained that ontology helps researchers appreciate the certainty of the nature and existence of the object they are researching.

As explained by Rehman and Alharthi (2016) epistemology is the science of what constitutes knowledge regarding its nature and forms and the assumptions of how knowledge can be understood. In other words, epistemology simply is the aspect of philosophy that urges a researcher to debate "the possibility and desirability of objectivity, subjectivity, causality, validity, generalisability" of a study (Patton, 2002, p. 134).

In line with research philosophy and paradigms, Zukauskas et al., (2018) note that the positivist and interpretive paradigms are other crucial philosophical research paradigms and methods of collecting data that a good researcher should be able to understand to pursue what constitutes adequate knowledge (epistemology) and what constitutes reality (ontology), which are the basics of any research project.

To better accurately understand the social reality, the positivist research paradigm chooses a study methodology that is independent of the researcher and relies on direct observation. This research

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paradigm assumes that the researcher's main goal is to find meaning. Instead of the researcher's conscience, the significance is determined by the investigation's goals (Zukauskas et al., 2018).

On the other hand, interpretive researchers oppose the positivist position of reality and argue that things are socially constructed by humans, which can be changed and understood subjectively (Rehman & Alharthi 2016). In the framework of this philosophy, a researcher, according to Ryan (2018), cannot totally dissociate himself from his own values and ideas, which may eventually affect how data is gathered, understood, and assessed. Understanding people's perceptions of the social phenomenon they are dealing with is the goal of interpretive research, not acquiring universal context and value-free knowledge (Rehman & Alharthi 2016). Additionally, the interpretive research approach fosters the ideal atmosphere for actors to discuss their experiences with the topic. Consequently, this enhances the process of collecting, describing, and interpreting data (Bondzi-Simpson & Agomor, 2020). According to Haradhan (2018), this design aids the researcher in comprehending the meaning that people derive from their daily lives. This study adopts the interpretive research paradigm. The reason for adopting the interpretive research paradigm is discussed as follows.

3.1.1 Justification for adopting interpretive research paradigm in this study.

This study addressed the question: What is existence? Furthermore, what is the nature of existence relative to how the COVID-19 pandemic was managed in West African countries? The objective of the study includes the "why" and "how "of the management of the COVID-19 pandemic in West Africa. As indicated by Rehman and Alharthi (2016), the application of the interpretative research paradigm technique is necessary to have a thorough grasp of the "why" and the "how." This is why the study adopts the interpretive paradigm to investigate the management of the COVID-19 pandemic specifically in Ghana.

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The researcher assumed that the questions of "why" and "how" the COVID-19 pandemic has been managed in West Africa will be better understood from the stakeholders' standpoint, who were part of the management of the COVID-19 pandemic. Thus, the study seeks to use an inductive approach to understand how COVID-19 was managed from the subjective experiences of stakeholders in various health and international organisations who were part of the management of the COVID-19 pandemic. The choice of an interpretive paradigm was also grounded in the assumption that knowledge of reality is a social construction by human actors and in this case individuals, institutions, and agencies that were involved in the management of the COVID-19 pandemic in West Africa specifically Ghana. The research approach was also considered based on the need to understand the phenomenon from the stakeholders' subjective viewpoint and seek an explanation from the participant rather than objective observation, a paradigm to which the interpretive research paradigm is ideal.

The interpretive research paradigm has been criticised by the positivist research paradigm which stipulates that it is easy for a researcher to dissociate him or herself to study the social world objectively but not subjectively (Žukauskas et al., 2018). Irrespective of this criticism, this study adopts the interpretive research paradigm because the researcher studied the phenomenon of the COVID-19 pandemic and its management in the West African context from the perspective of stakeholders who were part of the management processes in West Africa and specifically in Ghana.

3.2 Research Approach

The researcher employed a qualitative research method in carrying out this study. As defined by Aspers and Corte (2019), the qualitative approach is referred to as an interactive process in which an improved understanding of the scientific community is achieved by making new significant distinctions resulting from getting closer to the phenomenon studied. A qualitative approach is

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also defined by Kemparaj and Chavan (2013) as a range of methodological approaches that aim to generate an in-depth and interpreted understanding of the social world, by learning about people's social and material circumstances, their experiences, perspectives, and histories.

In line with the claims, Amenorhu (2018) also makes the claim that the qualitative method is very beneficial because it allows researchers to pose probing questions that require participants to respond in their own words as opposed to requiring them to select from a predetermined list of options. The choice of qualitative research for this study is therefore influenced by the above definitions. Specifically, the researcher was certain that the qualitative approach would enable the study to adequately explore and ascertain the experiences and actions of individuals, institutions, and agencies that were involved in the management of the COVID-19 pandemic in West Africa specifically Ghana.

3.3 Research Design

As defined by Astroth and Chung (2018), a research design is a plan or blueprint, which shows the researcher how research should be conducted or guided. Research design, therefore, directs the focus of the research. A research design, according to Astroth and Chung (2018), is a strategy or road map that instructs the researcher on how to carry out or direct a study. Therefore, a study's focus is directed by the research design. In this study, the researcher adopts the phenomenological design to achieve the objectives of the study. Specifically, the researcher used interpretative phenomenological analysis (IPA).

According to Smith and Shinebourne (2012), the aim of an IPA study is to explore in detail how participants are making sense of their personal and social world, and the main currency for an IPA study is the understanding of the meanings that participants make out of their experiences and events. According to the above author, an IPA involves a detailed examination of the participant's

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lifeworld; it attempts to explore personal experiences and is concerned with an individual's personal perception or account of an object or event, as opposed to an attempt to produce an objective statement of the object or event itself. The researcher is therefore convinced that IPA adequately guides the study to explore and ascertain how the COVID-19 pandemic was managed in the West African context, specifically, Ghana.

3.4 Trustworthiness

According to Nowell et al., (2017), trustworthiness is the process through which researchers persuade themselves and readers that their research findings are worthy of attention. As explained by Nowell et al, (2017), Trustworthiness in research is the process of ensuring that a study's findings are credible, transferable, confirmable, and dependable. Whereas the credibility of a study addresses the fitness between participants' views and the researcher's representation of them; transferability is ensured when a researcher provides adequate descriptions of steps leading to research findings to ensure the generalizability of research inquiry so that those who seek to transfer the findings to their own site can judge transferability. Whereas dependability is ensured when a researcher shows that the research process is logical, traceable, and clearly documented, conformability is concerned with establishing that the researcher's interpretations and findings are clearly derived from the data and this requires the researcher to demonstrate how conclusions and interpretations have been reached (Nowell et al., 2017). In line with the above definitions, the researcher has ensured that all the processes of credibility, transferability, conformability, and dependability are adequately adhered to ensure the trustworthiness of this study.

To improve the study's creditworthiness, data was methodically obtained from a variety of sources, including interviews with frontline workers, politicians, health practitioners, and authorities, as well as input from academic experts and researchers. This method assures the validity of findings

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by bringing together thoughts from multiple perspectives, avoiding isolated occurrences or biased opinions. A detailed record was kept, meticulously documenting all aspects of data gathering and analysis operations. This includes interview transcripts and the comprehensive coding methods used. This dedication to transparency and extensive documentation aids in the repeatability of the research process.

To ensure that the conclusions are transferable, the study covers the unique characteristics of Ghana's COVID-19 response, including its political, economic, and social components. This inclusive approach assures that findings are relevant and applicable to other nations with comparable features. Six participants associated with international organizations were included to extend the scope, avoiding the conclusions from being limited entirely to Ghana's experiences.

A thorough data analysis was carried out in order to uncover common themes and trends that go beyond Ghana's unique setting. This allows the findings to be used in a variety of contexts. Furthermore, considering alternate reasons for observed results protects against misinterpreting or attributing findings to factors unrelated to the IHR and other COVID-19 procedures.

Strict methods have been used to collect the data, including systematic document analysis and standardized interview protocols, to ensure data dependability and quality. Throughout the research process, a critical examination of the biases and assumptions of the researchers has been essential to reducing the potential impact of researcher bias on the findings.

3.5 Population of the Study

The totality of all items, subjects, or participants who adhere to a predetermined pattern, according to Boddy (2016), constitutes the study population. In other words, a population is the whole collection of objects that the researcher is interested in and from which some inferences are drawn because they share certain traits. The essence of this study is universal and relevant to all health

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practitioners and policymakers specifically in Ghana, the West African sub-region and beyond. Specifically, the population of this study will be made up of all individuals, institutions and agencies that were involved in the management of the COVID-19 pandemic in West Africa specifically Ghana. Some of these institutions include the Ghana Health Service, Ministry of Health, Ghana Medical Association, Ga East Municipal Hospital, ECOWAS, CDC Africa, Ghana Police Service. Some of the staff of these institutions were the Presidents, Directors, Lab Technicians, Nurses and Police Inspectors. The details of all the participants are presented in Table 3.1 and Table 3.2.

The criterion used for selecting the population for this study was relevant to the research questions rather than representativeness. Therefore, the study preferred participants who were informative regarding the research problem to be investigated. Against this backdrop, the research developed an eligibility criterion to identify potential participants or members of the population to be included in the study. The selection criteria for inclusion in this study are as follows:

1.0 Individuals, institutions, or agencies that participated in policy formulation towards the management of COVID-19 in Ghana or the West African sub-region.

2.0 Individuals, institutions, or agencies that participated in the implementation of policies related to the management of COVID-19 in Ghana or the West African sub-region.

3.0 Individuals, institutions, or agencies participated in the implementation of policies related to the management of COVID-19 in Ghana or the West African sub-region.

4.0 The Individuals, institutions, or agencies based in / or have a representative in Ghana or the West African sub-region.

5.0 The Individuals, institutions or agencies are willing to participate in the study.

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Some of these institutions include the Ghana Health Service, Ministry of Health, Ghana Medical Association, Ga East Municipal Hospital, ECOWAS, CDC Africa, Ghana Police Service. Some of the staff of these institutions were the Presidents, Directors, Lab Technicians, Nurses and Police Inspectors. The details of all the participants are presented in Table 3.1 and Table 3.2

3.6 Sampling Techniques

Purposive sampling was employed by the researcher to collect relevant information from the chosen participants. Specifically, the researcher employed convenience purposive sampling. Convenience purposive sampling, as described by Avrachenkov et al. (2016), is when a researcher chooses the samples based on his or her conveniences, such as geographic closeness or ease of contact with the samples. As a result, the researcher may quickly locate low-cost samples, saving time and money.

This approach gives researchers a methodical and strategic way to choose study participants who can contribute insightful information in line with the particular aims and objectives of the research. A deeper examination of particular traits or experiences within the targeted population is made possible by the deliberate selection process based on predetermined criteria, which also improves the study's focus and relevance to the research question. This strategy is especially helpful when looking for a deep understanding or when researching particular subgroups where the individual characteristics of each participant significantly advance the goals of the study (Staller, 2021). By ensuring that participants are chosen based on their direct relevance to the research questions or objectives, purposeful sampling enhances comprehension to a deeper degree. When compared to random sampling, this method is often more cost- and time-effective, especially when studying different populations or phenomena. By identifying individuals who possess particular knowledge, experiences, or characteristics relevant to the study, researchers can improve the quality of the

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data. Purposive sampling is especially useful for case studies, investigations involving specialized or unique groups, and qualitative research designs (Rai & Thapa, 2015). One of the technique's limitations is that because participants were not chosen at random, the results of purposive sampling may not be generalizable to a larger population. Selection bias may occur because subjectivity may be introduced by the researcher's judgment when choosing participants. Execution must be done carefully to prevent a lack of diversity in the sample, as this could restrict the range of viewpoints that are represented (Mujere, 2016; Rai & Thapa, 2015).

In order to reduce the limitations associated with researcher bias, lack of generalizability, and diversity, it is helpful to include participants with a variety of backgrounds, professional specializations, years of experience, and nationalities.

The researcher, therefore, used convenience purposive sampling to gather all the required data from individuals, institutions, and agencies relevant to the study and situated in Accra or any West African country and; is willing to participate in the study through online media in the case of individuals, institutions or agencies outside Ghana.

According to Avrachenkov et al. (2016), convenience purposive sampling entails the selection of samples according to the researcher's convenience, taking into account elements like proximity to the researcher or ease of contact. This practical approach minimizes time and cost constraints by enabling researchers to quickly identify and interact with samples that are easily accessible. Since there is a focus on speed, it is an effective approach, especially in situations where resources are scarce or there are logistical obstacles. It's important to recognize the trade-off between convenience and the possibility of bias introduction, though. Although this approach has many applications, the non-random selection process may result in a sample that is not entirely

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representative of the larger population, which could affect how broadly the results can be applied (Chandler & Shapiro, 2016).

Due to difficulties obtaining data from the originally intended heads of these institutions, convenience sampling was used. Obtaining timely and pertinent information in line with the study's timeline was made difficult by the fact that the key individuals were either on leave or had travelled overseas. The researcher chose to work with other employees of these institutions despite these limitations. These substitute employees were selected based on their knowledge base, perceived experience, or ability to get in touch with managers quickly to get answers. In order to ensure that the study's data collection process is both feasible and timely, this pragmatic approach sought to overcome the limitations caused by the intended participants' unavailability.

3.7 Sample Size

To estimate the sample size, the study was guided by (Bryan & Clarke 2016) assertion that qualitative research involves a relatively reasonable number of participants; hence the researcher used the convenience purposive sampling technique to select a total of forty (40) participants. Based on this, the composition of participants for the study is as follows:

A sample size of forty (40) participants was drawn from the population. The participants were selected from the following identified bodies; four (4) participants from the Ghana Health Service (GHS) and Ministry of Health (MoH), two (2) from the Ministry of Information three (3) participants from the Ghana Medical Association, two (2) participants from the Kumasi Centre for Collaborative Research (KCCR) of the Kwame Nkrumah University of Science and Technology, three (3) participant from the Civil Society Organisations CSO's in Ghana, two (2) academics and one (2) politicians (policymakers), four (4) participants from the law enforcers (security forces), two (2) participants from the Ghana Ambulance Service nine (9) participants

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from all the COVID-19 management centres, one (1) participant from WHO Ghana office, two (2) participants from UNDP, two (2) from the World Bank, one (1) participant from ECOWAS, one (1) from Centre for Disease Control (CDC), West Africa all totalling forty (40) participants.

Table 3. 1 Summary of the Demography of Key Informant Interview Participants

Pseudonym	Gender	Organization	Position	Years at Post	Level of Education
R1	Male	GMA	Former Vice-President & President	6	Master's Degree
R2	Female	GMA	Executive Member	5	Master's Degree
R3	Female	MoH	Head of Technical Coordination	35	PhD
R4	Male	MoH	Deputy Director, Training & Development	31	Master's Degree
R5	Female	GHS	Communication Officer	10	Master's Degree
R6	Male	GHS	Statistician and Health Information Officer	12	Master's Degree
R7	Male	Ministry of Information	Communication Officer	8	Master's Degree
R8	Male	Ministry of Information	Research & Development	6	Master's Degree

Table 3. 2 Summary of the Demography of In-depth Interview Participants

Pseudonym	Gender	Organization	Position	Years at Post	Level of Education
R9	Female	ISSER Ghana	Research Fellow	2	PhD
R10	Male	UGBS	Associate Professor	15	PhD
R11	Female	Ga East Hospital	Research Officer	3	First Degree
R12	Male	Ga East Hospital	Doctor	6	Master's Degree
R13	Female	Ga East Hospital	Lab Technician	4	First Degree
R14	Male	Shai Osu - Douku District Hospital	Health Research Officer	7	First Degree
R15	Male	Shai Osu - Douku District Hospital	Nurse	4	First Degree
R16	Female	Shai Osu - Douku District Hospital	Lab Technician	5	First Degree
R17	Female	Shai Osu - Douku District Hospital	Medical Officer	6	First Degree

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R18	Male	UGMC	Lab Technician	8	Master's Degree
R19	Female	UGMC	Nurse	4	First Degree
R20	Male	Citizens Movement Against Corruption (CSO)	Co-Chairperson	8	Master's Degree
R21	Male	CDD, Ghana	Research Analyst	5	Master's Degree
R22	Male	CDD, Ghana	Senior Programs Officer	12	Master's Degree
R23	Female	KCCR	Micro-Biologist	13	PhD
R24	Male	Parliament of Ghana	Member of Parliament, Ranking Member of Health Committee in Parliament	6	Master's Degree
R25	Male	Parliament of Ghana	Member of Parliament Ranking Member Security Committee	4	Master's Degree
R26	Female	KCCR	Lab Technician	6	Master's Degree
R27	Male	Ghana Medical Association (GMA), Ghana	Programmes Coordinator	6	Master's Degree
R28	Male	Ghana Police Service	Inspector of Police	12	First Degree
R29	Male	Motor Transport and Traffic Directorate	Inspector	12	Master's Degree
R30	Male	Ghana Armed Forces	Captain	12	Master's Degree
R31	Male	Ghana Immigration Service	Inspector	4	First Degree
R32	Male	Ghana Ambulance Service	Driver	8	First Degree
R33	Female	Ghana Ambulance Service	Nurse	6	First Degree
R34	Female	CDC West Africa Office	Management Officer	15	Master's Degree
R35	Male	ECOWAS (RCSDC)	Technical Officer for Surveillance and Disease Control	5	Master's Degree
R36	Male	WHO Ghana Office	Technical Officer for Public Health Security	3	Master's Degree
R37	Female	UNDP Ghana Office	Programme Specialist	8	Master's Degree

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R38	Female	UNDP Ghana Office	Programmes Officer	9	First Degree
R39	Male	World Bank, Ghana Office	Health Economist	3	Master's Degree
R40	Female	World Bank, Ghana Office	Administration Officer	7	Master's Degree

3.8 Method of Data Collection

The data for the study was gathered from two major sources which include primary sources and secondary sources. Specifically, the primary data was gathered from relevant individuals, institutions, and agencies as outlined in the sample size. On the other side, secondary data was gathered from academic books, papers, and online resources that are pertinent to the objective of the study. The following methods were utilized to collect the primary data.

3.8.1 Key Informant Interviews (KIIs)

First and foremost, KII guides were used to solicit first-hand information from a total of eight (8) key informants which include four (4) participants from Ghana Health Service (GHS) and Ministry of Health (MoH), two (2) from the Ministry of Information two (2) participants from the Ghana Medical Association This is shown in Table 3.1 above. These key informants were selected for first-hand information because these organisations are the institution mandated by the Ghanaian state to be at the forefront of the COVID-19 management activities in Ghana. As a result, the information from the key informants from these organisations was very relevant and this informed the researcher on how the rest of the participants of the study be engaged to achieve the objectives of the study. Key informant interviews (KIIs) are designed to produce in-depth insights, usually from people who have been recognized as subject matter experts (Elmendorf et al., 2006). The higher status and greater experience of the key informants may inadvertently lead to the perception that KIIs produce more valuable knowledge, depending on where they fall in the hierarchy of

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research methodologies. These informants are seen as important knowledge providers—possibly even more so than the insights gained from speaking with "regular" people (Lokot, 2021).

In the context of managing COVID-19 in Ghana, key institutions such as the Ministry of Health, Ghana Health Service, Ministry of Information, and the Ghana Medical Association were identified as influential entities in policymaking and governance. Their central role in the COVID-19 response equipped them with pertinent knowledge and expertise, positioning them as key informants capable of providing authoritative and strategic insights into the management of COVID-19 in West Africa.

3.8.2 In-depth interviews (IDIs)

In addition to the KIIs, the IDIs guide was used to elicit relevant information and the perception of a total of thirty-two (32) participants from the relevant organization. Unstructured interviewing, sometimes known as in-depth interviewing, is a research methodology that researchers use to gather data in order to fully understand the interviewee's viewpoint or phenomenon. It's a way to explore interesting topics that might lead to more research. Open-ended questions are a hallmark of in-depth interviews, which allow for a more natural and unstructured flow of information by posing questions to informants without predefined response options. When necessary, researchers use probing techniques to extract data that is relevant to their research question. This interviewing technique is also known as qualitative interviewing because of its emphasis on qualitative data (Milena et al., 2008; Berry 1999).

With the exception of ECOWAS and CDC participants, in-person interviews were the main method used to gather data for the research study. These interviews took place in the participants' offices. These one- to two-hour interviews allowed for a thorough examination of the research questions as well as the ability to ask follow-up questions in response to participant responses.

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Geographical barriers were removed from the interview process by using digital platforms like Zoom or WhatsApp calls for participants who were located outside of the country.

Specifically, the IDIs guide used one (1) participant each from the Institute of Statistical, Social and Economic Research (ISSER), Ghana and the University of Ghana Business School (UGBS) representing the academics; three (3) participants from Ga East Hospital and four (4) from the Shai Osu-Douku District hospital, two (2) from the University of Ghana Medical Centre (UGMC) representing COVID-19 treatment centres; two (2) participants from the Kumasi Centre for Collaborative Research (KCCR), two (2) participants from Centre for Democratic Development (CDD), one (1) from Ghana and Citizens Movement Against Corruption representing the Civil Society Organizations (CSO) and two (2) Members of Parliament of Ghana representing policymakers. There were four (4) security officers, two (2) participants each from the Ghana Ambulance Service, World Bank and the UNDP, and one (1) each from the Ghana Medical Association, ECOWAS, CDC Africa and WHO, Ghana.

3.9 Data Collection Technique/Instrument

According to Easwaramoorthy and Zarinpoush (2006), an interview is a vital technique for obtaining data for research because it entails a conversation between the interviewer and the respondent. This conversation can take place in person, on the phone, or increasingly online. Due to their effectiveness in revealing the story behind a participant's experiences, interviews—especially semi-structured ones—are frequently used (Doody & Noonan, 2013). In situations where there is little pre-coding knowledge, semi-structured interviews are useful for gathering attitudinal data on a larger scale. These interviews allow for flexibility in conducting in-depth exploration despite their time-consuming nature. Comprehensive content analysis is made possible by recorded responses, whether they are via written or audio documentation. In light of the open-

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ended nature of the questions, interviewer neutrality is fundamental. With the use of cues to prompt elaboration and flexible probing to address emergent topics, semi-structured interviews enable interviewers to probe deeper into the interview process (Fox, 2009).

Semi-structured interviews were used in the research study as a thorough technique for gathering information from important informants and carrying out in-depth interviews. A predetermined list of questions and the freedom to explore emerging themes in a conversational style were balanced in the interview design. With the exception of ECOWAS and CDC participants, in-person interviews were the main method used to gather data for the research study. These interviews took place in the participants' offices. These one- to two-hour interviews allowed for a thorough examination of the research questions as well as the ability to ask follow-up questions in response to participant responses. Geographical barriers were removed from the interview process by using digital platforms like Zoom or WhatsApp calls for participants who were located outside of the country

First, a list of important informants was created, which included officials from the Ghana Medical Association, Ministry of Information, Ghana Health Service, and Ministry of Health. It was determined that these people possessed substantial knowledge and proficiency regarding COVID-19 management. A predetermined list of questions about the main areas of interest, including the risks that COVID-19 posed to human security, the management of COVID-19 in Ghana and West Africa, the creation of international policy to combat COVID-19, and the application of health protocols, was used to kick off the semi-structured interviews after the introduction section that explain the purpose of the interview and collecting the necessary biographic data of the participants. However, the structure also made it possible to ask follow-up and probing questions in response to the main informants' responses. To ensure a deeper examination of their viewpoints

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and experiences, a subset of participants underwent in-depth interviews in parallel. The format of these interviews was open-ended, allowing participants to freely share their opinions. The purpose of the questions was to extract in-depth accounts and insights regarding the difficulties, achievements, and tactics used in COVID-19 management.

Throughout both types of interviews, a flexible approach was maintained to adapt to the dynamic nature of the discussions. The semi-structured format facilitated a rich exchange of information, ensuring that both the predefined research objectives and emergent themes were adequately addressed. All interviews, whether with key informants or participants in in-depth interviews, were meticulously recorded for accurate transcription. The transcriptions formed the basis for subsequent data analysis, ensuring a systematic and thorough examination of the collected information. This approach provided a nuanced and comprehensive understanding of the nuances and intricacies of COVID-19 management in West Africa, particularly in the Ghanaian context.

3.10 Data Analysis and Presentation

Thematic analysis was used to analyse the responses to achieve the objectives of the study. According to Braun and Clarke (2019), thematic analysis is a method of analysis that enables researchers to analyse responses based on specific themes which are usually derived from the research questions or objectives. The analysis revealed themes such as Economic Impact, Mortality, Morbidity, and Mobility, representing the threats to human security posed by Covid-19. The themes characterizing the strategy to manage COVID-19 in West Africa were leadership or governance, border closures and movement restrictions, prohibition of group gatherings, and vaccination. The researcher coded and grouped the transcribed data into major themes using each research objective as a theme. Related themes generated from the coded transcripts were then analysed in line with the research objectives using thematic analysis.

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Thematic analysis is a manual method of analysing a qualitative data. The researcher chose this method because it helped the researcher to be well informed or educated about the data collected due to the processes or steps involved in analysing data using this strategy. The specific steps through which the researcher used thematic analysis are described in detail as follows:

Transcribing audio data

The transcripts were captured by carefully listening to the audio recordings and verbatim copying the spoken information. The audio replay was performed twice in order to correct any flaws or omissions in the first transcription. The material was then formatted to improve clarity and readability. A thorough quality check followed, which included comparing audio parts to the transcribed text to ensure correctness. A thorough final review was performed to ensure consistency and completeness throughout the transcribing. The final transcribed text was saved in a suitable format, such as a Word document or text file. Sensitive material inside the transcriptions was handled securely to maintain confidentiality. In addition, for further protection and resilience, a backup of the final data was securely kept on both external and cloud storage.

Obtaining Data Saturation

Data saturation is the point in coding when it is clear that no new codes are coming from the data (Saunders et al., 2017). It basically means that the researcher has collected enough data that no new themes, patterns, or information are identified in continuing data collecting. This suggests a point of duplication, where more data collecting is unlikely to significantly improve the richness or depth of the analysis. While there is no widely accepted sample size for attaining data saturation, some researchers indicate that it commonly happens between 9 and 17 participants (Hennink & Kaiser, 2022). Reviewing the transcripts in the context of this study revealed that the codes or

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themes began to reoccur, suggesting that the researcher had reached a saturation point, demonstrating the richness and depth of the codes and themes acquired.

Coding the data

Once the data is saturated, the coding process begins, guided by logical concepts that are consistent with the study objectives. During coding, the researcher categorized or subdivided textual passages using phrases or terms that precisely captured the intended meaning of the participants in accordance with specified study objectives. To express the hazards caused by Covid-19 in West Africa and the related solutions adopted, several codes such as hunger, job losses, mortality, disease, migration, frontline workers, mental health, health education, awareness creation, and legalization were used. This rigorous coding method organizes and categorizes the qualitative data in accordance with the study goals.

Coding emerges as a critical tool in the process of translating raw qualitative data into a meaningful and convincing story. Coding, at its most basic, is evaluating a coherent piece of factual material—be it a word, a paragraph, or a page—and assigning it a label, often in the form of a word or brief phrase that conveys its essence. This fundamental procedure is critical in qualitative analysis because it condenses large amounts of empirical data and makes it conveniently accessible for extensive evaluation. Concurrently, coding improves the quality of the study and findings. Coding is essentially an early step of analysis, providing a basic yet critical investigation of the data (Linneberg & Korsgaard, 2019).

Generating themes or categories

After coding the data, the researcher grouped all codes that have similarities together. The researcher used the research questions and/or themes in the literature review as a guide in grouping the codes into themes. These themes and their categories are summarized in Table 3.3.

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Table 3. 3 Summary of Themes in Relationship to the Study Objectives

Objective 1	**Ascertain The Threats Posed by the COVID-19 Pandemic in West Africa**
Major theme	**Threats COVID-19 Posed to West Africa**
Sub-Theme	1. Economic Threat 2. Threats to Human Lives 3. Morbidity 4. Movement Restriction
Major theme	**Management Strategies Designed to Manage the Pandemic**
Sub-Themes	1. Border Closure & Ban on Foreign Travels 2. Public Health Education and Awareness Creation 3. Social Distancing, Mandatory Wearing of Mask & Washing of Hands. 4. Lockdown and Contact Tracing 5. Ban on Public and Social Gathering 6. Quarantine, Isolation and Treatment 7. Vaccinations
Major theme	**Actors Involved in the Management of COVID-19**
Sub-Themes	Government International Organizations (WHO, UNDP, World Bank) Media Religious Leaders Traditional Leaders

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Objective 2	**Find out how West Africa and Ghana managed the COVID-19 pandemic as a threat to human life and security.**
Major theme	**How COVID-19 served as a danger to the survival of people in Ghana and West Africa**
Sub-theme	1. Loss of Human Lives 2. Direct Impact on Health 3. Indirect Impact on Health 4. Financial or Economic Hardships 5. Restriction of Movement
Major theme	**How COVID-19 was communicated as an Emergency in West Africa**
Sub-Theme	1. Public Health Announcement 2. Ministerial Press Conferences 3. Media Broadcast, Publications and Advertisement
Major theme	**How COVID-19 was Treated as an Emergency and West Africa**
Sub-Theme	1. Presidential Leadership and Government Machinery 2. Border Closure & Screenings 3. Tracing Testing and Treatment 4. Ban on Religious and Group Gatherings 5. Total and Partial Lockdowns 6. Public Education and Awareness Creation 7. Vaccination

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Major theme	**Challenges with Implementing the COVID-19 Emergency Response Measures in West Africa**
Sub-Theme	1. Superstition Non-Compliance 2. Misinformation & False Rumours 3. Inadequate funding 4. Failed Promises & Discriminations 5. Unapproved Borders 6. Stigmatization
Objective 3	**To understand the kind of international policies and resources that were deployed in the management of COVID-19 in Ghana.**
Major theme	**Formulation of International Policies Against COVID-19**
Sub-Theme	1. No Particular International Law or Policy Formulated against Covid-19 2. Adherence to WHO Guidelines 3. Formulating localized policies based on IHR 4. Executive & Legislative Instruments
Major theme	**Implementation of International Policies in Ghana**
Sub Theme	1. Legislation and Law Enforcement 2. Public Health Education
Objective 4	**To determine the dynamics and challenges of COVID-19 management in Ghana**
Major theme	**Challenges Associated with the Management of COVID-19 in Ghana**

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Sub-Theme	1. Lack of Cooperation 2. Inadequate Funding 3. Vaccine Delay 4. Vaccine Hesitancy 5. Corruption 6. Restriction of Movement 7. Stigmatization
Major theme	**Challenges Associated with Vaccination or the Containment of the Virus in Ghana**
Sub-Theme	1. Unavailability of Vaccines 2. Safety and Security 3. Myths and Misinformation 4. Cultural and Superstitious Beliefs 5. Anti Vaccine
Major theme	**Financial Challenges Associated with the Management of COVID-19 in Ghana**
	1. Lack of Funding 2. Mismanagement or Misappropriation of Funds

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Describing the Data

After grouping all codes into themes, the researcher reviewed the themes and named all generated themes. The researcher then provided a vivid description of what each theme meant to the research

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objectives with brief quotations from the transcript to support the descriptions. These themes are summarized in Table 3.3.

These findings generated from the themes were then compared with the literature to find out if the literature supports the findings or the findings are new additions to literature.

3.11Ethical consideration

Adherence to ethical principles is essential in every research activity, directing the researcher's professional conduct throughout the process. According to Bhandari (2021), ethical issues are important because they protect participants' rights, ensure the integrity of the research process, and improve the study's internal validity. Ethical standards act as a safeguard, underlining the necessity of protecting participants' rights, preserving the integrity of the research service, and enhancing the overall validity of the study (Bhandari, 2021).

First and foremost, the researcher took an introductory letter from the Legon Centre for International Affairs and Diplomacy (LECIAD) to all the institutions and agencies listed above to inform them about the study and ask for their consent. Thereafter, the personnel selected by the institutions to respond to the study were also served an introductory letter to inform them about the study and assured them about the fact that their views would solely be used for academic purposes.

Thereafter, the researcher, in line with the ethics of qualitative research, informed the participants that the semi-structured interview would be recorded electronically for transcription purposes and assured them of confidentiality.

After the participants gave their verbal consent for the researcher to continue with the interview, the researcher went ahead to conduct the interviews and record them electronically. The recorded interviews were transcribed onto a Word document and kept as transcripts. Due to the location and

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unavailability of the participants some of the interviews were done via phone call and WhatsApp conversations.

In accordance with the ethics of research, the researcher informed the participants about the objectives of the research and also sought the consent of the participants signifying their willingness to take part in the interview prior to the actual interview. The consent of the participants was also sought prior to the electronic recording of the interviews. Participants were also assured that they were at liberty to withdraw their participation from the study at any point they felt uncomfortable. To ensure the anonymity of the participants Pseudonyms R1 to R40 as illustrated in Tables 3.1 and 3.2 above were assigned to the participants.

Chapter 8 findings will also be based specifically for the objective 4 or research question 4

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CHAPTER FOUR

DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS AND SETTING

1.0 Introduction

This chapter highlights the study participants' demographic characteristics as well as the geographical contexts in which the research was performed. The inclusion of individuals with a wide range of backgrounds, professional competence, degrees of experience, and nationalities has helped to mitigate possible constraints such as researcher bias, lack of generalizability, and a lack of diversity in the sample. We can better interpret the data and investigate potential factors that may have impacted the outcomes if we learn the demographic characteristics of the participants. Furthermore, investigating the study's geographical settings helps us to detect trends and variances in the data that might be linked to regional or contextual variables. This information is critical for understanding the findings' relevance and transferability to different situations.

1.1 Demographic Representation of Participants

The findings showed that forty (40) participants were interviewed either in person or via a phone call or WhatsApp conversation due to time and distance constraints. Out of the 40, eight (8) were Key Informants working at the Ghana Medical Association, Ghana Health Service, the Ministry of Health and the Ministry of Information as can be seen in Table 1. These four (4) public institutions were major stakeholders in decision-making during the COVID-19 pandemic hence they can provide key information necessary for the study. The remaining thirty-two (32) participants helped with in-depth interviews from different institutions and organizations that

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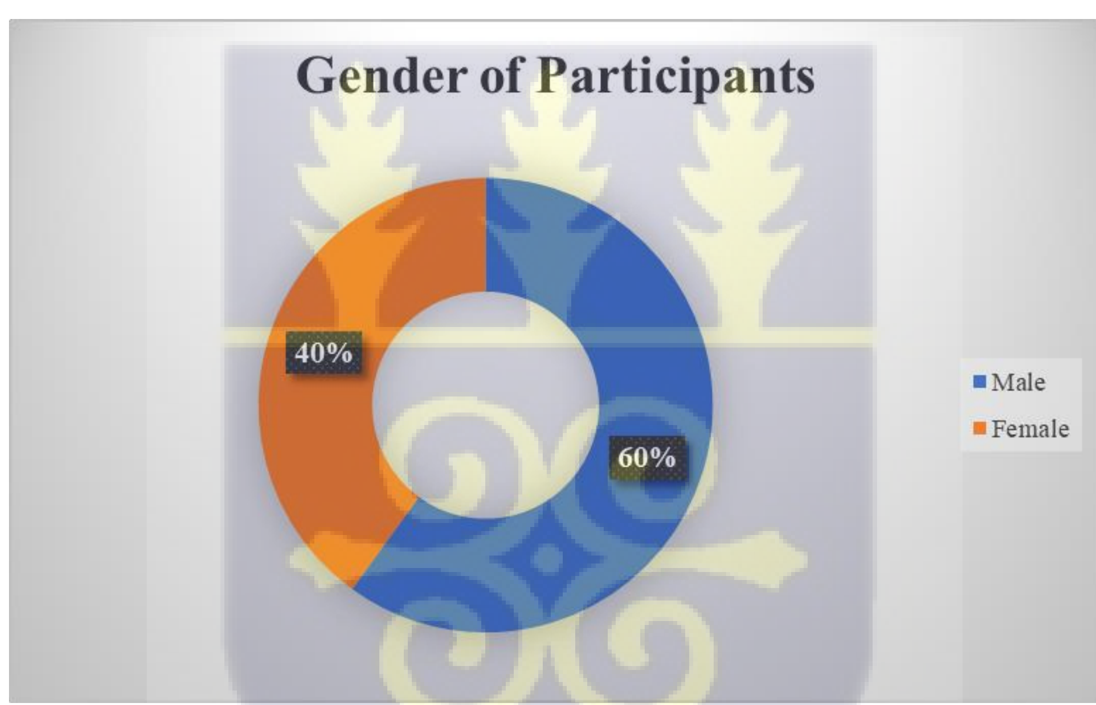
played different critical roles in managing COVID-19 in Ghana with the details and roles represented in Table 2.

Gender representation of the sample shows that sixteen (16) of the total participants were females whereas males were twenty-four (24) representing 40% and 60% respectively of the population. Even though there are more males than females in the study as a result of the purposive sampling used due to the position the participants occupy, there is an appreciable level of both gender representation in the study. This is illustrated in Figure 4.1

Figure 4. 1 Gender Representation of Total Participants



Source: Researcher's Field Data 2023

With work experience which was measured by the number of years the participants served at their position in their various organizations, six (6) have served for below six (6) years, seven (7) have been in that role for between six (6) to ten (10) years, five (5) serve for between ten (10) and fifteen

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(15) years and two have been at their post for over twenty (20) years. The myriad of experiences will enrich the findings since the differences in the periods of work come with different experiences and practices. The blend of these practices that characterized the different ages of experience will prove a more inclusive response for them. This is represented in Figure 4.2

Figure 4. 2 The Number of Years at the Current Position

Source: Researcher's Field Data 2023

The results show that the 40 participants have different academic qualifications ranging from a Bachelor's degree to a Doctor of Philosophy in different areas of specialization. Twelve (12) of the participants had their first degree, twenty-four (24) had a Master's degree and four (4) had a Ph.D. representing 30%, 60% and 10% respectively of the total sample used for the study. This

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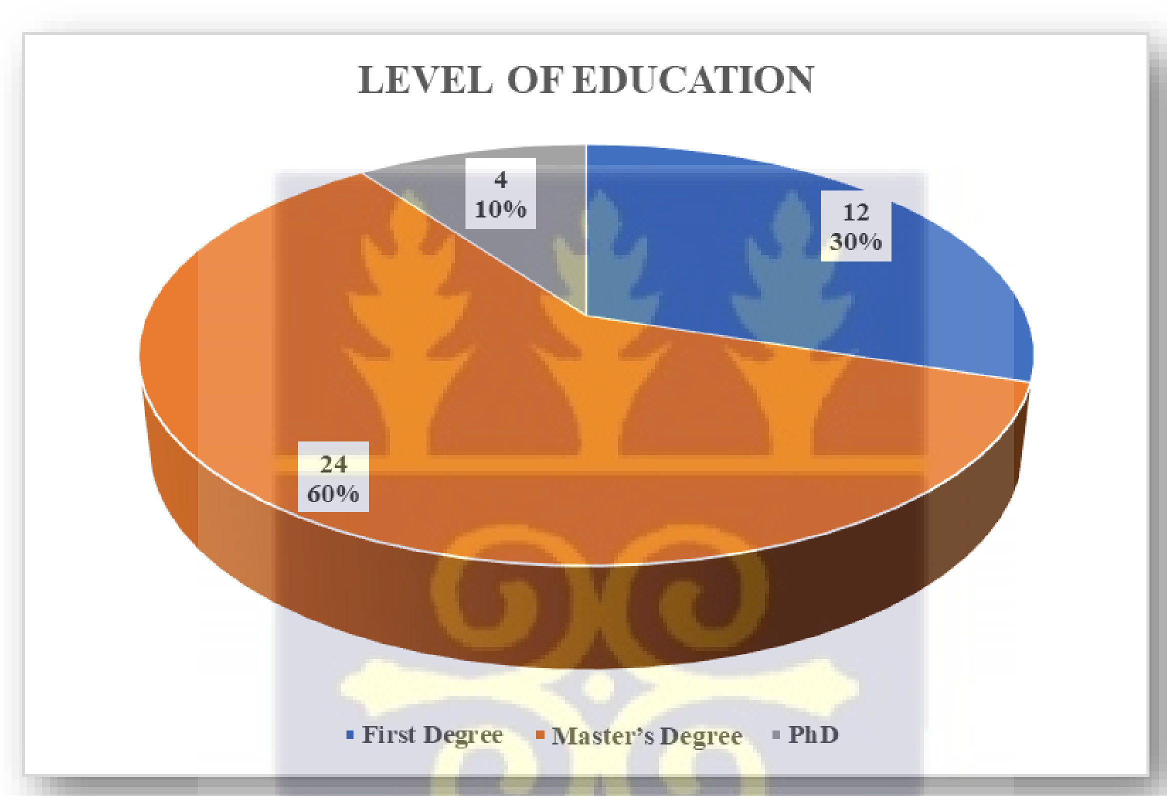
data is very critical to the study because it suggests all the participants have a minimum level of education that can guarantee their level of understanding of the subject of study and will provide relevant responses in the understanding of the phenomenon. The educational level of the participants is represented in Figure 4.3.

Figure 4. 3 Level of Education of All Participants



Source: Researcher's Field Data 2023

The organizations that were represented in this study included the Ghana Medical Association (GMA), Ghana Health Service (GHS), the Ministry of Health (MoH) and the Ministry of Information with two (2) participants each and these were the eight (8) Key Informants. Other organizations include one (1) participant each from the Institute of Statistical, Social and Economic

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Research (ISSER), Ghana and the University of Ghana Business School (UGBS) representing the academics; three (3) participants from Ga East Hospital and four (4) from the Shai Osu-Douku District hospital, two (2) from the University of Ghana Medical Centre (UGMC) representing COVID-19 treatment centres; two (2) participants from the Kumasi Centre for Collaborative Research (KCCR), two (2) participants from Centre for Democratic Development (CDD), one (1) from Ghana and Citizens Movement Against Corruption representing the Civil Society Organizations (CSO) and two (2) Members of Parliament of Ghana representing policymakers. There were four (4) security officers, two (2) participants each from the Ghana Ambulance Service, World Bank and the UNDP, and one (1) each from the Ghana Medical Association, ECOWAS, CDC Africa and WHO, Ghana.

The participants were identified in the discussions with Pseudonyms R1-R40 representing Participant one (1) to Participant forty (40) respectively. All the necessary details of the participants provided during the interview are summarized in Table 4.1 and Table 4.2.

Table 4. 1 Summary of the Demography of Key Informant Interview Participants

Pseudonym	Gender	Organization	Position	Years at Post	Level of Education
R1	Male	GMA	Former Vice-President & President	6	Master's Degree
R2	Female	GMA	Executive Member	5	Master's Degree
R3	Female	MoH	Head of Technical Coordination	35	PhD
R4	Male	MoH	Deputy Director, Training & Development	31	Master's Degree
R5	Female	GHS	Communication Officer	10	Master's Degree
R6	Male	GHS	Statistician and Health Information Officer	12	Master's Degree
R7	Male	Ministry of Information	Communication Officer	8	Master's Degree
R8	Male	Ministry of Information	Research & Development	6	Master's Degree

Source: Researcher's Field Data 2023

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Table 4. 2 Summary of the Demography of In-depth Interview Participants

Pseudonym	Gender	Organization	Position	Years at Post	Level of Education
R9	Female	ISSER Ghana	Research Fellow	2	PhD
R10	Male	UGBS	Associate Professor	15	PhD
R11	Female	Ga East Hospital	Research Officer	3	First Degree
R12	Male	Ga East Hospital	Doctor	6	Master's Degree
R13	Female	Ga East Hospital	Lab Technician	4	First Degree
R14	Male	Shai Osu - Douku District Hospital	Health Research Officer	7	First Degree
R15	Male	Shai Osu - Douku District Hospital	Nurse	4	First Degree
R16	Female	Shai Osu - Douku District Hospital	Lab Technician	5	First Degree
R17	Female	Shai Osu - Douku District Hospital	Medical Officer	6	First Degree
R18	Male	UGMC	Lab Technician	8	Master's Degree
R19	Female	UGMC	Nurse	4	First Degree
R20	Male	Citizens Movement Against Corruption (CSO)	Co-Chairperson	8	Master's Degree
R21	Male	CDD, Ghana	Research Analyst	5	Master's Degree
R22	Male	CDD, Ghana	Senior Programs Officer	12	Master's Degree
R23	Female	KCCR	Micro-Biologist	13	PhD
R24	Male	Parliament of Ghana	Member of Parliament, Ranking Member of Health Committee in Parliament	6	Master's Degree
R25	Male	Parliament of Ghana	Member of Parliament Ranking Member Security Committee	4	Master's Degree
R26	Female	KCCR	Lab Technician	6	Master's Degree
R27	Male	Ghana Medical Association (GMA), Ghana	Programmes Coordinator	6	Master's Degree
R28	Male	Ghana Police Service	Inspector of Police	12	First Degree

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R29	Male	Motor Transport and Traffic Directorate	Inspector	12	Master's Degree
R30	Male	Ghana Armed Forces	Captain	12	Master's Degree
R31	Male	Ghana Immigration Service	Inspector	4	First Degree
R32	Male	Ghana Ambulance Service	Driver	8	First Degree
R33	Female	Ghana Ambulance Service	Nurse	6	First Degree
R34	Female	CDC West Africa Office	Management Officer	15	Master's Degree
R35	Male	ECOWAS (RCSDC)	Technical Officer for Surveillance and Disease Control	5	Master's Degree
R36	Male	WHO Ghana Office	Technical Officer for Public Health Security	3	Master's Degree
R37	Female	UNDP Ghana Office	Programme Specialist	8	Master's Degree
R38	Female	UNDP Ghana Office	Programmes Officer	9	First Degree
R39	Male	World Bank, Ghana Office	Health Economist	3	Master's Degree
R40	Female	World Bank, Ghana Office	Administration Officer	7	Master's Degree

Source: Researcher's Field Data 2023

1.2 Geographical Representation

The research carried out a targeted analysis of COVID-19 in the West African region, which includes sixteen different countries. The Economic Community of West African States (ECOWAS) is made up of the following nations: Benin, Burkina Faso, Cabo Verde, Cote d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo, with the exception of Mauritania (ECOWAS, 2021). These countries, although having distinct identities, have things in common such as skin tones, colonial histories, similar climates, parallel economic systems, and similar topographies. These similar traits might

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have a big impact on how they formulate policies, behave, and make decisions (Buscema et al., 2015; Penner et al., 2011). Due to the study's regional focus, the effects of these common factors on COVID-19 responses and management tactics could be thoroughly examined.

Figure 4. 4 Map of West African Countries

Source: (Agbo et al., 2018)

Studies showed that as of June 22, 2022, there had been more than 11.7 million confirmed cases and 253, 935 fatalities reported in Africa, and there had been 847,400 cases and 11,400 fatalities reported in the West African sub-region, even though its effects on the African continent have not been as catastrophic as in other parts of the world or as anticipated earlier (CDC (2019) in Taboe et al., (2022).

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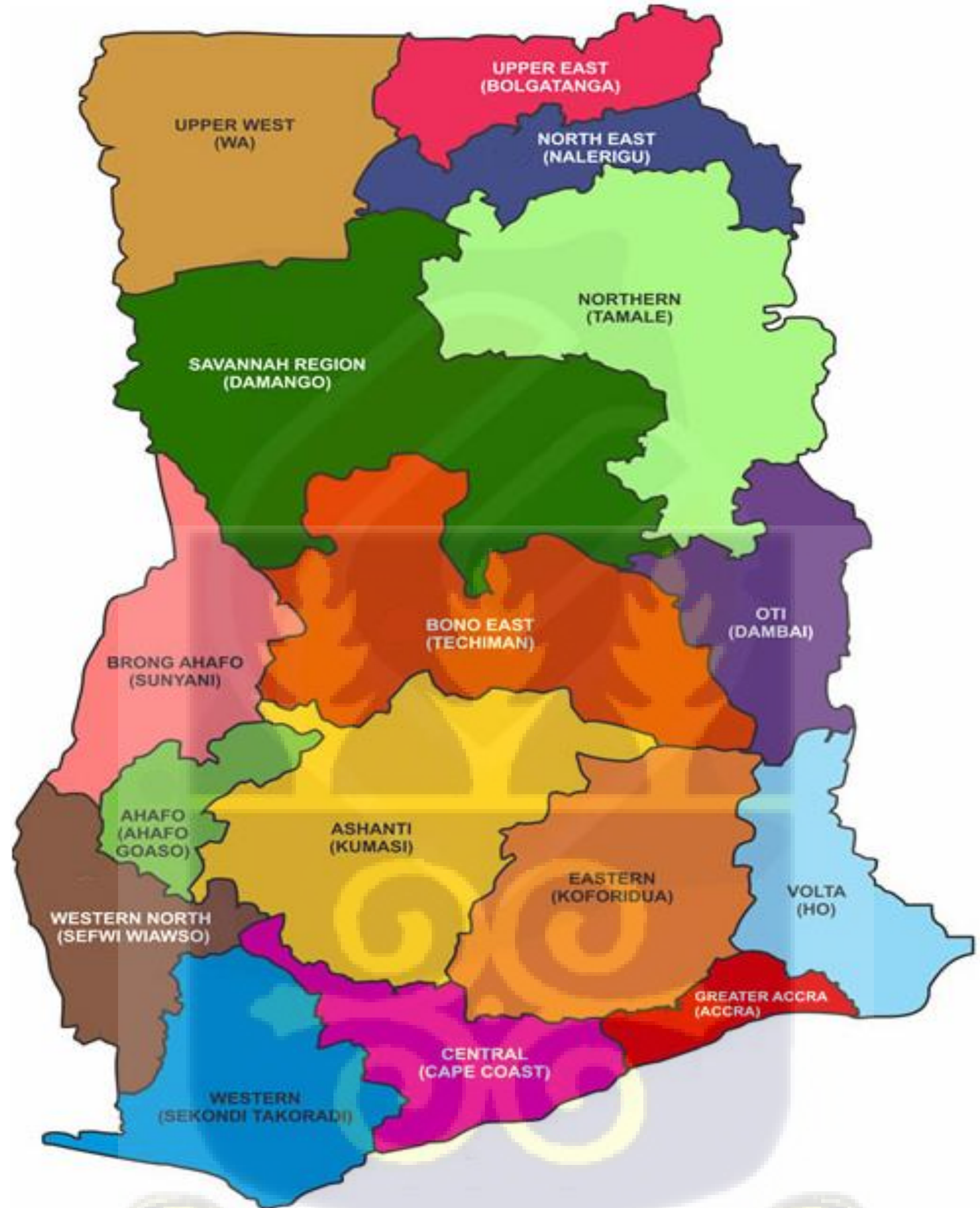
Figure 4. 5 The Ghana Map



Source: The Permanent Mission of Ghana to the United Nations

In order to obtain a deeper understanding of the implications of COVID-19 for human security in the wider West African context, this study specifically focused on Ghana. Ghana is a contributing member of the Economic Community of West African States (ECOWAS) and borders Togo,

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Burkina Faso, Cote d'Ivoire, and the Gulf of Guinea. Notably, research to date indicates that Ghana has had some of the lowest COVID-19 death rates in the region (Crankson et al., 2022). Therefore, the perspectives and experiences of Ghanaians, especially the Key Informants surveyed, regarding the securitization of COVID-19 in West Africa, provide priceless information. Ghana is an interesting case study in the larger West African context because of its distinct geopolitical location and comparatively effective pandemic management.

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CHAPTER FIVE

THE THREATS POSED BY THE COVID-19 PANDEMIC IN WEST AFRICA

5.0 Introduction

This chapter presents the findings in relation to the first objective of the study which is to ascertain the threats posed by the COVID-19 pandemic in West Africa. The chapter demonstrated how consistent the findings have been with literature but also identified some variations that have occurred over time. The chapter provided a meticulous discussion on the relevance of the findings in literature in filling the existing gap and its contribution to theories and relevant concepts. It also demonstrated the application of the findings in industry and practices and how important this will help with policy making and decision making. It has also shown the understanding of the citizens about coping and preventive mechanisms in times of pandemics and other outbreaks in their communities.

The chapter, first of all, presented the demography representation of the sample or participants in the study.

5.1 Main Findings on Ascertaining the Threats Posed by COVID-19 Pandemic in West Africa.

This section explores the various threats that participants identified regarding the COVID-19 pandemic's impact on West Africa. It is significant to remember that the opinions expressed in these responses are the opinions of the participants as shaped by their particular roles and affiliations and the information that was available to them at the time of the interviews. As such, the threats that have been identified provide a broad perspective that encompasses multiple societal

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domains. Data were presented using a range of techniques, such as figures, graphs, tables, and direct quotations, in order to satisfactorily communicate these findings and fulfill the research objectives. With regard to the threats posed by the pandemic in West Africa, the participants' varied experiences and viewpoints are effectively illustrated by this multifaceted approach.

5.1.1 Threats COVID-19 Posed to West Africa

Participants in the study identified a slew of threats posed by the COVID-19 pandemic, which affects not only Ghana but the entire West African region. These threats ranged from the tragic loss of life to the significant possibility of population displacement. Importantly, all participants were either Ghanaian citizens or people who lived and worked in Ghana. Their views on the challenges confronting the entire West African sub-region were shaped by a variety of information sources, including news reports, published research, conversations with friends and colleagues in other West African countries, and their own interpretations and beliefs.

The researcher thoughtfully crafted questions in multiple formats to maintain the integrity of the findings and mitigate any potential influence of personal biases or data distortions. Furthermore, the researcher painstakingly compared and contrasted responses, ensuring a high level of consistency across participants' responses. This methodical approach improved the reliability and credibility of the research findings.

The perceived threats identified by the participants were organized systematically into distinct themes. These thematic categories provided a variety of perspectives on the multifaceted ramifications of the COVID-19 pandemic in West Africa. The overarching themes encapsulated economic challenges such as rising living costs, declining living standards, food security concerns, rising unemployment rates, and the distressing collapse of businesses and organizations.

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Concerns were expressed by participants about the migration of healthcare professionals to more affluent countries in Europe and elsewhere. A major concern was the allure of modernized healthcare systems combined with more generous remuneration. Participants also expressed concerns about the mental health of healthcare workers dealing with the pandemic's demands. Healthcare infrastructure deficiencies and inadequacies emerged as major issues as well.

In addition, the study highlighted threats to personal safety, security, and survival. The tragic loss of human life experienced across West Africa exemplified these concerns. These findings collectively contribute a nuanced understanding of the multifaceted effects of the COVID-19 pandemic, providing valuable insights into the region's multifaceted challenges, with a particular emphasis on the context of Ghana. The illustrations below elaborate on these themes.

Economic Threats

The study's findings revealed a resounding consensus among all study participants, who collectively emphasized the multifaceted economic threats that COVID-19 posed to individuals, nations, and the broader West African sub-region. The participants, whose experiences and insights captured the pulse of the region, conveyed the pandemic's extensive economic toll.

Notably, the pandemic's economic effects were felt across multiple sectors, threatening people's livelihoods and prosperity across West Africa. The pandemic caused a wave of job losses that rippled through various trades, businesses, and vocations. This secondary job loss was attributed to a variety of factors stemming from the pandemic's disruptive force.

The public health measures aimed at reducing virus transmission were a major source of economic strain. Movement restrictions and social distancing mandates, for example, necessitated the temporary suspension of occupations and businesses that relied on physical interaction and close

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contact. The effects of these restrictions were felt throughout the West African sub-region's economic fabric.

Participants in the study shed light on the critical role of border closures in exacerbating economic threats. West Africa, and indeed the entire African continent, has historically relied heavily on imports. When borders were closed, disrupting the normal flow of goods and services, the intricate web of economic activities that supported livelihoods suffered greatly. This disruption was palpable in the form of inflationary pressures on essential goods and medical supplies, as well as a negative impact on cross-border trades in which many citizens were involved. These constraints weighed heavily on local economies along borders. Residents who had previously relied on border-adjacent commerce for a living found their livelihoods disrupted, resulting in increased economic hardship. The pandemic's consequences included artificial inflation in the prices of goods and services as a result of supply chain disruptions, as well as higher unemployment rates. This, in turn, limited individuals' and families' disposable income, exacerbating the cost of living while eroding living standards.

The economic consequences extended to governments, who found themselves in a dilemma. On one front, the public sector faced increased costs associated with COVID-19 response initiatives. This included the development of healthcare infrastructure, the acquisition of medical supplies, the procurement of Personal Protective Equipment (PPE), and the payment of allowances to frontline workers. Additional financial burdens were incurred as a result of the expansion and refurbishment of health facilities, as well as extensive public education and awareness campaigns.

At the same time, the pandemic had a negative impact on government revenue mobilization. The pandemic's low economic activity translated into lower tax revenues, lower turnover for businesses and corporations, limited international inflows, and a decline in foreign direct investments (FDI).

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The combination of these factors put governments under enormous economic stress, undermining their financial capacity to navigate the crisis.

The study participants' experiences and perspectives ring true as a poignant testament to the economic perils inflicted by COVID-19 on individuals, nations, and the West African sub-region as a whole. Economic threats have manifested as a multifaceted and interconnected web of challenges, profoundly altering the socioeconomic landscape.

> *"COVID-19 happened as a novel event (the pathogen) and in the early stage, nobody was sure about how it was going to pan out. There were several documents specifically one piece of literature that showed that we (the West African countries) should be expecting bodies littered because they are expecting very high deaths and several others. Failure to that expectation, the response to COVID-19 across the West African sub-region brought about huge economic ramifications and the implementation of lockdowns, slowing down economic activities as well as restrictions on travel, which again had a direct impact on trade. Also, the health systems of all these countries were challenged since they were dealing with something they had no knowledge of, and so supply chain mechanisms were severely disrupted. On the macro level, the above-mentioned are some of the threats posed to countries in the West African sub-regions".* – **R36**

> *"Restriction of movements, and we had to avoid handshaking or hugging because of COVID-19. Also, economically, because we were not able to go*

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about our daily activities due to the lockdown and in addition to the cost of securing some PPEs like face/nose masks, etc. affected the financial life of everybody. Our social and religious activities were threatened." – **R5**

"The threats are an increase or high rate of cost of living, loss of employment or jobs, it has worsened the living standards (dependency rate)" ... - **R6**

Threats to Human Lives

The participants unanimously emphasized the grave threat posed by the COVID-19 pandemic to the lives of people across West Africa, with their reflections shedding light on the scope of the problem. Their observations support the stark reality that the pandemic caused significant loss of life in the region. Indeed, the toll of COVID-19 went beyond national borders, with almost every West African country bearing witness to its dire consequences.

The participants asserted unequivocally that Ghana was not immune to the deadly effects of COVID-19. Reports of casualties echoed not only in Ghana but also in neighbouring West African countries. The participants' collective awareness, as well as the tragic empirical evidence, informed their shared perception of death because of the pandemic.

The participants also clarified an important aspect of the pandemic's impact. Notably, they acknowledged that while some deaths may not have been directly caused by COVID-19, their cause could be traced back to the pandemic's secondary effects. During the pandemic's tumultuous period, a significant portion of attention and resources understandably shifted to addressing the

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immediate threats posed by COVID-19. This refocusing came at the expense of other pre-existing health conditions, which were occasionally overlooked.

Individuals dealing with non-COVID-19 health issues, according to the participants, are more vulnerable. Regrettably, the reallocation of healthcare resources resulted in instances where individuals were unable to obtain the necessary attention for their underlying conditions. As a result, these people faced increased health risks, and tragically, some died as a result of untreated illnesses that could have been treated.

Furthermore, the psychological impact of the pandemic was evident in the accounts of the participants. COVID-19-related fears and anxieties discouraged some people from seeking timely medical care. The fear of contracting the virus while visiting healthcare facilities effectively deterred them, resulting in a lack of medical attention for unrelated health problems. As the participants pointed out, this fear-induced avoidance resulted in additional deaths.

n conclusion, the participants' collective perspective emphasized the existential threat that the COVID-19 pandemic represented for the people of West Africa. The accounts emphasized not only the immediate health risks posed by the virus, but also the complex web of consequences, which included the diversion of healthcare resources, the exacerbation of pre-existing health conditions, and psychological deterrents, all of which collectively amplified the pandemic's impact on human lives across the region.

INTEGRI PROCEDAMUS

"So, I will say is economic, food security, trade and loss of human life" – **R10**

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"… Again, a lot of people died and we were just losing many people including prominent individuals in the country. So COVID set back the economic progress of individuals, families, and micro-businesses to the extent that many did not survive beyond COVID. This had an impact on national domestic revenue mobilization and where we find ourselves as a country. Even though COVID is not necessarily a key causative factor in where we are today as a nation.

These effects are very much the same as the threats the sub-region experienced. Lockdown for instance was replicated across the sub-region. So, all the other countries in the sub-region would suffer the same thing. When there is hardship, two things naturally happen. One, people drift into rapping the natural resources including logging, illegal mining, etc. The other thing is crime and vices" – **R20.**

Morbidity

The result also showed that COVID-19 posed health threats in West Africa. The responses show that COVID-19 posed serious health threats to many people in the sub-region. People's medical conditions worsened when they got infected with COVID-19. There were a lot of infections, ranging from mild to moderate and critical conditions of the disease. People with underlying health conditions such as diabetes, hypertension, and HIV/AIDS were more vulnerable due to the COVID-19 pandemic. They also mentioned that there were initial reactions of some people towards the vaccines, resulting in some symptoms and medical conditions. Most importantly,

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COVID-19 further exposed the medical staff and other 'frontline' workers to infections and diseases. Just like in the cases of death, due to COVID-19, little attention was given to other diseases leading to high morbidity during the period. One major health condition during the pandemic era was mental health. According to the participant, there was a high level of fear of the pandemic even before the first case was recorded in the sub-region. This fear was a result of the devasting impact of the pandemic on lives in Europe and Asia. The fear of the disease has plunged many West Africans into depression, anxiety, stress and other emotional and mental instability for their very own lives and the lives of families that lived in abroad. Some responses also indicated that loss of jobs and businesses, poor standard of living and high cost of living further exacerbated the mental health conditions of people in West Africa.

Other ways COVID-19 posed threats to people's health in West Africa was a result of the inadequate health facilities and poor health systems that were exposed to by the pandemic. According to them, due to the lack of adequate and modernized health facilities in all the parts of the countries of West Africa, testing and treatment of COVID-19 was limited to fewer facilities. This makes it difficult for mass testing of COVID-19 leaving people with COVID-19 to remain in the various communities further spreading the disease. Lack of medical equipment like oxygen machines and other necessary machines to contain the disease has worsened the risk exposure of both citizens and health professionals to the disease.

> *"I think that COVID-19 for all of us as a sub-region was new and we really didn't know how it was going to come out. It was more of a panic and fear for everybody and of course including Ghana and I'm sure it's the same with all the countries in the sub-region. Especially, when we look at what was happening in Europe and the developed countries as compared to our*

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healthcare systems which are not that strong. So, we were all panicking and we were afraid. You notice that before we could say jack, within the sub-region, each country started reporting cases and then we went into an overdrive where borders were closed and I think even until recently Ghana's borders to its neighbours such as Togo are still closed. So, economic activities basically came to a halt and we had people who were sneaking in from other areas where they believed that their healthcare systems were not strong into countries where they thought they could get better care and in so doing exposing people to the virus.

We also, noticed that the sub-region actually was not prepared because you will realize that our customs officers posted at the border towns were not equipped with the knowledge of prevention. They were not given the proper PPEs and if you look across the sub-region we became more or less like a reactionary in our process since we didn't have already existing emergency measures against a pandemic of such nature. We were running around and we didn't really know what we wanted to do and what we shouldn't do. But I believe that ultimately, the way we were expecting the virus to have an effect on us as individuals and as human beings in the sub-region, I think we didn't see that". – **R1.**

INTEGRI PROCEDAMUS

Movement

The research findings shed light on a landscape profoundly altered by strict restrictions on the movement of people and goods. These containment measures were a firm response to the COVID-

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19 threat, which extended beyond Ghana and reverberated throughout the West African sub-region.

In Ghana, as in many other pandemic-affected cities, the measures included a sweeping lockdown of cities deemed vulnerable to virus spread. This broad restriction prompted the closure of intercity travel and restricted the movement of goods. As part of the coordinated effort to ensure the sustenance of essential lifelines during the health crisis, an exception was made for essential goods and services such as food and medical supplies.

Furthermore, the research findings indicated that the virus had been imported into the region. This perception stemmed from the trail of the first COVID-19 case reported, which indicated an external origin. As a result of this perceived threat, governments throughout the subregion took steps to secure their borders and limit entry into their respective territories. These measures included strict bans on international arrivals in Ghana, for example, as well as in parallel instances throughout the sub-region. In Ghana, the legislative apparatus was mobilized to pass a bill granting the President the authority to impose and enforce restrictions on human mobility. This legislative action was critical in orchestrating a comprehensive and proactive response to the pandemic's unfolding threat, strengthening the country's ability to contain the virus's spread.

The study thus sheds light on the legislative responses that helped to slow the spread of the virus in West Africa. The initiatives included a wide range of measures, from city lockdowns and intercity travel restrictions to international entry bans. These measures combined to form a bulwark against the pandemic's spread. The findings reaffirmed the region's commitment to mobilize resources and implement proactive interventions to protect public health and mitigate COVID-19's devastating impact. These actions demonstrated the adaptability and responsiveness of

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governments throughout the West African sub-region in dealing with a global health crisis and protecting their populations.

"The first one is an economic threat. During the pandemic businesses were halted, hindering a lot of people from getting income. Movements were restricted and lives were also lost". – **R14.**

"Restriction of movements and we had to avoid handshaking or hugging because of COVID-19. Also, economically because we were not able to go about our daily activities due to the lockdown and in addition to the cost of securing some PPEs like face/nose masks, etc. affected the financial life of everybody. Our social and religious activities were threatened" – **R5.**

Other threats that were mentioned ascribed to COVID-19 but were not major like those stated above include food security, limitation on socialization or the way of living, and stigmatization of people. According to them, COVID-19 poses food security threats since access to food by means of purchasing power has reduced. Also, since physical interactions were banned, it has changed the African way of living such as celebrations at funerals, weddings and religious gatherings, handshakes, and hugs of friends and relatives. Again, they mentioned that people who were treated for COVID-19 were stigmatized leading to trauma and other emotional and mental distress. There were health workers relocating to developed countries who needed health persons due to the impact of COVID-19 in their various continents and countries.

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"The first is poverty. We also did not have the health facilities coupled with the resources to fight it. At a point, those who were infected were stigmatized and so stigmatization was something we had to fight" – **R11.**

From the result, it is observed that, the economic, death and health threats of COVID-19 were the most mentioned. All the participants mentioned how COVID-19 posed economic hardship in sub-region. Mortality which is the loss of lives in the sub-region was the second-ranked threat of COVID-19 which was closely followed by morbidity. Even though there were other threats mentioned, these three were the major concerns the pandemic posed in West Africa. This is evident in Figure 4.4 and Table 4.3.

Figure 4. 6 Threats of COVID-19

Source: Researcher's Field Data 2023

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Table 4. 3 Threats of COVID-19

Threats	Frequency of Code	Percentage
Death	22	23%
Economic	34	35%
Food security	4	4%
Morbidity	18	19%
Health Facilities	3	3%
Health System	2	2%
Health Workers	2	2%
Living	1	1%
Mental	2	2%
Movement	5	5%
Socialization	1	1%
Stigmatization	2	2%

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Total	96	100%

Source: Researcher's Field Data 2023

The participant further explained that most of these threats are inseparable from each other. They illustrated that; some threats gave rise to other threats hence one threat has a ripple effect on another. Even though some were able to rank the risks in terms of their severity, others believed that the threats should not be ranked since they are the cause of other threats. For instance, to them, the restriction of movements especially resulted in a halt in economic activities which also can lead to food insecurity. Also, morbidity can lead to an increase in loss of life and migration to countries with the most robust health services.

"Due to the nature of the pandemic, it is difficult to take out because they are interlinked to be objective about the issue at hand. If there is a health threat and people cannot go to work, it affects the economy. It should be treated as very integrative and we can't discuss them separately each of them and what the impact looks like". – **R9.**

"… The lockdown affected businesses and families. It was a very difficult time. I had to pay the staff of all my two businesses over the period even though we were not working. As their boss, I was wondering how they were going to survive…" - **R20.**

Most of the participants who attempted to rank the impact of COVID-19, ranked Economic disruption, loss of lives, and health threats and exposure as the top most threats COVID-19 posed to the West African sub-regions. Some also explained that, even though Ghana was praised to be

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one of the countries with low mortality rates, every single life matters hence the loss of one life is more important to them than the economic hardship.

Out of the total 40 responses, 35% believed that economic hardship was the severest threat COVID-19 posed to West Africa, 29% believed death was the most fatal threat whereas 24% believed that the health of the people, the health system and facilities were the most threatened but the remaining 12% believed that all the threats were interrelated therefore it will be difficult to rank. These responses are represented in Figure 4.7

So, the impact on the economy was more severe than the health itself. With the health and the fear of death in the country and the sub-region cannot be compared to death in other parts of the world like China, the US, or maybe Europe. But in terms of hunger, the economic impact that we experienced was very big as a result of the lockdown which was meant to slow down the spread of the disease which ended up affecting the economy as a whole. Lots of people were laid off from work because the productivity of many industries was affected. Most businesses like restaurants and pubs were affected because of the lockdown measures that were put in place mainly in Accra, Kasoa, Kumasi, and its surroundings. – **R22**.

"The severest will be the loss of life because you cannot place value on human life. The next one is the increase in the cost of living, the moderate is the loss of jobs, the next is the rate at which people were exposed to morbidity in terms of

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sickness and the least would be the worsening of the living standards (dependency rate) which is as a result of the increase in the cost of living cutting down the rate of traveling and visitation to relatives. This can almost be seen across the entire West African sub-regions" – **R6.**

Figure 4. 7 - Ranking of COVID-19 Threats in West Africa

Source: Researcher's Field Data 2023

5.1.2 Management Strategies Designed to Manage the Pandemic

With the threats that COVID-19 posed to West Africa, governments were forced to act swiftly to limit the spread and mitigate the impact of the pandemic on their people and economies. COVID-19 as demonstrated from findings and previous studies has impacted not only individuals but also the national economy, many governments took drastic decisions to preserve lives, health and the economies of their nations. The participants indicated that West African countries took cues from Europe, Asia, America and other affected continents following the mortality rates from the

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pandemic and the vulnerability of their health systems to put in preventive measures to ensure a minimal spread of the disease in the sub-region. According to the participants, West African countries cannot boast of quality and enhanced health infrastructure and systems therefore they had to step up with measures to reduce the spread of the disease when they first reported their initial cases. The participants mentioned many strategies that were taken by individual governments to avert the impact of the pandemic in their respective countries. These measures are detailed below.

Border Closure & Ban on Foreign Travels

According to the participants, one of the first steps taken towards the management of the pandemic to alleviate its threats in the subregion is to close the land, sea, and air borders of the various countries to foreign entrants. According to them, COVID-19 was believed to have been imported since it was believed that, it first started in China and spread through Europe hence closure of borders to people and goods from abroad would limit the importation of the disease. According to them, governments in the sub-region closed their borders to other nationals so as to contain the disease. This they said was believed to enable the various countries to trace the already infected people, isolate them, and give them maximum care. According to them, there were no vaccines at the initial stage and no eminent cure for COVID-19 in the early days of the breakout, therefore every nation in West Africa wanted to isolate the affected people to save the entire population from further infections. According to the responses, even though the closure of borders led to the restriction of the movement of humans, goods, and services, and other economic hardships, the various governments believed that it was in the common and greater interest of their people. No one was permitted to come into the country unless you are a citizen and even citizens were quarantined for about two weeks before being allowed to mingle with their families and society.

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Public Health Education and Awareness Creation

Another immediate strategy identified to be adopted in most West African countries was the education and awareness creation of COVID-19, its risk factors and safety precautions that ought to be taken. According to the participants, Ghana for instance was heavy on public education which first took the President to address the nation even before the first case was recorded in the country and the likelihood of it in Ghana since some West African countries have had their initial cases. The President again officially announced the first two cases recorded and the severity of the disease on human lives hence the other critical measures taken to contain the spread. Subsequently, the President gives regular briefings on infections, critical cases treated patients and the number of deaths and more importantly encourages the citizens on personal hygiene practices, dieting to boost the immune system and the first aid measures to be given to infected people.

The participants also indicated that the public health education did not end at the level of the President, but was further decentralized to ensure that every citizen is well sensitized to help at least reduce the spread of the disease. They mentioned that the Ministry of Information organized almost daily press briefings to further explain the highlights of the address by the President, hosts the Ministry of Health, Ghana Health Services and other Health and Medical bodies to educate the populace on the disease and how to manage the situation at the local levels.

Another layer of education identified by the participants for awareness creation was the media publications and briefings. According to them the traditional media, print media, electronic media, and social media were potent forces used in educating the public and creating awareness of COVID-19 in the sub-region. Radio and Television stations were said to have played jingles and run advertisements to educate the public on the severity of the pandemic and rehash the safety protocols instituted by the government and other international health authorities like the WHO to

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prevent the spread of the disease. Even though they acknowledged, inaccurate, incomplete, and panic reportage in some of the media releases, especially the social media, they also acknowledged how important the media was especially social media in amplifying official and accurate reports on the pandemic which saw individuals posting GHS, MoH and Presidential highlights on status and other social media handles.

Churches, other religious organizations, CSOs, and NGOs were also involved in public education ensuring that the followers and the entire populace received the necessary, accurate and relevant information on the COVID-19 pandemic and the measures put in place to reduce the spread. These responses show that public health education and awareness creation served as one of the major strategies used to manage the threats posed by COVID-19.

> *"… Updates were given from time to time, the numbers and how people were doing and where the heavy load cases were apparent for everybody to see. And so there were seats from situation representatives as were given from the GHS and you could see the data in real-time at a certain point".* – **R1**

Social Distancing, Mandatory Wearing of Mask & Washing of Hands.

According to the participants, at every social or group meeting attendees were forced to observe the one-meter mandatory distance from the next person in order to minimize physical interactions and reduce the risk of transmission. This was observed in banks, public transport, offices, churches mosques and other public places. Market centres were also forced to ensure that people are not overly congested since that is the main mode of transmission of the disease. Also, wearing of facemasks was made compulsory and people were denied access to most public places without

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properly wearing masks. They noted again that, the security force was tasked to arrest and prosecute people without masks in public places and any gathering that will not observe the one-meter distance during any gathering. This they said has forced some public events to be held in sessions or on a shift basis to ensure compliance with these protocols.

Another preventive strategy was the constant washing of hands with soap and running water and the use of alcohol base sanitizer which has become popular among the people. The participants mentioned that, even though these measures could not cure COVID-19, they helped reduce the rate of infections in West Africa.

Lockdown and Contact Tracing

According to the participants, one of the most drastic measures taken was to lock down parts of some cities that were considered to be COVID-19 hotspots. For instance, in Ghana, Accra and some parts of Kumasi went into partial lockdown where people were not allowed to move beyond their communities. This according to the responses was done to manage, avoid or limit the further spreading of the disease as the existing cases were being managed since there was not an eminent cure for the disease at the time. According to them, even though there was a public outcry against the lockdown, it has become necessary considering the rapid increase in the cases and few COVID-19-related deaths that have been recorded. The participants indicated that one of the reasons for the lockdown was to help in effective contact tracing. According to the participants contact tracing to identify those who might have possibly come into contact with the infected people or places was a major strategy adopted by the various West African countries in order to manage the spread of COVID-19. With that contact tracing, they explain that anyone who might have a contacted an infected person or place is isolated and tested when positive isolated from society so that they will not further spread the virus. However, with the busy nature of the cities, contact tracing was

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becoming difficult and ineffective since an infected person could move to another city to further spread the disease. According to them, the lockdown, therefore has come to help to contain the spread in locations with high and faster infections so that the disease will not be exported to other cities in large numbers. According to them, most West African countries have good knowledge and expertise in contact tracing as they used it in a more recent Ebola virus epidemic that hit the sub-region less than a decade ago. This to them made it easier for implementation to help manage COVID-19 which according to them was very effective in reducing the number of infections.

> *"…At the national level, the president brought in the lockdown to manage and control the spread of the virus. The lockdown also raised the awareness of people to know that this is what was happening. Again, most of the cases were managed with nose masks and people were also encouraged to work on their diet…"* - **R11.**

Ban on Public and Social Gathering

According to the responses, another drastic step taken by governments to manage the disease apart from the lockdown was the outright ban on social or public gatherings. All social public gatherings like religious meetings, schools, football matches, and musical concerts were prohibited. Beaches, eat-in services are restaurants and bars, funerals, weddings, naming ceremonies, parties were restricted from happening. This was to reduce the interactions of people so that the transmission of the disease would be at the barest minimum. Even though has its own repercussions on the way of life, some of these events like church services, school sessions and some musical concerts have resorted to virtual meetings.

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Quarantine, Isolation and Treatment

Apart from the prevention measures which were mostly helpful to those who had not yet contracted the disease, the participants identified some proactive measures to help save the lives of those who were already infected. As mentioned earlier, those who have travelled back into the country after the border closure to foreigners were made to do a compulsory fourteen (14) days quarantine to ensure that, they were free from the disease before they were allowed to reintegrate into the larger society. According to them, travellers who entered the country are tested are either quarantined at designated hotels or are allowed to self-quarantine for 14 days and are retested and discharged if they still test negative for the virus. Those who however tested positive either on the day of arrival, during or after the 14 days of quarantine are isolated for treatment. The governments have created isolation centres to keep COVID-19 patients receiving special attention. These isolation centres are designated health facilities restricted to only COVID-19 cases and those with critical conditions were sent to the intensive care unit (ICU) for maximum attention. According to them, these isolation centres prevent COVID-19 patients not to mingle with other patients and eventually transmitting the virus to them.

According to the responses even though there was no explicit cure or vaccine for COVID-19 from the onset, medical practitioners used existing drugs to manage and treat the symptoms of COVID-19 which yielded some results and some rate of recovery in the sub-regions. According to them, patients showed signs of malaria, cold, high temperature, loss of appetite and the like so the professionals helped in different ways to relieve them of these symptoms and some later recovered fully from the disease even though some deaths were recorded in the subregion.

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"So, when you come to the hospitals, we were able to come up with an isolation unit whereby COVID-19 identified patients were being taken to for treatment to avoid spreading to other patients in the ward or facility. PPEs were made available to health workers to protect themselves because when health workers contract the disease it will be difficult for them to attend to the patients". – **R14.**

There was isolation, health workers had to always be in their PPEs (Personal Protective Equipment) even if they wore their scrubs. In the case of Ghana, when you get to GIDC, which is the infectious disease center. The structure was built to handle patients who have contracted infectious diseases. So the design of the structure itself helps to manage the disease. The structure has different entry and exit points. There is no way one can use the entry point for exit and vice versa. When a patient comes in, at the triage area, a nurse will have to confirm if the person has COVID-19 and the stage of the infection. COVID patients can either be in the mild, moderate or severe stage of infection. In the case of the mild, the patients are made to go home to quarantine and treat themselves. But for severe cases, the patient will have to be hospitalized. When I person is diagnosed to be at the moderate stage, it is decided whether to admit or be allowed to go home.

"Nurses who go in to treat patients will have to drop their PPEs at the back entrance. At the exit, the nurse is required to wash the hands and other parts of

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their bodies with 0.5 bleach solution. Again, there was regular disinfection exercise. Patients were given Vitamin C and other drugs to boost their immune system…" – **R11.**

Vaccinations

The participants also indicated that West African countries eagerly waited for the vaccine for COVID-19 hence the announcement of the vaccine for the disease was received with joy. Some countries in West Africa including Ghana even signed treaties with WHO even before the vaccine was found that they would embrace any certified vaccine that would cure or prevent infection of COVID-19. Though many people complained about the efficacy of the vaccine and how its approval by the Food and Drugs Authority (FDA) was done, yet many still accepted it as a panacea to the COVID-19 canker. According to the participants, one of the reasons why people embraced the vaccine was that even most of the other opposition political party leaders and religious leaders were taking it hence their followers got the confidence to go for their jabs.

It was also indicated by the participants that the government received some free amount of the vaccine from donors yet spent some amount of money to procure more vaccine to ensure that a large of people got vaccinated to protect them from either contracting or spreading of the virus.

"… Again, the vaccination exercise was also part of the strategies". – **R4**

Even though there were few other measures taken like remote working and virtual meetings, they came about as a result of these drastic detailed from the responses. The participants added that, even though the government led the initiatives, the private sector and, international organizations,

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CSOs, and other NGOs offered support in managing the threats posed by COVID-19. Some of these views expressed by the participants are illustrated with their direct quotations below.

> *"…Ghana was quite robust in the way we managed COVID-19. If you will remember, we needed to close or lockdown some parts of Kumasi and Accra because we perceived that there were certain areas where the case look was quite high and in order to contain it, we needed to go into some kind of lockdown. Schools, churches, mosques, and even markets were closed. So, in closing these areas down that was one of the ways we chose to manage the pandemic. We closed our borders. We decided that even travelling was restricted and of course, there were some protocols that were put in place everywhere, hand washing became synonymous with life, we were not supposed to shake hands and of course, people were told that they had to stay indoors as much as possible. And people began to work from home and if you go to the hospitals, it was more or less suspected cases PPEs were made available to ensure that transmission on our health workers is also reduced. And then, protocols for management were developed by the Ghana Health Service (GHS) and these protocols were revised from time to time as and when we knew more about the virus. And so, if you look at us as Ghana, our way of managing the pandemic was very good..."* – **R1**

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> *"… One of the strategies included the checks at the airport to screen those who were leaving and coming into the country. Coupled with the*

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communication strategies. I will say that the other countries within the sub-region were learning from us. The messages from the president were quite encouraging because there were other countries in the region that were not receiving any messages from their president…" - **R4**

The lockdown, vaccines, protocols like hand washing, use of sanitizers, and avoiding crowded places. The emergency legislation and then place such as beaches, bar, pubs and hostels were closed. Travels were stopped at a point including the closure of the borders… - **R20**

"There were a number of initiatives there were put in place. One is the development of treatment centres to be able to treat patients faster so that people do not lose their lives. There was extensive surveillance, contact tracing and testing. At some point in the response, Ghana happened to be one of the African countries with a higher number of tests to population ratio. The Some government took the initiative to provide some social support to the vulnerable population. Providing free water, subsidized electricity, and insurance for health workers to ensure that they feel safe at work. There was also the provision of needed medical and protective equipment including the PPEs (Personal Protective Equipment). There were also fumigations around markets to make sure. We have not measured to see how impactful those initiatives

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were but they all boosted public confidence in the public that at least, the government was taking some positive steps to address the pandemic.

Aside from the government, the private sector also did well. There was a private sector initiative to even develop a 100-bed facility in the case of Ghana and this was very timely. The industry was also involved as some produced PPEs when the international market was inaccessible to the country.

There was also WHO available to provide some directives and so governments had some reference points. There was guidance on risk communication and how to do risk communication was supported by UNICEF (United Nations International Children Emergency Fund) and many other development partners. There were guidelines on surveillance, testing and there was also good internal capacity to carry out some of these initiatives which were quite helpful." – **R39.**

5.1.3 Differences and Similarities in COVID-19 Management Strategies in West African Countries

The participants were asked whether or not the management strategies were uniform across the sub-region or whether Anglophone countries used a different approach as compared to Francophone countries. Most of the participants believed that the strategies adopted to manage the

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impact and threats of COVID-19 were uniform across the sub-region. According to them, almost every country has closed its borders, engaged in intensive public health education, created so much awareness of the pandemic in their various countries, and locked down parts of the countries. According to them most West African countries isolated infected people to give them special care to reduce the symptoms, banned social gatherings, mandated the wearing of masks, and encouraged more hygienic living. Most importantly, the adoption of COVID-19 management strategies was almost unanimous by most of the states in the West Africa sub-region. The responses show that most of the West African countries just like many of the remaining countries in the world followed the guidelines given by the WHO which makes them use a similar approach to manage the pandemic. The participants however indicated that even though, they adopted similar approaches, there were different levels and intensities of implementation. For instance, the lockdown in some countries took more cities and more days than other countries within the sub-region.

Furthermore, common reasons attributable to the similar approaches adopted by West African countries in managing the pandemic included the fact all the countries in the sub-region just like in the world were fighting a common enemy (COVID-19) hence if a strategy works in one, it is highly probable it will work in other countries since they have similar physical, geographical and climatic conditions. Also, most West African countries through ECOWAS easily share knowledge and solidarity with other member states therefore, in critical times like this, they are very much open to ideas and solutions sharing which is why they believe that the strategies used are similar across the sub-region.

The participants also explained that the disparities that may exist among the countries in the implementation of the strategies to manage COVID-19 can rather be attributed to the resources

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available in those countries and not the differences in their language background or colonialism. Evidence of these findings can be seen from the direct quotation of the participant shown below.

> *"There were a lot of similarities. Most countries require that before you come there you should have a negative PCR test done within a short period of 48 to 72 hours and then when you get in there, you are tested to ensure that you are indeed negative. They did have in place measures to quarantine those who tested positive. I remember going to Nigeria during that time and it was mandatory that you carry a negative PCR test with you and when you get there you are swapped to check to make sure that you are free and when you are coming back, the same thing is done. So those were similarities that you could find in every country. Temperatures were being taken almost everywhere and you will notice that the trend of ensuring that people carry negative PCR tests was run through everywhere. Unfortunately, it was only at those recognized proper ports and especially at the airports. You know within the sub-regions our borders are very porous, so for those places, it was quite difficult being able to ensure that at least people have these negative PCR tests before they can cross from one country to another. But with those at our airports and so forth it was very similar in terms of the way everybody was interested in ensuring that the protocols of you coming in with a negative PCR test like that…*
>
> *Maybe, the only difference was the fact that at a point in time, we were using more of cloth facemasks which when we ran out of the actual facemasks and*

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you assess the effectiveness of cloth masks as against facemasks with just the data that is available, you will realize that the data doesn't favour the using of cloth masks…" - **R1**

"There were similarities. Within that same period, I travelled to Nigeria and saw that they were doing similar things like us but their restrictions were not like ours. But as I said, we were on top as a country. The difference may be the way individual countries implemented the protocols. The reason is that we were all fighting a common virus. In effect, we were learning from each other. Again, countries within the region have the same climate and so countries were copying what their counterparts were doing. This gave room for some practicality in terms of local relevance. We had to rely on what we were improvising within to fight the pandemic". – **R4**

"It has to do with the climates in the various countries. If Cote d'Ivoire, Togo, and Burkina Faso were in the same temperate zone, you will realize that the effect of the disease will be almost the same except to which extent the respective countries would handle the disease in their countries. So, in its observation, the disease wasn't as severe in countries with higher temperatures (inability of the virus to survive) as those in the cold temperature zones like Italy, China, the UK, etc. The differences were not that much

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because we were all following the same WHO protocols. The impact on both the Francophone and Anglophone was almost the same". – **R24**

"Although different countries utilized diverse management strategies, at the macro level, trying to prevent the importation of the virus into countries, strategies of slowing down the virus and death rates by strengthening the health systems as well as means through which all these things translate into keeping the wheels of the economies running. Also, different countries implemented varied degrees of restriction on people's movements mostly in the hotspot regions and population size differs from how various countries were badly impacted. In a meeting with my colleagues from Togo, their entries were different considerations for allowing people in and out while Ghana was requiring people to have PCR tests and they were like you can't enter at all and this is because those are the decisions made by the ministries but if look at the international health regulation perspectives, it is not the most effective way to combat the pandemics but it is about establishing mechanisms making the people more resilient and responds positively to these effects". – **R36.**

5.1.4 Actors Involved in the Management of COVID-19

The results also show that the key actors in managing the pandemic are identical across the sub-region. According to them, due to the nature of threats COVID-19 posed to almost every aspect of human existence and survival, it had received the maximum national attention it required. The responses show that, in almost if not all West African countries, there was a strong involvement

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of the governments in managing the pandemic in their various countries. Most Presidents and Heads of State led the path, Ministries, and agencies responsible for health gave their full support, and international organizations like the World Bank, WHO, and UNDP in the various countries offered support. According to the participants, media houses, and traditional and religious leaders got involved in different ways to manage the pandemic. This once again showed that the actors involved in the management of the pandemic were similar even though there may be different forms or structures of government applicable in every nation.

The similarities of the actors are the Ministry of Health, Ghana Health Service, Food and Drugs Authority, and the media. The management was very good in terms of the media because there was the availability of information. From 2019, information in Nigeria was less until Ghana recorded its first case. This means that we are neighbours and whatever happens in this country will surely affect the neighbouring countries and vice versa such as the closing of the border, i.e. restricting the movements of individuals… - **R6.**

"I mean, different countries did varied things based on their structures and the approach that was put in place was not entirely different. Many countries closed their borders and restricted movements (non-pharmaceutical measures), hence, in terms of the actors the security agencies were involved. Medical people were involved in the curbing of the virus through surveillance (public health), identification, and testing which is clinical in the lab and all those treating the patients. The difference among the actors includes the

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decision makers and maybe the only line of difference is going to be the density of political actors who were involved. For instance, in Ghana, they decided to involve our chiefs, and religious leaders based on the set of contributions that they were making as compared to the other countries like the Rwandans and Nigeria with exceptions of their security apparatus and all their medical groups involved. Hence, what I will say is that non-traditional institutions were involved". – **R10.**

"I cannot think of a difference. Because the presidents were involved, the Ministry of Finance will come in because of resource deployment and most importantly the ministry in charge of health. Civil society, the media and other agencies that matter in the process". – **R20**

5.2 Discussion of Findings

Threats Posed by the Pandemic in West Africa

Economic Threats

From the responses, COVID-19 has disrupted the basics of living in many ways. The results showed that there were perceived major and minor threats or dangers that arose as a result of COVID-19 that hit the world. The results perceived economic devastation of West Africa from the impacts of COVID-19 such as a rise in unemployment, inflation, low-income levels, low turnover of businesses, and complete shutdown of business operations. Some businesses that mainly

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engaged in international trade had to fold up because most West African countries closed all their borders to their international counterparts since they believed most European, Asian, American and other foreign countries were at high risk following the number of cases and deaths that have been reported. These findings are similar to the study conducted by Asante and Mills (2020) where the partial lockdown in some cities has reduced the supply of some food items amidst their increased demand due to panic buying which resulted in artificial inflation in the price of some goods and services in Ghana. The closure of the border as stated by Asante and Mills (2020) led to a limited supply of such items which can otherwise not be available on the market unless by importation. This has international implications for the prospects and benefits of international trade among countries. One of the tenets of international trade is the theory of comparative advantage which works for the common good of the global market (Daniels et al, 2014; Vijayasri, 2013). The comparative advantage of international postulates that it is more economical and efficient for countries to focus their resources on producing what they can produce more efficiently and trade with other countries the goods that cost them more to produce. According to the theory, this will make all goods comparatively cheaper since the cost of production has been reduced to its barest minimum (Daniels et al, 2014). This then means that, with the closure of borders, some goods that otherwise would have sold at cheaper prices on the market saw some unusual inflation since the cost of production would also increase.

Seydou (2021) earlier observed that on average 28% of people in West Africa suffered job losses as a result of the impact of the COVID-19 pandemic. This job or income loss was more devasting in Senegal which stood at about 47% which explains the finding of increased poverty and hardship as threats that the pandemic posed in the sub-region.

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The economic hardship threats of COVID-19 have confirmed previous studies on how COVID-19 has disrupted larger economies and the global economies as a whole. Studies do not limit the economic impact of the pandemic to West Africa but have proven how the entire global economy was affected or disrupted by COVID-19. Maital and Barzani (2020) proposed three ways that the pandemic could affect the global economy from both the supply and demand sides. According to them, COVID-19 could affect production which affects supply, it can also affect the entire supply chain or disrupt the market which again reduces supply and then and reduces the purchasing power of distributors and consumers hence reducing supply. When the entire supply chain is affected, it can also affect the overall GDP since production will drop. According to them, this played out in the case of China when the closure of factories was one of the initial responses to COVID-19 which caused a shortage of supply due to lack of production. This was believed to have caused a reduction in output increasing the price of goods (Maital & Barzani 2020). This they conclude to have had a negative impact on the global economy. This shows that West Africa mirrors the economic hardship of COVID-19 developed world. This hardship was exacerbated by the vulnerability of West Africa which is highly dependent on imports hence once supply is disrupted it will lead to a shortage of imported products and services affecting inflation in the sub-region. Also, manufacturers who import some raw materials and equipment from other parts of the world will be affected since their raw materials are in not short supply. The supply chain from imports, therefore, has a dying consequence on the West African countries.

Another evidence of the economic disruption of COVID-19 was from the study of Mazur et al. (2021) on how the stock market crashed within four days in March 2020 citing the DOW Jones Industrial Average. They believed that this unprecedented fall of this stock index of about 26% was caused by the government's response to COVID-19 when it was announced in March as a

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global public health emergency in March 2020. The study however focused on the S&P 500 stock index which showed a significant change in revenue in the economy. Some factors that affected the economy from the study included restrictions imposed such as quarantine which has led to lower consumption and a plunge in revenue. On the other hand, some industries saw astronomical growth in revenue during the stock market crash especially the pharmaceuticals and technology companies since their services were in high demand at the time (Mazur et al., 2021). Mazur et al., (2021) found out the greatest losers are the stocks in crude petroleum, real estate, hospitality, and entertainment. These industries declined in their market capitalization by about 70%. Pharmaceuticals, Technology, food, and natural gas increased their monthly stock return by 20% (Mazur et al., 2021).

This is a confirmation of the findings on how COVID-19 affected the West African economy. The reason for this is that most countries in the sub-region rely heavily on the incomes from the exportation of products in the sectors that were negatively affected by COVID-19 such as crude petroleum products, hospitality, and entertainment whereas comparatively lower income is received from the Pharmaceuticals, software and technology. A classic example is that all the COVID-19 vaccines that have been approved and used came outside West Africa hence any monetary benefit from the discovery and manufacturing of the vaccines will elude them but the countries will then have to spend their limited resources to procure the vaccines. One can argue that West Africa is one of the sub-regions at the receiving of the economic hardship of COVID-19 due to the nature and structure of their economy.

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The findings corroborate earlier studies on COVID-19 has had a tremendous influence on the Ghanaian labour sector, notably in businesses such as tourism, hospitality, education, and importing (Mensah & Aboagye, 2023).

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Consistent with literature, COVID-19 has had a tremendous influence on the Ghanaian labour sector, notably in businesses such as tourism, hospitality, education, and importing. The restriction of international travel borders has had a profound impact on Ghana's tourist and hospitality industries. This has resulted in a huge increase in industrial unemployment (Dayour et al., 2020).

The findings further showed that the shutdown of schools has also had a substantial influence on Ghana's labour market. Private schools, in particular, have been heavily impacted by the epidemic, with many having to lay off employees owing to redundancies. This has resulted in financial hardship for both the impacted employees and their families. This is not only peculiar to Ghana, but studies show that schools laid off their staff as a result of COVID-19 due to the closure of schools to encourage social distancing (Lavado et al., 2022; Lucero-Prisno et al., 2020).

Furthermore, company owners and dealers that rely heavily on imports have been impacted by the epidemic. Border closures and supply chain disruptions have made it impossible for them to reach the worldwide market for their commodities, resulting in a considerable loss in income. This was the case in a similar study in Nigeria where the liquidity and profitability of businesses dropped since they could not import the raw materials required to produce and run their firms (Amnim et al., 2021).

The findings of the study give important insights into the complex ways in which the COVID-19 outbreak altered the pricing dynamics of products and services in West Africa. Border closures, supply-demand mismatches, and global supply chain disruptions all led to inflationary pressures and economic difficulties. These findings serve as a reminder of the need for diverse and resilient economies capable of navigating unexpected crises with higher resilience. Coulibaly (2022) made similar findings on the COVID-19 cases and world food prices that were directly related to the

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consumer price index and recommended government policies and regional cooperations to address the economic hardship of the pandemic.

The findings of the study highlight the considerable influence of the COVID-19 epidemic on the pricing dynamics of products and services in West Africa, notably in Ghana. According to the study, the pandemic's interruption of economic operations, along with border closures to contain the disease, had far-reaching implications on the supply and demand dynamics of foreign commodities and products. Ghana and other sub-regional nations rely significantly on imported commodities and products, both raw materials and completed items. Border closures hampered the entry of these commodities, resulting in a situation in which demand began to surpass supply. This surplus demand led to a significant increase in the pricing of imported products and services. This was not peculiar to West Africa or Ghana but a global phenomenon where the closure of the borders posed food security threats as a result of inflation making access to quality food high in Asia (Vargas-Hernández, 2023)

Furthermore, global supply chain interruptions caused by absolute lockdowns in several West African exporting nations aggravated the problem. With the global interdependence of economies, the market's limited supply was further constricted, resulting in an even more noticeable spike in prices. According to the findings, the break in the global supply chain contributed to supply shortages and consequent price increases. The impacts of these price increases were not isolated but had far-reaching consequences for the entire cost of living. Individuals' and families' purchasing power declined as prices rose, causing economic hardship.

Many people found themselves unable to satisfy their fundamental demands due to decreasing incomes and the necessity to spend additional cash to pay increased expenditures. According to the findings, "price increases have resulted in a high cost of living," which can be directly

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connected to lower buying power owing to lower salaries and greater expenditure. Evident from other literature was the hardship in other parts of the world due to the high cost of living in other parts of the world like the United States (Li & Mutchler, 2021). The International Monetary Fund (2022) calls for the addressing of inflation and the level of income of people since it affected the quality and food security since the income has been affected by the pandemic.

Finally, the COVID-19-induced price increases and accompanying economic issues highlight the fragility of nations that rely significantly on imports and are linked by global trade networks. The findings provided light on the intricate network of factors that contributed to individual and family economic challenges in West Africa. The research elucidates the multiple levels of impact that drove the observed trends, from supply-demand mismatches to global supply chain disruptions.

The findings accentuate the two-fold economic effect of the COVID-19 epidemic on West African governments, with a special focus on Ghana. The epidemic caused a complicated interplay of increased government spending and decreased income mobilization, producing a difficult economic situation for these countries. One aspect of the economic impact was increased government spending as a result of the necessity to handle the health problem. Governments were forced to allocate significant funds to purchase critical medical supplies such as Personal Protective Equipment (PPE), expand and renovate health facilities, and provide allowances for frontline workers. In addition, large efforts were made in public education and awareness initiatives to combat the virus's spread. Burger and Calitz (2021) observed the challenges COVID-19 posed to the economy of South Africa. According to them, the pandemic has aggravated the countries' fiscal woes and had a negative impact on their budget. They, therefore, established the requisite adjustment that ought to be made in government spending and revenue mobilization to breach the fiscal gap.

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The findings further elaborated the required investments were designed to lessen the pandemic's impact on public health and protect people's well-being. The increased government spending on COVID-19-related initiatives, on the other hand, was met by a decrease in revenue mobilization, creating the second component of the economic consequence. The pandemic-induced economic slowdown curtailed economic activity, which resulted in lower government income. The adoption of tax breaks and lower business turnovers aided this reduction. Similar to these findings is Bresser-Pereira (2020) who confirmed government spending on public health, and supporting individuals and businesses has bedevilled different economies.

Furthermore, the disruption in international inflows and foreign direct investments (FDI) generated a revenue imbalance for regional governments. Because of the confluence of these causes, governments were confronted with the task of preserving fiscal stability while coping with higher spending and decreased income.

Ghana, like other West African countries, faced the effects of this double-edged economic dilemma. Earlier studies measured the impact of COVID-19 on FDI and concluded that the pandemic had a negative impact on FDIs in emerging economies even though this is insignificant in countries that receive high foreign investment, but every significant the low and medium recipients (Koçak et al., 2022).

These findings highlight the difficult balance that governments must make between providing vital health interventions and maintaining budgetary health. The simultaneous increase in spending and decrease in revenue streams put significant strain on these countries' economies. According to the study, Ghana, like its regional peers, was not immune to this complicated economic predicament.

Mortality

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The findings also highlight the devastating impact of the COVID-19 epidemic on public health in West Africa, with a special focus on Ghana. According to the findings, the pandemic posed major hazards to human lives throughout the region, resulting in a variety of direct and indirect repercussions that resulted in loss of life. The participants' remarks demonstrate the blunt truth of COVID-19's influence on mortality. The virus caused confirmed deaths in practically every nation in West Africa, including Ghana, during the pandemic. This underscores the virus's global menace and its capacity to infiltrate even the most distant parts of the continent. Many studies and reports show the extent to which the pandemic has claimed lives especially in Europe, America, and Asia (Weinberger et al, 2020; Baud et al., 2020).

The details from the findings, however, go beyond the immediate consequences of COVID-19-related mortality. They stressed that even if not all fatalities were due to the virus, the pandemic's effect may still be seen in such cases. This is an important distinction to make since the pandemic's impacts went beyond the virus itself. Unintended effects resulted from the shift in focus and reallocation of resources to COVID-19 therapy and containment. The focus was shifted, which had a negative impact on other medically necessary problems. Some people lost their lives as a result of the difficulties they had receiving essential medical care because of pre-existing conditions or chronic diseases.

The findings also draw attention to a troubling phenomenon: people's reluctance to seek medical attention for diseases unrelated to COVID was caused by their fear of contracting COVID-19 at the health centres. This fear-driven avoidance of going to medical facilities out of concern about contracting the virus delayed the early detection and treatment of a variety of illnesses, which eventually led to avoidable deaths (Seytre et al., 2021). Lee et al. (2023) confirmed in their study

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that there were indirect deaths associated with COVID-19 in the United States and called for further studies on it to give a wider scope to the phenomenon.

Collectively, the research results show that the COVID-19 pandemic poses a complex threat to human life. In addition to the virus itself, pandemic response techniques' unintended side effects can pose a concern. The fear factor combined with the diversion of resources and attention made it difficult to sustain general public health. These findings serve as a sobering reminder that a health crisis affects all facets of healthcare, has an unfavourable mortality rate, and goes well beyond the virus's local area of influence.

Morbidity

The findings shed light on the multidimensional impact on people's well-being, healthcare systems, and more general social factors, providing a thorough picture of the substantial health hazards posed by the COVID-19 epidemic in West Africa. These revelations highlight the intricate relationship between COVID-19 and many health-related issues, ranging from immediate physical effects to systemic vulnerabilities and mental health consequences. The data amply demonstrate the wide spectrum of health risks that the pandemic in the area has caused. It has been demonstrated that COVID-19 has exacerbated pre-existing medical disorders in infected people, particularly in those with underlying health conditions such as diabetes, hypertension, and HIV/AIDS. With cases ranging from moderate to severe situations, the intensity of infections varied, illuminating the pandemic's different effects on health outcomes. The findings are not different from existing literature that demonstrated the burdens COVID-19 brought to human health. Some studies further acknowledged that some of these harmful health impacts are not directly COVID-19 but other existing health conditions that were worsened by the pandemic (Douglas et al., 2020; Talevi et al., 2020; Udoakang et al., 2023).

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Additionally, the findings indicated how severely the pandemic affected mental health. Even before the virus made it to the sub-region, the dread of COVID-19, which was first sparked by its worldwide effects, was widespread in West African society. As people struggled with worries for their own lives and that of their families' welfare, this dread led to mental health issues including despair, anxiety, stress, and emotional instability. These psychological responsibilities were made much more severe by the loss of jobs, enterprises, and standard of living. Semo and Frissa (2020) in their study alluded to the separation from families, the direct impact of COVID-19, and the loss of jobs and income as the potential cause of mental health. This is then deduced from their data from previous outbreaks in Africa like Ebola.

The study also highlights the weaknesses in West Africa's healthcare system. Widespread COVID-19 testing and treatment were hampered by the lack of access to modern healthcare facilities. The poor supply of medical supplies, including oxygen machines, highlighted how unprepared the health services were to deal with the pandemic. The availability of individuals to timely and efficient treatment was hampered by this resource shortage, which also put healthcare workers in increased danger. Studies have shown that one reason for lower cases in Africa was the inadequate COVID testing due to the lack of equipment, technologies, and poor healthcare facilities which poses some risk in keeping possible COVID-19 patients among the healthy population (Rutayisire et al., 2020).

It is impossible to overstate the pandemic's wider social effects on healthcare systems. Inadvertently, the focus on COVID-19 reactions diverted attention and resources away from other health issues, which exacerbated morbidity. These findings point to a complicated network of interrelated health issues that have been made worse by the disruptions caused by the epidemic. The research results paint a thorough and nuanced picture of the health risks posed by the COVID-

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19 outbreak in West Africa. The pandemic's effects on health are multifaceted, ranging from aggravating pre-existing physical illnesses to escalating mental health issues and revealing systemic vulnerabilities. Evident from the literature is the burden COVID-19 laid on the global health system. The pandemic has had a significant impact on worldwide health systems, which includes an unanticipated interruption in how other health care is executed (Schneider et al., 2021). According to them, the pandemic has the tendency to substantially upset Nigeria's ailing healthcare system. As a result, an efficient mix of nonpharmaceutical preventative interventions must be ramped up to avoid further eroding the existing health system.

These findings highlight the need for comprehensive and robust healthcare systems that can survive pandemic shocks while preserving the general well-being of people and communities. The study's findings also highlight the significance of comprehensive public health policies that cover mental health, economic resilience, and healthcare infrastructure development in addition to medical interventions.

Strategies Adopted to Reduce the Threats Posed by the Pandemic in West Africa

The Strategic Management Theory which is the foundation of this study alludes to how organizations are strategically managed through crises when organizational environments undergo cataclysmic upheavals. Ghana and West African sub-regions took practical steps to manage this pandemic. From the findings even though some of these steps were harsh and detrimental, human life and public health were the ultimate concerns of these steps. These steps vary in degrees in different parts of the sub-region.

The study's findings shed light on the diverse strategies used by West African countries to combat the COVID-19 outbreak. The findings give a thorough assessment of the immediate and long-term

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steps governments took to protect public health, prevent additional transmission, and assure citizens' general well-being. These initiatives highlight the complicated and dynamic aspect of reacting to a global health catastrophe while emphasizing population safety. At the start of the pandemic, rapid border closure emerged as a vital approach for limiting the importation and spread of COVID-19. This strategy intended to prevent viral importation from countries where cases had been documented. According to the findings, governments in the region felt that closing borders would assist in identifying and isolating affected persons, hence limiting disease transmission within their boundaries. Regardless of the economic and social consequences of border closures, the common and larger objective of preserving public health took precedence. The congruence between the research findings and the larger literature emphasizes the worldwide breadth of the COVID-19 pandemic response. Border closures were a popular approach used by governments throughout West Africa and abroad to combat the virus' spread. These findings emphasize nations' interdependence in the face of a common health catastrophe, as well as the collective desire to preserve lives and public health despite the various hurdles faced by border closures (Adekunle et al., 2020; Yaya et al., 2020; Seidu, 2020).

Along with the border restrictions, aggressive public education and awareness initiatives were quickly implemented. According to the findings, governments understood the significance of sharing accurate information on COVID-19, its risk factors, and safety precautions. Ghana, for example, took a proactive strategy that included presidential addresses and weekly briefings. These communications not only gave infection and case updates, but also practical advice on hygiene, diet, and first aid procedures. The goal of proper information transmission was to enable individuals to defend themselves and others (Hange et al., 2022).

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Physical separation has emerged as another critical technique to halt the virus's transmission. The study asserted that meetings were restricted, and individuals were forced to keep a one-meter spacing in different public locations. This method, which was expanded to banks, public transportation, religious institutions, and marketplaces, attempted to reduce physical encounters and mitigate transmission hazards (Sun & Zhai, 2020). To avoid future illness transmission, the wearing of facemasks was mandated, as were limits on congested marketplaces.

The study also emphasized the implementation of stricter measures, such as partial lockdowns in COVID-19 hotspots. This method, implemented in Ghana, limited transportation within some selected cities to control the virus's spread (Olivier et al., 2020). These lockdowns were put in place to handle current instances while preventing future spread. Bans on public meetings, including religious and social groups, were also imposed to decrease contact and transmission hazards.

The findings underline that governments also made significant efforts to isolate and treat affected persons. Travel quarantine and the development of isolation facilities were critical in controlling the virus's spread. These precautions were designed to detect and isolate infected people while also giving specific care and attention to those who tested positive. The study emphasizes the need for specialized isolation units to reduce cross-contamination and protect COVID-19 patients' health.

Vaccine anticipation was revealed as a critical element in the responses. The announcement and subsequent introduction of COVID-19 vaccinations were met with excitement and confidence. Despite worries regarding vaccination effectiveness and licensing processes, participants agreed that endorsements from political and religious leaders helped to foster public trust. The desire to accept vaccination indicates a shared awareness of the vaccine's ability to reduce illness effects and restore a sense of normality. Dzinamarira et al. (2021) confirmed the adoption of vaccines

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with South Africa being the first to receive one in Sub-Saharan Africa. Meanwhile, they said there was a lot of communication to reduce vaccine hesitancy in Africa. Other studies confirmed the general acceptance of vaccines in Ghana West Africa (Amo-Adjei et al., 2022; Taboe et al., 2022).

Finally, the research findings give a thorough insight into the tactics used by West African countries to address the COVID-19 epidemic. These initiatives together attempted to preserve public health, control transmission, and offer proper treatment to individuals impacted, ranging from border closures and public education campaigns to physical distancing measures and vaccine programmes. The complexity of these reactions emphasizes the significance of a coordinated and adaptable response to public health disasters, focusing on both immediate containment and long-term preparation.

5.3 The International Impact of the Threats Posed by Covid-19 in West Africa

The consequences of the COVID-19 threats in West Africa stretched well beyond the sub-region, having a significant influence on international allies. Given West Africa's dual function as an importer and exporter, the pandemic's interruptions have resulted in a lack of exports. This has the potential to cause price increases for certain commodities and products, causing a ripple effect in the worldwide economy (Agarwal & Chonzi, 2020).

Furthermore, the fall in demand for imported raw materials by West African nations, notably owing to the closure of industrial businesses, has had a negative impact on global GDP (Obayelu et al., 2021). This decline in demand affects not just international commerce but also the reciprocal economic advantages that these nations get from one another. Economic interdependence is obvious as disturbances in one region, such as West Africa, echo internationally, leading to a larger economic crisis.

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The disruptions in trade dynamics caused by a lack of exports and a fall in import demand highlight the susceptibility of international trade systems to exogenous shocks such as a worldwide health epidemic. The economic fallout reverberates not just inside the impacted West African countries, but also across the global economic landscape, stressing the importance of joint solutions to alleviate the effect of such crises on both regional and worldwide levels. As countries struggle with the pandemic's persisting problems, a coordinated effort is needed to repair and increase the resilience of global trade networks (Obayelu et al., 2021; Agarwal & Chonzi, 2020).

The significant loss of life in many European and Western nations has generated an urgent demand for extra human resources, driving people from West Africa to migrate in search of better-paying jobs. This shift in migratory patterns has had an impact not only on the workforce composition in the destination countries but also on the availability of service providers and skilled workers within West Africa. The effects of this trend are felt in both the source and destination areas, influencing labour market dynamics and emphasizing the interconnection of global workforce mobility (Murataj et al., 2022; Podra et al., 2021).

Finally, the implementation of mobility restrictions has interrupted the reciprocal benefits obtained from these nations' professional and specialized services. Many professionals provide their skills not just in their native countries, but all across the world. As a result, when their mobility is restricted, the supply of such services must unavoidably come to a halt, affecting both the specialists and the receivers of their expertise (Gillson & Muramatsu, 2020).

The restrictions on mobility have not only reduced professional services but also resulted in the loss of gains made through other channels such as vacation tours, educational exchange programs, and other training services. These activities are critical for increasing human resources and creating capability. Movement limitations have disturbed the flow of knowledge, experiences, and chances

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for skill development, reducing the reciprocal advantages received from these cross-border encounters (Abrahams & Bama, 2022; Ranasinghe et al., 2020).

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CHAPTER SIX

HOW WEST AFRICA AND GHANA MANAGED THE COVID-19 PANDEMIC AS A THREAT TO HUMAN SECURITY

6.0 Introduction

The COVID-19 pandemic, an unparalleled worldwide calamity, presented several hazards to human life and security. As governments faced with the crisis, methods and remedies were developed to lessen its impact. This chapter digs into the data connected to the second purpose of this study, which tries to understand how West Africa, particularly Ghana, dealt with the COVID-19 epidemic in the context of a danger to human life and security.

This section takes a diverse approach to unravelling the intricacies of pandemic management. It incorporates tables, graphs, statistics, and direct statements from participants to provide a complete overview of the conclusions gleaned through in-depth interviews. Furthermore, this chapter delves further into these significant discoveries, emphasizing their relevance in the larger context of pandemic management.

The discussion not only summarizes the findings but also makes links to previous studies and research. By contrasting the findings with past knowledge, we can gain a better understanding of the complex measures used by West African nations, particularly Ghana, to combat the COVID-19 epidemic. This analytical expedition navigates the complexities of public health education, legislative acts, international collaboration, and the numerous hurdles experienced in this collaborative attempt. Finally, this chapter presents a vivid picture of the region's response to the epidemic and lays the groundwork for further investigation in the next portions of this research.

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6.1 Major Findings on How West Africa and Ghana Managed the COVID-19 Pandemic as a Threat to Human Security

As stated in the conceptual framework of the study in chapter two, the Copenhagen school theories consider human securitization issues to arise when a particular issue is presented as posing an existential threat to some objects, a threat to be dealt with instantly with extraordinary measures (Diskaya, 2013). The theory demonstrates how the conceptualization of security has been expanded to include human security and the process of how to securitize an issue in health, it further necessitates the emergency powers or authority of a state to ensure social order and public compliance to implement a swift pandemic response.

Human security can also be referred to as safeguarding people against illnesses, starvation, oppression, and other chronic risks, as well as from unexpected and detrimental disturbances to the pattern of human everyday life (Diskaya, 2013; UNDP 1994).

From the previous chapter where the participants measured economic hardship, mortality, and morbidity as the three topmost threats the COVID-19 pandemic posed in the West Africa subregion, it is clear that these dangers will qualify as security threats according to the Copenhagen School theories and UNDP definitions. However, it is important to understand how the participants perceived these threats and how it was managed in Ghana and West Africa.

The participants indicated that the approach used in Ghana is no different in principle from the general approach in other West African countries, however, the management of human security threats may only be in the degree and intensity of implementation. The findings first of all indicated that management of COVID-19 to safeguard human security was evident in two major ways. First of all, the study found out COVID-19 was communicated to the people of West Africa as an emergency. This included the communication of the threats and the dangers associated with

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COVID-19 to human survival and how to prevent it. Secondly, the study also found out the practical measures adopted to save and protect human lives against COVID-19 and alleviate its impact on society.

6.1.1 How COVID-19 served as a danger to the survival of people in Ghana and West Africa

The participants identified how COVID-19 was hazardous to human survival in Ghana and the entire subregion. Similar to the threats the pandemic posed, the participants demonstrated that COVID-19 was dangerous for life since there have been reports of death recorded in Ghana and other countries in West Africa. To them, COVID-19 was confirmed by WHO, GHS, and MOH as a deadly disease coupled with empirical evidence of death in almost every country of the world. To them, this makes the disease a danger to human lives.

Another hazard of COVID-19 was the health vulnerability of people. According to them, the pandemic is caused by a virus that affects respiration, causes fever and other health complications. According to them, mental health disorders were also associated with the disease.

The participants also indicated that the financial hardships and cost of living are a danger to human existence caused by COVID-19. According to them, everybody requires financial ability to meet their daily needs for livelihood therefore the reduction in one's purchasing power will affect their standard of living and ultimately their lives. These findings are summarized in Figure 5.1 whereas the detailed explanations were done with each of the dangers mentioned.

INTEGRI PROCEDAMUS

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Figure 5. 1 Codes - Dangers of COVID-19 in Ghana and West Africa

Source: Researcher's Field Data 2023

Loss of Human Lives

Similar to the findings in chapter four on the threats posed by COVID-19 in West Africa, the participants identified the loss of human life as a major and ultimate danger posed by COVID-19 in Ghana and the sub-region. According to the participants, every life matters therefore the loss of human life is the most dangerous threat to human security. Even though the participants appreciated the danger in other areas such as the loss of jobs and the collapse of the economy, the loss of human lives is one of the direct dangers faced in Ghana and West Africa as a result of the breakout of COVID-19. Even though the mortality rate in West Africa is comparatively low as compared to other regions, there are some deaths reported as a result of COVID-19 which with no vaccine in view might have worsened with time. According to them the number of deaths reported in China,

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Italy, Spain the United States and other parts of the world posed a danger to the very existence of life and should any of the variants become fatal in the sub-region mortality would have been the highest because of the poor health system, facilities, and resources available in the sun-region.

Another way that death was described as the major threat to survival was that, some of the people who died as a result of COVID-19 were breadwinners, health professionals, and other vital personalities in society therefore their absence is not just a single person, but a loss to the society and the nation. Families will face hardships due to the loss of key relatives; lives will be affected because of the loss of health staff and most dependents will have to change the course of their livelihood because their provider has been killed by the pandemic.

According to the participants, the ultimate danger COVID-19 posed was death. They explained that when people lose their jobs and streams of income, it will eventually lead to a poor standard of living which makes them more vulnerable to poor health conditions which is a threat to humans.

> *"The only thing was that, the fear of death is one of the dangers that we faced because in other jurisdictions. the fact that COVID-19 was killing people more than malaria and other related diseases and more attention was driven to curbing COVID-19 but Africans were not dying as compared to the western countries".* – **R15.**

Direct Impact on Health

According to the participants, the pandemic posed serious health implications on the health of people. According to them, COVID-19 resulted in respiratory challenges, and other mild conditions like headache, dry cough and loss of appetite. According to them, health is so critical to our very

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existence therefore any condition that will challenge the health of people ought to be treated with the urgency required. To them, health was another major danger the pandemic posed to survival because it is the inception of death meaning all these health conditions can eventually lead to death. The participants indicated that people's health deteriorated rapidly when they were diagnosed with the virus which is mostly a result of weak immune systems. COVID-19 was believed to make people especially the elderly more vulnerable to other diseases which jeopardize their health and lives as well. The participants mentioned that, at a point, the daily cases of COVID-19 infection kept increasing which shows that the pandemic was a direct attack on the health of people indicating a looming danger to survival.

The participants also indicated that, beyond the physical health challenges associated with COVID-19, mental health was another danger posed by the pandemic. According to them, fear was heightened when the disease first broke out in the sub-region. There was the fear of the disease especially due to the number of deaths recorded in other parts of the world coupled with the poor health systems available in the sub-region made a lot of people think at the initial stages that not only West Africans but Africa would record the most fatal cases even though it turned out not to be so. According to the responses, COVID-19 brought about stress, anxiety, and depression, especially among those whose relatives have been quarantined and do not know how their conditions will turn out. Isolation in itself could affect the emotional imbalance since people have been disconnected from their social contacts they have known for a long time. The participants further explained that the frontline workers had to deal with pressures and stress associated with working overtime to meet the pressing demands of the COVID-19 cases.

The participants indicated that the side effects of the COVID-19 vaccines as reported in some countries can have lasting health conditions on patients. To them, there were reports of the vaccine

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having a negative impact on fertility and some cases death which even though has not been proven in Ghana or West Africa still poses a danger to human life and survival.

"In a number of ways, COVID-19 has had a big impact on public health. The SARS-CoV-2 virus is the primary cause of this illness, which has mild to severe respiratory symptoms. The most frequent signs and symptoms are fever, coughing, and breathing problems. It's crucial to keep in mind that some virus-infected people may be asymptomatic, which means they don't exhibit any symptoms but are still contagious. COVID-19 can cause pneumonia and potentially fatal acute respiratory distress syndrome in people who become seriously ill. Although the virus mainly targets the respiratory system, it can also harm other organs like the heart, kidneys, liver, and brain, which can result in a number of complications. The significance of underlying medical conditions has also been highlighted by COVID-19. Virus infection increases the risk of serious illness and complications in people who already have pre-existing conditions like cardiovascular disease, diabetes, respiratory issues, and weakened immune systems". – **R23.**

"Apart from the immediate consequences for physical health, COVID-19 has also had a negative effect on mental health.

The pandemic has exacerbated stress, anxiety, depression, and social isolation, all of which can have a lasting negative impact on people's health.

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Frontline responders and healthcare workers have also encountered acute stress and mental health issues as a result of the demands of treating COVID-19 patients and the risk of exposure". – R**15.**

"… Health-wise, people who were predisposed like those with NCDs (non-communicable diseases) and other diseases that were being managed if they got COVID-19, which will result in much more fatal outcomes" – **R39.**

Indirect Impact on Health

According to the participants, COVID-19 has affected the health system of most West African countries. The participants noted with grave concerns that, the poor health systems in West Africa were exacerbated by COVID-19. According to them due to the inadequate health facilities, most of the health centres had to limit their services to severe COVID-19 cases at the expense of other regular health services and routines. Almost all health resources including the limited staff were placed at the disposal of treatment of COVID-19. This however according to them has affected other conditions since much care and attention was not given to them. The participants also indicated that the regular health routines by community nurses were halted since more health staff were required to attend to COVID-19 increasing the risk of morbidity and mortality in non-COVID-19 patients.

It was also stated that for the fear of contracting COVID-19 or being wrongfully diagnosed with COVID-19 some people avoided the use of health facilities and resorted to self-medications and local herbal doctors which could cause more health problems than if they had used the approved health services. They also noticed that some health professionals migrated to other developed

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countries that were recruiting health workers for higher remuneration. This migration has further worsened the low availability of health professionals for the patients.

> *"As I said, it affected every aspect of life. Our health services were disrupted in the sense that there was no continuity in essential health services. If you depend on routine medical care. It means that your life will be stuck, especially for those who depend on routine medication for survival. Again, if because of COVID, your business is doing well it would affect your survival. So, in all forms including the health and economies posed a real threat to the survival of people".* – **R37.**

Financial or Economic Hardships

According to the participants, there are many financial factors that make COVID-19 dangerous to human life and survival. First of all, the participants mentioned that when COVID-19 hit West Africa some services were redundant. For instance, schools had to shut down and most private school teachers were laid off making them lose their sources of income. The hospitality and tourism industry was another place that was virtually shut down since most of their clients were foreigners who were restricted from entering the country drastically reducing the revenue and salary of staff and others were eventually laid off. Again, the participants noted that, as Ghana and West Africa are net importers, most manufacturing companies could not import raw materials for production forcing them to downsize and reduce allowances and perks of their employees. Traders who deal in imported goods could not go about their merchandise after they exhausted their stocks forcing them out of business and others faced untold economic hardship.

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Another economic factor that arose from COVID-19 was the high cost of living resulting from artificial inflation due to excess demand over supply. This inflation had a significant negative impact on the disposable income or purchasing power of people.

According to the participants, once the financial abilities of the people have been jeopardized every other aspect of their lives will suffer. According to them, loss of income or economic hardship will result first of all in food insecurity where people cannot afford quality food for their livelihood. Since people have lost their jobs and source of income, they may have to settle for cheaper food which may not be quality for their consumption and this to them poses danger to their health and eventually their lives.

The participants further explained that quality health care is a function of economic power therefore economic hardship will negatively affect access to quality health. People whose income has been affected by the pandemic either directly or indirectly will be challenged in some way in what kind of healthcare they would seek. There are some people who benefit with their families from the health insurance systems of their institutions therefore when those organizations are faced with making those difficult due to the economic impact of the pandemic, many lives are left vulnerable to access to poor healthcare.

The participants also pointed out how economic hardship has affected the food supply chain in the sub-region increasing the risk of food insecurity due to limited access to quality food. It was added that food insecurity gets worse with the poor and vulnerable who may not have the means to afford the limited available quality food.

They finally claimed that, economic hardship can lead to social vices like stealing and robbery and such social vices are dangerous to society. Once people are out of a job, they have to resort to other

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means of earning which sometimes are illegal and threaten human lives. According to them even though there may not be any available evidence to show the relationship between COVID-19 and robbery, the impact of COVID-19 can be long term which can lead to these social vices yet to be reported.

The participants also mentioned that this economic danger can also come from the macroeconomic front. With low-income mobilization as a result of the pandemic government spending on health, food security, human security and other basic amenities of lives can be affected. According to them when governments have a budget deficit, they are forced to increase their public debts or withdraw or increase the cost of some essential basic needs. When governments increase their debts, it can increase the general cost of borrowing which affects the cost of living making life more unbearable for the poor and vulnerable. Again, when governments' revenue mobilization is affected, they may be forced to impose more taxes or increase the existing tax rates which again affects the cost of living. These pieces of evidence according to them are compelling to make COVID-19 pose an economic danger to human existence.

"Agriculture, food production, and supply chains have all been impacted negatively by COVID-19's economic effects. As a result, there is now less affordable and nutrient-rich food available, which has increased food insecurity and malnutrition. Predominantly in children and vulnerable populations, a lack of access to adequate nutrition can impair immune systems and raise the risk of illnesses and poor health outcomes. Also, people's disposable income has been badly affected coupled with hikes in food prices making it difficult for them to afford quality food for their livelihood". – **R10**

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"Economic difficulties frequently make already existing disparities worse and disproportionately affect marginalized groups. As a result of their limited access to healthcare, wholesome food, safe water, and sanitation, the poor, women, children, and other vulnerable groups face greater health risks. These disproportions could become even more noticeable as a result of the economic recession, which would be harmful to these populations' health" – **R37.**

"The economic dip caused by the pandemic has stressed healthcare systems in West Africa. The decline in government revenues and budget restrictions have led to inadequate funds for healthcare infrastructure, equipment, and staff. Therefore, access to quality healthcare services, including essential treatments, preventive care, and immunizations, thus negatively impacting overall health outcomes will be greatly affected". – **R24.**

Restriction of Movement

The findings indicated that the restriction of movements posed so much danger to the populace. The participants noted that, with restriction on movement, the outbreak of any communicable disease would be unbearable which would have increased the challenges posed to the limited health facilities and personnel. According to them most part of the cities in West Africa including Accra-Ghana have slums with poor drainage, ventilation, and sanitation. So, with the restrictions like the lockdown and bans on intercity travel would have turned more disastrous if there was a cholera outbreak or any communicable and airborne disease.

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From the findings, the restrictions placed on movements have caused some form of domestic violence. The participants mentioned that there are people who use work as an escape from domestic pressures and hostilities therefore, now that they are kept home, any unresolved disputes could erupt into domestic violence which jeopardizes human life.

"Moving around restrictions can make it difficult to collect and dispose of solid waste or provide other waste management services. Poor waste management practices, decreased waste collection, and sanitization-related illnesses can all result in an increase in rodent and insect populations as well as environmental pollution. Communities are put at risk for new health problems, and subpar sewage systems might be further burdened". – **R6.**

"Numerous people and families have experienced stressful situations as a result of confinement practices and protracted periods of living in confined spaces at home. Household tension has risen as a result of increased financial uncertainty, job losses, and anxiety about the future. These stressors have the potential to intensify already ongoing conflicts and precipitate new instances of domestic violence". – **R11.**

"Restriction of mobility could increase the amount of time spent in cramped environments, like homes with poor ventilation or crowded public transportation. Contagious illnesses like COVID-19 are more likely to spread through the air when there is inadequate ventilation. Additionally endangering

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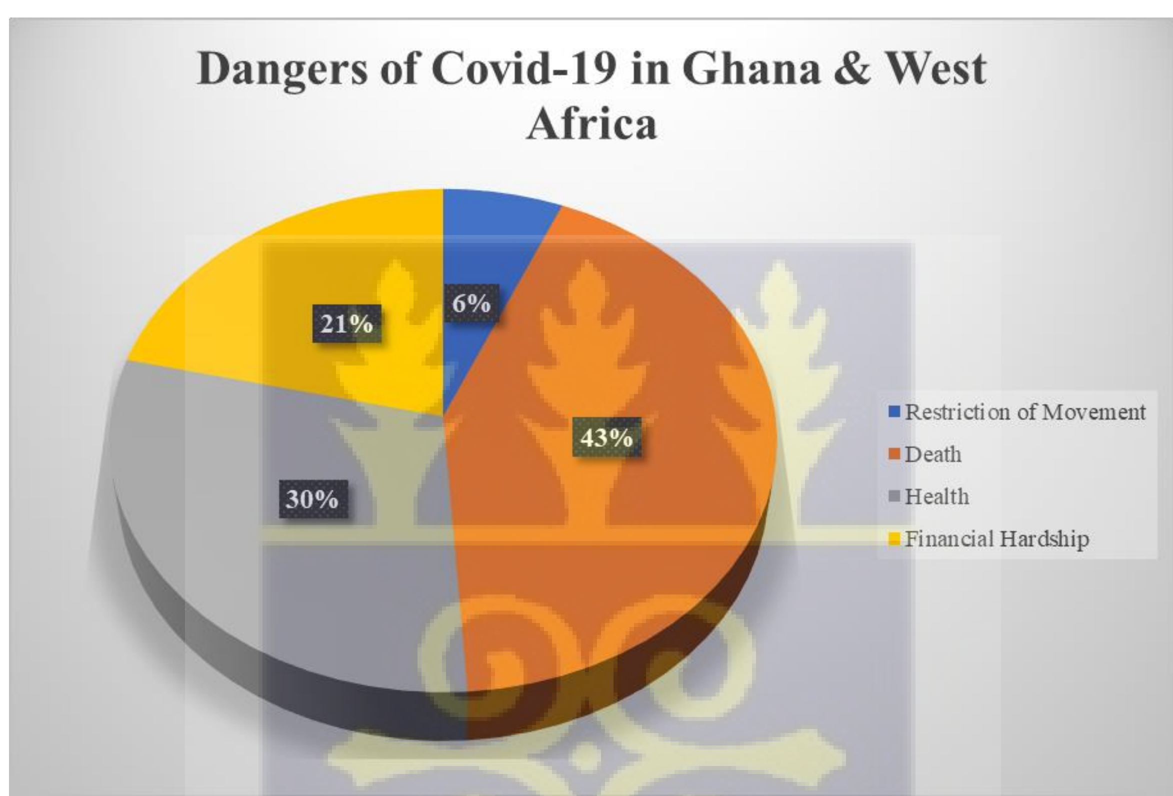
respiratory health, poorly ventilated areas can contribute to the accumulation of pollutants and indoor air contaminants". – **R20.**

These four themes developed from the codes from Figure 5.1 are represented in Figure 5.2

Figure 5. 2 Themes - Dangers of COVID-19 in Ghana & West Africa



Source: Researcher's Field Data 2023

6.1.2 How COVID-19 was communicated as an Emergency in West Africa

The findings suggest that a multifaceted strategy, including traditional media, community engagement, multilingual strategies, visual materials, and partnerships with various stakeholders, was used to communicate COVID-19 as an emergency in West Africa. The objectives were to

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make clear how serious the situation was, make sure that everyone understood the precautions to take, and encourage a coordinated effort to lessen the pandemic's effects.

According to the findings, considering the threats, risks and dangers associated with COVID-19, the various leaders needed to carry the entire nation along to respond to the pandemic as an emergency. These leaders needed to send unequivocal communication to their citizens about the security threats of COVID-19 to every life on in the country and across the world. The nation, therefore, needed to use various media to reach as many as possible with the distinct message of the hazards that face human existence as a result of the outbreak of COVID-19. According to them, especially in Ghana COVID-19 was communicated through the Presidential addresses, ministerial press conferences, media broadcasts, publications, and public education The various ways that Covid-19 was communicated as an emergency are detailed below.

Public Health Announcement

The findings showed that the first official communications of the pandemic were made by the Presidents, Heads of State, or their representatives. According to the participants, for example in Ghana, the President addressed the nation weeks before the first case was recorded in Ghana when the reports of some of the cases in the sub-region. According to the participants, the President hinted of the possibilities of the cases in Ghana due to the cross-border relationships we have with this country hence there need for surveillance and preparedness against infections. Meanwhile, there were media reports of the spread of COVID-19 in China and other European countries even though it was not treated as an emergency.

The participants said that the President came to announce the first two cases reported in Ghana and declared a state of emergency. This was announced in what has become his regular updates

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on COVID-19. The participants showed that the announcement came with a ban on social, religious, or large gatherings, avoiding handshakes and hugs, washing of hands with soap under running water, wearing of facemasks, and use of alcohol-based sanitizers. According to the findings the President also announced, the closure of land, sea and air borders to any country since the first two cases were believed to have been imported. This made the President ask parliament to pass a bill authorizing him to restrict the movement of people when the need arises.

According to the participants, this is similar to how it was announced in other West African countries. For instance, in Nigeria, the first announcement was made by the Ministry of Health led specifically by the Minister of Health when they first recorded their first case. He also outlined measures such as screening passengers at the airport before they are allowed to enter the country. This they believed raised awareness, of the reality and risk of the pandemic in the country.

In Cote d'Ivoire the findings show that the communication is closely related to that of Ghana where the Minister of Health and Public Hygiene declared a state of emergency when they also imported their first cases of COVID-19. This announcement also came with the restriction of movements within the country, restriction of movement into the country by people from the affected countries, fourteen days of mandatory quarantine for those who arrive from affected countries, and closure of schools and businesses.

These public health announcements across West Africa were identical in all the countries to communicate the emergency of COVID-19 to first of all create awareness and ensure surveillance by all citizens to mitigate the spread of the pandemic within the individual countries. Some of these responses are quoted below.

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"So, the fact that the president declared a state of emergency and pushed through legislation in the parliament to acquire emergency powers to make declarations and utter our freedoms alone poses to us that the government took the situation seriously and not as an ordinary event. Following the communication when the first case was identified in Ghana and the declaration of a state of emergency which led to the closure of borders, subsequently restricting movements, commandeered various facilities both private and public. They set up centres for the purposes of receiving cases and treating and isolating them. All these were extraordinary measures taken which do constitute daily happenings". – **R10.**

"In Abuja, at the Federal Ministry of Health, the Minister of Health made the announcement. The Minister, Dr. Ehanire announced that the government was taking action to stop the virus from spreading, including passenger screening at airports and borders and collaborating with medical professionals to find and treat cases. Along with cautionary measures like frequent hand washing, avoiding close contact with sick people, and covering coughs and sneezes, he urged the public to protect themselves from the virus" – **R1.**

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"COVID-19 was declared an emergency in the nation on March 20, 2020, by Dr. Pierre Dimba, Minister of Health and Public Hygiene of Côte d'Ivoire. In response to the expanding COVID-19 outbreak, Dr. Dimba declared a state of emergency at a press conference. Additionally, he outlined the various steps the government would take to stop the virus's spread, such as closing down businesses and schools, limiting travel, and placing travelers from affected nations in mandatory quarantine". – **R5.**

Ministerial Press Conferences

According to the findings, apart from the declaration of the Presidents and other Health authorities, there were media engagements as well. For instance, in Ghana there was an inter-ministerial team, working together with the COVID secretariat; a technical coordination committee chaired by the Minister of Health, and the emergency operations chaired by the Ghana Health Services. These agencies and ministries held regular press briefings with the media to give further explanations of the Presidential address and its implications for every individual. The findings show that these briefings allow the various media houses to ask questions and make suggestions through the ministry to the national COVID-19 secretariat on the issues on the ground the concerns of their listenership and viewership. According to the participants, the media can reach more people than the President and the ministries hence it is very necessary for the engagement to ensure that accurate information is communicated to the populace in a clear and distinct language that they can understand. These press briefings also afforded ministries the opportunities to present more

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empirical data on COVID-19 and health experts were actively involved to educate the press on the development of the pandemic in the country.

> *"The effective dissemination of COVID-19 as an emergency in Ghana was made possible by ministerial press conferences. They were successful in reaching a large audience, offered precise and current data, and contributed to the public's growing trust. In order to stop the virus from spreading as quickly in Ghana, ministerial press briefings were extremely important".* – **R4**.

Media Broadcast, Publications and Advertisement

The findings show the critical role the media play in amplifying the government's communication of COVID-19 as an emergency. According to the participants, even though the media organizations were not the originators of the data and information, they became the channel through which the information was made available to the entire populace. The participants indicated that the news briefs and major news bulletins were full on the emergency communication of COVID-19. The media was used mainly to communicate the dangers posed by COVID-19 and how it affects human security, the safety protocols to help reduce casualties, the legislation passed and the government efforts to protect human lives.

The participants further stated that the media held interviews with major stakeholders to provide further education in different languages to ensure that language was not a barrier to anyone. The findings also show that the media helped in playing adverts and jingles educating on the dangers of COVID-19 and the preventive measures to adopt to stay safe.

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According to the participants, due to West Africa's linguistic diversity, efforts were made to ensure effective understanding by communicating in a variety of languages. Information was disseminated in both official and regional languages to reach different population segments. Resources, posters, and radio shows have all been produced in translation to address linguistic diversity.

They also stated that the media conveyed key messages about COVID-19 through visuals such as posters, infographics and videos. Thanks to its design, the material is easy to understand and accessible to people with limited literacy. To emphasize the urgency of the situation, they also added images showing proper hand washing, mask use and physical distancing.

The four main ways the media was cited to help in communicating COVID-19 as an emergency were to provide updated and accurate records or data about COVID-19; increase awareness of the COVID-19 risks and prevention by means of news, announcements and social media campaigns; dispelling false information by verifying speculations from approved sources; and promoting prevention measures by encouraging their listeners to observe the safety protocols instituted by the government and health authorities.

"The media in Ghana launched the public service campaign "Stay Safe, Stay Home." Celebrities and other well-known individuals supported the campaign's call for residents to take precautions and stay at home.

In Nigeria, a number of radio and television commercials about COVID-19 were produced in conjunction with the media. The advertisements featured

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government officials and medical experts describing the virus and providing safety tips.

"Hands Up for Health" is a social media campaign that the Senegalese media launched. The campaign urged people to avoid touching their faces and regularly wash their hands". – **R22.**

6.1.3 How COVID-19 was Treated as an Emergency and West Africa

The findings showed that, COVID-19 was not only communicated as an emergency in Ghana and West Africa but there was a commitment to combat the pandemic through, prevention and treatment. According to the responses, several measures were adopted to handle COVID-19 as an emergency in West Africa. With the dangers COVID-19 posed to existence, measures were taken to treat the pandemic as an emergency to protect the health security of the people in the sub-region. According to them the emergency measures adopted by most nations in West Africa were identical since all of them are ensuring the safety and security of the lives of their people. These measures include Presidential Leadership, Education and Communication, Treatment and Isolation Centres, Government Machinery, Border Closure, Lockdown, Surveillance Systems, Contact Tracing Efforts and Restructuring of Health Systems.

Presidential Leadership and Government Machinery

Just like other parts of the world, the findings show that most heads of state and Presidents of the different countries in West Africa led the path of treating the pandemic as an emergency. For instance, in Ghana, the parliament passed a law to allow the President to restrict the movement of

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people within and into the country. Most governments in West Africa closed down public places and social gatherings and the security agencies were authorized to enforce these directives to ensure maximum compliance. This is to show how the governments perceived the pandemic as an emergency and their commitment to ensuring that it is contained from causing more devastating impacts on human lives.

According to the participants, governments gave full attention to the pandemic by redirecting funds and resources to the treatment of COVID-19 to ensure that lives were protected. The President of Ghana was cited to be explicit in his communication in prioritizing human lives over the economy hence he did not hesitate to lockdown the two main industrial cities in Ghana to ensure that the spread of the disease is curbed. The government expenditure on health had increased during the period to help fight COVID-19 such as providing PPEs for schools, health workers, and vulnerable communities. The governments of West Africa agreed to alter the academic timetable and that of the West African Senior School Certificate Examination.

Ghana was again cited to motivate and provide incentives for its frontline workers to keep them at work for longer hours to combat the disease. Allowances and other incentives were pledged by the government for the frontline health workers to ensure that they give their best in the fight against the pandemic.

The government of Ghana was cited to have made social interventions such as providing hot meals for some vulnerable people in Accra and Kumasi, paying for the water bills for all Ghanaians for three months and absorbing 50% of their electricity bills for 3 months. The government of Togo also replicated similar efforts by absorbing the electricity bills for all of its citizens for a period.

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According to the participants, most of the West African government did not delegate the issues of COVID-19 to agencies but were directly involved in the policy-making and budgetary allocations to ensure that the disease was managed effectively. The participants further applauded the governments for risking their international trade gains to close the borders for COVID-19 which communicates how unanimous African governments were in treating the pandemic as an emergency and not to be indulged for long.

"It was treated as a public health emergency and so it was given much attention and priority. We realized that the president had a different leadership role at his end. So, the regular updates and the measures that were put in place gave a clear picture of how seriously they took it and it wasn't only based on health-related issues but in multiple forms in terms of security; how to manage the security around all the borders". – **R22.**

"It is the same as the structures I outlined under the management strategies above. How the president led some of these committees and the approach developed to make sure that the right thing was done showed that it was an emergency. There were several committees that were set up to embark on community education. There were a number of treatment and isolation centres. So the whole government machinery and health system was geared toward ensuring that we were managing the pandemic well. Things were revised to make sure that we were handling the pandemic well looking at the government

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structures and the structures in our health systems. At a point in Ghana, our ports were closed and so everything was done to show that there was a pandemic that we were serious about tackling". – **R37.**

"Different governments in West Africa including the President of Ghana declared a state of emergency, put in place travel restrictions, closed businesses, group gatherings, and schools, encouraged social isolation, gave information and education, and distributed PPE. These are only a few examples of how COVID-19 was handled as an emergency in West Africa. Governments in the area responded in a variety of ways, but the majority took a number of actions to stop the virus's spread. These initiatives assisted in containing the virus's spread in West Africa and safeguarding the populace". – **R14.**

Border Closure & Screenings

The findings showed that particular attention was given to the borders of the countries in West Africa since almost all cases were imported. According to the participants, even though the border closure was welcomed by many in West Africa, there were concerns that it would have a negative impact on the economy of the nations. However, the various governments chose the public health route at the expense of economic gains to impose some travel restrictions in their countries. The

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participant mentioned that some countries like Ghana closed their borders to all foreign travel including from the closest neighbours like Togo, Burkina Faso Cote d'Ivoire to ensure the already existing cases can be managed and controlled. Other countries like Nigeria instituted screening of passengers who entered the country and quarantined for fourteen days. Mali was cited to be one of the countries that closed the borders initially for two weeks but extended several times following the trends and development in their countries.

According to the findings, the governmental response to COVID-19 by closing borders as a way to stop the virus's spread and safeguard public health. The decision to close borders was made to stop people from crossing internationally and to stop those who might be infected from doing so, in an effort to stop the spread of COVID-19.

> *"To prevent the spread of the virus, Ghana closed its borders. The increasing number of COVID-19 cases worldwide, the potential for imported cases, and the need to protect public health and safety domestically were some of the reasons for the decision to close the borders".* – **R9.**

> *From the little I gathered from sources; the economy of Mali has suffered significantly as a result of the border closure. Because of the border closure, trade flows have been disrupted, which is bad for the economy of the nation. Due to the closure, it has become more challenging for people to travel to and from Mali, which has had an impact on the tourism industry as well as other economic sectors. According to the Mali government, the public's health must*

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be protected by closing the border. Additionally, the government stated that it was attempting to lessen the negative economic effects of the border closure. – **R24.**

Tracing Testing and Treatment

The findings suggest, that there was a rapid response from the national health team of the various countries to stop the spread of the virus. This was said to have been done by contact tracing. People who might have come into contact with infected people were traced and isolated from society so as to reduce the possible spread of the virus to the healthy population. According to the participants, this was adopted from the emergency response measures adopted against Ebola in West Africa some years ago. This task was accomplished by a team of health professionals, volunteers, and security agencies which to them have yielded much results in limiting the spread of the virus.

Testing was a crucial emergency response during the COVID-19 pandemic in West African nations to locate and manage COVID-19 cases. The findings suggest that West African nations concentrated on building testing infrastructure and capacity quickly. To ensure widespread access to testing, they established specialized testing facilities, laboratories, and mobile testing units. This required acquiring the essential testing tools, educating medical staff, and extending laboratory networks. Most countries in the sub-region, resorted to testing especially potential risk persons identified through contact tracing. Most health facilities were equipped with either the antigen test or the PCR test to ensure that the infected sample was removed from the population. According to the participants, the identification and confirmation of COVID-19 cases involved diagnostic

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testing, mainly by using polymerase chain reaction (PCR) tests. For the developed world priority for the testing was for people who had COVID-19-like symptoms, close contacts of confirmed cases, healthcare professionals, and high-risk populations. Prompt isolation, treatment, and contact tracing were possible remedies to timely testing, which also helped to stop the spread of the infection. The findings also show that for the purpose of identifying incoming travellers carrying the COVID-19 infection, testing techniques were used at international borders and ports of entry. Depending on the country, testing was done either before departure or after arrival or both of the travellers. Border testing was to manage quarantine and isolation procedures for those who tested positive as well as to stop imported cases from entering the country.

Treatment was identified to be the final stage of the tracing and testing. The responses showed that West African countries including Ghana have designated isolation and treatment centres therefore when anyone tests positive, they are transferred to any of the isolation and treatment centres for maximum attention. At these centres, those with critical conditions were given priority for treatment. The participants indicated that even though there were no vaccines at the initial stages most of the infected people recovered as compared to the number of people who died in the sub-region. The participants said that the Ghana Health Service and Ministry of Health and other health agencies in various countries had discharged people who were treated and free from the symptoms of the COVID-19 pandemic.

"As a country, we demarcated centres where COVID patients were treated such as the Ga East hospital. However, what we did not do well in most of the centres was stigmatization. Patients came out to complain that health workers were pushing the food to them fearing to come close. The same case was

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reported in the quarantine centres. There was also an allocation of resources specifically targeting the management of the disease. The Ministry of Health was able to marshal a lot of sanitizers, and medications and also bring in health workers who were staying at home to avail themselves for services. The ministry also brought in some transports to handle the pandemic. Also, the lockdown, contact tracing and surveillance were also good emergency responses. Looking at the pandemic that happened in the 1920s with the flu, we implored the lockdown and the quarantine system. I think the same measures were repeated to handle COVID. There was a provision of basic tools even though they were not sufficient. While others hand the PPEs, other people like those who work at the mortuary were complaining about the lack of PPEs. This I believe will be similar to what was done in other countries within the sub-region". – **R5.**

"They set up centres for the purposes of receiving cases, treating and isolating them. All these were extraordinary measures taken which do constitute to daily happenings". – **R10**

"According to a statement I read from the WHO Africa website, travel restrictions have been implemented in Sierra Leone as an additional precaution and extraordinary measure in response to the COVID-19

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pandemic. All government officials are not permitted to travel abroad at any time, according to a 16 March statement from the Office of the President, which also urged the public to "refrain, as far as possible, from overseas travel until further notice.". The rule also forbids any public gatherings with more than 100 attendees". – **R36.**

"… There was a development of treatment centres to be able to treat patients faster so that people do not lose their lives. There was extensive surveillance, contact tracing and testing. At some point in the response, Ghana happened to be one of the African countries with a higher number of tests to population ratio..." – **R39.**

Ban on Religious and Group Gatherings

The participants indicated that COVID-19 was confirmed to have been spread through physical touches, therefore governments in West Africa placed bans or limited physical interactions of people. When the President of Ghana declared the state of emergency, he was cited to have placed restrictions on church activities, school closure, closure of beaches, bars and restaurants, banning weddings and funerals that gather more than twenty-five people and other public gatherings. Other countries in West Africa were also confirmed to use similar approaches in restricting public gatherings. The governments even though duly acknowledged the impact of these measures on the lives of people and businesses, especially the tourism industry, they went ahead to implement them

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to protect lives and public safety. Due to the emergency nature of the pandemic especially the non-availability of the vaccine at the initial stages, every government took the necessary measures to reduce the spread at the expense of international trade and economic growth. According to the participants even though this did not go well with some religious people, most of the religious leaders were cooperative in ensuring that, these measures were adhered to.

"Some countries in West Africa imposed restrictions on religious gatherings, including churches, in the early stages of the pandemic in an effort to stop the virus's spread. Note that different countries have different special rules and regulations and that these can occasionally change as conditions alter. Church services and other religious gatherings were temporarily discontinued in Ghana during the early stages of the pandemic. In nations like Nigeria, Senegal, and Cote d'Ivoire, similar limitations have been put in place, which set a cap on the number of attendees at religious events or impose brief closures". – **R9.**

Total and Partial Lockdowns

According to the participants, various governments intensified their measures in treating COVID-19 when the initial measures did not prevent the spread of the disease as expected. Findings show that some cities in Ghana like Accra and Kumasi went into partial lockdown for a period to restrict movement within these cities. According to them, people were not allowed to move into the cities or out of the cities unless for those who are involved in the food or essential service value chain.

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According to the participants, in March and April 2020, lockdowns occurred in several states in Nigeria, including Lagos, Abuja, and Ogun. Senegal was said to have enacted a curfew and declared an emergency in March 2020, restricting travel and other non-essential activities. These steps were taken in an effort to contain the virus's spread and safeguard the general public. Findings show that travel restrictions and a national curfew were implemented in Côte d'Ivoire in March 2020. Movement was restricted, non-essential businesses were closed, and social gatherings were forbidden at certain times. The participants again cited that; a state of lockdown was implemented across all of Sierra Leone in April 2020. During the lockdown, there were limitations on movement, the closure of non-essential businesses, and public gatherings. Burkina Faso enacted a curfew and declared a state of emergency beginning in March 2020. The curfew placed restrictions on movement and forbade social gatherings during particular hours. A lockdown and a state of emergency were implemented in Liberia in April 2020. The lockdown included restrictions on movement, the closing of non-essential businesses, and bans on public gatherings.

According to the participants these lockdowns were enacted in targeted areas that were identified as the hotspots of COVID-19 recording high infection rates. This came as emergency measures to respond to COVID-19 in the sub-region.

"Even though I didn't go the other countries internet has made it possible to monitor the situation in other places to be informed as a researcher. I understand the Burkinabe government issued 'stay-at-home' directives, advising people to stay inside and restrict their travel to only necessary tasks. This meant that people were urged to limit their time spent outside to tasks that were absolutely necessary, like getting food, getting medical attention, or

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performing essential work. To reduce public gatherings and possible sources of virus transmission, non-essential businesses, such as stores, markets, and entertainment venues, were frequently instructed to temporarily close. To minimize the flow of people and lower the risk of virus transmission in crowded vehicles, public transportation services—including buses, taxis, and commercial vehicles—were either curtailed or suspended". – **R9.**

"The lockdown in Ghana is not any different from other parts of the sub-region. Nigeria also had lockdowns in different states like Ogun Abuja and Lagos when their COVID-19 started rising. This measure imposed severe restrictions on movement, non-essential business activities were halted closure of, and restrictions on social gatherings. A noticeable change in Nigerians' daily lives happened as the lockdown measures went into effect. As more people followed the orders to stay at home, previously busy streets became quieter. There was an unearthly stillness as the main markets, shopping malls, and public areas were closed. Despite the economic disadvantage of the lockdown, it was in the best interest of the public and the safety of human lives". – **R11.**

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"From reports I read online; a nationwide lockdown was implemented in Sierra Leone during the COVID-19 pandemic as a precaution to stop the virus's spread. Through a series of coordinated actions, the government and relevant authorities implemented the lockdown. During the lockdown, curfews and other restrictions on movement were put in place to further regulate motion and prevent pointless travel.

There were designated times when people were not permitted to leave their homes, save for absolutely necessary activities like getting to work or accessing essential healthcare. For the purpose of enforcing the lockdown procedures, law enforcement agencies like the military and police were sent in. Security personnel were stationed at checkpoints to monitor movement and guarantee adherence to the regulations. Penalties or fines may be imposed on those who violate the lockdown regulations". – **R14.**

"So, how the situation was handled as an emergency issue tells the responses that were adopted. So basically, the lockdown, protocols, closure of borders and vaccination". – **R20.**

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Public Education and Awareness Creation

The findings show that constant and effective communication was used as an emergency measure against COVID-19. According to the participants, the President of Ghana engaged the people of Ghana on a weekly basis to provide updates on the cases and the effectiveness of the measures implemented. Also, he announces new measures following the development from the surveillance done by the MoH and GHS. Public education continues at the ministerial level where press briefings are held to bring clarity to the highlights from the Presidential addresses. National agencies like the National Commission for Civic Education (NCCE) were fully engaged to ensure nationwide public health education in local languages through their district directorates. Churches and other religious organizations educated their followers on the dangers of COVID-19 and prevention measures.

The participants indicated that the media was the powerhouse of all these forms of public education and the creation of awareness. According to them, all forms of media from traditional media, print media, and social media were used to disseminate information on COVID-19 targeting the very last person in the remotest areas in the country. The Presidential addresses were delivered on almost all national television and radio stations and broadcasted on social media, especially on Facebook. The press briefings were also live on major national television and radio stations and rebroadcast for those who missed the live sessions. The highlights were designed into infographics which were shared on many WhatsApp statuses and other social media platforms.

According to the participants, musicians came up with songs to promote public awareness of the pandemic same as comic actors created content to educate people on the emergency of the situation of COVID-19.

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Public education and awareness creation were not only adopted in Ghana, but other West African countries replicated the same in their countries. According to the participants, Ghana is not an island hence they either share or learn their emergency response measures with other neighbouring countries in the sub-region.

The content of the education is mainly to update the people of Ghana with the current data of the pandemic, the risk factors, and the threats it poses to lives. The public awareness further demonstrated how one can prevent themselves from contracting the disease and the steps to take if they notice some symptoms of COVID-19. The public education constantly reiterated the protocols outlined such as social distancing, constant washing of hands with soap under running water, the mandatory wearing of the mask in public places, and the use of alcohol-based hand sanitizers.

"West African nations sought to alter behaviours, increase awareness, and empower people to take the required precautionary measures to slow the spread of COVID-19 by implementing extensive public education strategies. The improvement of education drives and the propagation of truthful and current information were made possible by ongoing monitoring and evaluation". – **R1**

"At the end of the day, effective communication was done through several channels and strategies. The Ministry of Information together with the

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presidency gave weekly updates creating awareness of the disease, its rate of spread, and protocols laid down to prevent the spread of the disease through the 'fellow Ghanaian broadcast', which was delivered on a weekly basis. There were also vaccines for people to take as directed to help boost their immune system. So, there was a task force for communication and it was sourced from the presidency. The Ministry of Information also had a plan to engage the Minister of Health or the Director General of the Ghana Health Service to talk about the disease itself and its management processes to prevent the spread of the virus". – **R5.**

"So, it is the same as the lockdown, contact tracing, and much education. The education helped people to look out for when infected with the virus. Whether their case is mild, moderate, or severe. WHO and Ghana Health Service also came out with guidelines that helped to manage the situation. These guidelines were widely shared for all to see". – **R10.**

"The importance of maintaining physical distance and avoiding crowded areas and large gatherings was emphasized in public education campaigns. In order to lower the risk of virus transmission, messages emphasized the significance of keeping a safe distance from others, even in social settings.

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Public awareness crusades encouraged wearing face masks or other facial coverings as a useful protective measure. At the hospitals, we dedicated time to teaching people how to wash their hands and use masks properly. To ensure maximum effectiveness, guidelines on appropriate mask usage, including how to put on, take off, and clean masks, were provided. This was not only limited to Ghana but across the sub-region and the world at large" – **R11.**

Vaccination

The findings suggested that West Africa did not hesitate to receive the vaccines approved for use by WHO. Most West African countries embraced the vaccinations when WHO announced some certified vaccines for COVID-19. Governments, health organizations, and global partners have taken a principal role in vaccine distribution, administration, and public awareness campaigns to ensure widespread vaccination coverage.

Countries in the sub-region received some vaccines donated by some international bodies and procured additional vaccines to ensure that a good number of their population were vaccinated.

In addition to the free vaccines, West African nations have pursued the acquisition of COVID-19 vaccines via a number of avenues, including bilateral agreements, multilateral projects like the COVAX facility, and collaborations with pharmaceutical firms. The region's vaccination clinics have all received their supply of vaccine doses.

The approach to vaccination in West Africa has prioritized more risky populations and frontline workers when implementing. This strategy guarantees that those who are most at risk of

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contracting a serious illness or being exposed to it are immunized first. The elderly, people with underlying medical conditions, frontline workers, and healthcare workers are mostly priority groups.

The vaccines were believed to be the last stop for the emergency that promised to prevent the infection of the virus. Almost all West African countries had targets to get a certain number of the population vaccinated by a particular time. Countries such as Ghana make vaccination mandatory at the airport before one can enter the country. Those who had not been vaccinated were made to take their doses of the vaccine at the airport. Airlines with unvaccinated passengers were handed down fines showing the commitment of the government to managing COVID-19 as a security threat in their countries.

The findings show that, even though the vaccination started from the national level it was decentralized to regional and district hospitals. Vaccination centres were established at different places to easily reach the entire populace to minimize the risk of infection. The findings showed that the vaccination was free to ensure that there was some level of equity in the administration of the vaccines in the country.

Following the approved vaccination protocols, trained healthcare professionals administer the vaccines to the recipients. To keep track of vaccine doses administered, monitor side effects, and guarantee proper follow-up for second doses, when applicable, vaccination records and data are meticulously documented.

"But the difference in terms of Africa, Ghana has been doing well because of the availability of the vaccine which is still ongoing but for Nigeria or Togo, it

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is hard to hear that they are in some mass vaccination. And the mode of disseminating the information to the public will determine whether they take the vaccine or not. But the government is doing its best to make sure that the vaccine controls and it was seen that the label on the last vaccination was expired but the shelf life is still there so it has made the vaccination protracted. This was to the extent that GHS and the Ministry of Health collaborated with the Food and Drugs Board to issue a statement that the drug was safe". – **R6.**

"Reports suggest that since the first COVID-19 case was reported in March 2021, Sierra Leone has reported over 6,983 cases of the virus with 123 fatalities. 2,308,000 doses of the COVID-19 vaccine, which were donated by the governments of the United States of America, Iceland, Sweden, Norway, France, and China, have been shipped and delivered by UNICEF through the COVAX facility and the AU. Astra Zeneca, Sinopharm, Pfizer, and Johnson & Johnson COVID-19 vaccines are among them". – **R10.**

"As it stands now it is a low-level threat because now there is the availability of vaccines that we have used along the line and the majority of the citizens have taken the vaccine boosting their immunity in Ghana and across the world". – **R22.**

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"The Director for of global immunization at the CDC in Nigeria was reported to have admitted that Nigeria was the third country in Africa to receive vaccines from COVID-19 Vaccines Global Access (COVAX), a global alliance that supplies COVID-19 vaccines to low- and middle-income countries. The Oxford/AstraZeneca vaccine was delivered in four million doses on March 2, 2021, and it reached Nigeria. He and the US Ambassador to Nigeria remarked that it was a life changer for Nigeria's effort towards fighting COVID-19". – **R24.**

6.1.4 The Effectiveness of the Emergencies Measures Against COVID-19

In order to understand whether or not these measures worked as expected and how well they were used to manage COVID-19, the participants were asked to share their views and on the effectiveness of how COVID-19 was communicated and treated as an emergency in Ghana and other West African countries.

In their responses, all the participants believed that the emergency responses were generally effective and has reduced or limited the risks the pandemic posed to human survival. They however expressed different levels of effectiveness with numerous challenges in implementing these measures.

According to the participants, the measures put in place were effective because they have been tested and tried during previous outbreaks in the past decades. The participants believed that the intense public health and education and awareness creation carried out at all levels of communication was one of the effective measures adopted to manage COVID-19. They cited

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Ghana as an example when the President took a keen interest in the emergency communication of the dangers of COVID-19, the preventive measures, and the updated statistics on a weekly basis getting the buy-in of all Ghanaians to ensure that everybody put safety first in handling COVID-19.

They added that the media further amplified the awareness creation and public education by hosting public health experts and other professional health practitioners to provide timely and accurate information on the pandemic to every citizen in almost every major spoken language of the people. To them, communication was very effective in ensuring behavioural and attitudinal changes among the people since it has painted a vivid picture of how deadly COVID-19 was and the need to take the necessary precautions to save one's life and that of others.

The findings also showed that despite its peculiar setbacks, social media also contributed to the effectiveness of communication and public education. They mentioned that information and certified data of COVID-19 statistics were shared on social media which went viral and possibly faster and wider than the traditional media. According to them, many people used their WhatsApp status to share updated information. They cited that WHO social media handles were accessible in the sub-region and live proceedings were followed. Press briefings were left on different social media platforms for replay at will at one's convenience which was not possible without social media. According to the participants, the music and comedy created by the entertainment industry helped and a long way to promote the communication of the emergency of COVID-19 because the people could easily relate to them. They, therefore, applauded the entertainment industry for the tremendous role they played in making public education and awareness creation very effective in combating human security threats of COVID-19 in the sub-region.

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The participants also mentioned that a test of the effectiveness of the measures put in place is the infection and mortality rate in the sub-region. According to them, West Africa is one of the regions with the lowest mortality rate. According to the participants, these measures adopted by the various governments contributed so much in mitigating the incidence rates in the region even though there are still lapses that have to be filled.

The findings also showed that the legislative instrument passed by the parliament of Ghana and the involvement of the law enforcement agencies contributed largely to the success of implementing emergency measures to safeguard lives during the pandemic. According to them, the security forces were instrumental not only in Ghana but in other countries in the sub-region to ensure compliance with directives and legislation. According to the participants, for instance in Ghana, immigration officers manned our borders with the help of the military to ensure that all those arriving in the country are made to go through the necessary processes so as not to import new cases into the country. The participants also said that the curfew imposed in some parts of the sub-region such as Burkina Faso and Senegal was enforced by security officers which would compel people to abide by the regulations. Without the enforcement, some of these directives might have been ignored or disregarded at the expense of human security. The enforcement is an indication that West African countries treated COVID-19 as a security threat and therefore used all the necessary government and national apparatus to combat it.

One participant indicated that, as an institution, they have not conducted any assessment or appraisal study, or exercise on the effectiveness of these measures, however, he was sure that, there was a high likelihood of these measures being effective considering the relatively lower fatalities recorded in the sub-region. According to them, until such a study is conducted, there cannot be any conclusive report on the effectiveness of the measures.

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"Yes, I do think so. Of course, if you compared it to other countries and the number of cases and deaths, you will say that relatively they were effective because if they weren't effective, we would probably face the same case mortalities as compared to the other countries. Especially, even to the fact that Ghana is a major transit within the West African sub-region. And so, if we were still allowing people to come for instance; we had aggressive surveillance, testing, gene expert machines in almost all the regions and the fact that we had both private and public facilities commandeered to treat cases, low death rate compared to other countries in the sub-region, speaks out that we did something right". – **R10**.

"Yes, they were very effective because similar viruses have already happened in the 60s, 70s and the rest. And these were interventions that were put in place to curtail the illness example is the wearing of the nose mask, social distancing, washing of hands and several others which really helped". – **R14.**

I will say kudos to the government of Ghana because we cannot deny the fact that regular communication, Passing the LI to stop movement, restrictions on

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gathering and later relaxation of same, etc. I think that these measures were well thought through. The part that I am not sure we did too well was the use of resources we mobilized. I don't think we had value for money. People thought they would never account for the use of the resources so they did what they wanted. That is a shame. If Fidelity Bank could sponsor the building of that world-class health centre, then handed it over to the government. It shows that there was that positive goodwill to make sure that we all go through it. – **R20**

"From reliable sources, the Liberian government also put in place a number of other measures including lockdowns, curfews, vaccination, and closure of public gatherings to stop the spread of COVID-19 in addition to border closure just like other West African counterparts. The implementation of these policies, along with border closures, seems to have slowed the COVID-19 virus's spread in Liberia. This was evident in relatively low fatalities associated with the virus in the country. It's crucial to remember that the virus still poses a threat to the nation and that there are still a lot of active cases there". – **R36.**

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"We are yet to commission any assessment into that. So, I cannot pass judgment because we have not done any assessment. However, as I mentioned earlier, at the peak of the pandemic, Ghana was mentioned as one of the countries that was performing very well in the area of testing and contact tracing. This was publicly known and the global database confirmed this. So, the response was good but it also depends on what you are comparing with". – **R39**.

6.1.5Challenges with Implementing the COVID-19 Emergency Response Measures in West Africa

The participants mentioned earlier that, the effectiveness of the measures implemented to address the emergency of the pandemic were confronted with some restrains. According to them if not for these challenges, the emergency measures would have been more successful. Some of these challenges have been detailed below.

At CDC, we believe that, even though the global rollout of the COVID-19 vaccine is an extraordinary response to a grave global pandemic that was confronted with numerous and ever-changing challenges, there are still useful lessons that can be drawn from the earlier introductions of other vaccines. COVID-19 International Vaccine Implementation and Evaluation (CIVIE)

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> *programme builds on the knowledge gained from other international vaccine initiatives in order to help low- and middle-income countries (LMICs) deploy and assess COVID-19 vaccines. This decreases COVID-19's threat to the world while also assisting LMICs in reducing disease burden and transmission in their own countries. These programmes can help long-term immunization programmes expand and help partner countries better protect their citizens from diseases that can be prevented or treated with vaccines.* – **R34.**

Superstition

According to the participants, Africa is believed to be one of the most religious continents with different religious beliefs and practices. According to them, there was widespread belief in some sections of Ghanaians and other West Africans that, COVID-19 never existed. These groups of people either believed that it was a spiritual attack or it never existed. The participants mentioned that these people quizzed why COVID-19 fizzled out at the introduction of the vaccines even though a large number of Africans are yet to be vaccinated. The findings show that these people wondered why were Africans and for that matter West Africans not losing their lives like it was recorded in China, Italy, Spain, the United States, the United Kingdom and other developed countries that have more sophisticated health systems than Africa.

The participants further mentioned that some of the people believed that the remedy for COVID-19 was not the vaccine but rooted in spiritual practices such as fasting and prayers, using amulets and charms engaging in other rituals. This, therefore, affected compliance and complicated the works of law enforcement agencies such that some religious leaders were hosting religious

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gatherings that were banned to ensure social distancing. According to them, there were instances where the police had to confront people who preach on the street and force them to comply with the rules and protocols outlined.

The participants also believed that some of the people believed local and herbal medicines were more potent in the prevention of COVID-19 than the first aid measures proposed. Some believed that even if they contracted COVID-19 they would be able to cure themselves with traditional and herbal medicine hence they did not take the safety precautions seriously. They believed that when they were attacked by more deadly diseases than COVID-19 they recovered by resorting to herbal medicines.

"That is if there was a disease in the first place. Apart from South Africa and Uganda which had a second wave that was high… how many countries had a wave that you can say was so large compared to the European countries? Even when you compare the way we use our informal and formal markets and our crowded households. Do you think that we had that COVID taxes? When you look at it compared to Europe where they were into the isolations and the others and what happened to them. Compare it to Ghana and Nigeria. Hence, was there a crisis or there was an overreaction or something else? Also, the emergency measure ended up exacerbating the economic situation of many people because of the informal nature of our economy. Apart from that the protocols and how we managed it throughout COVID and it has even increased our economic reliability because just after that in 2021, there sudden increment in taxes into the subsequent year 2022 which resulted in

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inflation of products (bread and other stuffs) and services. Hence, if COVID did kill us then COVID will kill us". – **R10.**

"I think the measures really helped. However, the coming in of the vaccines and the sudden disappearance of the virus makes people to think that the disease did not exist in the first place. Meanwhile, the campaign for people to eat well also went down well. People were taking oranges and every home had vitamin C. People were covering themselves under hot water and eating some local foods to boost their immune systems. I can say the lockdown helped because a point after the lockdown, we had another spike of the virus. I remember there was even a spike after Christmas and we were discussing that the president should have declared lockdown during the season". – **R11.**

"As a law enforcer, one of the hardest things I had to do was persuade people to follow the safety procedures even when they didn't think the virus existed. People have dismissed the reality of COVID-19 as a flu, a hoax, or something that only affects the elderly. Since they each held their own opinions and I was powerless to persuade them otherwise, it was challenging to argue with them. However, I still had to make an effort to uphold the law, which occasionally

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resulted in conflict. We had people cursing us that we were trying to fight God. This really made our work difficult". – **R28.**

Non-Compliance

According to the participants, there were some people who just were not interested in the protocols or were non-compliant. Some of the reasons for this is that they feel they need to go about the routine activities that will give them their daily livelihood. According to them, street hawkers felt that a day without them on the street would mean they would have nothing for food and upkeep. There were other pleasure seekers who went to the beaches amidst the spread of COVID-19 to kill the boredom of being at home. According to the participants, some of the people gave their own definitions of what an essential service was and claimed their services were essential hence they would not observe the lockdown that was imposed on them. The participants reported an incidence in the Volta Region of Ghana where most of the border towns trade or farm in Togo hence closing the border, therefore, is imposing direct and immediate hardship on them since their source of livelihood would be taken away from them.

The participants indicated that, with the informal public transport services, most of the transport operators violated the social distance protocols to fully load their buses and taxis. The justification they gave was that observing social distance would make them run at a loss since it was going to drastically reduce their revenue which would make it difficult for them to meet their targets and pay their car owners or settle the credit facilities.

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The participants also indicated that most people especially in Ghana, held funerals hosting more than the twenty-five authorized people. Even though this was against the protocols announced by the President, it was difficult for the law enforcers to be everywhere. Some of the videos of the funeral went viral on social media and those that the police were informed of resulted in some rebuttal between the police and the traditional leaders inhibiting the police from fully executing their work.

According to the participants, some political parties held rallies in the country flouting social distancing and without facemasks. This they believed made a lot of people begin to disregard the rules or the safety measures. According to them how could the lawmakers become the lawbreakers and expect commoners to obey the law?

We had an instance where people were calling for the arrest and prosecution of the NPP activist during one of their primaries in the heat of COVID-19 as they prepared for the 2020 general elections. According to them a rally that had the President and Vice-President in attendance ended up in a jubilation for some party members without their masks and not observing social distancing because they were seen hugging. I think the President admitted it in his subsequent address on COVID-19 and mentioned that it should not be repeated and I believe that has addressed and killed the matter hence as a law enforcement unit we could proceed any further. This however emboldened the superstition that, COVID-19 was just a hoax and not as deadly as it was portrayed. From that time, I think people's commitment to observing the protocols was affected negatively. – **R28**

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Misinformation & False Rumours

The participants also showed that there were a lot of rumours and misinformation about COVID-19. According to them, people spread information about the cure for COVID-19 and false alarms about people infected with COVID-19. They indicated that false news spreads more on social media since it lacks local regulation authorities. According to the participants, information on the lockdown in Ghana for instance came weeks before the President declared the lockdown and this caused panic buying and artificial inflation. Rumours were received that African leaders were being paid to report high cases of COVID-19 this then was the reason for the rapid increase of the cases in West Africa. This false information led to the disregard of some of the measures since people believed that the whole COVID-19 is about the conspiracy theory. Other participants also indicated that COVID-19 was to bring a 5G mobile network hence the lockdown was a deliberate attempt to get people out of the streets to make way for the connection to be made to enable the world's superpowers to control every human being with artificial intelligence (AI). These rumours then have made people resistant to the safety protocols instituted to save lives.

"This COVID-19 came in with lots of misinformation (false perception) which spread much faster since it was new to our system, hence, it was very difficult to communicate the facts. At the end of the day, effective communication was done through several channels and strategies. The Ministry of Information together with the presidency gave weekly updates creating awareness of the disease, its rate of spread, and protocols laid down to prevent the spread of the

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disease through the 'fellow Ghanaian broadcast', which was delivered on a weekly basis. We also had people abusing the hotline with offensive words and unreal information and when the surveillance team got to the location, they found out that it was a false alarm. This is discouraging and delayed the response since we also want to be sure by doing more due diligence before dispatching the ambulance to destinations from calls using the hotline". – **R5.**

Inadequate funding

According to the participants, funding played a critical role in the emergency response to COVID-19 in West Africa. For instance, the provision of PPE, creation of Isolation and treatment centres, procurement of vaccines, financing budget deficit, the stimulus package for small businesses and other financial obligations that were associated with COVID-19 required extra funding since it was not part of the initial budgets of the COVID-19. According to the participants, there were incidences of inadequate supply of PPE in some health facilities which was believed to be as a result of lack of funding. According to the participants, some African countries had to seek World Bank support in combating the pandemic. One of the key informants whose identity is withheld, indicated that, since Ghana did not have emergency funds, they had to divert other resources to tackle COVID-19. He or she believed that the government had to look for funding to be able to meet the demands of the pandemic and this caused some delay in the emergency response to COVID-19.

Even though ECOWAS was said to have released funding for the West Africa Health Organization (WAHO) to provide some PPE, testing kits and ventilators to its member states, the funding was inadequate hence these supplies were limited affecting the number of tests to run in the sub-region.

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Nigeria for instance has been cited to have tested only 0.14 in a thousand population. This funding challenge has limited the effectiveness of the collective emergency response measures in West Africa.

"During the pandemic, every other fund was diverted to the management of the pandemic. I think there should be an emergency fund the government must put together to ensure that there are always funds to handle such emergencies. There was some preparedness when we got Ebola and so this fund will be very much needed. We don't need to be looking for funds in the middle of handling the pandemic as we did in this case. The money should be available for such purposes. We also need health or health security laws or legal instruments that will be binding successive governments to ensure that they put in place plans and policies to handle such pandemics. Luckily the records of how this pandemic has been managed will be there to guide the next pandemic. This legal instrument will guide the process for the next stage and will force everyone to bid or work with the laid down policies". - **KI**

"It is arguable that the Ebola experience in West Africa strengthened the region's political determination to establish operational regional health institutions, enabling a provincial response to the present threat. To avoid similar attacks on WAHO like that they received during the Ebola outbreak,

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for its slow response, failing to send experts who could have provided adequate information at the outset, and failing to increase testing capacity, some measures were put in place. Even though as of the end of March 2020 infection rate was still low in the sub-region, ECOWAS had already provided funding to WAHO to buy and give away testing kits, PPE, and a small number of ventilators for the region's member states. Though ECOWAS was able to facilitate the purchase of medical equipment, the level is still low. As of the 5th of April 2020, WAHO had distributed 35,000,000 test kits to member states, with an additional 240,000,000 kits and 120 ventilators on order. Even though the numbers of PPE and other supplies were low, it was to augment the efforts of the member states in their emergency response and preparedness against the disease" – **R35.**

Failed Promises & Discriminations

According to participants some of the health workers became demoralized when they did to get to receive the allowances promised by the government. The findings show that, even though some people received some funding, others felt discriminated against. The participants indicated that the operational definition of 'frontline' workers was equivocal hence many health professionals who thought they were frontline workers but were excluded from the payment of the allowances became embittered and offended which affected their motivations in caring for COVID-19 patients. According to the participants, the concerns were that every health worker was at the forefront of fighting the disease since the symptoms are similar to fever and cold, all health facilities are exposed to the dangers of COVID-19 because they may be dealing with COVID-19 patients who

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might have reported for malaria. The participants believed that this has affected the commitment of health workers who may no longer be willing to attend to COVID-19 patients because they do so at their own perils.

The social intervention programme on the other hand was also faced with similar challenges where people believed that the food was shared on political and ethnic identity. Some people felt left out and developed a mistrust of the government. Others also felt left out of the free water distribution since most of them are not connected to the Ghana water supply but source their water from private suppliers.

"Where we had a few challenges was with the allowances. Not all the people who were identified as frontline workers received what is due them to date". – **R4.**

"There were lots of challenges with the government fulfilling promises made to frontline health workers. Most of the promises have never been received. Also, some reported of mismanagement of funds in some of the district or regional hospitals. I will stress that funds meant for COVID were not managed well because the frontline workers in this facility did not even receive a penny from the government. Meanwhile, they all worked hard to combat the virus among all patients, and at the end of the day, they did not receive anything. We understood that the CDC, World Bank, and several others donated an amount of money to the government to combat the virus, PPEs were provided but the financial support for the staff did not come". – **R14.**

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Unapproved Borders

According to the participants, a major challenge faced in the entire sub-region was the ineffectiveness of the border closure. According to the participants, many West African countries have people living in one country and working in another country. This is very rampant in the communities in the border communities. According to the participants, there are unproved routes mostly footpaths used by residents in the border towns to cross to other neighbouring countries either for trading or farming. These unapproved routes are not manned by security officers hence some people still cross their borders making the various nations exposed to the importation of the virus.

The participants indicated incidences on the porous, Mali Niger border, the Nigeria-Benin border, and the Ghana-Burkina Faso. Cote d'Ivoire and Togo borders had similar incidences of people crossing the borders of other countries through unapproved means. These individuals escaped the screening, testing and mandatory quarantine in the various countries hence exposing the sub-region to the importation of the virus into the country.

The uncontrolled crossing of borders permitted people to avoid official checkpoints and health screening procedures posed difficulties in combating the virus in the sub-region. This has caused the virus to spread unchecked across international boundaries, making it challenging to effectively contain and control the pandemic. Finding and isolating people who may have been exposed to confirmed COVID-19 cases makes it difficult to determine their risk of infection. This puts a limitation on efforts to break the chain of transmission and raises the possibility of the virus spreading further.

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This according to the participants has undermined the border closure effort to contain the disease since there could be more imported cases of the disease on the blind of the authorities.

"At ECOWAS, we have had several reports in the past about unauthorized borders that exist in almost every member state which sometimes poses governance and accountability challenges to the various countries. We need to find a sustainable solution to this. There have been reports of people using unauthorized crossing points to get around quarantine and health screening procedures in 2020 at the Nigeria-Benin border. This unregulated movement complicated efforts to find contacts and raised the possibility of bringing COVID-19 cases into the country. It has been difficult to stop COVID-19 from spreading because of the porous Mali-Niger border. It is now more challenging to restrict the movement of infected people and track their contacts because unapproved crossings have made it possible for people to get around health inspections and quarantine procedures". – **R35.**

Stigmatization

The findings showed that those who recovered from the pandemic were stigmatized by some people. This has caused so much emotional damage to people leading to mental health issues like, stress, anxiety and depression. The stigmatization, therefore, prevented people from seeking medical assistance when they showed some symptoms which could be COVID-19. Due to this people who might have been living with COVID-19 remain in society have contact with others

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and spread the disease more. Due to the stigmatization others chose self-isolation, and self-medication which may not be as effective as if they had sought and complied with full medical support. For the fear of stigma, that they will be impotent and infertile, people have refused to be vaccinated exposing them to the vaccines.

According to the participants some health professionals also faced stigmatization since people believe that if they come into close contact with COVID-19 patients they should have the virus. This can affect the morale of these health professionals and affect their attitude toward helping out the fight against the virus.

The participants also mentioned that people feared losing their jobs hence they would not act as if they were well and keep the symptoms of COVID-19 at work exposing the entire organization to the risk of COVID-19.

Stigmatization did not start with COVID-19 so people have transferred their experiences to COVID-19 and kept their challenges to themselves. If not for stigmatization, the emergency response to COVID-19 would have received a higher success rating.

"The measures were very effective but the issue was the stigmatization because if something happens Ghanaians want to polish the whole story and label it hence, hindered lots of people from reporting themselves when they are experiencing the signs and symptoms associated with COVID-19 which led some people to lose their jobs specifically those in the private sector. So, the government has to check on those short backs by setting some people as a scapegoat". – **R6**

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"People who have COVID-19 or have come into contact with infected people are stigmatized, which results in social exclusion and discrimination. This makes the environment intimidating and unfriendly to people which makes them unlikely to let people that they are showing some symptoms of COVID-19 and seek medical attention and comply with the protocols. Additionally, it makes it more difficult to locate and isolate affected individuals, two important steps in stopping the virus from spreading". – **R34.**

6.2 Discussion of Findings

The findings of the study offered insight into how the COVID-19 outbreak was handled as a danger to human security in the West African sub-region, notably in Ghana. These findings are consistent with the definitions of securitization offered by the Copenhagen School and the United Nations Development Programme (UNDP), which see security as comprising a wide variety of non-traditional problems that might harm human well-being and social stability (UNDP, 1994).

According to the Copenhagen School's securitization theory, the participants' assessments of economic hardship, death, and morbidity as the main risks presented by COVID-19 reflect the concept of "speech actions," in which an issue is portrayed as an existential threat that necessitates immediate and extreme steps to overcome (Diskaya, 2013). According to the study findings, COVID-19 was presented to the people of West Africa, especially Ghana, as an emergency problem requiring collective attention, collaboration, and quick action. This conceptualization

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elevated COVID-19 from a health problem to a security one, underlining the importance of collaborative measures to limit its impact on human lives and well-being (Sarkodie et al., 2021).

The communication of the concerns and perils related to the pandemic demonstrated the security concerns of COVID-19. According to the findings, governments and relevant agencies participated in public announcements and education campaigns emphasizing the seriousness of the health issue, the possible repercussions of unrestricted spread, and the need for residents to adhere to preventative procedures. This strategy is consistent with the Copenhagen School's idea of securitization, which involves framing an issue as an existential danger in order to gain public support and mobilize resources for its mitigation (Diskaya, 2013).

Furthermore, the findings indicated that practical steps were put in place to preserve human lives and lessen the impact of the epidemic on society. Travel restrictions, border closures, lockdowns, mandatory mask-wearing, and social separation were among the measures used across West African countries, including Ghana. These steps are intended to protect public health, prevent viral spread, and lessen the infection's potential impact on economic stability and social order. This approach is consistent with the UNDP's definition of security, which prioritizes human well-being and social cohesiveness (UNDP, 1994).

The research findings also indicate that upholding human security from COVID-19 showed itself in both regional and national reactions. While the overall methodology was identical throughout West African nations, the intensity and degree of execution varied according to contextual factors such as healthcare facilities, economic capability, and governance frameworks. This nuanced approach is consistent with the Copenhagen School's belief that securitization may occur to varied degrees and intensities depending on security actors' perceptions and the sociopolitical situation.

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Therefore, the two main ways that COVID-19 was managed in West Africa as a threat to human security was, first of all, communicating the pandemic as an emergency and then taking the necessary emergency measures to contain the spread and eradicate it (Antwi-Boasiako et al., 2021).

5.1.1 Communicating COVID-19 as a Human Security Threat in Ghana and West Africa

The findings of the study highlight the extensive and diverse communication approach used to portray the COVID-19 pandemic as an emergency in West Africa, notably in Ghana. According to the report, the communication efforts were motivated by the need to confront the gravity of the situation, develop a shared knowledge of preventative actions, and foster a coordinated response to lessen the effects of the pandemic. This strategy is compatible with the principles of successful crisis communication, emphasizing the necessity of a clear, consistent, and focused message in engaging and mobilizing the public during times of disaster (Sharples et al., 2022; Coombs, 2021).

The multidimensional communication approach used in West Africa included a variety of channels and tactics, reflecting a grasp of the region's different information users and settings. Traditional media, such as presidential addresses, ministerial news conferences, and media broadcasts, played an important role in reaching a large audience and communicating authoritative information. These platforms acted as authoritative information sources, allowing leaders to express the seriousness of the crisis and emphasize the critical need for collective action (Seytre et al., 2021; Adepoju, 2020).

Furthermore, the utilization of community participation and multilingual initiatives demonstrates an understanding of the significance of customizing messages to local settings and language

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variety. The findings indicate that efforts were made at the grassroots level to interact with communities, acknowledging the importance of local knowledge and cultural subtleties in ensuring effective communication. This strategy is consistent with crisis communication ideas that highlight the necessity of trust building and direct engagement with communities in order to develop understanding and compliance which further entrenches the concept of human security as described by the UNDP and Copenhagen School Theories (Diskaya, 2013; UNDP 1994).

The findings also revealed that the use of graphic elements enhanced the communication approach by making information more accessible and understood. Infographics, posters, and films are excellent methods for communicating complicated topics and health-related information. Leaders might raise public understanding of preventive measures and safety practices by employing visual materials, resulting in more informed decision-making and behaviour modification (Pandya, 2022; Delicado & Rowland, 2021).

According to the findings, multiple stakeholders were crucial in enhancing emergency communication efforts. The research emphasizes the role of government agencies, non-governmental organizations, healthcare professionals, and other stakeholders in providing correct information and fostering a coordinated response. Such collaborations not only increase the credibility of the messaging but also make it easier to disseminate information across other networks. The emphasis on reaching as many individuals as possible emphasizes the urgency and danger of the COVID-19 outbreak. This serves as the confirmation of the study by Adebisi et al. (2021) who demonstrated the effectiveness of risk communication and community engagement in communicating the threats posed by COVID-19 in thirteen African countries.

The findings further showed that in Ghana, the presidential speech, ministerial press conferences, media broadcasts, publications, and public education programmes all contributed to a well-

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coordinated communication plan. The Partnering and collaborating of multiple stakeholders were crucial in enhancing emergency communication efforts. The research emphasizes the role of government agencies, non-governmental organizations, healthcare professionals, and other stakeholders in providing correct information and fostering a coordinated response. Such collaborations not only increase the credibility of the messaging but also make it easier to disseminate information across other networks. Antwi-Boasiako and Nyarkoh (2021) put forth a similar argument in the conclusion of their study that, the collaboration of government machinery, and the media both social and traditional resulted in significant effective communication in the COVID-19 management approach

The emphasis on reaching as many individuals as possible emphasizes the urgency and danger of the COVID-19 outbreak. In Ghana, the presidential speech, cabinet press conferences, media broadcasts, publications, and public education programmes all contributed to a well-coordinated communication plan. Leaders want to guarantee that no one is left in the dark regarding the hazards and measures related to COVID-19 by utilizing several platforms and engaging various communication channels.

Finally, the outcomes of the study indicate the usefulness of a comprehensive communication approach in portraying the COVID-19 epidemic as an emergency in West Africa. Traditional media, community involvement, multilingual tactics, visual materials, and partnerships were used to engage the public, enhance understanding, and encourage compliance with preventive actions. This method not only emphasizes the need for good crisis communication but also demonstrates a commitment to protecting public health and well-being in the midst of a global health catastrophe.

5.1.2 The Pragmatic Measures Adopted to Manage COVID-19 in Ghana and West Africa

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As already stated, how COVID-19 was perceived and managed as a human security threat was first of all by communicating it to get national and regional buy-in which was followed by the measures adopted to contain the spread and cure the disease.

The findings highlight the diverse emergency reactions adopted by West African governments to protect lives against the risks posed by COVID-19. These solutions addressed many aspects of governance, public health, and social well-being, and they are consistent with major findings from earlier research on pandemic management in the region. The findings emphasize the need for quick and coordinated government interventions, which match with earlier studies highlighting the vital role of leadership during public health crises. The findings of study on the role of heads of state and presidents in designing emergency responses are consistent with previous literature that emphasizes the importance of political obligation in leading an effective approach to managing the pandemic (Osei-Kojo et al., 2022; Udoakang et al., 2022; Imtyaz et al., 2020) These findings support the view that leadership at the highest levels of government is critical in communicating the gravity of the situation and ensuring that complete actions to safeguard lives are implemented.

The strategy of public communication and education as identified by findings further elaborates previous research that emphasizes the need for clear and accessible public messages during pandemics (Sharples et al., 2022). The utilization of conventional media, community participation, and multilingual techniques also agrees with literature that emphasizes the importance of effective communication in communicating critical information, resolving misunderstandings, and increasing public adherence to preventive measures. The Presidential addresses, press conferences, and public education activities in Ghana and other parts of the sub-regions were demonstrated by the findings as a well-coordinated strategy to communicate the emergency nature of COVID-19 (Seytre et al., 2021; Adepoju, 2020).

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The creation of treatment and isolation centres, as well as the diversion of resources to healthcare, is consistent with past studies like that of Peck (2020) in Korea on pandemic response, which emphasizes the need to bolster the healthcare system during emergencies. The findings highlight the need to have appropriate medical infrastructure, experienced healthcare professionals, and treatment facilities in place to handle the inflow of patients. This is consistent with previous research that emphasizes the need for surge capacity and readiness in health systems to meet the weights of a pandemic (Talisuna, 2020).

The closure of international borders and lockdown procedures emphasized in the findings are consistent with earlier studies on pandemic containment techniques. The findings further showed that non-pharmaceutical treatments to limit illness transmission, such as limited movement, closing of public venues, and travel restrictions, are in line with published research on non-pharmaceutical interventions to reduce disease transmission. The findings further corroborate with earlier studies highlighting the difficult trade-offs between public health and economic considerations, especially in resource-constrained contexts (Moore et al., 2021; Kaim et al., 2021; Adekunle et al., 2020).

The vaccine distribution, prioritizing, and administration techniques stated in the findings are consistent with previous studies on vaccine distribution, prioritization, and administration during pandemics. The focus on high-risk populations, frontline workers, and disadvantaged groups supports known vaccine allocation principles designed to optimize effect and protect those most vulnerable to severe illness. In keeping with global efforts to guarantee fair vaccination availability, the study emphasizes the necessity of utilizing multiple vaccine procurement mechanisms, such as bilateral partnerships and multilateral cooperation (Cook & Roberts, 2021; Jecker et al., 2021).

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Furthermore, the findings emphasized how the vaccination programme was decentralized coupled with the comprehensive preservation of immunization records resonated with literature highlighting the importance of efficient and equitable vaccine delivery, as well as effective data management, to track coverage and outcomes. The findings of the study on targeted vaccination campaigns required vaccination at entrance points, and the engagement of skilled healthcare professionals are consistent with existing studies on effective vaccine delivery systems (Marfoh et al., 2023; Amponsa-Achiano et al., 2022). Amponsa-Achiano et al. (2022) demonstrated how vaccine decentralization resulted in about 95% efficiency in the distribution with the already established systems used in earlier vaccination exercises.

Finally, the findings of the study present a complete picture of how Ghana and West African nations responded to COVID-19 as an emergency and adopted various steps to secure public health. These findings are consistent with earlier studies on pandemic preparedness, emphasizing the significance of leadership, communication, healthcare system strengthening, containment tactics, and vaccine delivery. By situating these findings within the larger context of pandemic response literature, it is clear that West African countries' strategy for controlling COVID-19 is based on recognized best practices and indicates a commitment to protecting lives and public safety.

6.3 International Relations in Managing COVID-19 in West Africa

While the first response to COVID-19 was heightened nationalism with border closures for national security, controlling the epidemic has demanded a move toward international collaboration (Ferhani & Rushton, 2020). Bilateral treaties and international cooperation have become critical weapons in the worldwide fight against the virus (Fazal, 2020). Countries realize the pandemic's interconnectedness and the necessity for coordinated action. Engagements with

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other countries have enabled the exchange of resources, knowledge, and vaccinations, supported by bilateral agreements and international collaboration. This move from pure nationalism to a more collaborative strategy reflects the realization that the pandemic's issues transcend national borders, underlining the significance of joint efforts in combatting and reducing the global effect of COVID-19 (Ferhani & Rushton, 2020; Fazal, 2020).

Despite efforts to locally manufacture medical supplies and personal protective equipment (PPE) domestically, the sub-region's internal capacities were unable to fulfil the rising demand during the COVID-19 epidemic. Recognizing these constraints, governments sought international assistance for key supplies, emphasizing the importance of a coordinated global response. Different studies underline the difficulties that diverse countries confront in increasing domestic output to match the severity of the crisis (Institute for Economic Justice, 2022; Cohen & van der Meulen Rodgers, 2020).

International aid was therefore critical in bridging the gaps, supplying critical medical equipment and personal protective equipment (PPE) where local skills fell short. This joint approach was critical in controlling the virus's spread and protecting healthcare personnel. The worldwide community understood the interdependence involved in handling a public health catastrophe, paving the way for enhanced collaboration and solidarity to address not only the immediate issues but also to plan for the ultimate deployment of vaccinations to eradicate the virus. This emphasizes the necessity of international cooperation in strengthening collective resilience in the face of global health risks. (Chersich et al., 2020).

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Also, the were economic supports from international donors like the IMF and the World to augment the budget of some of these developing economies (Chitenderu & Ncwadi, 2022). Some of these funds were used for budget deficits, to provide for frontline workers, and to supply free

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basic amenities to the citizens. Some of these funds were used as stimulus packages for businesses to help them survive the impact of the pandemic (Nyarko et al., 2020).

In response to the economic constraints faced by the COVID-19 epidemic, emerging nations in West Africa received considerable financial help from foreign donors, most notably the International Monetary Fund (IMF) and the World Bank (Chitenderu & Ncwadi, 2022). These contributions were critical in supplementing these nations' budgets, correcting budget shortfalls, and supporting other pandemic-fighting measures.

The financial aid was varied, including allocations for frontline personnel, free basic utilities for individuals, and the implementation of economic stimulus packages. These funds amongst other things were intended to mitigate the economic effect of the pandemic, assist companies in navigating the hurdles, and ensure the population's well-being (Nyarko et al. 2020).

When it came to vaccine attempts, however, West Africa faced a particular obstacle. West Africa, unlike some other regions, lacked legally licensed vaccines made inside the sub-region (Lawal et al., 2022). As a result of this, vaccinations have to be obtained from other international organizations. The region's inability to generate its own vaccinations highlighted the necessity of global collaboration and fair access to medicines to ensure complete viral protection.

International donors' financial assistance not only helped these nations weather the immediate economic consequences but also positioned them to join in global immunization campaigns. The necessity for improved local capacities, research, and infrastructure development to ensure self-sufficiency in responding to future health emergencies is highlighted by the reliance on external sources for vaccinations. The dynamics of both economic and health assistance highlight nations'

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interconnectivity in addressing the numerous problems faced by the global epidemic (Chitenderu & Ncwadi, 2022; Nyarko et al. 2020).

6.4 Relevance of Theory to Finding

The study's base in Strategic Management Theory in a Post-Epidemic and Non-Ergodic World provides a solid framework for analysing West African governments' varied and multifaceted reactions to the problems provided by the COVID-19 pandemic. This theoretical lens sheds light on how nations negotiate short-term shocks and uncertainties while preparing themselves for long-term strategic adjustments in order to prosper in the emerging "New Normal" (Ahlstrom et al., 2020). The study's findings demonstrate how the Strategic Management Theory successfully explains and contextualizes governments' immediate and adaptive steps to mitigate the pandemic's disastrous consequences. The theory's emphasis on developing solutions to deal with discontinuities and high uncertainty corresponds to the COVID-19 crisis's quick and unexpected character. The rapid and coordinated measures of governments, including border closures, lockdowns, and the development of treatment facilities, reveal a deliberate reaction to the virus's immediate risks.

Furthermore, the theory's use goes beyond the crisis response phase. The study demonstrates how Strategic Management Theory may shed light on the medium to long-term consequences of government initiatives. For example, the implementation of mandated vaccines and continuing testing demonstrates a strategic approach to accomplishing the ultimate aim of viral eradication. These policies are consistent with the theory's emphasis on long-term strategy modifications to efficiently manage the competitive landscape and societal well-being.

The implementation of economic measures, such as COVID-19 taxes and levies, shows the theory's insights about the need to adopt economic tactics to alleviate the negative effects of the

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pandemic. These approaches recognize the possible long-term economic consequences and reflect a proactive approach to responding to the changing environment. Furthermore, the study emphasizes how the pandemic has resulted in long-term changes in organizational processes. The move to remote or hybrid working arrangements that arose as a result of the pandemic is consistent with the theory's emphasis on adjusting to the "New Normal." This move represents an organizational strategic shift to improve operations and remain competitive in a post-pandemic context.

In conclusion, the study effectively illustrates how Strategic Management Theory in a Post-Epidemic and Non-Ergodic World provides a complete context for understanding governments' and companies' diverse and dynamic reactions to the COVID-19 pandemic in West Africa. The theory's emphasis on both immediate crisis management and long-term strategic adaptation provides useful insights into the current pandemic's multifaceted difficulties and prospects. According to the findings, the theory's applicability extends to numerous dimensions of governance, policy-making, and organizational practices, contributing to a more comprehensive insight into the pandemic's impact and the actions taken to combat it.

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CHAPTER SEVEN

UNDERSTANDING THE KIND OF INTERNATIONAL POLICIES AND RESOURCES THAT WERE DEPLOYED IN THE MANAGEMENT OF COVID-19 IN GHANA.

7.0 Introduction

An unprecedented global challenge, the COVID-19 pandemic outbreak required quick and cooperative responses from all countries. Like many other nations, Ghana had to deal with the challenges of preventing the virus's spread while preserving public health and limiting socioeconomic disruptions. Ghana's management of the pandemic in this situation was significantly influenced by international cooperation, policies, and resource mobilization.

This chapter provides a thorough analysis of the international strategies and tools used by Ghana in response to COVID-19. It aims to shed light on the policies and partnerships the Ghanaian government has started with other countries' governments, non-governmental organizations, and international organizations. We want to understand how well international policies helped Ghana's pandemic response and identify areas where cooperation and resource distribution could be improved by analysing these research findings.

7.1 Major Findings on Understanding the Kind of International Policies and Resources That Were Deployed in the Management Of COVID-19 In Ghana.

The participants expressed their views on the formulation and implementation of international policies in Ghana in response to the COVID-19 pandemic. The findings revealed the impact of international bodies on the management of COVID-19 in Ghana through these policies that were

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implemented by Ghana. The findings showed the understanding of the participants of international health regulations and how critical it was in securitizing COVID-19 in Ghana.

7.1.1 Formulation of International Policies Against COVID-19

The participants were asked to explain the international policies that were formulated as a global effort to combat the COVID-19 pandemic.

The participants generally stated that there were no specific 'policies' formulated against COVID-19. Most of them interpreted policies as laws or rules that are binding on every country to obey. The participants added that, even though there were no specific policies formulated for the COVID-19 pandemic, the WHO provided some guidelines and entreated member states including Ghana to follow in order to curb the spread of the virus. The responses from the participants indicated that no country was under any obligation to abide by any such international policies but most countries formulated their own policies and legislation taking cues from the guidelines issued by the WHO. According to the participants, WHO constantly updated the world with the statistics and behaviour of the virus and shared proven and practical ways to reduce the spread and contain the virus. These measures most countries in the West Africa sub-regions just like the other parts of the world implemented have proven to have yielded positive in fighting against the pandemic.

The participants further noted that even though most of the countries adopted some of the guidelines given by the WHO, a lot of these were left to the discretion of the individual countries. This suggests that there was not a uniform international policy adopted globally to combat COVID-19 but every country picked and chose which of these guidelines best fit their situations and the dynamics of the pandemic in their countries. The participants also noted that even though there were no new policies formed purposely for COVID-19 globally, most of the various countries in the world adopted some of the guidelines and measures adopted to mitigate previous pandemics

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and other communicable diseases in the time past and at different times across the globe. They cited West Africa for instance adopted measures such as contact tracing and isolation which was used during the Ebola outbreak in the sub-region. The measures that were adopted from the WHO guidelines against COVID-19 have been expounded below.

According to the respondents WHO was the main authority in terms of the guidelines that informed the decisions and policy of most nations. Even though other international bodies like CDC, IMF, and World Bank provided different forms of support, WHO played the leading role in providing guidelines to the various nations, especially through their health ministries and agencies, and provided public health education globally. The participants added that, though it was not mandatory for every country to follow such rules or guidelines, many countries adopted it since they had proven to be effective in managing previous pandemics.

"I know as a result of the World Health Assembly, guidelines and protocols were formed to handle the pandemic but I have not read extensively on that. Also, there were internal meetings to come up with some guidelines and protocols. Looking at the strategies we implemented in the country, it was a blend of international guidelines and local protocols. The disease started from Wuhan in China and so we were all implementing some of the strategies they had used over the period to control the disease. We copied the quarantine system, fumigation, and even the vaccination. When we had the vaccines, sensitization did not go down well and so people did not want to take it. Also, the package we designed for the health workers had its motivation from Wuhan because they had one as a result of losing most of their health workers. As it

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stands now, the package they instituted is having a pull effect on our health workers and so most of them are migrating there ..." – **R4.**

"Countries were given guidelines in terms of how they should manage the process and not policies. So, countries made their own decisions based on the data that was available to them but of course, these decisions were made in the context of the international guidelines in terms of how to manage the health emergency. For instance, there were guidelines such as limiting transmission, covering of nose, what sort of nose covering is effective, what was effective for treating patients and Ghana based on its evidence and situation it resources and decided to do what was feasible within its context which was different from what the United Kingdom or the United States were doing" – **R10**.

"I don't know of any international police. What I know is that WHO provided guidelines but countries had to localize them. So, the nose masks and the closure of the borders were all national restrictions. What WHO did was give guidance on the importance of wearing masks, observing social distancing, etc. These are guidance and not policies or laws" – **R37.**

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Wearing of Facemasks

The participants indicated that to fight the COVID-19 pandemic, wearing masks has become an essential international protocol. Many nations and international health organizations recommended and required masks as a preventive measure to stop the virus' spread, mostly fabric face coverings and surgical masks. According to the participants, most countries have adopted the wearing of facemasks as a safety measure against the spread of COVID-19. The participant believed that the masks were used globally which was mandatory in many parts of the world in order to ensure compliance. The participants explained that COVID-19 was transmitted through droplets from people which usually happens from sneezing, coughing, and yawning therefore the masks were prescribed by the WHO to help prevent those droplets from falling on objects likely to be touched by other people. This will help reduce the risk of the spread. The masks were also to help people from touching their faces, noses, and mouths so that in case they have come into contact with the virus by touching, the masks will prevent them from transferring themselves through the eyes, mouth or nostrils. Wearing masks became mandatory on airlines and some commercial vehicles; some work places and service providers insisted on the wearing of masks before granting access to their facilities. According to them, this was adopted in different parts of the world in different countries and continents as a universal measure to contain the virus. The participants showed that both the CDC and WHO were consistent in their communications and the public health education insisting that the wearing of masks to prevent the uninfected from contracting the virus and also reducing the chance of the infected from further spreading. The consistency of the mask-wearing campaign of these reputable international health organisations somehow convinced different countries and governments to strictly adhere to this protocol as a universal rule in preventing COVID-19. There is public education on the proper wearing of the mask to ensure maximum

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protection against COVID-19 infections and this protocol was strictly enforced at health centres since they are considered high-risk areas for infections. The participants further showed that most governments, health organizations influencers were involved in the promotion of the wearing of the facemask to educate people about its importance to their safety against the pandemic and to protect others from the virus. Overall, a multi-layered strategy to stop the spread of COVID-19 includes international mask-wearing protocols as a key element. In addition to supporting other public health initiatives, it is a practical and useful preventive measure that contributes to global efforts to reduce the impact of the epidemic.

> *"The widespread use of masks produced a joint protective effect, especially when coupled with other preventive measures like hand washing and social distancing. The international guideline promoted the general use of masks in all public places, both indoors and outdoors"* – **R37.**

> *The widespread use of masks produced a joint protective effect, especially when coupled with other preventive measures like hand washing and social distancing. The international guideline promoted the general use of masks in all public places, both indoors and outdoors* – **R35.**

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Figure 6. 1 Appropriate Way of Wearing Face Mask

Source: (World Health Organization, 2021)

Hand Hygiene

The findings show that hand washing was basic universal etiquette in the prevention of the COVID-19 pandemic. It was highly recommended and sponsored by reputable international health organizations and governments around the world as a modest but proven way to prevent the spread of the virus.

The participants noted that another measure adopted globally from the guidelines of WHO was the washing of hands and the use of hand sanitisers. The respondents explained that washing hands with soap, especially under running water was adopted globally to be a preventive measure in preventing the spread of the virus. According to them, soap has an active ingredient in killing the germs or bacteria that cause the virus. The participants noted that where it was difficult to get water

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and soap for hand washing, people were encouraged to use alcohol-based sanitizers to frequently clean their hands to fight the bacteria that cause or transmit the virus. According to the participants, the virus was believed to be able to survive on surfaces for some time when a person touches the surface could carry the virus with a higher chance of touching the face or nose. Therefore, handwashing would help kill the bacteria to break the transmission from the hand to the mouth or any other part. The results showed the importance of handwashing as the primary preventive measure was emphasized by governments, international health organizations, and media campaigns. There have been campaigns to increase awareness of the value of proper handwashing techniques in preventing COVID-19. They cited Ghana for instance where what is called the 'veronica bucket' was used at different public places and offices and institutions to enforce compulsory handwashing before gaining access to those facilities. This has led to different people inventing new equipment to aid handwashing of which a number of them were automated or semiautomated to limit the touching of the taps before and after washing of hands. Local companies also were encouraged to produce alcohol-based sanitizers to make them affordable to the citizens to encourage and promote their usage since it was an internationally endorsed measure in reducing the infection of COVID-19. The participants indicated that this has led to handwashing becoming part of the culture of people not only against COVID-19 but also to enhance general personal hygiene.

Handwashing was used as a safety protocol in Ghana because of how the international health organizations positioned it as a proven way to break the transmission.

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Internationally, everybody was wearing PPEs. So, nobody went to COVID patients without PPEs and then the washing of hands also came in. Veronica Bucket was all over the place because people we introduced to the culture of washing hands and the use of sanitizers… - **R34.**

At CDC we are of the view that, most of the time, the best way to eliminate germs is to wash your hands with soap and water. Sanitizers containing at least 60% alcohol are next the alternative in the absence of soap and water soap. Looking at the product label of the sanitizer will allow you to determine whether it contains at least 60% alcohol. We have a guide to proper handwashing on our website which is to first "wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap. Lather your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails. Scrub your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice. Rinse your hands well under clean, running water. Dry your hands using a clean towel or air dry them" – **R34.**

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Figure 6. 2 Veronica Bucket Used for Handwashing

Source: (UNICEF, 2021)

Figure 6. 3 Solar Handwash Machine Made in Ghana

Source: (Nettey, 2020)

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Figure 6. 4 Hand Sanitiser Made in Ghana During COVID-19 Pandemic

Source: (Tesfaye, 2020)

Social Distancing

Another Protocol adopted in most countries, especially in the West Africa sub-region was social distancing as revealed by the findings. According to the participants, one of the most crucial public health strategies adopted to stop the transmission of COVID-19 was social distancing. It entails keeping a minimum of 6 feet between you and other people, avoiding crowded areas, and attending

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fewer social congregations. The participants mentioned that the WHO guidelines indicated that the virus can be transmitted by coming into close contact with people who are infected through a handshake or hug or any other physical touch. According to them coming into the close increases the risk of the respiratory droplets of the infected person dropping on the infected leading to the transmission of the virus. As a result, the participants said that WHO and other international health organizations recommend that, people should avoid close physical contact to reduce the spread of the virus. The findings show that most countries across the world adopted these guidelines enforced in their countries. The results showed that social distancing was enforced in all public gatherings, offices, markets places and even among commercial transport operators. The participants indicated that the general rule applied in Ghana for instance was the one-meter head-to-head mandatory distance enforced by the government at all social gatherings where the presidential task force visited some social and public gatherings at randoms and those who flouted this directive were brought to book.

The participants indicated that some businesses and organizations to observe the social distancing directive, adopted a shift-based working system to allow fewer people in the office at any given time to create the space to observe the social distancing. Other organizations also implemented the work-from-home policy where their workers were made to work remotely so that they minimize their close contact with colleagues.

The findings also showed that the social distancing led to the ban on schools, churches, sit-in restaurants, beaches, mosques, musical concerts and other businesses and activities that require the gathering of large crowds. Most meetings were made to be held virtually so that physical interaction would be reduced drastically.

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"… Due to its effectiveness in lowering transmission rates and preserving public health, social distance has generally become a crucial international recommendation in the fight against COVID-19. It demanded widespread adherence and illustrated the significance of personal accountability in preventing the virus's spread during the pandemic. The recommendation urged people to keep a safe distance from others, both inside and outside, to avoid having respiratory droplets touch them (typically at least 6 feet or 2 meters)".

– **R20**.

"We noticed that the spread of the virus is enabled by closeness, time, and the number of contacts. The goal of community physical distancing is to minimize the quantity, intensity, and duration of contact. Although a complete lockdown may not be possible, every effort should be made to limit the number of unneeded opportunities for contact. At CDC Africa our policy document recommended that "at the community level, physical distancing can involve shielding the medically vulnerable, and closure of any events or settings in which people gather together, including schools, workplaces, houses of worship, and cultural, social, and sports events. Many African Union Member States have already introduced individual physical distancing measures and are considering how best to implement community physical distancing" – **R34.**

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Figure 6. 5 WHO Guideline on Social Distancing

Source:(WHO)

Testing Isolation and Quarantine

The findings show that testing and quarantine became a global phenomenon as it was a recommendation from international health organizations. The participants believe that most countries adopted testing to isolate the sick population from the healthy ones. According to the participants, the guidelines on the type of testing, the strategies to use for the testing and the

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methodology adopted by many countries emanated from the international guidelines available. The global response to the pandemic has been made possible through international collaboration and sharing of information on testing methods, supplies and best practices.

The participants indicated that some of the COVID-19 patients were asymptomatic therefore the testing was necessary recommendations from the international health organizations to isolate such people from the entire population. According to them, testing helped to confirm whether the symptoms being displayed are COVID-19 or other diseases. The findings showed Numerous testing strategies, such as polymerase chain reaction (PCR), antigen, and antibody tests, have been adopted by nations and health organizations worldwide. As nations increased their testing efforts and worked together on research and development, testing accessibility and capacity improved over time. The participants indicated that testing was necessary and very essential to decision making as to when to impose, intensify and relax COVID-19 restrictions in tandem with the available data.

In conjunction with testing is the isolation of COVID-19 patients from the healthy population. The results show that isolation was an international guideline adopted by most countries. At the initial stages of the pandemic where no vaccine was in view, most countries ensured that the spread of COVID-19 was limited to the barest minimum. Therefore, isolation centres were created and those who tested positive were quarantined and treated. The isolation makes it possible the limit physical contact and interaction with other people to break the transmission chain.

The findings showed that it was recommended that people who had direct contact with confirmed COVID-19 cases or who showed symptoms but had not yet received test results isolate themselves. In order to prevent unintentionally spreading the virus, quarantine periods were typically 10–14 days long. The participants mentioned that even quarantine was implemented in different ways.

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The participants stated that people were advised to wait to resume normal activities until they had finished the required isolation period and met certain requirements such as symptom improvement and negative test results to ensure they were no longer contagious.

"In order to prevent the spread of COVID-19, isolation was a fundamental preventive measure that was essential in halting the infection chain. Countries attempted to stop the pandemic's spread and safeguard vulnerable populations by isolating infected people and those at risk of infection. The global effort to combat COVID-19 relied heavily on international cooperation and compliance with isolation guidelines". – **10**.

"It was recommended by international health organizations to isolate such people from the general population because some of the COVID-19 patients were asymptomatic and testing was therefore required. Testing was able to determine whether the symptoms were caused by COVID-19 or by another illness. The results demonstrated that many testing methods, including polymerase chain reaction (PCR), antigen, and antibody tests, have been adopted by countries and health organizations around the world. Testing accessibility and capacity improved over time as nations increased their testing efforts and collaborated on research and development.

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When deciding when to impose, intensify, and relax the COVID-19 restriction in conjunction with the available data, the participants indicated that testing was necessary and absolutely essential”. – **R24.**

Vaccination

The findings show that the international guidelines were very influential in accepting any vaccine for COVID-19. The participants mentioned that before any vaccine was accepted globally it had to be sanctioned by the WHO. The participants agreed that the entire world was eager to accept and procure any vaccine that would be approved and certified to be effective in either curing or preventing COVID-19. The pandemic had a global effect on lives, health, and economies therefore every country was eager to alleviate the impact driving out COVID-19 from their countries. As a result, different countries embraced internationally approved. The findings showed that international health organizations collaborated with nations to improve their pandemic readiness and response capabilities, which includes organizing the distribution of vaccines in case of future public health emergencies. According to the participants, most countries were influenced by the WHO's Emergency Use Listing (EUL) procedure as a tool to speed up the endorsement of vaccines for emergencies, including COVID-19. EUL offers a seal of approval that denotes a vaccine's safety and effectiveness, which can have an impact on countries' agreement to sanction and use particular vaccines.

Even though countries were not obliged to take the vaccine, international regulations have influenced the choice of the vaccines they used. According to the participants some international restrictions such as no vaccination and no entry made some governments adopt and mandate the

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vaccines in their countries. Technical and expertise support and research and other media publications from international organizations played critical roles in the procurement, approval, and deployment strategies of individual countries.

They conclude that the vaccination strategies of many countries against COVID-19 are significantly influenced by international health authorities, such as the WHO. Their advice and suggestions are essential in forming national strategies for vaccine administration, distribution, and overall pandemic management. International health organizations use their knowledge, clout, and advocacy efforts to sway national vaccination programmes against COVID-19. Assisting in the development of successful vaccine strategies and advancing the international campaign to fight the pandemic, their leadership and cooperation are crucial.

"The WHO's Emergency Use Listing (EUL) procedure, which aims to expedite the approval of vaccines for emergencies like COVID-19, had an impact on the majority of nations including Ghana. There were rumours and attacks on FDA for approving some vaccines for emergency use. EUL provides a seal of approval that indicates a vaccine's efficacy and safety, which can affect countries' decisions to sanction and use specific vaccines.

Despite the fact that countries were not required to use the vaccine, international regulations influenced the vaccines they chose to use". – **R20.**

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"International health organizations have access to a vast network of experts in various fields related to public health and infectious diseases. They conduct research, analyse data, and evaluate vaccine efficacy and safety. Based on this expertise, they issue evidence-based guidelines and recommendations on vaccine usage, prioritization, and distribution. These international health bodies enable international cooperation and coordination between nations and vaccine producers. They collaborate with authorities and other parties to guarantee fair access to vaccines and encourage a just distribution of vaccines to areas that most urgently require them". – **R35**.

International Health Regulations

The findings also showed that, in essence, there were not any new policies that were formulated against COVID-19 but countries simply followed the International Health Regulations. According to some participants, the IHR contains a policy document that provides guidelines for preventing the spread of diseases in seasons of pandemics like COVID-19. They emphasized that most of the COVID-19 protocols adopted by countries from the WHO were already outlined in the IHR which formed the basis for the guidelines provided by WHO. To them, if there was any global policy against COVID-19, it would be the IHR. According to them the goal of IHR is to prevent and protect against, control and respond to any public health risk spread of any disease internationally. This is done in a way that its impact on international trade and travel arises only out of necessity. They further mentioned that this was enacted in 2005 by the World Health Assembly to which

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member states or countries signed to be bound by it. This then informed the decisions and policies of most countries in the hesitance to close their borders when COVID-19 first broke out in China. The IHR helped with protocols to protect lives against COVID-19 and reduce the public spread leading to protocols like social distancing and mandatory wearing of facemasks and isolations and quarantine of infected people.

"No, there were no laws apart from what we call the International Health Regulation. This regulation enjoins every country to have some level of preparedness to manage and prevent any health crisis. Ghana has been a signatory to this regulation and I think the international bodies have come to know that the IHR has not helped the fight against COVID-19 much. As a result, there is an ongoing conversation to amend the IHR or create a pandemic treaty that allows for quality and those countries who have to suffer because they do not have vaccines to manage the pandemic among its people. The IHR also allows for data sharing among others. A lot is happening in the space and Ghana must take advantage to ensure, whether that revision or treaty comes in or not, we also have some legal instrument in terms of health security which can support the way we handle the pandemic. Even though we have the public health law, we do not have or have not done enough to support its implementation. Some of the issues in the public health laws require some amendment because vaccination cannot be done by anybody except those who have been licensed according to the law"– **R3.**

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7.1.2 Implementation of International Policies in Ghana

From the findings above, there is no evidence that there were no new international policies formulated against COVID-19, nevertheless, most countries including Ghana adopted some of the guidelines proposed or suggested by WHO as protocols to observe to reduce the public spread of the virus and protect lives against COVID-19. As stated earlier, some of these measures include wearing facemasks, handwashing, social distancing, isolation, testing, contact tracing, and vaccination. According to the participants, the government took practical steps to formulate policies and implement these policies in accordance with these guidelines. The findings showed that Ghana adopted two main approaches to implement these policies against COVID-19. These two measures were legislations with law enforcement and public education.

> *By applying a thorough and methodical approach to the IHR, Ghana was able to respond to the COVID-19 pandemic, stop the virus' spread, and protect public health. The nation demonstrated its commitment to ensuring the security of global health by making efforts that were in line with international best practices.* – **R22**.

Legislation and Law Enforcement

According to the findings, in order for Ghana to operationalize the IHR within its domestic context, the government established a legal and policy framework to ensure that the nation's response adhered to international standards, this included integrating the IHR provisions into current public health laws and regulations. The participants stated that in order to ensure compliance with public health rules and restrictions in a country like Ghana, enforcing COVID-19 policies by law required

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putting in place a number of legal procedures. Ghana adopted an amalgamation of legislative measures, executive instruments, and regulations to carry out COVID-19 policies throughout the pandemic. A careful balance between the protection of public health and individual rights was necessary for COVID-19 policies to be enforced by law.

To keep the public's trust and cooperation, the government had to make sure that enforcement measures were reasonable, transparent, and effectively communicated.

The participants also stated that a public health emergency was declared by the government, giving it the authority to take the necessary steps to safeguard the public's health and safety. The COVID-19 policies could be put into effect thanks to this declaration's legal foundation. This declaration of a statement of emergency declared by the President made the parliament of Ghana pass a bill to allow the President to restrict people's movement to safeguard public health.

According to the participants, everybody in Ghana was mandated by law to wear facemasks in public places with consequences to the recalcitrant. Furthermore, there was a ban on public gatherings including churches, mosques, funerals, and weddings which saw some event organizers and religious leaders who flouted these directives being arrested by the law enforcers. Also, there was mandatory testing or proof of negative test results at the airport and compulsory screening for all travellers without which they would not be allowed access to the country. In areas where there were lockdowns, the security task force including the Police, Military, and other security officers was deployed to enforce compliance with the directive.

Meanwhile, the task of enforcing COVID-19 regulations on the ground fell to law enforcement and security organizations. They checked for compliance, monitored it, and prosecuted offenders.

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We mounted checkpoints, to prevent or minimize intercity travel during the lockdown period. We encountered many people who had different reasons trying to convince us to allow them to travel but our team did a good job of assessing every case and taking the necessary actions. We the support from the military who helped us in ensuring compliance with most of these directives. You might have seen the video of the task force intercepting head porters who attempted to leave Accra to the Northern part of Ghana when they were banned from operating during the lockdown. And also, the argument that ensued between our man and one taxi driver trended on social media. In all, I will say we had a higher level of success in ensuring compliance with these directives even though we encountered some challenges. – **R29.**

"Amidst all the controversies we had in parliament, we at parliament had to pass the "Imposition of Restrictions Act, 2020" (Act 1012) been passed in Ghana as of my most recent knowledge update in September 2021, giving the government the authority to enact restrictions during public health emergencies like the COVID-19 pandemic. The Act gave the President a legal foundation within which to issue executive orders, carry out a variety of policies, respond to public health emergencies, and safeguard the general populace's health and safety. The Imposition of Restrictions Act, 2020 gave the President the power to restrict people's movements, gatherings, commercial

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activities, and other events in order to stop the transmission of infectious diseases and effectively handle public health crises. In times of emergency, the Act sought to attain an equilibrium between protecting the public's health and upholding individual rights". – **R24.**

Public Health Education

The findings showed that Ghana adopted more of a collaborative approach in implementing the international guidelines. This involved engaging in public education to get the buy-in of the citizens to cooperate with government efforts in tackling the pandemic. Public health education was one of the major ways used to implement the guidelines. Public health education was done at every level of government. According to the participants, the President led the path by giving very regular briefings and announcing every measure taken by the government in accordance with the IHR to preserve lives. The President also announced the legislation passed and explained the importance of some of the seemingly harsh decisions taken like the lockdown, border closure ban on funerals, weddings, schools, religious and other public gatherings. According to the participants, these open communications aimed to earn the government public support where every citizen accepts responsibility for their action or inaction that could contribute to the transmission or prevention of the virus.

The participants further stated that public health education was carried out at the ministerial level to explain the guidelines announced by the President and the details and forms of implementation they will assume. The local health authorities were also like the GHS and GMA were also cited to have been fully engaged in giving professional and expert communication on the importance of

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these guidelines and how to religiously follow the protocols. According to the respondents there were videos and infographics on the proper way of wearing face masks and handwashing as exhibited in Figure 6.6 and Figure 6.7. The participants further indicated other public institutions like NCCE, District Assemblies, and Hospitals helped in the implementation by providing support in educating the public on the protocols to observe to prevent themselves and the public from the transmission of the virus.

The media was critical in this approach in implementing the guidelines. According to the respondents even though the media was so phenomenon in airing and transmission of the government's efforts in reaching the public with measures taken to contain the pandemic, the media also took other initiatives to augment government efforts. The media houses ran advertisements in different forms to educate the entire nation on the COVID-19 policies and guidelines to help reduce public transmission and live healthily. According to the participants, this approach got many Ghanaians to empathize with in government, empowered against the pandemic, and increased the surveillance exercise. One of the reasons stated for the effectiveness of this approach was how people perceived their vulnerability and the perils of their lives if they failed to observe the protocols. According to the participants the government prioritized this more than the forceful implementation since it has appealed to the psychology of the people. The participants added that security enforcement was just a mop-up to the public education approach.

"So, when a patient approaches a facility, the health information unit will educate them on how to use nose masks, social distancing, etc. Through the healthcare system, the health information unit was implementing some of the policies. Also, the leaders of the churches did implement such policies by

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educating the congregation on the seriousness of COVID-19 and the measures that were put in place to minimize the spread. Through the media, some of the health workers were educating the general public on some of the safety measures that we have". – **R14.**

"In order to implement the global recommendations for using masks and maintaining good hand hygiene during the COVID-19 pandemic, the Ministry of Health used public health education as a potent tool. We took a comprehensive approach that aimed to educate the public, spread correct information, and encourage positive behavioural change. We incorporated routine services provided by medical clinics and hospitals with COVID-19 prevention education.

Patients' education on proper mask usage and handwashing techniques was greatly aided by healthcare professionals. To provide updates on COVID-19 and emphasize the value of following international regulations, we held press conferences and media briefings. We responded to journalist questions as well as public concerns". – **R4.**

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Figure 6. 6 Proper & Improper Ways of Wearing a Facemask

Source : MoH (Ampomah & Ampomah, 2020).

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Figure 6. 7 Proper Handwash Procedure

Source: (NCCE, 2021).

7.1.3 The Knowledge of International Health Regulations (IHR)

Findings from section 6.1.3 indicated that there were no new laws or policies formulated globally against COVID-19 even though most countries adopted the guidelines of the international health organizations. According to some respondents, these guidelines provided by WHO and other international health authorities were not new either but were already part of the IHR enacted in

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2005. This section therefore provides findings on the knowledge of the participants on IHR whether or not they all understand or know about IHR.

The findings show that out of the 40 participants, 32 claimed to have knowledge of IHR and the remaining eight (8) responded in the negative. Again, from the fourteen (14) participants who have knowledge of IHR, twenty-one (21) were males and the remaining eleven (11) were females. This finding is shown in Figures 6.8 & 6.9

Figure 6. 8 Participants' Knowledge of IHR

Source: Researcher's Field Data 2023

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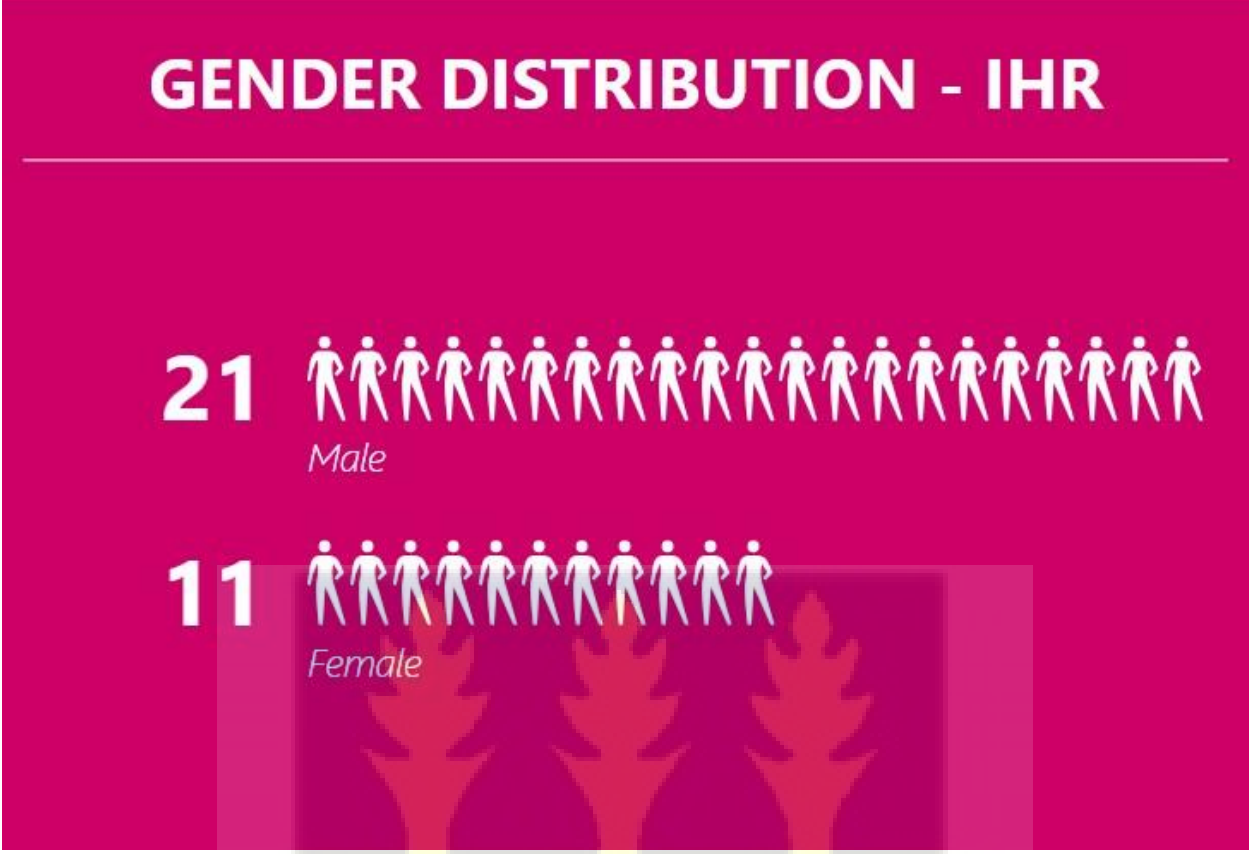
Figure 6. 9 Gender Distribution - Knowledge of IHR



Source: Researcher's Field Data 2023

In order to ascertain the extent of their knowledge of IHR by the participants, they were asked to explain in their own understanding what the IHR meant. According to the findings, twenty (20) participants were specific and detailed in their explanation of IHR, eight (8) showed a general knowledge whereas the remaining four (4) demonstrated they had no idea of IHR even though they claimed to have heard of or know about IHR. The explanation was juxtaposed with the definition and summary of the IHR by WHO to ensure that the relevant elements were touched by these definitions.

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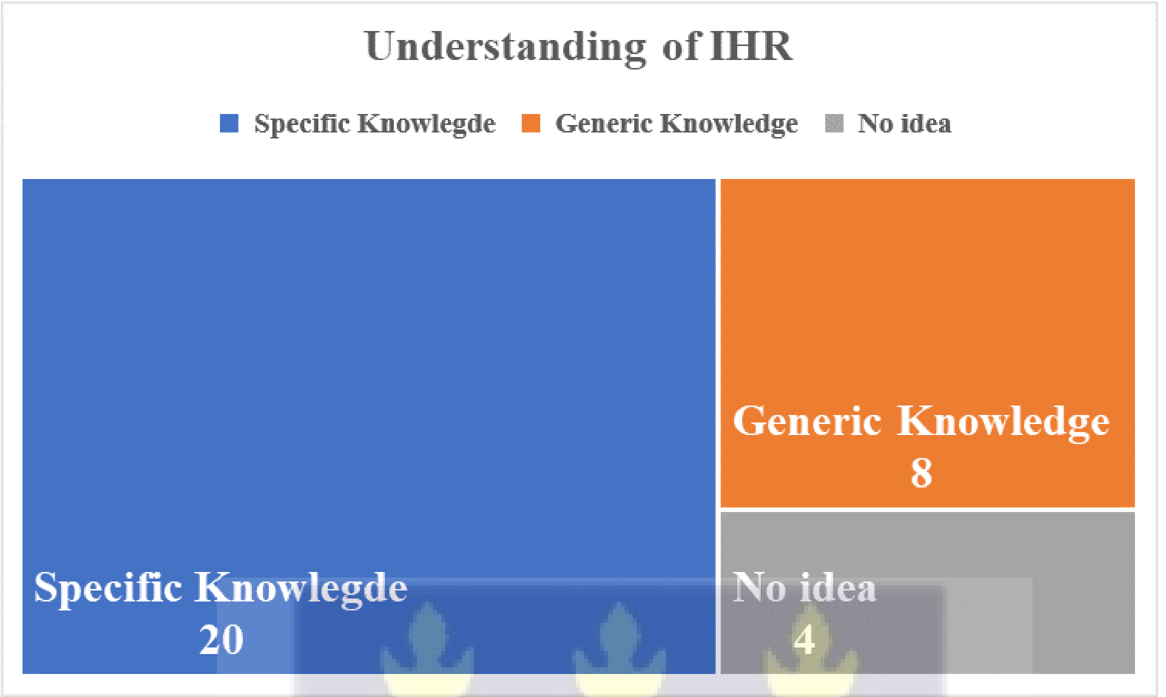
Figure 6. 10 Understanding of IHR



Source: Researcher's Field Data 2023

According to the WHO (2019), IHR is a body of international law that has legal force in 196 nations, including the 194 WHO Member States. In response to the deadly epidemics that once ravaged Europe, the IHR was born. The IHR establish reporting requirements on public health events as one of the rights and obligations of nations. The Regulations also specify the standards to be used in determining whether a specific incident qualifies as a "public health emergency of international concern.".

The Regulations further mandate that nations create and sustain fundamental capabilities for surveillance and response, including at designated points of entry, and that they name a National IHR Focal Point for communication with the WHO. Additional provisions cover topics like the health records required for international travel and international transportation (WHO, 2019).

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They finally introduced significant measures to protect the rights of travellers and other people in handling their personal data, informed consent, and impartiality in the application of health procedures under the Regulations (WHO, 2019).

According to WHO (2019), the implementation of the IHR is dependent on the various governments of the member states to use all their government machinery and resources while they receive partnerships from WHO for capacity building. For Implementation, the IHR require that member states are able to that they have adequate surveillance structures to promptly identify public health concerns, report these incidences of international public health concern through their National IHR Focal Point and appropriately respond to health risks and emergencies. The implementation seeks to limit international spread and avoid needless cross-border travel and trade restrictions (WHO, 2019).

For preparedness, the WHO develops and offers tools, advice, and training to assist nations in enhancing and maintaining their capacities for ensuring quick detection, verification, and response to public health risks. In order to assist each country in fulfilling its IHR commitment, WHO's assistance is centered on the urgent needs that have been identified by the WHO Regional and Country Offices (WHO, 2019).

This formed the basis of categorizing the understanding of the participants into Specific Knowledge, General Knowledge and No Idea. Some respondents mentioned the legality of the framework and touched on almost every relevant component of the regulations whereas others were general to know that it was about responding to pandemics and the rest only mentioned that it was a good policy. This then suggests that there as an appreciable number of the participants (12, 60%) have an idea of the IHR in relation to global pandemics like COVID-19. Examples of

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no idea, specific knowledge and general knowledge are cited below in the direct quotations of the participants.

> *"It's a good regulation that will put the African countries on their toes. Before the coming in of the pandemic, our system wasn't all that robust. So, this regulation will strengthen our healthcare system in order to meet even if any future pandemic is higher than COVID-19".* – **R15**.

> *"An international accord to my knowledge that was tried into enforcement with various degrees of success was the International Health Regulation (IHR). It has existed since 2005. IHR ensures global security. The International Health Regulation is a legally binding document for all countries that are part of the WHO, and most countries have signed up for it. This regulation exists to foster collaborations to promote health security which has considerations requiring countries to build capacities to be able to prevent, detect and respond to health emergencies (are anything that requires the health system to be activated to respond usually in a multi-sectorial fashion). Again, to prevent the international spread of diseases. Hence, countries must be able to prevent diseases from affecting other countries by raising an alarm of caution to the international communities. For example, we recently encountered the Marburg fever and MVDR outbreak last year around places in the Western region that have close linkages to the Ivory Coast, we were*

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obliged to notify the international community that Ghana has this disease under battle. Also, based on the scale and the threat, it allows the country to benefit from support from outside whether financial or technical or… On the highest stage, we have an expert committee that we can put together to determine as to whether it is a fate like a public health emergency of international concern like COVID is, has been and still is. Ghana recently also dealt with monkeypox which was also declared likewise". – **R36.**

"Regulations put in place to help with pandemic preparedness and response. It guides countries as to how they need to proceed when they face some of these challenges. Issues relating to our ports/points of entry etc. and how to make sure that we have the needed infrastructure and logistics emanate from the guidance of the IHR". – **R37.**

The participants however acknowledged the relevance of IHR in fighting COVID-19 in Ghana and other countries. They mentioned that Ghana announced or reported the cases recorded by their surveillance systems and attempted international spread by closing its borders to contain the spread and prevent its spread to other countries. According to the participants, almost all safety protocols Ghana adopted to fight the pandemic primarily emanated from the IHR making them effective in managing and containing the pandemic

7.1.4 Resource Deployment to Manage COVID-19 in Ghana

During COVID-19, Ghana like other countries had to fall on some assistance to deploy the necessary resources in combating the disease. Ghana had to deploy technical, human and financial

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resources to combat COVID-19. Some of these resources were mobilized locally whereas others were received from other international partners.

7.1.5 Technical and Human Resources Deployed

According to the participants, the public universities with public health units were some of the technical resources deployed. They mentioned the University of Ghana, Kwame Nkrumah University of Science and Technology and the University of Health and Allied Sciences to have been of great support in making their management and technical expertise available on the management of public health crisis management. The technical support from these universities helped in identifying the variants and behaviour of the virus in Ghana.

The participants also indicated the laboratories as technical resources deployed during the pandemic. Even though limited in number the laboratories were the centres to confirm and validate COVID-19 cases in Ghana. The laboratories possess the technical tools or equipment to go beyond the symptoms and confirm or not if someone tests positive for the virus.

The participants also identified PPEs as technical resources deployed to manage COVID-19. The supply of facemasks, hand gloves, and overall uniforms to health workers were necessary to protect them from contracting the disease. They further stated that these PPEs were not limited to only health centres, but extended to schools and other public places to help reduce the public spread of the disease. The participants added that these resources were not only supplied by the government but individuals and organizations joined and supported with the supply of these resources to ensure that, the disease is contained at every level leaving no one behind since everybody is a potential risk factor.

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The participants also classified some personnel as technical resources and not just human resources due to the specialized role they played. Some of these staff mentioned include critical care nurses and other experts from WHO even though were not Ghanaians provided their support.

The participants also mentioned that the hospitals and other health facilities were technical resources deployed to manage COVID-19. They mentioned that some hospitals due to their technical equipment were designated to be isolation and treatment centres. They further mentioned that some centres were established or opened to manage COVID-19 cases. In addition, the participants mentioned that there was a COVID-19 technical committee responsible for the protocols, treatments and PPE. The Foods and Drugs Authority (FDA) was mentioned to be one of the technical resources playing a critical role in assessing the safety and veracity of vaccines received and procured for the vaccination exercise.

However, with human resources deployed the participants mentioned that all health staff were deployed in the management of COVID-19 in Ghana. According to them, while some were directly involved in the direct management and treatment of the cases others were part of the surveillance team at the various health centres and reported any suspected cases from all the health centres. The findings show that due to the existing low staff of health professionals, medical students and retired personnel were engaged to help manage COVID-19.

The participants further indicated that, apart from the health professionals, different personnel also were critical in the management of the pandemic. These people include the staff of Ghana Ambulance Service, the security personnel, all staff of GHS and MoH, drivers, the media, the contact tracing team and the inter-ministerial task force established by the government. According to them all these personnel and more were the human resources deployed to manage the pandemic in Ghana. The participants concluded that even though these resources were inadequate, the

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available ones were judiciously used. One of the resources for this was because even the rich and influential were unable to seek medical attention outside the country since almost every country was plagued by the pandemic and had their health facilities under pressure.

"For the hospital to be able to sufficiently discharge the role as the main COVID-19 treatment centre, doctors had to move from Ridge, Korle-Bu and other Hospitals in the country to this place. The Ghana Infectious Disease Centre (GIDC) was built within three (3) months and then the equipment was imported to operate the centre. I heard a similar one has been built in the northern region. So, the GIDC was not part of the structure of the hospital. It was built immediately when the COVID came. It was built with the donations from others. So, at the facility, you will see the pictures of the donors". – **R11**.

"With the technical resources, everybody came on board. Those with expertise such as doctors, health information officers, lab technicians, disease control officers, and researchers all came on board to support to manage or help minimize the spread of the virus. There were various forms of support from the Ghana Health Service, Ministry of Health, CDC, and AstraZeneca. We also had our in-service training in the facility on how to manage patients with COVID-19 and how to use the PPEs very well to avoid getting the virus". – **R14.**

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"Technical resources go hand-in-hand with human resources in the sense of capability. There is a lot of learning that has gone on both internally and from outside and around that time it was difficult to have meetings among people so a lot of virtual platforms were utilized but this does suit the case of training people to manage cases. Another good practice was the rapid development of the Ghana Infectious Diseases Centre (GIDC) and also due to this strong facility, we will be able to manage highly contagious diseases even if we have Ebola". – **R36.**

7.1.6 Financial Resources Deployed

According to the participants, funding was a very essential resource in the management of the pandemic. According to them, most of the technical and human resources were not possible but for financial resources. The participants noted that there was an internal mobilization of financial resources by the government through the Ministry of Finance and the Central Bank of Ghana. There was also an establishment of a COVID-19 trust fund that received contributions and donations from individuals, businesses, NGOs, religious and other organizations.

The findings also showed that the government has imposed levies on individuals and businesses to recover what has been spent to combat the pandemic. The findings further revealed that some hospitals and health centres had to fall on their internally generated funds to combat the spread of the virus when resources were not adequately supplied by the government.

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The findings also showed that there were financial resources like international donors to help support the government to ensure that COVID-19 is well managed in the country. Apart from the donor support it was noted that Ghana had received credit facilities externally. Some of the international sources of funds were the World Bank, International Monetary Fund, WHO, CDC and UNICEF.

According to participants, the main use of the resources was to first equip the various health centres with the necessary PPEs and other equipment, medical supplies and facilities required to manage the disease. The participants further noted that, procurement of the vaccines also had a considerable allocation of financial resources. The recruitment and training of health professionals and supporting staff received financial resources.

The establishment of GIDC, isolation and treatment centres and their subsequent operational and overhead cost were capital-intensive that required a lot of funding. Funds were deployed for the contact tracing and other surveillance exercise as well. There were social intervention efforts of the government in providing hot meals to some vulnerable in Accra, the utilities subventions for three months and the stimulus package of Small and Medium Enterprises during the pandemic had part of the financial resources.

Some COVID-19 patients were also treated free of charge and allocations were also made to research into the COVID-19 and improve upon the treatment of the pandemic. Staff allowances were part of the allocation of financial resources. Public Health Education, media advertisement and publicity and the use of airtime require a lot of logistics and financial resources.

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"For financial resources, I think that was the bottom line for everything that we did. A lot of money had to go to the procurement of PPEs, and other protective equipment and we needed to have money to import some of these masks that we were not producing in this country. There was the need to put in place temporary centres for COVID-19 cases and a lot of money went into it. And COVID-19 was quite new, so we needed to really be able to get people to come to speed with exactly what was going on and how to manage it. So, there was a lot of training and the training required a lot of money and resources. And even how to properly use some of these logistics like the PPEs, people had to be trained on how to wear them, how to remove them, and the kind of things that they will need to be able to ensure that they are safe themselves. All of those required a lot of training and there was a lot of education as well and these educations were not also for free. We needed to put in these fliers, there was the need for us to have airtime and there was talk about COVID-19 and being able to put up advertisements that were not free. So, lots and lots of money in that direction to be able to ensure that at least we were able to do what we did". – **R1.**

"Ghana actually developed a plan called the strategic response plan for Ghana and this was used as a blueprint by the government for the COVID-19 response. With most of the financial resources, the ministry can give you the

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fact and figures of where they are coming from. But to the best of my knowledge, some of the resources came from the government, loans from the World Bank, and both lateral and bilateral agencies like WHO, and UNICEF in their course of helping in the management of COVID-19 response either in cash or in-kind for the procurement of PPEs and lab supplies". – **R36.**

"I cannot speak to the country's financial resources. However, I know that donor agencies provided resources to support the country. I don't know the amount. Also, I know that the country made available human resources. Also, there were treatment and isolation centres. Some healthcare workers were reassigned and trained to adequately respond to some of the critical cases. So, the country made available some human resources to make sure that there were adequate human resources to man the treatment centres". – **R37.**

7.1.6.1 Concerns on Financial Resources

The participants expressed some concerns about the use of the resources. Eight (8) of them believed that the resources were fairly used as well as expected. However, twenty-two (22) of the participants said they were poorly used and ten (10) abstained from answering for various reasons.

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Figure 6. 11 The Use of Financial Resources in Ghana for COVID-19

Source: Researcher's Field Data 2023

The reason for the four to believe that the resources were judiciously used was that most health and medical supplies required were made available. PPEs were supplied to hospitals, schools, and communities. Funding was made available for tracing, testing, and treatment and eventually the procurement of the vaccines.

On the other hand, the eleven believed that even though funds were made available they were not judiciously used. They cited the unpaid allowances of health workers who were promised by the President in the heat of the outbreak, and the discrimination of the sharing of hot meals which they believed was overbilled. Others said there was a lack of accountability and transparency in the use of the funds which to them what was deployed was far less than what was available to use.

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The remaining group believed that they could not speak to the matter because they did not have any official evidence to support any claims hence, they preferred that the Ministry of Health and Ghana Health Service provide a more accurate report.

> *"The government released the money and also established a fund for the COVID. So, individuals and corporate organizations made donations to the fund. I don't know whether there were funds from international agencies to countries to fight COVID. COVID treatment was free for everyone except for the purchase of a few drugs. So that was how some of the money was used. The medication, and oxygen that was used were all free. Imagine the cost of oxygen and yet there were people on oxygen for 20 to 30 days and yet they paid nothing".* – **R11**.

> *"... So, the area we didn't do well was how the resources we got were applied. Just imagine after being given free water and electricity the government came back to tax the populace. This was under the belt. Also, as the COVID-19 audit report shows, when the Ministry of Finance had to go through the GIFMIX for procurement, the Ministry of Local Government gave out 10 contracts that had nothing to do with COVID-19. Even for the Ministry of Health, there was an issue of 100 million dollars' worth of vaccines was not supplied. This needs reengagement in order to collect back our monies. In my mind, I am wondering*

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why should our key spending officers wait for the Auditor General to come up with these findings when they could have acted on some of them". – **R20.**

"I cannot speak to the country's financial resources. However, I know that donor agencies provided resources to support the country. I don't know the amount..." – **R37.**

7.2 Discussion of Findings

Formulation of International Policies Against COVID-19

The findings indicate the lack of concrete "policy" created at the international level to address the COVID-19 epidemic that is consistent with current research and global health governance systems. The debate of international policy in the context of the epidemic necessitates a comprehensive knowledge of the role of international institutions, notably the World Health Organization (WHO), as well as individual states' coordinated response (Burkle, 2020).

The findings claimed that there were no legally enforceable international measures in the form of laws or norms in place to address COVID-19 is consistent with the decentralized character of global health governance. International health rules are generally directed by the World Health Organization's International Health Regulations (IHR), which serve as a framework for nations to improve their capacity to identify, analyse, alert, and respond to public health threats. The IHR provides the groundwork for countries to build their own policies and actions in response to specific health hazards, such as pandemics (Habibi et al., 2020).

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According to the finding WHO's primary role is to provide guidelines and recommendations, which represents the organization's mandate as a global health leader. During a health emergency, the WHO's mission is to offer evidence-based recommendations, technical expertise, and coordination to member nations. Scientific research, epidemiological statistics, and lessons learned from prior health crises influenced the organization's COVID-19 recommendations. This is consistent with the results that several nations implemented measures based on WHO guidelines. Literature shows that any uncommon incident that poses a public health danger to other nations through global transmission and necessitates a collaborated worldwide response is permitted under the IHR for the WHO Director-General to declare a public health emergency of international concern (PHEIC) (Phelan et al., 2020). This made the Director General declare COVID-19 a pandemic and provided guidelines from the IHR to contain the international spread.

The findings' acknowledgment of each nation's choice in adopting recommendations emphasizes the notion of national sovereignty in public health decision-making. Countries can modify and adjust recommendations to their particular situations, taking into account issues such as healthcare infrastructure, cultural customs, and socioeconomic realities. This adaptability in implementation reflects the varied and dynamic character of global health concerns. Similar to the study of Gostin (2020), the IHR established concrete requirements for states to build national public health capacity and promote international health security by using the ethical authority of health law to design national efforts to limit illness. States maintain the sovereign right to enact national healthcare legislation, although such legislation "shall enshrine the aim" of the IHR, strengthening international obligations. These global health responsibilities extend to human rights legislation, with the International Covenant on Civil and Political Rights demanding that regional

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implementation "must be with full regard for the civility, human rights, and personal liberties of individuals."

Furthermore, the findings mentioned the utilization of strategies from previous pandemics, like those of Ebola, emphasizing the notion of “policy transfer and lesson learning in global health governance”. Countries frequently use past experiences to shape their responses to current health risks. This adaptable strategy aligns with the changing nature of public health policy and the need for context-sensitive treatments which is a confirmation of other studies (Abayomi et al., 2021)

Ultimately, the findings of this study corroborate the concept that collegial recommendations, suggestions, and best practices, rather than rigid, globally applicable regulations, describe international policy in the context of the COVID-19 epidemic. The WHO's position as an influencing authority, individual nations' autonomy in decision-making, and the absorption of lessons learned from previous health crises all contribute to a comprehensive and dynamic global response to the epidemic. This is consistent with prior work on the decentralized and adaptive character of global health governance.

Implementation of International Guidelines in Ghana Against COVID-19

According to the findings, Ghana used a multifaceted strategy to apply international standards for handling the COVID-19 epidemic. This method included the use of legislation and law enforcement, as well as a strong public education campaign. Sebeelo (2023) also confirmed that almost all African countries needed to police international COVID-19 protocols especially the stringent lockdowns especially at the onset of the outbreak. The findings stressed the importance of public health education and open communication, particularly at the presidential and ministerial levels, in gaining public support for and compliance with COVID-19 standards (Koller, 2023).

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The dedication to openness and clear communication from the top levels of government was at the heart of Ghana's strategy. The President performed a key role in informing the public regularly, explaining the necessity of measures like lockdowns and border closures, and assuring citizens knew the importance of their cooperation. This frank and compassionate message aims to engage individuals and turn them into active partners in the virus's fight (Osei-Kojo et al., 2022).

Osei-Kojo et al. (2022) again had similar findings that emphasized the role of several public organizations, including the National Commission for Civic Education (NCCE), District Assemblies, and hospitals in spreading information and teaching the public about COVID-19 guidelines. This joint effort guaranteed that information reached every part of the country, increasing public awareness and comprehension.

According to the findings, the media was also crucial in information sharing and helping to educate the populace. Media organizations actively sponsored educational programs, including commercials, to underline the necessity of abiding by COVID-19 rules, in addition to just reporting on government activities. This method helped to raise public awareness and foster a sense of shared responsibility. According to recent research, since the virus's breakout, worldwide and local news networks have enhanced public knowledge and reduced fear through live broadcasts of news briefings, press conferences, and town halls. On websites, in journals, in magazines, and on social media platforms such as "Facebook, Instagram, and Twitter", health experts and others publicized and discussed health guidelines and governmental orders which support the findings (Mheidly & Fares, 2020).

Even though the findings also highlighted that law enforcement played a role in ensuring compliance, it was viewed as a complement to the larger approach of public education (Sebeelo, 2023). The government tried to appeal to people's feelings of duty and psychology, therefore

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promoting voluntary compliance, by focusing on public education and stressing the possible hazards and vulnerabilities faced by individuals.

To conclude, Ghana's strategy to adopt international COVID-19 recommendations included legislation, law enforcement, and, most importantly, an extensive public education campaign. This multi-pronged strategy aimed to involve individuals, increase understanding, and eventually promote voluntary compliance with COVID-19 regulations. The findings emphasize the necessity of open communication and community engagement in effectively handling a public health issue.

6.1.1 The Understanding and Application of International Health Regulations Against COVID-19 in Ghana

The findings demonstrated that participants had varying levels of understanding of the International Health Regulations (IHR), ranging from specialized information to general knowledge and, in some cases, a lack of comprehension. When dealing with complicated international agreements and health standards, this variety of comprehension is not unusual. Some participants displayed a specialized understanding of the IHR framework. They noted the legal issues and many rules, implying a greater awareness of the IHR's complexities. These persons were more likely familiar with international health treaties or actively sought knowledge about the IHR.

Some participants, on the other hand, demonstrated a more general understanding of the IHR. They were aware that it was about responding to pandemics and contagious illnesses, but they did not dive into the specifics. This level of knowledge indicates a fundamental understanding of the IHR's mission and significance in the context of global health issues. Surprisingly, some participants acknowledged having little knowledge of the IHR or its relevance. This lack of understanding may

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be due to a lack of exposure to international health legislation or a general lack of knowledge of global health governance institutions. This was indicated in earlier studies where the assessment of IHR development reveals that the WHO African region routinely ranks last internationally in most fundamental competencies (Fu et al., 2022).

Notwithstanding the various degrees of comprehension, the findings acknowledged the IHR's importance in Ghana's reaction to COVID-19. It was found that Ghana's efforts, such as reporting cases and shutting borders to prevent the virus from spreading internationally, were consistent with the IHR's norms. This finding emphasizes the IHR's practical usefulness in directing nations' responses to pandemics and ensuring successful infectious disease control and containment which is consistent with literature (Ayeni & Aborisade, 2022; Moore et al., 2021).

In conclusion, the varied degrees of understanding of IHR throughout especially in the fight against COVID-19 in Ghana underscore the importance of continued education and awareness-building about international health rules. While some people had particular knowledge, others had a broader understanding of the IHR's mission. Despite this, delegates acknowledged the IHR's importance in molding Ghana's response to the epidemic, underlining the practical applicability of these global health standards. Increased awareness and comprehension of international health standards can lead to more effective responses to future health emergencies.

7.3 Relevance of Finding to Theory

The findings of this study show a clear match between Strategic Management Theory and the implementation of International Health Regulations (IHR) to reduce uncertainties and economic upheavals induced by the COVID-19 outbreak in Ghana. The framework of the study, which expands Strategic Management Theory to include short-term discontinuities and high uncertainty, gives vital insights into how governments might respond to such crises efficiently.

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The COVID-19 epidemic is a perfect illustration of a short-term disruption marked by considerable uncertainty. Governments throughout the world were challenged with a new virus whose behaviour was mysterious. The IHR, with its principles and recommendations, was a critical instrument in navigating this uncertainty for nations like Ghana. It provided a disciplined framework for quickly and efficiently reacting to the situation.

The study underlines the importance of making rapid changes to deal with the pandemic's problems and maintain civilisation. Ghana's implementation of IHR-aligned measures like case reporting and border closures indicates the country's proactive reaction to the current problem. This is consistent with Strategic Management Theory's focus on adaptation and rapid decision-making in the face of interruptions.

The study also emphasizes the significance of long-term strategy modifications in dealing with the "New Normal" that arises after the epidemic. The IHR urges nations to develop their healthcare systems, monitoring capacity, and readiness for future health hazards, in addition to addressing short-term response. Ghana's compliance with IHR principles positions the country well to manage the changing competitive landscape in the post-pandemic era, coinciding with the theory's emphasis on adjusting to new sociopolitical and institutional upheavals.

The analysis also emphasizes the importance of worldwide collaboration in combating the epidemic. The IHR encourages international collaboration and the exchange of information. Ghana's adherence to IHR standards reflects its willingness to work together with other states to restrict the virus's worldwide spread. This collaborative approach, recommended by both IHR and Strategic Management Theory, highlights the need for nations to work together to address global concerns.

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In conclusion, the outcomes of this research show the importance of Strategic Management Theory in the context of the COVID-19 pandemic. The congruence of the theory's premises with Ghana's usage of IHR highlights the necessity of dynamic capabilities, adaptation, and international collaboration in handling crises defined by short-term disruptions and high uncertainty. This not only assists nations in addressing urgent issues, but it also positions them for success in the emerging "New Normal" context.

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CHAPTER EIGHT

THE DYNAMICS AND CHALLENGES OF COVID-19 MANAGEMENT IN GHANA

8.0 Introduction

This chapter presents the findings on the challenges associated with the management of COVID-19 in Ghana. The chapter in its various subsections, touched on the challenges associated with the management of COVID-19, the challenges associated with resource utilization, and the challenges associated with the containment of the virus and the vaccination exercise. The key discoveries made as a result of the analysis of the data gathered are presented in this chapter. The study examines the variables that influenced public cooperation with public health recommendations and vaccination efforts in order to shed light on the complexities of Ghana's COVID-19 management. It provides new information on vaccine reluctance and the effect of false information on vaccination rates. The chapter also highlights the difficulties the healthcare system has to deal with, including the lack of resources, the strain on hospitals, and the socio-economic disparities that affected how the pandemic was handled.

The direct quotation of the participants featured prominently in the presentation of data with some charts and graphs to represent the views of the participants.

8.1 Major Findings on the dynamics and challenges of COVID-19 management in Ghana

The results showed that there were different kinds of challenges in containing and managing COVID-19 in Ghana. The challenges identified by the participants developed into three main themes. The three main challenges were management, vaccination and financial challenges and this affected the containment of the pandemic in Ghana.

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8.1.1 Challenges Associated with the Management of COVID-19 in Ghana

The findings showed that there were numerous challenges that were faced in managing COVID-19 in Ghana. The participants mentioned many things that challenged Ghana's effort against COVID-19. These challenges included behaviour, attitude, vaccines, beliefs, the health system., and funding amongst other things. These challenges were coded and represented in Figure 7.1

Figure 7. 1 Codes for Challenges of Managing COVID-19 in Ghana

Source: Researcher's Field Data 2023

The challenges mentioned were developed into themes which are also represented in Figure 7.2. From the findings, the delay in the vaccines, lack of cooperation, corruption, and vaccine hesitancy were the top most challenges in managing COVID-19. Stigmatization was one of the lowest challenges to be identified. These themes were explained in detail with the direct quotations of the participants.

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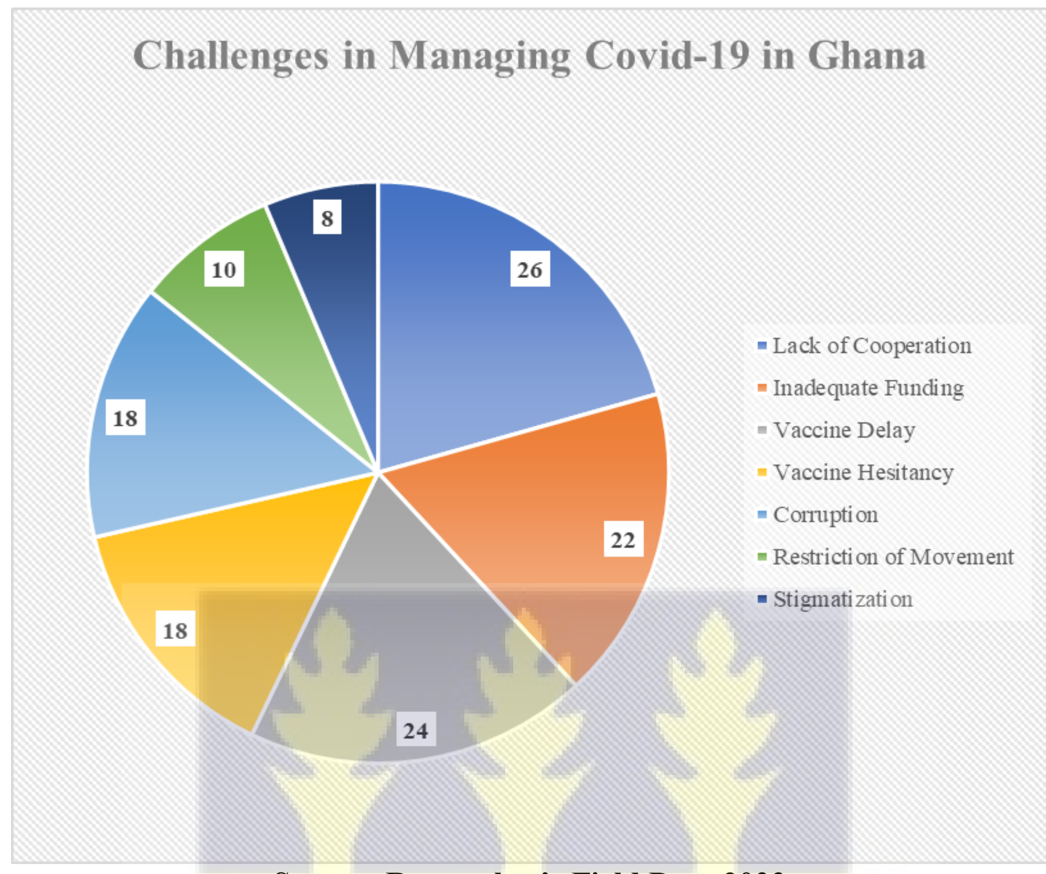
Figure 7. 2 Themes for Challenges of COVID-19 Management in Ghana.



Source: Researcher's Field Data 2023

Lack of Cooperation

Even though there was an appreciable level of cooperation among Ghanaians, the findings showed that there were some cases of lack of cooperation in the management of the pandemic.

According to the participants, a major challenge has to do with the behavioural and attitudinal change among some Ghanaians. According to them, there were some who were indifferent during the pandemic and flouted the protocols and measures put in place for different reasons. According to the participants, people believed that COVID-19 was a myth or a conspiracy theory and cast doubts about its realities. To them, the disease was created by some superpowers to control the well. The participants indicated that some sections of the populace did not adhere to public health

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standards, such as hand hygiene, wearing masks, and social isolation. The lack of compliance was ascribed to a number of reasons, including complacency, exhaustion from prolonged restrictions, and ignorance of the virus's severity.

According to the participants, some people believed that COVID-19 was not as deadly as it was claimed. Their claim was rooted in the belief that COVID-19 cannot thrive in Africa. These people argue that, if COVID-19 were real and as deadly as it was portrayed, why did West Africa and for that matter Ghana experience the lowest mortality rate even though we have a challenged health system? This belief and disposition made many people have a negative attitude and total disregard towards the protocols outlined to prevent the spread of the disease. According to the participants, funerals, weddings, concerts and parties and other public gatherings were still happening gathering people more than the twenty-five approved by the President. This to them, happened mostly in the rural areas where it was believed to have less supervision by the law enforcement agencies.

The participants also noted that, even though people also believed that, COVID-19 was dangerous to lives, they had other means of livelihood hence they went about their daily living and interacting with others. The participants cited market women who could not observe the social distance for long but carried out business as usual undermining the safety protocols instituted by the government. According to them, the street hawkers could not be kept off the streets even though they were the most vulnerable group because they must operate daily to survive. The structure of the public transport makes it impractical to observe social distancing which it challenging to manage the pandemic in Ghana.

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The participants also believed that ignorance and illiteracy made many people fully appreciate the threats and dangers the pandemic poses to existence making it difficult to cause the required behavioural change to make them cooperate with the national effort in managing the pandemic.

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Due to the unstructured and informal sector of the Ghana economy, law enforcement and supervision are herculean tasks considering the limited number of security personnel available.

"Some people didn't think COVID-19 was as deadly as it was made out to be. Their argument was based on the notion that COVID-19 could not flourish in Africa. These individuals contend that if COVID-19 were real and as deadly as it was depicted, why did West Africa and Ghana, in particular, experience low deaths despite having bad hospitals? Due to their attitudes and beliefs, many people adopted a pessimistic outlook and showed complete disregard for the procedures set forth to stop the disease's spread. Funerals, weddings, concerts, parties, and other public gatherings were still taking place, the participants claimed and were still drawing more attendees than the twenty-five allowed by the President. These events mostly occurred in rural areas where there was thought to be less law enforcement oversight". – **R39.**

"Because of their ignorance and illiteracy, many people are unable to fully comprehend the threats and dangers the pandemic poses to life, making it difficult to influence their behaviour in a way that will enable them to cooperate with the national effort to contain the pandemic. Since there are so few security personnel available, maintaining the law is a herculean task in Ghana because of the unorganized and informal nature of the economy". –

R30.

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Inadequate Funding

Another major challenge identified by participants was inadequate funding to manage COVID-19 in Ghana. According to the findings, funding played a critical role in managing the pandemic from the beginning to the end. Funds were required to provide PPEs, set up and equip health facilities, do public education and create awareness, pay staff allowances, procure vaccines, recruitment of health personnel, staff training, transport medical supplies to health centres, and the entire value chain involved in the management of the COVID-19. According to the participants, COVID-19 was not part of the initial government expenditure for 2020 therefore the outbreak took many governments including Ghana as a surprise. This, therefore, posed a challenge to the management of COVID-19. The findings showed that the government had to get support from the donor and international partners to be able to fund the management of the pandemic. These fundings require agreements that take time to negotiate which also delays the adequate response measures needed to manage the transmission of the disease.

There were reported cases of a shortage of PPEs in some medical facilities which affect the flow of work of medical staff and this was attributed to lack of funding. The participants further noted that there was an inadequate supply of funds to recruit and train the required number of health workers to provide their services during the pandemic. It was also found that there was not enough research done about the virus since there was not adequate funding for research and possible vaccine manufacturing.

From all the findings, it is now apparent that Ghana's healthcare system was put under a great deal of strain by the pandemic. Funding was needed in large amounts to develop medical facilities, buy

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medical equipment, and supply healthcare workers with satisfactory protective equipment. It took a lot of resources for the nation to quickly step up its healthcare system to handle the rising cases of COVID-19 which was not adequate enough to meet the demands on the facilities.

The participants explained that controlling the virus's spread required testing and contact tracing. However, expanding testing capacity and carrying out in-depth contact tracing necessitated significant funding. The difficulties in obtaining funding were made worse by the expense of buying test kits, setting up testing facilities, and training staff to perform contact tracing. Lack of funding slowed Ghana's effort to test its entire population which also affected the quality and quantity of contact tracing exercise.

Funding constituted a key component in ensuring that the public received dosages of vaccines as they became available.

The participant noted that significant financial resources were needed for the purchase, storage, and dispensing of vaccines. Additionally, it costs a lot to run vaccination crusades, set up vaccination facilities, and oversee vaccine distribution. Most of these processes were delayed since Ghana had to depend on support, grants, and loans to be able to carry out the vaccination exercise. The government of Ghana was said to have given the vaccines for free to its citizens which will require them to mobilize so much resources to be able to vaccinate a majority of its population. This according to the findings took some time and effort and delayed the vaccination process.

Even though the government of Ghana was applauded for being one of the countries to have effectively managed COVID-19, the participants believed that the management would have been better should there be adequate funding.

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"We realized that we were naked at a point in terms of human resources. Again, the virus exposed our poor health infrastructure in the country. Financially, we did not have the required budget to support and so we were soliciting funds which also affected the distribution". – **R4.**

"There were challenges in terms of logistics supply. Sometimes shortage of reagents can occur. In terms of human resources, there can be challenges in terms of funding for staff to perform their research. Occasionally, you have staff becoming stigmatized and some got sick along the line. Sometimes the social support that was needed was lacking. These are challenges that cut across all the health workers that were involved in managing the pandemic". – **R23.**

"PPEs, the setup and equipping of health facilities, public education, and awareness campaigns, the payment of staff allowances, the purchase of vaccines, the hiring of healthcare workers, staff training, the delivery of medical supplies to health centres, and the entire value chain associated with the management of the COVID-19 all required funding. COVID-19 was not included in the initial government budget for 2020; as a result, the outbreak caught many governments by surprise, including Ghana. The management of COVID-19 faced a challenge as a result of this. For the purpose of funding the

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control of the pandemic, the government needed assistance from donors and international partners. In order to receive these funds, agreements must be reached, which delays the implementation of the proper response strategies required to control disease transmission". – **R14.**

Vaccine Delay

The findings show many significant obstacles in managing COVID-19 in were associated with the delay in vaccine availability. Countries like Ghana were keen to obtain vaccines to shield their citizens and stop the spread of the virus as the pandemic spread across the globe. Delays in getting vaccines were caused by a number of factors, though, which posed serious problems for the country's COVID-19 response. According to the participants, COVID-19 remained a long-term threat to Ghana's population with no vaccine in view since there was no official confirmation of the date of the availability of the first vaccine. High-risk groups, including healthcare workers and the elderly, were exposed to the virus more frequently due to the lack of vaccines, potentially placing a strain on the healthcare system.

The findings showed that Ghana's healthcare system was under tremendous strain as a result of the protracted vaccine availability delay. In the absence of a vaccine, health professionals could only attempt to alleviate the symptoms and impact of the virus on the health of people. The absence of vaccines led to more hospitalizations, a strain on the healthcare system, and a possible shortage of hospital beds, oxygen, and other vital medical supplies. As there was no cure for COVID-19 prior to the vaccines, medical professionals tried different methods to curb the spread which was exhausting. The unavailability of the vaccines made the management process longer, tiring,

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uncertain, and riskier since the health staff and other frontline workers were exposed to more risk. The participants bemoaned a number of health experts that lost their lives through COVID-19 which was a numerical disadvantage to the health service.

"The situation was the same throughout West Africa. Because of the delay in obtaining vaccines, our region was left susceptible, which had an impact on our economies, healthcare systems, and population health. It took international cooperation and concerted efforts to address vaccine delays. Even though we were eventually able to obtain vaccines, the delay demonstrated the need for improved readiness and equitable access to vaccines for upcoming public health emergencies. To ensure prompt and efficient responses to such global threats, cooperation between nations and international organizations is essential"l. – **R35**.

Vaccine Hesitancy

The findings also suggest that there were challenges of vaccine hesitancy in managing COVID-19 in Ghana. According to the participants when Ghana eventually took delivery of the vaccines, it took the government so a whole lot of effort to get people vaccinated. The participants acknowledged that even though so many people voluntarily got vaccinated, others were forced to vaccinate by their organizations and employers without which they would not be allowed to work in the office. The participants noted that, even though vaccination is free for all Ghanaians, there

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are a good number of unvaccinated populations in Ghana. According to the participants, people have different reasons for not taking the vaccines.

One of the reasons for not vaccinating was the belief system and superstition. It was found that some people believed that COVID-19 is a myth and not a reality hence there was no need to need to be vaccinated since they could be infected. This group of people argued that COVID-19 none of their relatives have been infected by the disease hence it does not exist which makes them reject the vaccines. They believed that the Western world created the whole tale about COVID-19 and faked the morbidity and mortality so as to convince Africans to receive the vaccine which allows them access to control them by artificial intelligence. To them the vaccine is a programme to control the entire with artificial intelligence they will not be vaccinated.

The findings also showed that people refused to be vaccinated when they saw the initial reactions of people to vaccines taken. According to the respondents, there were some reactions and health complaints by some people who had the initial jabs terrifying many others from taking the vaccines. According to them, some others believed that there were reports of death from different parts of the world as a result of the vaccinations which was a deterrent to some Ghanaians from the vaccination. The participants noted that there were rumours and news about the terms and conditions of the vaccine which prevented pregnant women from vaccinations and any other person who intends to give birth in the short term suggesting that, it can affect human fertility which most people use to refuse the vaccination.

The participants again mentioned that people also refused vaccination because they felt the vaccines were not safe or did not give absolute protection against the virus. One reason identified for this feeling was how the vaccine was rushed to be discovered. According to these people, vaccines take time to be developed but the COVID-19 vaccines took a relatively shorter time to

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develop which to them might not have gone through enough testing process but launched for use which can jeopardize their health and ultimately lives. Others also identified reported cases of infection in those who were vaccinated in different parts of the world. This to them has discouraged many people from getting vaccinated.

The participants also suggest that some people are naturally antivaccine which made them refuse the vaccination. According to them, these people were said to have negative reactions to vaccines in general which made many of them reject the COVID-19 vaccines and are part of the unvaccinated population.

The final reason for people not vaccinating was when the WHO announced that COVID-19 was no longer a public health emergency. According to the participants, people interpreted that announcement as the end to COVID-19 which to them there was no COVID-19 in the world therefore vaccination was inconsequential to them. This announcement made some people believe that their hypothesis of COVID-19 being a myth has been sustained therefore they will not be vaccinated.

"We have come across people who are reluctant to take the vaccines as a result of false information and stories spreading on the internet and other platforms. Some are concerned about possible negative effects or wonder how quickly the vaccines were created. As leaders in the field of health, we recognize how critical it is to address these worries and increase public confidence in vaccines. We worked relentlessly to deliver correct and trustworthy evidence about the vaccines, their thorough trying procedures, and

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the irresistible evidence of their efficacy in averting acute illness and causalities from COVID-19". – **R33.**

Corruption

From the findings, corruption was identified as a challenge to the management of the COVID-19 pandemic. According to the participants, funds meant for the management of COVID-19 got diverted to different people which led to the inadequate fund for the management of the pandemic. According to them, funds were released to procure vaccines some quantities of the vaccine never got delivered. The participants further mentioned that some medical supplies were either delayed or not made available because the funds meant for them got truncated or siphoned to different places. The participants mentioned that one glaring evidence of corruption was when some frontline workers were denied their allowances even though the President made a public commitment to them.

The participants stated that some public officials took advantage of the situation to breach the procurement processes in the name of the public health emergency and misappropriated the funds meant to manage the pandemic. The findings show that there was a concerted effort to prevent an investigation into the COVID-19 account however, the Auditor General's report revealed possible corruption in the disbursement of the COVID-19. The Auditor General's report, therefore, formed the premise for their conclusion that there were corruption or corruption-related activities with the management of COVID-19 in Ghana.

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The participants also suggested that the lack of transparency and accountability of the COVID-19 fund is an indication that there may be unapproved expenditures that were to the detriment of the country. They cited the case of the feeding of the people with hot meals as a clear case of the inflated cost of expenditures which the government did not convincingly account for the total number of people fed and the unit cost of food.

The participants believed that Ghana could have done more than we did considering the funds made available for COVID-19. The misappropriation of the funds and the suspected embezzlements has impeded the management effort of the nation.

> *"So, corruption took place and because we are in this negative situation, a lot of things were left blank in terms of procurement processing and purchasing, so, there were quite a number of issues in there. And the government was very hard on us in terms of trying to get a report on the use of funds and whatever they used in managing COVID-19. They tried to restrict even parliament from probing into the use of the funds. They were also confusing things until quite recently they had a full report from the Auditor General".* – **R22.**

> *"... I think when it comes to the sources, mainly it was from the international communities, and then if you will remember we had a lot of money coming as a donation towards the COVID-19 fight which even as we speak there is an issue as to how its accountability has been done. Probably, we've not been able to account for the money the way we should have accounted for it. So, we had a lot of money from WHO and other international partners and as a country, we*

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even introduced a COVID-19 levy where each item we buy you are contributing to the COVID-19 fund. There were a lot of donations from people who were in the business community and even some of the churches donated to the fund and individuals also donated, so we had a lot of money from both official and unofficial sources as a country. And of the various organizations that supported the drive most of them drew their money from these areas where the donations are gone, GHS, and NCCE had a budget, and had some donations both from the international communities and government which they also escalated to some of the organizations even including GMA we were able to get resource some funds from them and GHS to embark on COVID-19 education. …" - **R1**.

Restriction of Movement

The restriction placed on movements also affected the management of the pandemic in Ghana. The borders of this country were closed to foreign countries and most of the products were imported from other countries. Due to this, there was a shortage of supply of some medical supplies from those countries. There were stringent measures on importation which affected the international supply chain of goods and services. The restriction of the movement of goods and services made it difficult for international suppliers to deliver vital medical supplies on time. Because of this, it took longer to get the PPE, testing kits, and other essential medical supplies we needed to safeguard our healthcare personnel and handle the rising cases of COVID-19. Some of these medical supplies were critical in the management of the pandemic. There were reported cases of limited supply of

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PPEs which forced some Ghanaians into the manufacturing of facemasks of which most were more expensive due to the diseconomy of scale. Other foreign countries were on lockdown which affected the importation of some essential goods and services affecting the effective management of the pandemic.

The findings also revealed that international movement bans also had an impact on the travel of medical experts and specialists, who were crucial for imparting instruction, offering technical assistance, and facilitating the sharing of knowledge. Our attempts to use global proficiency to fight the pandemic were hampered by the difficulty of collaborating with international partners on research and best practices. They believed that the restrictions on movement also affected our ability to import specialized medical tools and cutting-edge technologies necessary for treating and diagnosing COVID-19 severe cases. As a result of our difficulty accessing the most recent medical advancements, our healthcare system was put under increased strain

The restrictions on movement served as a reminder of how crucial it is to improve domestic manufacturing capacity and boost the resilience of the health sector in a nation that is heavily dependent on international supply chains for medical necessities. Diversifying our medical supply sources and encouraging domestic production are crucial steps in preventing future interferences in global supply chains, it has become clear.

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The international supply chain for goods and services was impacted by the strict regulations on importation. International suppliers struggled to deliver crucial medical supplies on time due to restrictions on the free flow of goods and services. The PPE, testing kits, and other crucial medical supplies we required to protect our healthcare workers and deal with the rising COVID-19 cases took longer to obtain as a result. Some of these medical supplies were essential in controlling the pandemic. According to some reports, there was a shortage of PPEs, forcing some Ghanaians to produce facemasks, the majority of which were more expensive due to the diseconomy of scale.

Stigmatization

According to the findings, stigmatization was a challenge to the management of the pandemic in Ghana. The participants said that the stigmatization of infected people and their families as a result of the virus's widespread fear and anxiety has made it tough for them to reach out for support and healthcare services. As a result of this stigma, some groups have been targeted unfairly, including immigrants and healthcare workers who are thought to be more susceptible to the virus. As a result of stigmatization and people's fear of rejection or discrimination, COVID-19 cases in Ghana have been underreported. This underreporting can create a wrong notion of security and impede efforts to stop the virus's spread.

According to them, people were discriminated against in their society and workplaces hence they kept their health conditions which made most asymptomatic patients transmit the virus to their colleagues and close contacts.

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The participants mentioned that this worsened when the healthcare professionals and first responders were stigmatized as well in Ghana; they were wrongfully viewed as potential virus carriers and were subjected to social exclusion and even home eviction. Those already exerting great effort to stop the pandemic were subjected to a tremendous psychological burden as a result.

> *In managing COVID-19 in Ghana, stigmatization has been a challenging obstacle. As the virus spread, so did apprehension and false information, which contributed to the stigmatization of those who had the disease and the communities where they lived. People with COVID-19 or those who had recovered from it experienced prejudice, social exclusion, and other forms of hostility, which made it difficult to implement effective management strategies.*

8.1.2 Challenges Associated with Vaccination or the Containment of the Virus in Ghana

Based on extensive research, data analysis, and professional insights, this sub-chapter presents conclusions on the difficulties in immunization and virus control in Ghana. The country's response to the COVID-19 pandemic can now be better understood because of these difficulties, which have also helped us identify important areas for future preparation and improvement. The ultimate objective is to build on this experience and strengthen Ghana's ability to effectively address the current epidemic and upcoming health crises.

The findings showed that the vaccine was much anticipated from the onset of the pandemic since it was believed to be the lasting solution to the pandemic. The findings suggested that, until the introduction of the vaccine, COVID-19 was still perceived to be a high-risk and public health

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emergency. Ghana for instance as a country lacked the internal or domestic capacity to manufacture its own vaccines hence COVID-19 remained and some of its measures were still in force until the vaccination exercise. The participants mentioned that the wearing of facemasks in public places, border closure, and compulsory testing at the airport were still in full force until vaccinations. The vaccine was believed to be the acme of the war against COVID-19.

The finding however showed that, even though vaccination helped restore life to normal in Ghana, the entire exercise was confronted with many challenges. Some of these include superstitious beliefs, mistrust of the global health system, phobia, and antivaccination.

Unavailability of Vaccines

Ghana's efforts to contain and manage the COVID-19 pandemic have been severely hampered by a shortage of vaccine supplies. As the virus spreads around the world, the race to develop and produce a highly effective vaccine has accelerated. Ensuring equitable access to vaccines has proven to be a daunting and time-consuming task in all countries, especially in low- and middle-income regions such as Ghana. According to the participants, it was common knowledge that it took more than a year to have certified vaccines for COVID-19. This according to them caused much delay in the commencement of the vaccination against the pandemic.

According to the participants, the lack of vaccines available during the initial periods of vaccination was one of Ghana's biggest issues. Through pre-purchase arrangements with pharmaceutical firms, many developed countries have acquired large quantities of vaccines, making nations like Ghana to be left with a limited supply. This uneven distribution makes it more difficult for Ghana to quickly immunize its population and worsens existing global health disparities. Even though Ghana had free doses of the vaccines it was woefully inadequate to

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vaccinate the targeted national vaccination hence only frontline workers and some public officials were vaccinated with first consignments which posed challenges to the vaccination exercise in Ghana.

The participants also noted that the disruption of the global supply chain further delayed the availability of the vaccines for distribution. Furthermore, the subsequent procurement of the vaccines by the government was delayed as it involved different consultations and approvals which affected the timely arrival of the vaccines for the larger population. The participants further noted that, some of the vaccines needed to always be kept at a particular low temperature which made it difficult for those particular vaccines to be sent to rural areas for the exercise.

Safety and Security

This finding also emphasizes participant hesitation and worries about the quick development and approval of vaccines. A number of COVID-19 vaccines were introduced as a result of the pandemic's scientific community's assiduous efforts to create vaccines quickly. However, the participants believed that the rapidity of vaccine development and approval, however, raised concerns among some Ghanaians. They thought the procedure was hurried, which led them to question the safety and effectiveness of the vaccines. They added that the lack of knowledge of vaccine technology advancements and the meticulous scientific testing that these vaccines underwent led to concerns about the accelerated timeline. Due to the quick development of vaccines, people's reluctance was exacerbated by worries about the possible repercussions or the future harm of the vaccines. Due to these concerns, people wanted more proof of the vaccines' safety profile before deciding to get vaccinated. Additionally, the participants' uncertainty might have been affected by antique occurrences of vaccines that experienced safety problems in the

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past. Even in the midst of a global health emergency, these experiences may have influenced a hesitant attitude toward accepting recently developed vaccines.

Myths and Misinformation

The results showed that participants generally believed lies and myths about the COVID-19 vaccine. The finding shows that misinformation has a significant impact on people's attitudes toward vaccination. According to the participants, the perceived negative impact of the COVID-19 vaccine was influenced by some exaggerated or incorrect claims.

Although these claims have been disproved by scientific data, some still believe that vaccines can cause harmful side effects or long-term health problems. According to them, people do not want to take the vaccine because of fear and hesitation because of false information about possible side effects.

The findings also suggest that there is misinformation about how receiving the COVID-19 vaccine can significantly change a person's identity or physical characteristics. Many of these myths suggest that, among other things, vaccination can change a person's appearance or personality.

These rumours spread mainly through informal word of mouth, social media and other unofficial channels and are not based on organized safety, increasing resistance to vaccination.

Participants believed that social and cultural factors such as deep-rooted beliefs and superstitions were the main reasons why these myths and misconceptions spread. It is also difficult to effectively combat and counter false narratives as information spreads rapidly through digital platforms.

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These false pieces of information and myths posed a significant challenge to the vaccination exercise even though many attempts were made to dispel them through public education and sensitization.

Cultural and Superstitious Beliefs

The result emphasizes how cultural and superstitious beliefs affected the vaccination campaign against the pandemic. The participants stated that deeply entrenched cultural theories and orientations were a major factor in determining people's attitudes and behaviours toward vaccination.

The Ghanaian society just like any other African country is believed to be strongly influenced by cultural beliefs, which have an impact on many different aspects of daily life, which also include healthcare choices. The participants acknowledged that people’s views of the COVID-19 vaccines were influenced by specific cultural beliefs and practices. For instance, some people might have depended on herbal treatments for illnesses or believed in conventional healing techniques. Due to this, they could possibly be dubious about the value of immunization or choose different strategies to defend themselves against COVID-19.

Additionally, traditions and superstitions were said to have also influenced how people felt about vaccination. Given the long antiquity of old beliefs and practices in Ghana, some people were believed to have been persuaded by urban folklore or rumours about the vaccines' alleged side effects. Participants might have believed untrue rumours, for example, that the vaccines were cursed or brought bad luck or contained harmful substances.

According to the participants, these beliefs are not solely as a result of the traditional principles but other religious practices and faith affected people’s willingness to receive the vaccine or not.

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According to them, some people viewed the pandemic as a satanic agenda to introduce vaccines into people's hence it should be rejected. Some people may be reluctant to get vaccines or become resistant to them as a result of these cultural and gullible beliefs. They might not have sought vaccination because they were afraid of the unknown and relied on traditional methods.

Anti Vaccine

The findings showed that there are naturally antivaccine people. The respondents noted that people's hesitancy to the vaccine is a result of the resistance they developed towards vaccines even before COVID-19. According to them, people have had different reactions to vaccinations and immunization in the past hence they have written themselves off in any vaccination exercise. According to the participants, such groups of people will be hard to convince since they have had personal experiences as evidence of their position. The participants further noted that other groups also tend to develop a fear of needles and since the vaccination is through the means of injection, they naturally will resist taking it. According to them, such people would prefer the vaccination to be a tablet, capsule, or suspension rather than an injection. The participants noted that these two people have deep-seated beliefs out of experiences which will first of all need psychological attention before they can be convinced to take the vaccine. They concluded that this disposition had a negative impact on the vaccination exercise and the containment of the virus in Ghana.

8.1.3 Financial Challenges Associated with the Management of COVID-19 in Ghana

It is now clear from the findings COVID-19 caused an unprecedented global health crisis and Ghana encountered many difficulties in effectively managing and containing the pandemic due to the virus' quick spread. One of the biggest obstacles to building a strong response to this public

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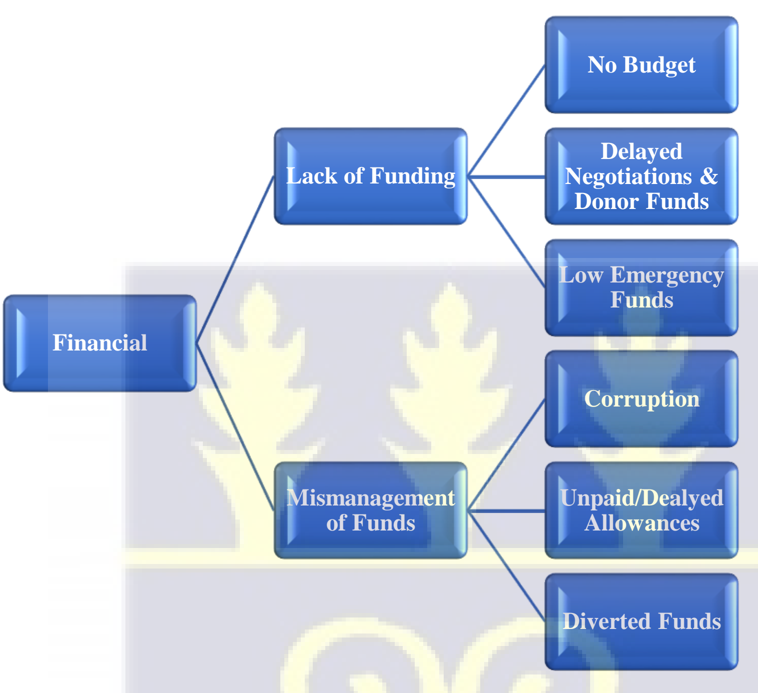
health emergency among these issues was funding. An in-depth analysis of Ghana's financial difficulties in dealing with COVID-19 and its effects on the nation's healthcare system, economy, and overall pandemic management are provided in this study. The two main financial challenges mentioned in the study were inadequate funding and corruption or misappropriation of the limited funds.



Lack of Funding

A major issue raised by participants was Ghana's lack of funding for the fight against COVID-19. The results showed that end-to-end funding is critical to controlling this epidemic. According to the participants, personal protective equipment, setting up and furnishing of health facilities, public education, and awareness campaigns, payment of workers' allowances, purchase of vaccines, employment of health workers, training of personnel, supply of medical supplies to health centres and all matters related to COVID-19 management throughout the value chain Both require funding.

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Participants argued that many governments, including Ghana, were caught off guard by the outbreak because they had not initially budgeted for COVID-19 in 2020. The results show that governments need help from donors and international partners to finance pandemic management.

Funds required contracts, and the response needed to control the spread of the disease was delayed because negotiations took time. Lack of funding has been blamed for a lack of personal protective equipment in some healthcare facilities, affecting the workflow of medical staff.

Participants also noted insufficient funding to hire and train the necessary number of health workers to provide services during the pandemic.

The virus has also been shown to be under-researched due to a lack of funding for research and the production of a potential vaccine. It is now clear from all studies that the pandemic has severely strained Ghana's health infrastructure.

The participants mentioned significant financial investment was required to build medical facilities, buy medical equipment and provide adequate protective equipment for medical personnel. Due to the increasing number of cases of COVID-19, the country had to rapidly expand its healthcare system because the facilities could not keep up with the demand. Participants explained that testing and contact tracing are needed to stop the spread of the virus. However, significant funding is needed to increase testing capacity and conduct in-depth contact tracing. The cost of purchasing test kits, building testing equipment, and training personnel for contact tracing will only exacerbate the funding problem.

A lack of funding has slowed Ghana's efforts to test the entire population and has also affected the quantity and quality of contact tracing efforts. Funding is essential to ensure timely public access to vaccines. The participant mentioned that purchasing, storing, and distributing vaccines requires

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significant capital investment. It is expensive to conduct vaccination campaigns, set up vaccination facilities, and manage vaccine distribution. According to the participants, most of the process has been delayed because Ghana relies heavily on aid, grants, and loans for its vaccination efforts.

The Ghanaian government reportedly provided vaccines to its citizens free of charge, so significant financial resources must be mobilized to provide vaccination to the majority of the country's population. The results indicated that the vaccination process had been delayed.

Although the government of Ghana is being praised as one of the countries that successfully managed COVID-19, participants felt that the management would be better if it had adequate funding.

Mismanagement or Misappropriation of Funds

Corruption was mentioned as one of the significant financial challenges encountered in the management of the pandemic.

The findings show that management of the COVID-19 pandemic was found to be challenging due to the findings regarding corruption. The participants mentioned that funds intended for the management of COVID-19 allegedly got diverted to other people, leaving a lack of funding for the pandemic's control. They claim that although funds were made available for the purchase of vaccines, some vaccine orders were never fulfilled.

Additionally, the participants mentioned that some medical supplies were either delayed or not made available because the funds intended for them were cut off or diverted to other uses. The fact that some frontline workers were denied their allowances despite the President publicly promising to do so was cited by the participants as one glaring example of corruption.

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According to the participants, some public officials exploited the situation to circumvent procurement procedures under the guise of a public health emergency and divert funds intended for pandemic management. The results demonstrate that there was a concerted effort to halt the investigation into the COVID-19 account, but the Auditor General's report exposed potential corruption in the COVID-19 disbursement. They concluded that there had been corruption or activities related to corruption with the management of COVID-19 in Ghana based on the Auditor General's report.

The participants also made the argument that the COVID-19 fund's lack of transparency and accountability is a sign that there may have been unauthorized expenditures that hurt the nation.

They used the example of the government failing to convincingly account for the total number of people fed and the per-unit cost of food as a clear case of the inflated cost of expenditures. According to the participants, Ghana could have accomplished more than we did given the funding made available for COVID-19. The mismanagement of funds and alleged embezzlements have hampered the country's management efforts.

… I think when it comes to the sources, mainly it was from the international communities, and then if you will remember we had a lot of money coming as a donation towards the COVID-19 fight which even as we speak there is an issue as to how its accountability has been done. Probably, we've not been able to account for the money the way we should have accounted for it. So, we had a lot of money from WHO and other international partners and as a country, we

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even introduced a COVID-19 levy where each item we buy you are contributing to the COVID-19 fund. There were a lot of donations from people who were in the business community and even some of the churches donated to the fund and individuals also donated, so we had a lot of money from both official and unofficial sources as a country. And of the various organizations that supported the drive most of them drew their money from these areas where the donations are gone, GHS, and NCCE had a budget, and had some donations both from the international communities and government which they also escalated to some of the organizations even including GMA we were able to get resource some funds from them and GHS to embark on COVID-19 education. ...

8.2 Discussion of Findings

The study's findings indicate numerous key obstacles that Ghana encountered in dealing with the COVID-19 epidemic. These problems, which ranged from public scepticism and opposition to corruption, had significant ramifications for the country's response operations. There were issues with management, vaccinations, and funding in the pandemic's handling.

The speed to procure vaccines to save lives and reduce suffering created avenues for corrupt behaviours and shoddy deals in some countries but elements of procurement corruption, procurement breaches and irregularities in the vaccine distribution chain were not completely detached from politics. In Ghana, the political and civil pressure to secure a sufficient supply of

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vaccines led to procurement irregularities. On 9 March 2021, Ghana's MoH entered into a procurement contract with a United Arab Emirates royal and a private company, S.L. Global, for the supply of 3.4 million doses of the Sputnik V COVID-19 vaccine at a unit cost of US$ 19. Vaccine supply delays were a serious barrier. The study focuses on how these delays impacted Ghana's capacity to safeguard vulnerable groups, such as healthcare workers and the elderly, and how they may have led to stress on the healthcare system. Delays in vaccine availability lengthened the management process, increasing dangers for frontline employees and putting enormous strain on healthcare institutions. Consistent with the study in South Africa, the Supply-side constraints such as vaccination 'availability', 'infrastructure', and 'accessibility' all represent substantial barriers to optimum adoption in South Africa (Cooper et al., 2021).

The stigmatization of COVID-19 patients and healthcare staff is a major societal issue. Fear and prejudice resulted in misreporting of cases, hampering attempts to curb the virus's transmission. This problem not only has an impact on people's mental health but also jeopardizes contact tracking and public health measures. Literature corroborates this finding on how COVID-19 patients were stigmatized and discriminated against hence people do not own when experiencing such symptoms (Osei et al., 2022; Schmidt et al., 2020; Nkansah et al., 2020).

One of the most significant issues discovered is Ghanaians' resistance and apathy to COVID-19 prevention efforts. This conduct varied from noncompliance with health measures to skepticism about the virus's severity. Such views not only impeded the government's efforts to limit the pandemic but also endangered individuals and communities. It reflects a greater issue of misinformation and a lack of public education, both of which have hampered the adoption of suggested health measures. Vaccine hesitancy has surfaced as a key impediment to Ghana's

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immunization effort. Some people were discouraged from being vaccinated due to misinformation, mistrust about vaccination safety and efficacy, and conspiracy theories. This reluctance is a significant barrier to gaining universal vaccine coverage, which is critical for herd immunity and, eventually, surviving the epidemic. Adomako et al. (2021) discovered similar challenges of vaccine hesitancy due to health concerns and the safety of vaccines and recommended the need for mass education to get the collaboration of everybody in the vaccination exercise.

The findings also emphasized the apprehension caused by worries regarding the quick development and licensing of COVID-19 vaccinations. This is consistent with previous research, which shows that individuals frequently correlate vaccination safety with the time it takes to create and test them. The perception of a hurried procedure may raise concerns about safety and efficacy. Misinformation and falsehoods about COVID-19 vaccinations are a well-documented problem across the world. This study underlines the influence of misleading claims and overstated information on people's vaccination views. The impact of misinformation on vaccination reluctance has been extensively researched, emphasizing the need for good communication and public education. Myths and conceptions were among the reasons people gave for being hesitant to receive the COVID-19 vaccines according to earlier studies (Aberese-Ako et al., 2023)

The study elaborates on the need for money in managing the epidemic. The initial absence of cash allocation for COVID-19 preparation and response in Ghana constituted a significant obstacle. While foreign donors and organizations rushed forward to help, difficulties in securing agreements and disbursing funding slowed response activities. Inadequate financing also resulted in a scarcity of personal protective equipment (PPE), testing kits, and vital medical supplies, hurting the overall capacity to control the infection efficiently. Extant literature has proven this finding to be consistent because different countries all over the world and not only Ghana or West Africa had a

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hard time financing the management of COVID-19 since it was unexpected but had a damaging impact on all aspects of human endeavour (Amu et al., 2022; Salamzadeh & Dana, 2021; Rosenthal et al., 2020).

The misuse of COVID-19 funding is a serious concern. The diversion of cash intended for critical supplies, such as vaccinations and medical equipment, raises concerns about transparency and accountability. Corruption undermines faith in public health systems and jeopardizes pandemic response efforts. Border closures and severe import controls in Ghana have affected the worldwide supply chain of products and services, especially medical supplies. This hampered the timely purchase of critical resources, such as personal protective equipment and testing kits, and underlined the country's reliance on global supply networks for healthcare demands. A study that explicitly identified corruption, especially in the procurement of the vaccine was by Atinga et al. (2022). They claimed that the rush to get vaccinations in order to save lives and alleviate suffering offered opportunities for unscrupulous behaviour and shady dealings in some countries. However, components of procurement corruption, procurement breaches, and vaccine distribution chain anomalies were not fully divorced from politics. They cited Ghana as an example, governmental and social pressure to ensure an adequate supply of vaccinations resulted in procurement misdeeds where the Ministry of Health signed a deal with a private business in the UAE, S.L. Global, for the provision of 3.4 million doses of the Sputnik V COVID-19 vaccine at a unit cost of US$ 19. The decision to purchase each dosage for nearly double the manufacturing price of US$ 10 drew criticism and outrage from the media, opposition political parties, and civil society organizations. The Ministry's choice to engage intermediaries to get costly vaccinations was also questioned by certain members of the public.

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COVID-19 management in Ghana has been a complicated task, involving behavioural, economic, and structural constraints. These problems have underlined the importance of extensive public education efforts, open and accountable governance, diverse supply chains, and vaccination hesitancy measures. Addressing these challenges is critical for preparing for future health emergencies and ensuring successful pandemic management. Ghana's experience emphasizes the significance of coordinated actions at the global, national, and local levels to effectively tackle the epidemic.

In summary, the management of COVID-19 in Ghana offered a multidimensional problem that included concerns relating to healthcare administration, immunization, and budgetary restrictions. The study put emphasis on the need for competent strategic management, international collaboration, and prompt decision-making in mitigating the pandemic's uncertainty.

Furthermore, Ghana's immunization efforts were hampered by obstacles such as vaccine reluctance caused by disinformation and cultural beliefs, as well as logistical and budgetary restraints.

The absence of financing to implement the entire response necessary to battle COVID-19 effectively surfaced as a major worry. The lack of budgetary allocations in the early phases of the epidemic, as well as delayed financing talks and resource constraints, underscored the vital necessity for long-term financial planning and new funding structures.

Ghana and other countries may learn a lot from these issues as they prepare to deal with future global health catastrophes, emphasizing the need for healthcare resilience, timely access to immunizations, and smart financial planning to preserve public health and welfare.

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CHAPTER NINE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

9.0 Introduction

This chapter is the result of an extensive journey through the complex environment of MANAGING COVID-19 PANDEMIC IN WEST AFRICA: THE CASE OF GHANA. It dug deep into how Covid-19 was controlled in West Africa, notably Ghana, during the course of the doctorate dissertation to unearth insights, trends, and consequences that contribute considerably to our knowledge of the issue. This chapter synthesizes the important results, distils their implications, and concludes with a thorough conclusion and set of suggestions that provide useful advice for future study and practical applications.

The research takes an interpretive journey in this chapter, highlighting the key conclusions from this comprehensive study. The chapter examined the implications of these findings, drawing parallels to previous literature and considering their larger significance in the setting of the research. Furthermore, the researcher provided a definitive viewpoint, uniting the diverse aspects of our analysis into a unified whole.

9.1 Summary of Findings

The study begins by outlining the vulnerabilities posed by COVID-19 in West Africa, laying the groundwork for comprehending the situation. The second objective expands on this by looking at how West Africa, namely Ghana, responded to these risks, offering insight into the management tactics used.

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The third objective broadens the scope to include an examination of the global community's policies and resources utilized to assist Ghana in managing the epidemic. This goal includes information on the joint efforts and external support obtained.

The fourth objective looks more into Ghana's internal dynamics and issues in operating COVID-19. It combines data on policy efficacy, healthcare system capabilities, and socioeconomic implications to provide a holistic picture of the issues at hand.

Overall, these objectives complement one another to give a complex view of the COVID-19 management process in West Africa, with a particular emphasis on Ghana, incorporating local, national, and international components.

Threats Posed by Covid-19 in West Africa

The findings of the study have shed light on the COVID-19 pandemic's complex and nuanced effects in West Africa, with a focus on the threats to the region's economy, mortality, morbidity, and mobility. These findings shed light on the significant and connected difficulties the area has been facing throughout the current global health crisis. Economic threats have become a widespread concern, continuing a global trend. The impact of COVID-19 on the economic stability of West African nations was emphasized by all participants. Businesses were severely impacted by lockdowns, restrictions, and disruptions to supply chains, which resulted in widespread job losses, lower incomes, and financial hardship. This economic fallout had a significant impact on entire economies in addition to individual livelihoods, which had far-reaching effects on regional development and efforts to reduce poverty.

The second-ranked danger, mortality, emphasizes the devastating impact of the epidemic on West Africa's population. The findings highlighted serious concerns about the loss of life caused by

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COVID-19. This is not only a terrible human tragedy, but it also puts enormous strain on already overburdened healthcare systems. The pandemic's disproportionate impact on vulnerable communities, as well as regional healthcare inequities, intensifies this threat, emphasizing the critical need for focused public health initiatives. Morbidity, which follows death, emphasizes the burden of disease and suffering endured by COVID-19-affected individuals. Concerns were raised regarding the load on healthcare institutions, insufficient resources, and the difficulties in providing effective treatment to individuals impacted. Morbidity affects not just individual health but also healthcare infrastructure and resources.

Finally, movement limitations appeared as a major problem, illustrating the delicate balance between public health policies and socioeconomic realities. While travel limitations were judged vital to halt the virus's spread, they also caused difficulties, particularly in an area where informal businesses and day wage work are common. Participants emphasized the hardships that people whose livelihoods were affected by lockdowns encountered.

The region's reaction to the pandemic has been defined by economic, mortality, morbidity, and movement-related risks. Addressing these issues would need a thorough and nuanced strategy that takes into consideration the region's particular socioeconomic environment and healthcare infrastructure. This study lays the groundwork for policymakers, healthcare professionals, and stakeholders to design targeted interventions and measures to lessen the impact of possible future pandemics in West Africa, highlighting the importance of resilience, commonality, and fair access to healthcare resources.

INTEGRI PROCEDAMUS

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Managing the COVID-19 Pandemic as a Threat to Human Security

The findings shed light on West African nations' diverse and coordinated response to the COVID-19 epidemic. Recognizing the virus's grave danger, these governments implemented a variety of emergency measures aimed at protecting public health and preserving the safety and security of their citizens. Presidential leadership emerged as a critical pillar of the region's pandemic response. Participants emphasized the importance of national leaders in steering their respective nations through the crisis, offering important direction, and mobilizing popular support. Effective leadership was viewed as critical in mobilizing resources, implementing policies, and preserving public trust.

Public health education and awareness creation through effective communication were critical in conveying critical information about the infection and preventive measures. Governments, in collaboration with health authorities, launched public awareness programs to educate individuals about COVID-19, how it spreads, and the need for hygiene and immunization. Clear and consistent communication was regarded as critical in encouraging adherence to health standards.

The creation of Treatment and Isolation Centres was a critical component of the emergency response. These facilities were critical for treating persons infected with the virus and isolating them to avoid further transmission. Such facilities were critical in keeping healthcare systems from being overburdened.

To organize and carry out pandemic reaction operations, the government machinery was activated. The need for streamlined and efficient bureaucracy in supporting the speedy deployment of resources, laws, and public health interventions was emphasized by participants. Border closures and lockdowns were enacted as severe measures to halt the virus's spread. While these efforts had

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economic and societal consequences, participants emphasized their importance in limiting the epidemic, particularly in its early phases. For tracking the virus's transmission, robust surveillance systems and contact tracing efforts were deemed necessary. Participants recognized the importance of technology and data in tracking cases, identifying hotspots, and isolating probable transmission sources. Effective contact tracing was critical for breaking transmission chains.

The epidemic triggered a deeper restructuring of the region's healthcare systems. To improve capacity and resilience, governments invested in healthcare facilities, equipment, and employees. This restructure aims to address not just urgent requirements, but also to enhance healthcare systems in preparation for future health concerns. These actions, which included presidential leadership, education, treatment and isolation, government cooperation, border control, lockdowns, surveillance, contact tracing, and health system reform, were designed to save lives and safeguard public health. This study emphasizes the need for adaptive governance and regional collaboration in efficiently dealing with global health catastrophes. It offers important information for policymakers and healthcare executives looking to improve pandemic preparedness and response in West Africa and beyond.

International Policies and Resources That Were Deployed in the Management Of COVID-19 In Ghana.

This study emphasizes the complex and dynamic character of worldwide policy responses to the COVID-19 pandemic. The findings underline the importance of collaborative opinions, suggestions, and best practices in moulding the worldwide response to the epidemic above strict, universally applicable legislation. This approach recognizes the intricacies and unique conditions that various nations and areas confront. One key finding from this research is the World Health Organization's (WHO) varied position as an international influencing authority. While the WHO

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provides critical information and suggestions, it does so within a framework that respects individual nations' decision-making authority. This dual function acknowledges that one-size-fits-all laws are sometimes impracticable and that flexibility is essential to manage the pandemic's unique concerns.

The various degrees of awareness of the International Health Regulations (IHR) across participants reflect the complexities of global health governance. These various viewpoints, ranging from expert knowledge to broad awareness and, at times, a lack of comprehension, highlight the need for improved communication and education on international health systems. This misunderstanding highlights the significance of knowledge distribution and capacity building in ensuring that governments can navigate the regulatory framework efficiently amid health crises.

Furthermore, the study emphasizes the importance of historical precedents and lessons learnt from previous health crises. Individual nations' and international agencies' actions have been shaped by these experiences, resulting in a more comprehensive and flexible strategy for managing the COVID-19 pandemic.

In summary, this study sheds light on a global reaction defined by national collaboration, adaptation, and mutual respect. It highlights the fluid character of international politics, in which norms and suggestions serve as crucial guideposts but governments maintain the flexibility to adjust their responses to their individual circumstances. This adaptable and collaborative strategy is critical in dealing with a diverse and fast-growing global disaster like the COVID-19 epidemic. These findings give vital insights for policymakers, global health organizations, and international leaders as the globe grapples with the epidemic and prepares for future health threats. They emphasize the significance of cultivating a collective spirit of collaboration and knowledge-

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sharing while preserving national sovereignty in developing successful solutions to global health challenges.

The study also outlines several technical and human resources used in the virus's fight. In the fight against COVID-19, public institutions with established public health divisions have emerged as critical technological resources. These organizations not only offered expertise, but also critical care nurses and specialists, with assistance from the World Health Organization (WHO). This partnership cut beyond national boundaries, underlining the worldwide cooperation essential to combat a pandemic of this size. Ghana's healthcare infrastructure was critical, with hospitals and clinics designated as isolation and treatment centres. The nation's capacity to manage COVID-19 cases was strengthened by using existing technological equipment in these institutions.

Human resources were equally important. Ghana used a varied workforce to address a scarcity of healthcare personnel. Medical students and retired staff were enlisted to help the healthcare system, exhibiting a creative way to filling resource deficiencies. Financial mobilization has emerged as an essential component of Ghana's pandemic response. Internal financial resources were mobilized by the government through the Ministry of Finance and the Central Bank. Furthermore, the formation of a COVID-19 trust fund permitted contributions and donations from a variety of sectors, including individuals, enterprises, non-governmental organizations (NGOs), religious groups, and others.

International donors and credit facilities boosted the financial resources available for pandemic control even more. This multi-pronged approach to resource mobilization and deployment highlights Ghana's complete plan for ensuring successful COVID-19 management within its boundaries. These findings shed light on the multi-sectoral, collaborative, and adaptable nature of the global health crisis response.

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Dynamics and Challenges of COVID-19 Management in Ghana

The research observed several problems Ghana faced in its efforts to limit and manage the COVID-19 outbreak. These difficulties converged into three main themes: management, vaccination, and budgetary constraints, all of which had a substantial influence on the country's capacity to contain the virus's spread.

During the pandemic, management problems loomed big. Several crucial difficulties were recognized by the study which included delays in vaccine procurement and delivery which impeded the rapid implementation of immunization programmes. A lack of coordination among parties prevented a coordinated response, probably due to competing interests and goals. Corruption, a global issue in hospital administration, has emerged as a key barrier, possibly diverting resources away from pandemic response efforts. Vaccine hesitancy has weakened public trust, owing to worries about safety and effectiveness. Interestingly, stigmatization was rated less severe, maybe as a result of intensive awareness initiatives.

Vaccination, a critical component of pandemic control, encountered various challenges. The lack of widely available vaccinations limited the extent of immunization programs. Concerns about safety and security surfaced, as did doubts about the quick development and licensing of vaccinations. Misinformation and myths spread, impacting public opinion and desire to be vaccinated. As some saw vaccinations through the perspective of traditional healing procedures, deeply ingrained cultural and superstitious beliefs played a role. A segment of the community remained adamantly anti-vaccine, creating a unique issue that needed psychological attention and persuasion.

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Financial difficulties developed as a major pillar of pandemic management. Inadequate finance hampered numerous areas of the response, including the procurement of medical supplies and the expansion of healthcare facilities. Corruption and theft of scarce finances worsened financial difficulties by diverting resources away from their original purpose. This topic emphasized the importance of transparent and accountable financial management during times of crisis.

9.2 Contributions of the Study

This study contributes significantly to the current body of knowledge and will have far-reaching consequences for global health governance, pandemic management, and international collaboration. The analysis reveals a substantial gap in IHR awareness and comprehension across nations. This conclusion emphasizes the importance of stronger education and communication methods to guarantee that states can navigate and execute international health laws successfully. It sheds light on the difficulties of reconciling national sovereignty with global health security, demanding a rethinking of the IHR framework.

According to the findings, while countries rely on IHR as a core framework, they frequently establish country-specific laws and guidelines to effectively manage pandemics. This emphasizes the significance of flexibility within the IHR framework in order to suit the specific conditions and demands of various countries. It advocates a more flexible approach to global health governance. This paper contributes to the methods needed for the global economy to recover from the substantial disruptions created by the COVID-19 pandemic by underlining the significance of pandemic management theory. It emphasizes the significance of resilience, adaptation, and readiness in dealing with future health issues.

The study lays the groundwork for governments to respond to pandemics, which endanger both human lives and security. It delves into the important components of a successful pandemic

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response, including leadership, education, treatment, and international cooperation. These findings have the potential to influence future pandemic preparation policies at the national and worldwide levels.

This study is an important resource for international studies and policymakers, notably in public health and pandemic management. It provides practical insights into the difficulties and possibilities that come with implementing international health rules and handling global health emergencies. It can help to shape policies and actions targeted at improving pandemic preparedness and response.

The research is important for regional organizations like the Economic Community of West African States (ECOWAS) and the African Union. It allows them to assess their preparation levels and identify gaps in their public health systems. This can direct regional efforts to increase health infrastructure, capacity, and collaboration, eventually increasing African states' resilience in the face of future health risks.

The study emphasizes the need for countries to create long-term policies and laws based on IHR that are adapted to their own settings and situations. This strategy guarantees that governments are better prepared to deal with any future disaster or epidemic. It emphasizes the importance of striking a balance between global norms and local adaptability in pandemic management.

Finally, this study not only broadens our understanding of the obstacles and possibilities connected with international health rules but also offers practical insights into how governments and international organizations might negotiate the complicated landscape of global health governance. It emphasizes the significance of collaboration, education, and adaptation in effectively controlling pandemics and ensuring the health and well-being of communities all over the world. As the globe

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grapples with the COVID-19 epidemic and prepares for future health threats, the findings of this study provide a vital blueprint for a more resilient and prepared global population.

9.3 Challenges and Limitations of the Study

The research process, like many others, was fraught with difficulties and limits that must be acknowledged. These difficulties and constraints were met with ethical and practical solutions.

One of the most significant problems encountered throughout this investigation was the restricted access to the intended sample. Accessing persons with direct knowledge of pandemic management was difficult logistically owing to their schedules and locales. When in-person interactions were not possible within the study's timetable, virtual interviews were undertaken to alleviate this. This method enabled a greater reach and guaranteed that important thoughts were gathered from a varied group of participants.

In addition, the study's timeframe is a notable limitation. COVID-19's influence is evolving, and there may be dynamic shifts in how it impacts cultures in the next years. Most studies undertaken during the pandemic had this constraint, and the research correctly focused on the information available up to the study's endpoint. Future studies can expand on this data to record the pandemic's continuous development.

Furthermore, COVID-19 is a dynamic global health concern with quickly changing circumstances. The study recognizes that its findings offer a snapshot of the situation at a certain point in time. As the epidemic progresses, additional difficulties and countermeasures may arise. As a result, the study's results are based on the information accessible during the research period and should be viewed from this perspective.

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Also, Participants in the research were mostly Ghanaians or Ghanaians living in Ghana. Their opinions and responses may be shaped by the unique circumstances of Ghana. The study acknowledges that there may be differences in how COVID-19 was administered in various sub-regional nations. To remedy this shortcoming, future research can repeat comparable studies in various countries to give a more thorough knowledge of regional reactions to the epidemic.

In conclusion, while this study encountered problems and restrictions inherent in investigating a fast-growing global health crisis, it used ethical and practical solutions to overcome these constraints. These difficulties do not reduce the significance of the study's results but rather present an opportunity for future research to expand on and further investigate the intricacies of pandemic management in many contexts and throughout time.

9.4 Conclusion

To conclude, the COVID-19 pandemic confronted West Africa with a multidimensional danger that included economic, mortality, morbidity, and mobility issues. To combat these issues and protect human well-being, a variety of initiatives were implemented, with public health education and awareness campaigns taking the lead. Legislative activities and law enforcement supported these attempts to assure compliance. While there was no new international legislation or policy related to the epidemic, the reliance on established WHO standards based on the International Health Regulations (IHR) was critical in establishing country-specific policies and guidelines across the area. This collaborative approach enabled governments to personalize their actions while gaining access to a global framework of best practices.

However, the path to containing the epidemic was not without difficulties. These difficulties were organized into three major themes: management, immunization, and budgetary constraints. These included vaccine delivery delays, vaccination reluctance, financial constraints, and worries

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regarding money allocation and misuse. Despite these limitations, the study highlighted West African governments' resilience and agility in dealing with a complex global health problem. It emphasizes the crucial need for clear communication, international teamwork, and following established health recommendations. As the area navigates the developing pandemic scenario, these lessons will be useful assets for future preparedness and response efforts not only in West Africa but internationally.

9.5 Recommendations of the Study

In its reaction to COVID-19, Ghana, the West African sub-region and the entire global village have faced a complicated web of problems. These findings highlight the significance of addressing not just the medical components of a pandemic, but also the sociocultural, administrative, and economic aspects. To effectively handle such crises, a holistic and collaborative strategy is required. The study's findings provide vital lessons for future pandemic preparedness and response efforts, highlighting the importance of proactive management, transparent governance, and focused public involvement in order to reduce the numerous problems faced by infectious disease epidemics.

One of the paramount concerns from the findings one the level of knowledge and enforcement of IHR in member countries. Therefore, it is essential to address the disparities in awareness and comprehension seen among participants if we want to improve the effectiveness of global health governance and guarantee seamless compliance with the International Health Regulations (IHR). To increase awareness and understanding of the IHR, comprehensive education programs must be developed and put into place on both a national and international level. In addition to healthcare professionals, these initiatives ought to address policymakers, public servants, and members of the general public. We need to promote cooperation between the health sector and other pertinent

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industries, including diplomacy, media, and education. This cooperative method can facilitate information dissemination and guarantee a comprehensive comprehension of global health governance.

Promoting transparency in the communication of information about the implications of international health regulations is necessary. Create accountability systems to guarantee compliance. In order to share best practices for knowledge dissemination and capacity building, nations and international organizations should work together. Peer-to-peer learning and technical assistance programs fall under this category. To identify gaps and tailor educational efforts accordingly, periodic assessments on knowledge and comprehension of international health regulations should be done. Implementing these recommendations will help the international community work to create a network of nations that is more knowledgeable and competent, and better able to respond to health emergencies in accordance with the International Health Regulations. As a result, efforts to combat pandemics and improve global health governance will be more successful.

Several important recommendations can be made based on the research findings to help policymakers, healthcare providers, and stakeholders improve pandemic preparedness and response, not just in West Africa but also for any unforeseeable global health crises. First and foremost, policymakers ought to give top priority to creating flexible governance frameworks that can quickly adapt to pandemics' dynamic nature. This includes the capacity for quick resource allocation, data-driven decision-making, and cross-sectoral collaboration on problem-solving. Additionally, for a more coordinated response to public health emergencies, West African countries should keep bolstering regional cooperation mechanisms. To ensure consistency in

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approach, this includes exchanging best practices, buying medical supplies collectively, and harmonizing public health policies.

Governments should set aside enough money to support healthcare infrastructure, making sure that hospitals are well-equipped and have the capacity to handle increases in patient volume during a pandemic. The West African sub-region must take a critical look at the healthcare systems and prioritize infrastructure development and capacity building not only for the pandemics but also to provide quality healthcare service to their people. WHO should support different countries in building capacities and other infrastructure to boost local pharmaceutical manufacturing industries in the production of healthcare supplies and vaccines so that when supply chains are interrupted, domestic supplies will be available to ensure uninterrupted healthcare supplies and ensure swift management of pandemics.

The fight against false information and debunking of myths about vaccinations and other public health measures needs to be stepped up by public health authorities. Strong public education campaigns, the use of social media, and the involvement of community leaders can accomplish this. There is a need for constant public health education especially in rural areas that have limited access to current information to dispel long-held beliefs, myths and superstitions about health and disease. With this sensitization, there will be less work to be done during pandemics or crises since the level of superstitions is likely to reduce among the populace.

All facets of the population must be guaranteed equitable access to healthcare resources, such as vaccines and treatments globally. WHO, CDC and other international health authorities should ensure equitable access to healthcare resources to all nations of the world since all of them are potential threats in times like this. Proportionate resources should be made available to all nations when available so that all these countries can effectively control any pandemic that may arise.

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Countries and communities that are vulnerable and underserved should receive special consideration.

It is recommended that authorities should maintain openness in the management of financial resources and healthcare. Governments should implement measures to stop money from being stolen or corrupted during emergencies. Governments must ensure to deal with the canker of corruption and misappropriation of funds such that there must be strict and sanctions and punishments for diverting public funds especially in times like pandemics where human lives and security are a priority to deter a corrupt person from the act. Government institutions should be empowered and autonomous and ruthlessly deal with anyone found culpable in infracting these rules that guide the allocation and disbursement of funds allocated for public health emergencies since their action or inactions can jeopardize many lives even beyond the borders of the country.

Similarly, it is recommended that global health organizations and world leaders be implored to promote international cooperation and knowledge exchange while upholding national sovereignty. This may result in more efficient and just solutions to the world's health crises. Long-term strategy reforms in a post-pandemic world are crucial due to the impact of the pandemic on life and livelihood. Create plans that take institutional, socio-political, and technological changes into account to ensure economic competitiveness and resilience in the "New Normal." Additionally, the collaborative, multi-sectoral nature of the pandemic response needs to be emphasized. Engage experts from a variety of disciplines, such as international studies, policy-making, economics, sociology, and psychology, in addition to healthcare professionals, to address the myriad problems that health emergencies present.

Prioritizing resilience-building initiatives at the individual, community, and national levels is also necessary. This includes assistance with mental health issues, instruction in disaster preparedness,

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and economic diversification to lessen vulnerability during crises. These suggestions highlight the value of a comprehensive, flexible, and team-based approach to pandemic preparedness and response. Policymakers and healthcare executives can better equip their countries to deal with the current COVID-19 pandemic and upcoming global health challenges by putting these strategies into practice.

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APPENDIX

Interview Guide

MANAGING COVID-19 PANDEMIC IN WEST AFRICA: THE CASE OF GHANA

My name is Catherine Deynu. I am a PhD Student from the Legon Centre for International Affairs and Diplomacy (LECIAD), University of Ghana. I am conducting a research on the above topic for the purposes of my dissertation. Kindly assist me by providing your responses to each question. All responses will be treated with strict confidentiality and used for academic research purposes only. No particular individual(s) or address will be identified in the results. Kindly respond as sincerely as possible. You can also decide to stop the interview at any point if you become uncomfortable during the interview process.

To help me transcribe the information gathered and have access to the full data, I want to electronically record the interview session. Once again, the recorded information will be treated with strict confidentiality and used for academic research purposes only.

Please can you give me your consent to record the interview session? Please mark (X) appropriately

Yes ☐

No ☐

Thank you for your assistance. I am very grateful.

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INTERVIEW GUIDE FOR PARTICIPANTS

Demographic Information

Institution (organization) of Participants:

Office/ Position/ Status of Participants:

Number of years at post:

Age:

Gender:

Highest level of Education:

INTEGRI PROCEDAMUS

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Objective 1. To ascertain the threats posed by COVID-19 pandemic in West Africa.

1. Please list and explain the threats posed to the West African sub-region by COVID-19.
   - *Probe to find out threats that apply to the West African sub-region as a whole and not only specific countries.*
2. In terms of the severity (seriousness) of the threats listed above, please rank the threats with 1 being the most severe (serious) threat, 2 being moderately severe (serious) and 3 being least severe (serious).
3. Please explain why you rate the various threats to be more severe (serious), moderately severe and less severe (serious).
4. Are there similarities in the COVID-19 management strategies between Francophonie and Anglophone countries within the West African sub-region?
5. Briefly discuss or explain any differences in the COVID-19 management strategies between Francophonie and Anglophone countries.
6. What factors accounted for such variations or similarities between Francophonie and Anglophone countries?
7. Specifically with regards to actors, were there differences among the actors that manage COVID-19 among West African states?
8. How does COVID-19 pose threats to each of the following sectors within the West African sub-region?

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a. Free movement across the sub-region

b. Trade activities across the sub-region

c. Health facilities across the sub-region.

Objective 2. Find out how West Africa and Ghana securitized the COVID-19 pandemic.

1. How did COVID-19 serve as a danger to the survival of people in the West African Sub-region?

2. How was COVID-19 treated as an emergency issue in West Africa?

3. How was Covid-19, as an issue of emergency communicated within the Member States of the West African Sub-region?

   - *Probe to find out how ECOWAS and other international bodies such as the UN and WHO treated and communicated COVID-19 as an emergency within the Sub-regional level.*

4. Which emergency responses were implemented to overcome "the war" on COVID-19 in West Africa?

<u>GHANA</u>:

5. Specifically, in Ghana, how was Covid-19 treated as an issue of emergency in Ghana?

6. How was COVID-19 as an issue of emergency communicated within Ghana?

   - *Probe to find out how the Government of Ghana, THE Ministry of Health and other National Organisations treated and communicated Covid-19 as an emergency in Ghana.*

7. Which emergency responses were implemented to overcome "the war" on COVID-19 specifically in Ghana?

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8. Do you think such emergency measures adopted in Ghana were effective in combating the disease?

9. Which specific similarities and variations exist in the emergency responses implemented within the sub-region in general as compared to the emergency responses implemented in Ghana?

10. What reasons and factors accounted for such variations or similarities in the emergency responses?

Objective 3. To understand the kind of international policies and resources that were deployed in the management of COVID-19 in Ghana.

INTERNATIONAL POLICIES

1.What international policies were formulated against COVID-19 across the globe?

2. How were such international policies implemented in West Africa (within ECOWAS member states)?

3. Specifically, in the Ghanaian context, how were these international policies implemented against COVID-19?

4. Are you aware of the International Health Regulations (IHR) that was enacted in 2005 by the World Health Assembly (WHA)?

5. Please discuss or explain what you know about the IHR.

6. What do you know about WHA in the context of management of pandemics like COVID-19?

7. How relevant is the IHR in the management of pandemics especially COVID-19?

8. How has the International Health Regulations enacted in 2005 by Resolution WHA implemented in Ghana in line with the management of COVID-19?

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- *Specifically, ask about International Health Regulations only if the participants did not mention it in Q20.*

RESOURCES

9. Briefly discuss how financial resources were used in line with the management of COVID-19 in West Africa.

10. Specifically, in Ghana, which financial resources were used in the management of COVID-19 and how were they utilised?

11. Briefly discuss the technical resources that were used in the management of COVID-19 in West Africa.

12. Specifically, in Ghana, which technical resources were used in the management of COVID-19 and how were they utilised?

13. Do you think technical resources were really relevant in the management of COVID-19 in West Africa and Ghana? Why?

14. Briefly discuss the human resources that were used in the management of COVID-19 in the West. Africa?

15. Specifically, in Ghana, which human resources were used in the management of COVID-19 and how were they utilised?

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Objective 4. To determine the challenges of COVID-19 management in Ghana.

1. Briefly discuss the challenges associated with the securitization of COVID-19 in West Africa.

2. Specifically, in Ghana, which challenges are associated with the securitization of COVID-19 in Ghana?

3. Briefly discuss the challenges that were associated with the formulation and or implementation of international policies towards COVID-19 in West Africa.

4. Specifically, in Ghana, which challenges are associated with the implementation of international policies towards COVID-19 in Ghana?

5. Briefly discuss the challenges associated with the utilisation of resources (financial resources, technical resources and human resources) in West Africa.

6. Briefly discuss the challenges associated with the utilisation of resources (financial resources, technical resources and human resources) in Ghana.

7. Briefly discuss the challenges associated with the containment/vaccinations of COVID-19 in West Africa.

8. Briefly discuss the challenges associated with the containment/vaccinations in Ghana.

This is the end of the interview. Thank you very much. I am very grateful.

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