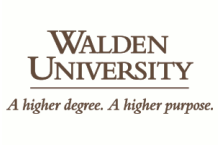

2020

Ebola Outbreak in Liberia and Sierra Leone: Role of Nonmedical Emergency Management Agencies

Eugene Owusu Afrifa

Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Eugene Owusu Afrifa

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Ernesto Escobedo, Committee Chairperson,
Public Policy and Administration Faculty

Dr. JoAnn McAllister, Committee Member,
Public Policy and Administration Faculty

Dr. George Kieh, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

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Eugene Owusu Afrifa

MPhil, Walden University, 2020

MA, University of Ghana, 2011

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Final Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Public Policy and Administration

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Abstract

The 2014 Ebola crisis killed 11,315 people across 6 countries, making it the deadliest crisis globally since the virus was discovered in 1976. However, the roles played by nonmedical emergency management agencies (EMAs) in Liberia and Sierra Leone during that crisis remain unknown. The purpose of this study was to bridge the gap in knowledge by documenting the roles which were played or should have been played by EMAs in Liberia and Sierra Leone in responding to the 2014 Ebola crisis involving policymaking in emergency management (EM). The research questions focused on the roles that were played or should have been played by EMAs in Liberia and Sierra Leone, as well as similar agencies in West Africa in responding to the Ebola crisis. This study was a generic qualitative inquiry grounded in the functionalist theory. Purposeful sampled interviews with 12 EM experts from Liberia, Sierra Leone, and Ghana were used. An inductive thematic analytical approach was used in the data analysis. The results showed that EMAs played crucial roles in coordination, communication, and control of the movement of people. The study also revealed that EMAs should have planned for unfamiliar hazards before the Ebola crisis. Further, the Economic Community of West African States (ECOWAS) should have ensured the synergy of EM resources of its member states when responding to epidemics that transcend international boundaries. Recommendations of this study include, planning for unfamiliar hazards, and the need for ECOWAS to develop a memorandum of understanding among EMAs of member states. This research provides a blueprint on how EMAs can appropriately respond to unknown epidemics in future to save lives in West Africa.

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Dedication

I dedicate my dissertation first and foremost to my Lord and Savior Jesus Christ for sustaining me throughout this difficult but exciting journey. This dissertation is also dedicated to my late father Ex-Warrant Officer Daniel Benjamin Owusu and my mother Mary Tufour who valued the importance of education and spent all their lives and resources to give my siblings and I the best they could. I also dedicate this to my loving wife Mrs. Victoria Naa Dedei Owusu-Afrifa and children Dalvin Benjamín, and Marilyn Ewura Abena Owusu-Afrifa, who had to endure my long periods of absence from home in pursuit of this PhD. For both of you, my young children, I did this for you to know that you should never give up in life and you should always strive for success irrespective of your circumstance. To my brother, Dr. Kenneth Kwarteng, and my friend Lieutenant Colonel Farouck M-Basher (Rtd); you two were my inspiration and source of encouragement. Finally to the entire D.B. Owusu and BT Aryeetey families, I truly appreciate all of you for your prayers and support. *Meda mo nyinaa ase.*

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Chapter 1: Introduction to the Study

Introduction

In 2014, the Ebola epidemic ravaged West Africa. The situation devastated the social cohesion of the most impacted countries of Liberia, Sierra Leone, and Guinea. Although the West African outbreak of 2014 was not the first Ebola outbreak in the world, the magnitude of this outbreak exposed the lack of national and regional response to epidemics of such magnitude. The roles that were played or should have been played by mandated nonmedical emergency management agencies (EMAs) in Liberia and Sierra Leone as well as similar agencies in West Africa need to be highlighted to prepare such agencies to respond to epidemics that transcend national boundaries. This study therefore explored the key roles that were played or should have been played by EMAs.

This chapter highlights the background of the study, which leads to the problem statement, purpose of the study, and research questions. The chapter also highlights the theoretical framework and nature of the study. It further defines operational terminologies and assumptions as well as the scope, limitations, and significance of the study.

Background of the Study

The Ebola virus disease (EVD) outbreak which adversely affected the Manor River Region of West Africa in 2014 was the deadliest ever recorded in human history. The 2014 outbreak that started in Guinea in December 2013 became the deadliest since the virus was first discovered in 1976. By 23 October 2014, about 10,129 cases had been reported globally, with Liberia suffering 2,705 deaths (Ryan,

2014). According to Hsu et al. (2018), 21 months after the first confirmed case, which was recorded on 23 March 2014, the virus killed 11,315 people across six countries: Liberia, Guinea, Sierra Leone, Nigeria, the USA, and Mali.

The epidemic significantly stalled all socioeconomic activities in Guinea, Liberia, and Sierra Leone. According to the United Nations Sustainable Development Group West for and Central Africa (2015), the EVD pandemic which hit "Guinea, Liberia, and Sierra Leone is the longest, largest, deadliest, and the most complex and challenging Ebola outbreak in history" (p. 1). The 2014-2016 Ebola epidemic was the largest outbreak in history as 28,646 suspected, probable, and confirmed cases were reported with 11,323 deaths by March 30, 2016 (Hsu et al., 2018). Guinea, Liberia, and Sierra Leone had weak health infrastructure due to long histories of colonialism and civil conflicts (Giugale, 2017; Keirns, 2015; Streifel, 2015). This subsequently contributed to the significant impact the crisis had on nationals in the affected countries.

The pandemic had a considerable impact on the socioeconomic development of Liberia, Sierra Leone, and Guinea. The World Bank in 2014 estimated that the total Gross Domestic Product (GDP) loss of Liberia, Guinea, and Sierra Leone combined was about $2.2 billion. Prior to the epidemic, the World Bank had estimated a 2015 economic growth rates of 6.8%, 8.9%, and 4.3% for Liberia, Sierra Leone, and Guinea respectively. However, at the peak of the epidemic, the World Bank (2014) said, estimated growth for the three countries had reduced to 3.0%for Liberia, -2.0% for Sierra Leone, and -0.2% for Guinea. According to a 2014 report of the International Monetary Fund (IMF), prior to the Ebola outbreak, Sierra Leone's

economy was buoyant and one of the fastest growing economies with a 11.3% targeted growth rate for 2014. The IMF report also stated that the Government of Sierra Leone had a long-term plan of attaining a middle-income status by 2035 and possibly bringing this date forward before the Ebola crisis began.

From the onset of the epidemic, the responsibility of managing the crisis was left to respective governments and nongovernmental organizations (NGOs). However, as the pandemic increased in pace, it became clear that the disease did not only pose a threat to West Africa but also globally. The rapid increase of the infections of the diseases therefore triggered a global response led by the United Nations (UN) (Laverack & Manoncourt, 2015).

The 2014 Ebola epidemic that ravaged the Manor River area of West Africa was the worst of its kind. Significantly, Ebola outbreak of such magnitude had never been witnessed around the world, and as a result, all actors at national, regional and the international community, were found wanting as the crisis escalated (Rothe et al., 2015). According to the World Council of Churches, World Vision and the World Health Organization (WHO), as referenced by Greyling et. al., (2017), various stakeholders such as governments, international organizations civil society and the faith sector, were all ill prepared for the scale and complication of the Ebola pandemic and consequently delayed the needed response

In spite of the critical roles that were played by nonmedical EMAs in Liberia and Sierra Leone during the crisis, available literature does not explain the significant roles that such agencies played or should have played in responding to the Ebola crisis. Further, available studies on the Ebola crisis do not explain the functions that

were played or should have been played by EMAs at the regional level in West Africa.

Background History of Liberia and Sierra Leone

Brief History of Liberia

Liberia had early contacts with Europeans in 1461 when the Portuguese named the area the Grain Coast due to its abundance of grains (US, Department of State, 2008). The British later established a trading post in the Grain Coast in 1663, but the Portuguese destroyed the posts in 1664. This marked the last contact with Europeans and the Western World in Liberia until freed slaves arrived on the coast in the early 1880s. These freed African American slaves were later known as Americo-Liberians and established the capital city and named it Monrovia in 1820 after United States President James Monroe founded the country. The country declared its independence on 26 July 1847. Although Liberia traces its origins to US colonization, Liberia was neither a formal colony nor territory of the USA. However, the USA regards Liberia as an area of special interest (Whyte, 2016).

In the formative years of the country, the Americo-Liberians sometimes had stiff and violent disapproval from the native people who felt they had been left out of citizenship until 1904. Significantly, the style of governance in Liberia was fashioned along similar lines as the United States. The political rulership was mainly in the hands of the Americo-Liberians, who were about 5% of the population. The political rights of the Indigenes had been circumscribed by the powerful Americo-Liberians. The Americo-Liberian political elites under the True Whig Party dominated political power from independence until 1980, when private and noncommissioned officers

from the dispossessed majority staged a coup d'état under the leadership of Master Sergeant Kanyon Doe (Yekutiel, 2013). The 1980 coup d'état effectively ended the over 133-year monopoly of political power by the Americo-Liberians and ushered in the People's Redemption Council (PRC). The coupists publicly executed the deposed President William Tolbert and several other members of his regime who were mostly Americo- Liberians.

On December 24, 1989, a small group of insurgents under the leadership of Doe's previous procurement chief, Charles Taylor, entered Liberia from Cote d'Ivoire (US Department of State, 2008). This insurgency later led to the killing of President Samuel Kanyon Doe. On September 9, 1990, Doe was brutally murdered by Prince Johnson, a former ally of Charles Taylor who had broken away from Taylor's New Patriotic Front of Liberia (NPFL) and formed an Independent NPFL. After over 6 years of fighting, the war claimed at least 150,000 lives and displaced almost half of the population (Peterson, 1996). The Economic Community of West African States (ECOWAS) intervened with the ECOWAS Monitoring Group (ECOMOG), a multinational armed force and installed an Interim Government of National Unity in October 1990 under the leadership of Dr. Amos Sawyer (US, Department of State, 2008). In July 1997, after hurried disarmament and demobilization of the warring factions, general elections were held, and Charles Taylor emerged victorious. Later in 2003, because of Taylor's misrule, former adversaries of Taylor started another war, which eventually led to the resignation and exile of Taylor to Nigeria. ECOWAS again intervened and sent 3600 peacekeepers under the ECOWAS Mission in Liberia (ECOMIL).

Warring factions, political parties, and civil society later agreed and signed a comprehensive peace agreement that laid the framework for a 2-year National Transitional Government of Liberia (NTGL) under the leadership of Gyude Bryant. Later in October 2003, by Security Council Resolution 1509, The UN established the United Nations Peacekeeping Mission in Liberia (UNMIL) and assumed security responsibility of Liberia after a comprehensive peace agreement was signed by the feuding factions. UNMIL facilitated the peace and stability of the country, which saw the election of President Ellen Johnson Sirleaf, the first female president in Africa. In 2014, the country was devastated by the Ebola epidemic which killed 11,323 people around the globe by March 30, 2016 (Hsu et al., 2018). After President Sirleaf served two 6-year successful terms in office, Liberians went to the polls and elected President George Weah, who was sworn into office on January 22, 2018.

History of Sierra Leone

According to African International Mission Services (AIMS, n.d.), Sierra Leone has been populated for 2.5 millennia by different groups of people from various parts of Africa. The British in the 17th century set up a trading post near Sierra Leone, first to trade in lumber and ivory, but later expanded into slave trade. A colony was later established, and in 1787, after the American Revolution, Sierra Leone became a destination for relocating black loyalists who had earlier been settled in Nova Scotia, When the slave trade was abolished, the British sent many Africans who had been liberated from the illegal slave trade to Freetown. Later, 1,200 Black Nova Scotians who had earlier escaped slavery in the United States joined (A.IMS, n.d.)

On April 27, 1961, under the leadership of Sir Milton Margai, Sierra Leone became independent from the United Kingdom, and Margai became the country's first Prime Minister. Later in 1962, under the Sierra Leone People's Party (SLPP), Margai won a landslide victory in the country's elections. After his death, his brother, Sir Albert Margai assumed power as Prime Minister in 1964 and later attempted to establish a one-party state but was resisted by the opposition All People's Congress (APC). In another general election in 1967, the APC candidate Siaka Stevens emerged victorious as the Prime Minister. However, soon after taking office, he was removed in a coup d'état led by Brigadier David Lansana. In April 1968, Brigadier Lansana's National Redemption Council (NRC) was toppled by a group of soldiers referred to as the Anticorruption Revolutionary Movement (ACRM) led by Brigadier John Amadu Bangura in another coup d'état. The ACRM jailed several members of the NRC, reestablished the Constitution, and restored Siaka Stevens as the country's Prime Minister.

On April 19, 1971, Sierra Leone was declared a republic by its Parliament, and Siaka Stevens was made the first president of the country and served two terms. In 1978, the country's parliament approved a new constitution, which made the country a one-party state, and the APC, the only legitimate political party in the country. After Siaka Steven's retirement in 1985, the APC named General Joseph Saidu Momoh as a new presidential candidate, who won in a one-party referendum on November 28, 1985 to become the president.

In the early 1990s, a rebel group under Corporal Foday Sankoh's Revolutionary United Front (RUF) waged a rebellion on the Government of Sierra

Leone from the East along the country's borders with Liberia in a war that lasted 11 years. According to Binningsbø and Dupuy (2009), when the war ended in 2002, between 30,000 and 75,000 people had died, and several other thousands had suffered atrocities such as gang rape, sexual servitude, and mutilations. Although crimes were carried out by both sides, the RUF was noted for amputating limbs of their victims.

In 1991, ECOMOG intervened and tried to support Sierra Leone's army to fight the rebellion. However, in 1992, a group of young military officers under the leadership of Captain Valentine Strasser overthrew President Momoh's government amid the rebellion. The junta established the National Provisional Ruling Council (NPRC) that ruled until 1996. Although Captain Strasser assured to hand over power to a constitutionally elected government in 1996, he was overthrown by his second-in-command, Julius Maada Bio, in a bloodless coup in January 1996.

Bio voluntarily gave up power to Ahmed Tijan Kabbah on March 29, 1996, after the latter had won a democratic election. On 25 May 1997, Kabbah's SLPP government was toppled by a group of soldiers who had formed the Armed Forces Revolutionary Council (AFRC) under the leadership of Johnny Paul Koroma. The AFRC teamed up with the RUF and ruled the country until February 13, 1998 when in response to President Koroma's request to the UN and ECOWAS to intervene. ECOMOG troops stormed Freetown, ousted the junta, and reinstated him. President Kabbah again overwhelmingly won a general election in 2002 and served a second 5-year term in office until 2007 when he handed over power to Ernest Bai Koroma of the opposition APC who won subsequent elections.

President Koroma led the country for a decade after winning a second 5-year term in office and handed over power to Maada Bio on 4 April 2018 after the latter won the presidential election. Significantly, Bai Koroma's tenure witnessed two of the country's worst disasters: the mudslide of August 2017, which killed more than 1000 people and the Ebola epidemic between 2014 and 2016.

Problem Statement

The significantly impacted countries of Liberia, Sierra Leone, and Guinea were totally devastated by the EVD, leading to the death of several thousands of people. According to Sy and Copley (2015), by March 2015, within a year after the outbreak was declared, the EVD in West Africa had killed more than six times the collective total deaths (1,560) from all previous Ebola epidemics in Africa. The EVD did not only negatively impact the affected countries socioeconomically, but also posed a threat to regional and global security (Bappah, 2015; Nakamura, 2014). As a result of the devastating nature of the virus, President Obama, in his address at the United Nations in September 2014 indicated that the Ebola epidemic had "become more than a health crisis," and was a "growing threat to regional and global security" (Zavis & Hennessey, 2014, para 2).

At the peak of the epidemic in West Africa, social services in the affected countries collapsed. The seriousness of the Ebola outbreak required the need for improved emergency management (EM) systems and effective disaster response in the concerned countries in particular and West Africa as a whole (Morton Hamer et al., 2017). Although during emergencies of such magnitude, the appropriate emergency management agencies of the affected countries are required to take a lead

role in managing the crisis, such roles which were played or should have been played by the non-medical EMAs of Liberia and Sierra Leone remain unknown. Additionally, available literature on the Ebola crisis of 2014 does not highlight the roles played by nonmedical EMAs in West Africa when responding to the crisis. The study focused on this lack of information by describing the specific roles played or should have been played by EMAs at the national and regional levels in dealing with the 2014 Ebola epidemic in Liberia and Sierra Leone.

Purpose of the Study

The purpose of this generic qualitative study was to learn about the roles played by mandated nonmedical EMAs in Liberia and Sierra Leone, at the national level as well as similar agencies in West Africa in terms of managing the Ebola epidemic of 2014. The researcher also highlighted the lessons that can be drawn from nonmedical EM response to the Ebola crisis. This study was grounded in the pragmatist and advocacy view, which according to Creswell (2014) means that research inquiry needs to be interwoven with politics and public agenda. Creswell (2014) further explained that pragmatism as a worldview arises out of actions, situations, and consequences.

The 2014 Ebola crisis offers a good opportunity for EM experts to learn about how to better handle similar crises elsewhere in future. Significantly, as the Ebola crisis of 2014 increased in pace and it became more evident that it posed a significant threat to global peace and security, a response from the UN was triggered (Laverack & Manoncourt, 2015). However, not much is known about the roles nonmedical EMAs of Liberia and Sierra Leone played in responding to the crisis. This research

therefore described any roles that were played or should have been played by these EMAs.

The study relied on primary data gathered from interviews with EM experts from institutions in Liberia and Sierra Leone who played critical roles during the response to the crisis. Data were also collected through interviews with selected individuals from the National Emergency Management Organization (NADMO) of Ghana as well as a subject matter expert from the Kofi Anan International Peacekeeping Training Center (KAIPTC). The goal of the study was to add knowledge regarding how EMAs of countries should respond to national epidemics as well as how such agencies should manage epidemics that concurrently afflict numerous countries.

Research Questions

The researcher used the research questions for this study to fill a gap in existing literature regarding EM. The research questions focused on the roles that were played or should have been played by nonmedical EMAs in Liberia and Sierra Leone, as well as similar agencies in West Africa when responding to the 2014 Ebola crisis. The research questions were:

RQ1: What roles did nonmedical EMAs in Liberia and Sierra Leone play when responding to the 2014 Ebola crisis?

RQ2: What roles should nonmedical EMAs of Liberia and Sierra Leone and similar agencies in West Africa have played when responding to the 2014 Ebola crisis?

Theoretical Framework

According to Ravitch and Carl (2016), the theoretical framework comprises of a combination of a set of established theories about ways of framing the core constructs embodied in a research question (Kindle Locations 1426-1427). In the view of Vinz (2015), the theoretical framework further provides scientific validation for research as it shows that the study is based on scientific theory. This study was grounded in the functionalist theory, which is based mainly on the works of Herbert Spencer, Emile Durkheim, Talcott Parsons, and Robert Merton. The theory holds that "society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole" (Mooney et al., 2007, p. 1). The functionalist theory places emphasis on the fact that society is made of parts which are interconnected. The theory highlights that each part impacts others and is also influenced by other parts. It is important to recognize that in EM, different agencies and organizations play different roles when dealing with a crisis. It is also worthwhile to understand the usefulness of the important roles played by each stakeholder, to be able to effectively manage epidemics such as Ebola in future.

Nature of the Study

The study was a generic qualitative inquiry with a focus on pragmatic descriptive method. There are different approaches in a qualitative study, which include phenomenology, grounded theory, or ethnography as well as generic qualitative inquiry (Lambert & Lambert, 2012; Percy et al., 2015; Kennedy, 2016). Percy et al. (2015), elucidated that generic qualitative inquiry examines people's accounts of their subjective opinions, outlooks, opinions, or reflections on their

experiences, of things in the outer world. A generic qualitative inquiry according to Caelli, as referenced by Cooper and Endacott(2007), attempts to find and understand a phenomenon, a process, or the outlook and worldviews of the people involved.

Selecting a particular research approach should not only be informed by the worldview assumptions of the researcher and process of enquiry, neither should it be just by preference of the researcher, but should rather be determined mainly by the research questions (Creswell 2014, Marshal 1996). The researcher believed that in doing research, emphasis needed not to be placed on the method but rather the problem. The focus of the researcher was to use any possible means to gather data and analyze them to answer the research questions.

In this generic qualitative inquiry study, the researcher used the purposeful sampling method and identified EM experts from Liberia, Sierra Leone, and Ghana, and collected data through interviews with respondents. Although the study focused on Liberia and Sierra Leone, the collection of data from respondents in Ghana highlighted the perspective of EM response to the Ebola epidemic from the broader West Africa perspective. All data were transcribed, coded, and converted to categories and themes. The inductive thematic analysis approach was used to analyze all data to arrive at findings and conclusions.

Operational Definitions

Ebola Virus Disease (EVD): According to the Centers for Disease Control and Prevention (CDC), (2017), EVD is an unusual and lethal disease which usually affect humans and nonhuman primates. EVD is caused by an infection of one of the five known Ebola virus species. These species include Ebola virus Zaire, Ebola virus

Sudan, Taï Forest virus (Côte d'Ivoire), Bundibugyo virus, and Reston virus (Reston ebolavirus), which is known only to affect nonhuman primates and pigs . According to the Public Health Agency of Canada (2014), a person is said to be infected with EVD if he or she presents a fever of more than 38 degrees Celsius and exhibits at least one other symptom such as malaise, myalgia, and severe headache. Other symptoms include conjunctival injection, pharyngitis, severe abdominal pain, vomiting, bloody diarrhea, bleeding not associated with injury, and unexplained hemorrhage.

Emergency Management (EM): According to Sylves (2015), EM is primarily the organization and management of the resources of communities or countries to reduce risks relating to severe events that have catastrophic consequences. Efforts are usually made for the reduction of losses and costs through the execution of strategies that encompasses the entire cycle of disasters such as preparedness, response, recovery and mitigation. In the context of this study, the definition of emergency management includes the non-medical aspect of dealing with risk and the avoidance and prevention of risks associated with the Ebola Virus Disease.

*Epidemic/Pandemic:*The rapid spread of highly infectious or contagious diseases to several people within given population in a very short period of time.

Assumption

Interview responses involved opinions and personal professional experiences of respondents in terms of managing disasters. Although such opinions may not be verified as factual and true and could affect the authenticity of the research findings, the researcher assumed that such responses were accurate and subjected them to analysis to arrive at conclusions and recommendations.

Scope and Delimitations

This research only sought to describe and document the roles that were played or should have been played by mandated nonmedical EMAs in Liberia and Sierra Leone during the 2014 Ebola crisis with the view to enriching EM policymaking. The study did not cover activities, functions, and responsibilities of EMAs in Liberia and Sierra Leone in terms of managing other natural or humanmade disasters. The study did not also explain the roles of other nonmedical stakeholders such as international NGOs and other actors who may have played significant roles during the 2014 Ebola crisis.

Liberia, Sierra Leone, and Guinea were the countries that were significantly impacted by the EVD in 2014. To explain the work of nonmedical EMAs in affected countries, it would have been prudent to consider the three most impacted nations. However, due to the researcher's limitation in terms of speaking French, the study only focused on Sierra Leone and Liberia and did not include Guinea. In addition to data that was collected from Liberia and Sierra Leone, the researcher also collected data from EM experts in Ghana to give a broader West African perspective of EM response to the Ebola epidemic.

Limitations

One of the key limitations of this study is the fact that the responses from participants were based on the subjective professional experience from the limited roles they played during the Ebola crisis. The responses from participants were therefore, quite subjective and may not represent the actual state of affairs as far as leadership and decision making in the respective EMAs were concerned.

Additionally, although the researcher identified and contacted 19 EM experts, only 12 of them agreed to participate in the study. Therefore, the findings of this research may not reflect the views of all EM experts in Liberia, Sierra Leone, and Ghana. Further, no data was collected from other stake holders nor ECOWAS. Therefore, there were no corroborative views or counter views from persons outside EMAs in Liberia, Sierra Leone and Ghana.

Significance of the Study

The study explains how nonmedical EMAs should have managed the Ebola crisis in Liberia and Sierra Leone. The research revealed how the mandated EMAs in Liberia and Sierra Leone could apply the essential skills of EM to combat national and universal epidemics of disastrous magnitudes in the future. The research will also be useful for nonmedical EMAs in many countries who may be confronted with managing future epidemics not only in their respective countries but also contributing towards a regional and global response to epidemics. This research may positively impact social change through the development of a blueprint on how EMAs can appropriately respond to unknown epidemics to save lives in West Africa in future.

Summary

This chapter highlights historical information about Liberia and Sierra Leone. The goal for this study was to explore the roles that were played or should have been played by mandated EMAs in Liberia and Sierra Leone during the Ebola outbreak of 2014, which devastated these countries. Available literature which is reviewed in Chapter 2 shows a gap in this area of study. The study therefore employed a generic qualitative inquiry methodology with a focus on the pragmatic descriptive method to

investigate the possible roles that were played or should have been played by EMAs in Liberia and Sierra Leone, as well as such similar agencies in West Africa in responding the 2014 epidemic. This enabled the researcher to determine the key roles to be played by EMAs in managing epidemics that transcend the boundaries of countries.

Chapter 2 highlights scholarly information about the Ebola crisis of 2014. The methodology used in this study is outlined in Chapter 3. The researcher discusses data collection, analysis and results in Chapter 4, and draws conclusions and makes recommendations in Chapter 5.

Chapter 2: Literature Review

Introduction

This qualitative research aimed to describe the roles played by nonmedical EMAs in Liberia and Sierra Leone, as well as similar agencies in West Africa when responding to the Ebola epidemic of 2014. The study suggests roles that should have been played by EMAs before, during, and after the Ebola crisis. This chapter involves studies regarding the Ebola epidemic and EMAs. In this chapter, the researcher highlights strategies used for the search through available literature and the theoretical framework . During the review of available literature, the researcher realized that there was no available information on how EMAs responded to the 2014 Ebola crisis.

Themes include the history of the Ebola epidemic, sociopolitical factors that led to the rapid spread of the disease, the failure of systems in Liberia and Sierra Leone which contributed to the spread of the virus, and the effect of the Ebola epidemic on socioeconomic development of Liberia and Sierra Leone. Other themes discussed in this chapter include international panic and stigmatization of Africans, weaponization and bioterrorism of Ebola virus, the national response of Liberia and Sierra Leone to the crisis, the response of the international community to the crisis, and the involvement of the militaries of Great Britain and the United States of America who responded to the epidemic.

Strategy for Search of Literature

The researcher used multiple databases to identify peer-reviewed literature on the subject mainly from the Walden library, google scholar as well as open source information. Books and articles were also retrieved from databases including EBSCO,

Jstor, Project muse, Arts and humanities, Political science, Research library social science, ProQuest, Pdfdrive.net, Gutenberg.org, and Archive.org. The researcher used keyword such as, Ebola, emergency, disaster, management, response, planning, Liberia, Sierra Leone, to search through the databases. The researcher combined and paired the words differently to search through all the databases. All the literature found from the search were within a five-year range between 2014 and 2019.

Theoretical Framework

This study was guided by the functionalist theory. The functionalist theory is based mainly on the works of Emile Durkheim, Talcott Parsons, and Robert Merton. The theory holds that "society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole" (Mooney et al., 2007, p. 1). The theory emphasizes the importance of allowing each component of society to play its function to support other components to eventually complement the effective functioning of the whole society. According to Fletcher (1956), Durkheim's work was mainly based on what he referred to as "social facts" which meant values, cultural norms, and social structures that exist outside of the individual but have influence on the individual. Fletcher (1956) further highlighted that in Durkheim's work titled "The Rules of Sociological Method," Durkheim surmised that to get a deeper understanding of social facts the historical antecedents, and an analysis of the functions of these social facts regarding the social ends they serve, are crucial.

According to Trueman (2018), Parsons viewed society as a system that has four basic functional rudiments namely, adaptation, goal attainment, integration and

pattern maintenance. Trueman (2018), highlighted that from the perspective of the Parsons theory of functionalism, all parts of society can be primarily understood by considering the roles they perform in a society.

Within the functionalist theory, the diverse parts of society are principally composed of social institutions, each of which is meant to fill various needs. Each of the institutions has specific roles in forming and shaping society (Crossman, 2018). The functionalist theory of society is usually likened to the human body where the entire body represents the entire society, and the parts in society represent the various body parts of the human body. The parts of the human body complement each other to facilitate the proper functioning of the entire body. Similarly, when the various components of society play their ascribed roles, they complement each other for the society to run efficiently (Fletcher 1956).

It is important however to underscore that the functionalist theory has been criticized by several scholars. Despite Durkheim's clarity that the historical antecedents and functions of social facts complement each other, some scholars have criticized the theory emphasizing on the functional elements of the theory and neglecting the historical perspective (Fletcher 1956). Among the criticisms of the functionalist theory is that factionalism risks being misled by their theoretical assumptions to misjudge the degree of functional unity in a social structure (Fletcher 1956). It is imperative to note that it cannot be correct to assume that all social grouping such as political parties, trade union groups, governments, other interest groups, etc. all work for the collective good and harmoniously in a society (Fletcher 1956 p. 38). Another significant criticism of the functionalist theory is the

implications the theory has on policymaking. The theory seeks to advocate that established institutions are indispensable and inviolable just because they are in existence (Fletcher 1956). According to Crossman (2018) critics, such as Antonio Gramsci, have argued that the functionalist theory validates the status quo and is maintained by the course of cultural hegemony. The theory further discourages people from taking active roles in social change even when such changes in society may benefit them.

In spite of the cogent criticisms leveled against the functionalist theory, the researcher considered that it is the appropriate theoretical approach for this study. The researcher considered all other stakeholders in EM such as INGOs, military, medical establishments, non-medical emergency management agencies, relevant government ministries, and agencies, among others as being part of the collective whole. The researcher, however, drew a distinction among roles of various stakeholders and highlighted the specific roles that the nonmedical EMAs played or should have played to complement the collective whole, in managing the Ebola epidemic.

History of the Ebola Epidemic

According to Simon (2014), The first recording of Ebola outbreak was on 27 June 1976 in Nasara, Sudan, where after 5 days of exhibiting symptoms of diarrhea, vomiting, and high body temperature the virus claimed the life of its first ever victim. Subsequently, 151 others died out of 288 cases of infections that were reported. Simon (2014), said that the Ebola outbreak again occurred within months of the first outbreak in Nasara, this time in Zaire (now the Democratic Republic of Congo [DRC]) with 280 out of 318 infected people in that country losing their lives.

According to the WHO (2018), however, there were simultaneous outbreaks in Nasara (South Sudan) and Yambuku (DRC Congo) in 1976 near the Ebola River, from where the virus derived its name. Subsequently, as of 2016, the Ebola virus had killed nearly 41% (9,604 out of 23,729) of people infected internationally (Maras & Miranda, 2016). In spite of the fact that the first Ebola outbreak was recorded in 1976, the Ebola virus only became extensively known in the early 1990s (Fidler, 2015).

The scale of the EVD epidemic that occurred in West Africa in 2013–2015 was unparalleled in human history. According to Oleribe et al., (2015), before the 2013-14 outbreak in West Africa, there had been about 23 other outbreaks mainly in East and Central Africa, with about 2,500 cases. The countries that had suffered outbreaks included the Democratic Republic of Congo, Sudan, Gabon, Ivory Coast, Uganda and Congo-Brazzaville. Before the West Africa outbreak, the largest EVD epidemic occurred in 2000 in Uganda with a total of 425 reported cases out of which 224 people died, representing 53% fatality (Cenciarelli et al., 2015a; Kinsman, 2012). Since the first case of Ebola was reported in 1976, and before the 2013 outbreak in West Africa, 1,527 victims out of the 2,306 reported cases had died, representing 66% fatality rate (Kinsman, 2012).

The 2013 outbreak was the first of its kind in West Africa (Kissi 2014). The disease broke out in December 2013, in a small village in Guinea (Hood, 2015). According to Yan and Smith (2015), the first infection in the 2013 outbreak can be traced to an unknown two-year-old toddler, Emile, now referred to as patient zero, who contracted the disease in December 2013 exhibiting fever, black stool, and vomiting, and died four days after on December 6. Within a month, his young sister,

mother, and grandmother also died with similar symptoms. In the next couple of months, the disease spread to the other parts of the country, and within months the virus had jumped the border into Liberia and later spread into Sierra Leone (Hood, 2015; McInnes, 2015). On August 8, 2014, as a result of the severity of the epidemic in West Africa, the WHO declared the situation a Public Health Emergency of International Concern (PHEIC) (Centers for Disease Control and Prevention 2017a). As at March 29, 2016, when WHO lifted the PHEIC status, a total of 3,814 suspected probable or confirmed cases had been reported in Guinea with 2,544 deaths. (Centers for Disease Control and Prevention 2017a),

The Ebola disease was first reported in Liberia in the Lofa County in March 2014 by the Ministry of Health. (Lindblade et al., 2015; Bowles et al., 2016, p. 271). In spite of early calls for a national and international response, the spread of the disease overtook the capabilities of authorities and spread very fast to other parts of the country (Bowles et al., 2016). The virus quickly spread to Monrovia, the capital city by the end of May, and by August, 10 out of the 15 counties of the country had been infected by the virus and by December 2014, several outbreaks were detected in remote rural areas of the country (Lindblade et al., 2015). According to the Centers for Disease Control and Prevention (2017 a), Liberia was initially declared free from Ebola in May 2014. However, other cases were later seen and treated, with the country being redeclared free from Ebola in September 2015. After that, additional cases were found and dealt with until January 14, 2016, when the country announced that it was Ebola-free with no additional cases being found. The disease was later spread to other countries such as Nigeria and the United States. At the end of the

crisis, Liberia recorded a total of 10, 678 suspected, probable or confirmed cases with 4,810 deaths.

In Sierra Leone, the virus was probably first brought to the country in May 2014 when people returned from Guinea after the funeral of a traditional healer who got infected and died trying to cure victims of Ebola in Guinea. According to a WHO (2018), report however, investigations later revealed that the country's first case was a female who was a guest at the home of an Ebola victim in Guinea. When her hosts fell sick, she returned to Sierra Leone and died there soon after. However, her death was neither investigated nor reported on time. The disease quickly spread through the country and by July 2014 cases had been reported in Freetown, the capital and many other parts of the country. As at December 31, 2014, a total of 9446 confirmed cases were reported, including 2758 deaths in Sierra Leone (Cenciarelli et al., 2015a). By March 29, 2016, when WHO lifted the PHEIC status, Sierra Leone had recorded 14,124 suspected, probable or confirmed cases with 3,956 fatalities (Centers for Disease Control and Prevention 2017a).

In addition to the profoundly hit countries of Liberia Guinea and Sierra Leone, other countries in West Africa such as Nigeria, Senegal, and Mali, had infections but were rapidly dealt with. According to Oleribe et al. (2015), the first case of Ebola entered Nigeria on 20 July 2014, when a Liberian diplomat, Patrick Sawyer, traveled to Nigeria. After suspicion on ten diagnoses on 23 July, Sawyer was confirmed positive to the Ebola virus on 25 July, the day he died. The disease eventually spread to the southern city of Port Harcourt, through an individual who was under surveillance and had traveled to the city to get secret treatment. Unlike Liberia,

Guinea, and Sierra Leone, Nigeria managed to contain the situation, and as at the time WHO lifted the PHEIC status, Nigeria had a total of 20 suspected, probable or confirmed cases with eight fatalities (Centers for Disease Control and Prevention 2017 a).

The only case of Ebola reported case in Senegal occurred when a student from Guinea-Conakry traveled to Senegal. When he was seen to exhibit symptoms such as diarrhea and fever, he was treated for malaria and later sent to the University Hospital in Dakar on 29 August 2014, where he was diagnosed as Ebola patient and treated (Oleribe et al., 2015, p). In Mali, eight suspected, probable or confirmed cases were reported with six fatalities. It is important to underscore that countries such as Italy, United Kingdom, and Spain had a case each of Ebola infection but was all treated with no deaths. The United States, however, had four confirmed cases with one fatality. The victim had traveled to the United States from Liberia to the United States. He was isolated for treatment but later died.

Although non-medical emergency management agencies have important roles to play in the management of epidemics, it is noteworthy to underscore that in all the known outbreaks, the role of such non-medical emergency management agencies has not been highlighted in all the available literature.

Sociopolitical Factors Leading to Rapid Spread of the Virus

During the 2014 epidemic, between December 2013 when the virus claimed its first victim in October 2014, the disease had killed 4,951 people and infected 13, 567 others, “crippling families, health systems, incomes, food supply and economies” of Guinea, Liberia and Sierra Leone in its wake (Wilkinson & Leach 2015, p. 136).

By the beginning of 2014, the infection rate was rising exponentially as the number of infections doubled every 20 to 30 days (Hood, 2015). Several reasons account for the rapid spread of the Ebola Virus from the beginning of the first recorded casualty in Guinea and its subsequent spread to Liberia and Sierra Leone and further to other countries. Among the reasons include, cultural practices and poverty, the apathy of the Governments of Sierra Leone and Liberia at the onset of the epidemic, poor public education, and slow response from the international community, among others.

High levels of poverty and cultural practices and beliefs contributed significantly to the spread of the virus (Forestier et al., 2016). Chan, (2014) observed that large numbers of people in the expressively impacted countries of the Ebola epidemic do not have stable remunerated employment, a situation which fuels population movements across borders in their quest to find work. By this movement of people between Guinea, Liberia, and Sierra Leone, and to other countries outside the West African region, infected people "carried the virus along" and infected people in other countries. Further, many socio-cultural and customary practices such as shaking hands, traditional ways of nursing the sick, initiation rites and burial rituals were identified as major causes of the rates of Ebola transmission (Gbla, 2018).

Bell et al. (2017) argued that the Ebola outbreak rather eroded cultural ties and significantly changed the cultural behavior of the people who were significantly impacted. Consequent to the Ebola outbreak, people stopped relating normally with others in the communities. It is quite customary for Liberians, for instance, to eat together, hug each other and shake hands, however, because of the Ebola outbreak, these practices had changed. Bell et al. (2017), further highlighted that West Africans

often view burials as a celebration of life and are entrenched with rituals such as bathing and preparing a dead body. However, because of the Ebola outbreak, there has been a significant shift in such cultural and traditional practices.

According to Forestier et al., (2016), the first casualty of the West African Ebola outbreak of 2014 occurred when the victim, an 18-month-old child died on 26 December 2013, within two days of becoming ill. By the second week of January, several members of his family together with many community health workers also died . Although these deaths should have immediately alerted officials, it was only on 24 January 2014 that the first public health alert was issued even though initial investigations concluded that the victims had died of cholera. Despite the seriousness of the issue, there were no further public health alerts until 1 March 2014. Even after the virus had entered, Liberia and Sierra Leone, government officials, were very slow in responding to the epidemic, a situation which allowed the virus to gain roots in the two countries.

Also, inadequate and misleading public education significantly contributed to the spread of the virus. Among the public education that was churned out was that the people should not eat bushmeat, and a consumption ban was subsequently put in place in Guinea (Wilkinson & Leach, 2015). This message was misleading to the extent that although the Ebola virus was traced to fruit bats, its subsequent spread was mainly human to human transmission. (Wilkinson & Leach, 2014). The role of bushmeat had erroneously emerged even in the theoretical discourse on Ebola, although, some evidence took cognizance of the fact that the Ebola virus was characterized by a single zoonotic source, while its subsequent infections were exclusively human to

human transmission (Sastry &Dutta 2017). Another significant factor that contributed to the rapid spread of the disease was the fact that rumors circulated that health officials were responsible for the spread of the disease and subsequently, some communities completely shut themselves off. Patients were even removed from treatment facilities, and health centers attacked (Wilkinson & Leach, 2014).

The slow response of the international community also contributed to the containment of the epidemic. At the onset of the Ebola crisis, both national governments of the significantly impacted countries and the international community were slow in responding, a situation which facilitated the wide spread of the virus from Guinea where it first occurred, to neighboring Liberia and Sierra Leone. There was a lack of coordination between the Ministry of Health in Guinea and the WHO, at the onset of the outbreak in Guinea. This situation compounded by the proximity of where the outbreak began, and boundaries among Guinea, Liberia, and Sierra Leone led to an easy spread of the virus to neighboring Liberia and Sierra Leone (Wilkinson and Leach, 2014). The WHO only announced on its website on 23 March 2014 after the virus had infected people in neighboring Libera and Sierra Leone. (Forestier et al., 2016)

It is important to note that at the onset of the epidemic if the non- medical emergency management agencies in the impacted countries had responded rapidly, the outbreak would most probably have been contained to avoid its uncontrolled spread and the vast loss of life in the affected countries. However, minimal literature exists on the roles played by these agencies. The need for the development of the EMAs in these countries can therefore not be overemphasized.

Systemic Failure Contributing to the Spread of Ebola

Epidemics, when they strike can be very destructive to society and the health infrastructure of countries. According to the Centers for Disease Control and Prevention (2017b), epidemics could sometimes lead to millions of mortality cases and devastate the healthcare systems of the affected country. In the view of Roemer-Mahler and Rushton (2016), the outbreak of the EVD that ravaged Liberia, Guinea, and Sierra Leone in 2014 was in several ways an exceptional epidemic. The Ebola epidemic also revealed the weaknesses in the health delivery system of the affected countries. According to Ifediora, and Aning, (2017), the Ebola outbreak did not only expose the challenges of national, regional and global bodies but also the weaknesses of various institutional frameworks that should have been competent to manage the outbreak. Researchers have ascribed several causative factors to the breakdown of the health delivery systems in Liberia and Sierra Leone (Anderson & Beresford 2016; Bappah, 2015; Moran, 2015; Kissi, 2014). As at the time the Ebola outbreak occurred, the public health infrastructure system in all the seriously impacted countries was woefully short-staffed and not adequately funded (Comfort et al., 2016).

The decades of civil wars the broke out in Liberia, and Sierra Leone had a grave consequence on social services in the two countries. This negatively impacted the healthcare systems in the affected countries to the extent that when the Ebola crisis started, the fragile health systems in place could not adequately contain the outbreak. For instance, in 2013, Sierra Leone had 0.2 doctors and 1.7 nurses/midwives per 10,000 population, compared with 7.8 and 49, and 27.9 and 88.3 in South Africa and the United Kingdom respectively (Fitzgerald et al., 2016). The

state of affairs in healthcare delivery in neighboring Liberia and Guinea were no different. Although a gloomy picture of healthcare delivery has been painted in Guinea, Liberia and Sierra Leone, Comfort et al. (2016) highlighted that between 2007 and 2011, the Liberian Government had managed to double the number of healthcare workers from a low of 3,996 to 8553. The Liberian Government also had plans to increase the number to 15000 by 2021 and increase per capita expenditure on healthcare from $18 in 2011 to $44 by 2021. With the population of healthcare workers in Liberia and Sierra Leone this low, it is not surprising that the Ebola epidemic could not be effectively managed by healthcare workers in the two countries, resulting in several deaths before the intervention of other external respondents.

Moran (2015), compared the outbreak and uncontrollable spread of the disease in Liberia, Guinea, and Sierra Leone, to the cases that were reported in Nigeria, Senegal, and Mali and argued that Liberia, Guinea, and Sierra Leone which were mainly impacted by the crisis had weak health systems because of wars. Nigeria, Senegal, and Mali, on the contrary, had good public health systems and as a result, were able to better deal with the outbreak. The broken health system in Liberia Guinea and Sierra Leone can also be blamed on public policies some of which were prescribed by the International Monetary Fund (IMF) and the World Bank, as well as international help requirements that removed state financial funding for health education (Kisi, 2014).

It is also instructive to underscore the fact that even before the Ebola outbreak in West Africa, several African countries had broken health care systems. This

situation, which Kissi (2014), describes as “the criminal neglect of the health infrastructure of the affected countries by dictatorial governments and their officials who have amassed tremendous wealth” (p. 2). This epic description of the health care system in West Africa was a significant cause of the easy spread of the epidemic among the three most impacted countries by the Ebola epidemic.

Additionally, other factors such as the weak and corrupt political system in Sierra Leone led to a weak health system in that country that was incapable of containing the Ebola pandemic and thereby leading to its spread in Sierra Leone (Anderson & Beresford 2016). Anderson and Beresford (2016) highlighted that “Since the country’s devastating civil war of (1991–2002, Sierra Leone has become a ‘laboratory’ for liberal experiments in state building and governance” (p. 469). Further, the health sector of Sierra Leone has always been dependent on external aid, which has consequently compromised the government’s control over the sector (Anderson & Beresford, 2016).

Davies and Rushton (2016), also raised very critical questions on medical assistance to civilians by peacekeeping missions. They indicated that the reliance of external partners such as peacekeeping missions to cushion failing national health systems in countries such as Liberia was detrimental and one of the main reasons why the country was unable to provide a workable national health system. However, the crucial issue is, for a country that was coming out of over a decade of civil war, external assistance in most spheres of public life including support in the medical field was crucial to sustain the fragile structures which remained after the war.

Significantly, it is noteworthy that in spite of the crucial roles that non-medical emergency management agencies have to play in responding to the crisis, not much is known about the capacity of such agencies in Liberia and Sierra Leone before, during and after the West Africa Ebola crisis of 2013/14.

Effect of Ebola on Socioeconomic Development of Liberia and Sierra Leone

The Ebola outbreak in West Africa was very rare, and almost totally overturned developmental efforts in Liberia and Sierra Leone after the civil wars that ravaged those countries. (Oleribe et al., 2015) The epidemic had a considerably negative impact on the socio-economic growth of the affected and negative impact development impact was quite colossal. Ryan (2014), asserted that the severity of the outbreak significantly disrupted the entire established fabric of Liberia, unsettling not only the governance structure of but also the health system. Before the Ebola crisis, Guinea, Liberia, and Sierra Leone had very good prospects for socio-economic accomplishments, bearing in mind their enormous natural wealth and improving macroeconomic projections (Sy & Copley, 2015). In Sierra Leone, as a result of the Ebola outbreak, both exports and the capacity to generate revenue through taxes were severely weakened due to the substantial decrease in economic activities (Dumbuya & Nirupama, 2017).

According to Bappah (2015), "the International Monetary Fund (IMF) and World Bank projected that the immediate fiscal effects of the EVD outbreak were US$113 million (5.1 percent of GDP) for Liberia, US$95 million (2.1% of GDP) for Sierra Leone, and US$120 million (1.8%) for Guinea" (p. 192). The consequence of the disaster also saw a sharp reduction of GDP growth rate of Liberia from the

preliminary 8.7% through 5.9% and 2.5% to 1% (Ryan, 2014). Revised World Bank estimates projected that more than $ 1.6 billion of productivity from the severely impacted countries of the Ebola epidemic would be forgone in 2015 (Bowles et al., 2016).

Because of the disease, countries which share common borders with the infected countries closed their borders and limited movement of persons across countries to avert a more spread of the disease (Sy & Copley 2015). The epidemic seriously hampered agricultural production, a situation which did not only lead to price uncertainties but also stifled sale of agricultural products in Liberia, Sierra Leone and Guinea (Sy& Copley 2015). Public and private limitations on commerce and travel did not only jeopardize the already poor economic situation of the infected countries but also hindered efforts to control the disease (Moon et al., 2015). Eventually, the crisis led to the most noteworthy setback to economic development in Liberia and Sierra Leone in more than a decade (Bowles et al., 2016, p. 271).

Within Liberia, there was a significant reduction in economic activities and jobs in entire country during the Ebola crisis, especially in the in Monrovia (Bowles et al., 2016). In Monrovia, the construction and restaurant sectors witnessed significant cuts in employment. The situation in Sierra Leone was not different as the crisis forced several companies to cut down their operations, leaving just skeletal staff or temporarily halting their operations to prevent their staff from being infected. This state of affairs significantly obstructed revenue and GDP (Dumbuya & Nirupama, 2016). Consequently, there was a domino effect which impacted the service industry such as hospitality and tourism.

Additionally, some foreign-owned companies either completely shut down their operations or operated at minimum capacity, causing a significant impact on the economies of the affected countries. In Liberia, a Chinese company that was undertaking a World Bank contract for the construction of a road that was to facilitate trade between Liberia and Guinea, China Henan International Cooperation Group, pulled out its workers, leaving the most significant infrastructural project in Liberia to be redundant (Taylor, 2015). Similarly, the Chinese Civil Engineering Construction Company sent its foremen and critical workers back to China and postponed all local projects in Sierra Leone, because of the Ebola outbreak. The China Kingho Energy Group also abandoned its premises and pulled out of Sierra Leone (Taylor, 2015)

According to Wilkinson and Leach (2015), at the peak of the Ebola crisis in July 2015, London Mining, a London-based firm withdrew its expatriate staff from the country. Also, British Airways and other airlines stopped all flights to the country, a situation which further negatively impacted on trade. Apart from the negative impact of the Ebola crisis on the economic activities of the natives and revenue to the Governments of Liberia and Sierra Leone, the epidemic negatively hit every sphere of the broader society of Liberia and Sierra Leone. At the peak of the crisis, religious and other social activities were halted, schools were closed, and social relations among people were significantly impaired.

It is important to underscore that despite the negative socio-economic impact of the Ebola crisis on Liberia and Sierra Leone very little is known about the roles non-emergency management agencies such as the Liberia National Disaster Management Agency (NDMA) and the Sierra Leone Department of Disaster

Management within the Office of National Security (ONS). A crucial question is whether an intervention by or inclusion of these non-medical emergency management agencies in the two countries would have averted the epidemic and thereby preserving the socio-economic gains that had been made by both countries after many years of brutal civil wars in those countries.

International Panic and Stigmatization of Africans

The Ebola epidemic in West Africa in 2013 to 2015 invoked fear and panic around the world which led to some governments either contemplating or taking drastic measures to prevent a possible outbreak in their respective countries. Although Africa is a continent of 54 countries, many Africans were sometimes lumped together as coming from one country (Opar 2014). This generalization was done either from out of panic and fear of infection or merely out of ignorance. Kissi (2014) highlighted that, while some people stereotyped Africa and Africans as the quintessence of sickness and argued that Ebola from the "dark Africa" poses a danger to "American civilization", others contended that such reactions are reasonable public health reactions to a lethal virus. In Kissi's view such arguments make Ebola, Africa and indeed all Africans synonymous. Such situations do not only create unnecessary fear and panic around Africans but also reinforces the wrong impression and stigmatization of the continent and its people as "backward" and "dangerous."

According to Monson (2017) Although the first patient of the 2014 Ebola crisis was documented in March 2014, the media did not pay attention until late summer 2014 when Dr. Kent Brantly, arrived in the United States for treatment after contracting the virus. As a result, of Dr. Brantly's arrival, the US media was saturated

with headlines such as "Close to Home: First Case of Ebola Diagnosed in the U.S." and "American Nurse with Protective Gear Gets Ebola: How Could This Happen" (p. 4). While 99% of Ebola infections were in Guinea, Libera and Sierra Leone, a few travel related incidents to Nigeria, Senegal, Mali and the United States highlighted the potential for the disease to spread by travelers from Africa, a situation which dominated American media portrayals of the Ebola virus (Gronke, 2015).

Kim, (2014), described how some experts and volunteers who served in Liberia during the crisis were stigmatized and subjected to some scientifically indefensible quarantine policy in New Jersey and Maine when they returned to the United States. Moon et al., (2015), held the view that response to the Ebola infections in the United States was characterized by fear and hysteria which later resulted in counterproductive measures including quarantines of aid workers who were returning, a situation which significantly hindered the control of the epidemic. Several other countries, companies, and organizations also imposed travel restrictions on their staff.

Due to lack of knowledge, several countries tried to use border controls to prevent the "importation of the disease" into their respective territories. Gronke (2015), summarized some of the countries that took drastic measures to use border controls to avoid infections. Indeed, African countries such as Cameroun, Gambia, Ivory Coast, Kenya, Nigeria, and Senegal stopped, or limited air travels form all Ebola-infected countries (Gronke, 2015). South Africa refused entry to non-citizens, and others on permanent residence status traveling from the infected countries (Gronke, 2015). Other developed countries such as Australia, provisionally deferred immigration and humanitarian programs to West Africans. In Costa Rica, authorities

were on high alert because of large numbers of undocumented West Africans who were en-route to the United States through the country to the extent that police officers were warned not to touch any dead bodies under any situation including road traffic accidents and crime scenes devoid of Ebola suspicion (Gronke, 2015). Just on Ebola suspicion Albania detained and quarantined illegal Eritrean migrants who had arrived there through Greece, with the intention of crossing the Adriatic Sea into Italy.

Even though the Ebola epidemic significantly affected only three out of 16 West African countries, to a large extent anyone traveling from any part of Africa to other parts of the world was thought to be infected with Ebola virus. Also, because of unnecessary fear that had been created, professionals who could go into the infected countries to help respond to the crisis were scared to go. Kim (2014), posited that even respectable people in society had contributed to the scaremongering and advocated for travel bans.

It is interesting to note that in spite of all the fear and subsequent stigmatization of everyone traveling from Africa to the rest of the world, for fear of carrying the virus, Ghana accepted to host the Headquarters of the UN Mission for Ebola Emergency Response (UNMEER) in Accra. This meant that responders had to respond to and from Accra, however, not a single case of infection was and has ever been reported in Ghana. The fact that there was no Ebola infection reported in Ghana despite the movement of people to and from Liberia and Sierra Leone during the epidemic, is an indication that many countries were unnecessarily afraid of infections. However, what needed to be done was to put in credible measures to prevent possible transmission of the virus, rather than stigmatizing travelers from Africa.

Weaponization and Bioterrorism of Ebola Virus

In human history, adversaries in conflicts or wars have always found a way to deal lethal blows to their opponents to defeat or annihilate them. In the early parts of the twentieth century, efforts were made by countries to weaponize viral agents (Pedersen, 2017). According to Chiodo, as referenced by Pedersen (2017), accounts of warfare in the Middle Ages indicate that there was a use of combat weapons such as spears and swords which were deliberately infected with bacterial agents. Pedersen (2017) referenced Langmuir and Andrews who had stated that during the twentieth century, the manufacturing of epidemics advanced to include the delivery of aerosol pathogens or the contamination of water and food supplies. Some scholars have indicated that there are legitimate concerns that the Ebola virus could be used by extremists in a bioterrorism attack, (Passi et al., 2015; Maras & Miranda, 2016; Malizia et al., 2016).

From the 1980s, extremists have gradually considered biological warfare agents as a highly threatening tool for disruption of civil society and world economy (Cenciarelli et al., 2015b). Maras and Miranda (2016), observed that in the 1990s Aum Shinrikyo, the leader of a Japanese cult with the name Shoko Asahara, together with many doctors moved to the then Zaire (Democratic Republic of Congo) under the pretext of a medical assignment to study and to obtain samples of the deadly Ebola virus. Although the cult was unsuccessful in creating biological weapons, it is important to emphasize that the attempt by the group to even get samples of the virus to weaponize it for mass destruction is an indication that both state and non-state actors to do maximum damage to humanity could still use the virus.

Ebola is a dangerous virus that does not only cause an extremely contagious infection which is difficult to contain, but it may also be used deliberately to present a serious threat as a possible biowarfare agent (Cenciarelli et al., 2015b). During the Ebola Crisis in West Africa, the political class in the United States had suggested the imposition of travel ban because of the fear that ISIS recruits could infect themselves with Ebola to carry out bioterrorism (Kim, 2014).

Because terrorism is one of the main security threats of the twenty-first century, the possibility of non-state actors attempting to weaponize the Ebola virus for terrorist acts cannot be overemphasized. Passi et al. (2015), highlighted how the Ebola virus spreads and surmised that due to the potential features of the Ebola virus, it is a highly likely agent for bioterrorism. Considering that Ebola may be caused naturally, Thiessen (2014), opined that with Ebola, "mother nature has created a perfect weapon" (para. 6). Should Ebola and Islamic radicalism be combined into one, the world will become a very dangerous place (Thiessen, 2014).

In Mcinnes (2016) view, from a traditional national security standpoint, attention has rarely been fixated on the likelihood for a health crisis to lead to failure of states which has far-reaching consequences for regional stability and international security. Mcinnes (2016), further highlighted the possible use of pathogens such as smallpox or anthrax as weapons of mass destruction, plus the probable use of pathogens for bioterrorism.

Possible agents of attack are categorized by the dangers they pose, and these categories range from A, B and C, with Category A being the most dangerous. Due to its capability to create mass terror and commotion, coupled with the distinct public

health activities required to treat infected people, Ebola is categorized as Category A. (Pedersen, 2017; Cenciarelli et al., 2015b). In Pedersen's (2017) view, a genetically invented virus can be more disastrous than atomic weapons. Gunaratne (2015), surmised that despite scientific progress in medical virus surveillance if the Ebola virus were intentionally introduced into a densely inhabited area, the consequence would be catastrophic. As highlighted by Thiessen (2014), if terrorists collect samples of infected body fluids and clandestinely place them at public places on doorknobs, handrails etc. the disease will spread silently before authorities realize that a biological attack has occurred. Thiessen (2014), further posited that the Ebola virus was prevalent on the African continent where terrorist groups such as Boko Haram, Ai-Qaeda and Islamic State are active. Considering the 21-day gestation period of the virus, terrorist groups could get more than enough time to infect themselves and others before they are detected.

Cenciarelli et al. (2015), however, hypothesized with two worst-case scenarios where Ebola virus can be released, the choice of which would depend on the purpose of the terrorist organization. The first scenario included an overt attack, and the second, a stealthy attack. Regarding overt attack, Cenciarelli et al. (2015), posited that using Ebola virus would be useless, apart from the fear and panic it will cause, since such actions and infections would be prompted leading to isolation procedures by the authorities. The detection and other procedures might lead to the blocking of the spread of the virus and reduction in lethal cases. About a stealthy attach, Cenciarelli et al. (2015), indicated that the strategy of deliberately and covertly infecting people without anyone realizing would have a suspended effect through manipulation of the

incubation period. This strategy has the potential to widely spread infections among people with serious ramifications of mass murder. Due to the disastrous consequences of the potential use of the Ebola virus as a weapon of mass destruction by terrorist groups, the need for non-medical emergency managers to have a contingency plan in place to deal with related safety and security issues cannot be overemphasized.

National Response

When epidemics break out, the timeliness of rapid response is crucial to prevent its spread. In the wake of the crisis, the most impacted countries made several efforts to contain the situation, albeit such efforts have been criticized as lacking efficiency. The Liberia and Sierra Leone, governments' responses were prompted at the peak of the outbreak and subsequently rolled out measures including the imposition of state of emergency, and putting large areas under quarantine, to begin to tackle the epidemic (Bowles et al., 2016; Wilkinson & Leach 2015). Additionally, the respective government of Liberia and Sierra Leone put in other measures to contain the epidemics.

Gbla (2018), emphasized that in Sierra Leone, the government harnessed all its resources in an attempt to tackle the Ebola crisis. Operationally, the Government of Sierra Leone responded to the crisis by creating and executing various agendas with the view to effectively coordinating a response to the crisis. Between July and September 2014, the Government of Sierra Leone established an Emergency Operations Center (EOC) which was primarily used for the coordination of activities (Olushayo et al., 2016). Then, from October 2014 till the end of the crisis in

November 2015, the Government used a command and control fashioned Incident Management System (IMS) referred to as the National Ebola Response Center (NERC) to manage the epidemic (Olushayo et al., 2016). The initial national EOC had the responsibility of coordinating the operational and technical aspects of the response under five technical components, namely; "coordination; epidemiology/surveillance/laboratory; case management/infection control; social mobilization/psychosocial support; and logistics" (p. 2).

The EOC was mainly managed under the Ministry of Health and Sanitation and was overseen by the Minister for Health or the Chief Medical Officer. The ONS, an agency that is mandated to coordinate emergency management in the country and most suitable for that role (Gbla, 2018), however, could have better managed this oversight and coordination responsibility. As a result of the failure of the EOC, the government established the NERC, which was more encompassing and included several other actors including the Security Agencies. The Security Agencies such as the Sierra Leone Armed Forces (RSLAF), the Sierra Leone Police (SLP) as well as hybrid structures including chiefdom and district security committees, District Ebola Response Committees (DERC), etc. joined efforts to manage the epidemic (Gbla, 2018).

The NERC was designed with a local government oversight through a chief executive officer appointed by the President (Forestier et al., 2016). Unlike many other places around the globe such as Nepal in 2015 and Haiti in 2010 where the local governments were completely overwhelmed in their effort to coordinate relief and response during the disasters in those countries, the case of Sierra Leone was

completely different due to the effectiveness of the NERC and DERCs that were set up by the Sierra Leone Government (Forestier et al., 2016). The situation room at the NERC was replicated at the various DERCs with slight modification, depending on the particular requirements of the district (Forestier et al., 2016). At both the NERC and DERC levels, the military gave advisors and Chiefs of Staffs to effectively coordinate response and assist the chief executive officer (Forestier et al., 2016).

According to UNICEF as referenced by Thomas et al. (2017), as the epidemic escalated and began to spill out of control in Liberia, President Ellen Johnson Sirleaf declared a state of emergency, shut schools, provisionally laid off less essential government employees and closed the country's land borders. Also, the President, with the support of the Center for Disease Control, created an Incident Management System, under the oversight of the Ministry of Health and Social Welfare. She further created a Presidential Advisory Committee on Ebola under her supervision as the highest decision and policymaking body on the Ebola crisis response, with the view to ensuring accountability and establishing a clear chain of command (Thomas et al. 2017),

Scholars have given how various institutions responded to the Ebola crisis in West Africa, and reasons why these responses were effective or otherwise, in containing the crisis (Shepler, 2017; Comfort et al., 2016; Olushayo et al., 2016). In all the significantly impacted countries, the responses were ineffective due to factors such as the scale of the outbreak, ineffective capacity for response and emergency communication, ineffective coordination, poor health systems, and community resistance (Olushayo et al., 2016). Liberia and Sierra Leone are among the least

ranked countries in the global Human Development Index, ranked 176 and 183 respectively out of 187 countries, and as such, did not have the required systems in place to deal with a mass outbreak of a disease (Wenham, 2016). Given the limited resources of the respective Ministries of Health of the significantly impacted countries, it was practically impossible for the Ministries to be able to effectively deal with the threat of Ebola without assistance from the other actors and the international community (Comfort et al., 2016).

Shepler (2017), ascribed corruption, mismanagement of funds and weakness of the State as part of the factors that contributed to the spread of the disease. Shepler, (2017), further highlighted that the virus was given a foothold when the Ministries of Health of Liberia and Sierra Leone played down the threat at the beginning of the crisis. In Liberia, because of constant accusations of corruption in President Sirleaf's government, several Liberians even thought that the Ebola outbreak was a subterfuge by corrupt officials to make money (Shepler 2017),

According to Wilkinson and Leach (2015), the problem of insufficient resources in Sierra Leone was compounded by corruption. It is alleged that high-level corruption resulted in donors suspending funds to the Ministry of Health and Sanitation in 2013 (Wilkinson & Leach, 2015), Distrust and lack of confidence among the citizenry also significantly impacted governments efforts to deal with the catastrophe. Also, a rising lack of trust between the public and government officials mired communal mobilization and civic education (Moon et al., 2015). In Sierra Leone, people peddled rumors and gave various unsubstantiated reasons, targeting various groups. Rumors such as US government using Ebola as bio-weapons,

pharmaceutical companies testing new vaccines, politicians using Ebola to eliminate the populations of the strongholds of their opponents were all peddled (Shepler, 2017). These made people lose confidence in the Sierra Leone Government's fight against the epidemic.

Significantly, it is important to underscore that the Governments of both Sierra Leone and Liberia put is some measures at the peak of the crisis with the view to ensuring an efficient response in their respective countries. However, it is worthy of note that the roles of the Disaster Management Department of ONS for Sierra Leone and the Liberia NDMA, the agencies which are charged with the primary responsibility of coordinating national disaster response in these countries were not clearly spelled out in the scheme of the respective Governments' response efforts to the crisis.

The Response of the International Community

The Ebola crisis was more complex than a typical health emergency. It was a "multi-dimensional public and altruistic crisis which required a complex, multi-faceted response involving health, aid coordination, personal security, food security, appropriate budgetary decision-making, and responsive governance, among others" (Ryan, 2014). Roemer-Mahler and Rushton (2016), contended that in spite of over twenty years of significant investment in global health, the comprehensive response to the Ebola outbreak in West Africa was sluggish and uncoordinated. Dubois et al. (2015), observed that although the warning signs were there, the World Health Organization failed to see the impending severity of the epidemic and therefore did not respond early enough. Dubois et al. (2015), further posited that in spite of the

warnings from agencies on the ground and persistent appeals for action, these calls were disregarded. As a result, Médecins Sans Frontières (MSF) together with less experienced agencies and astounded government services were left to address major medical issues on their own without the needed support from the international community. Dubois et al. (2015), therefore blamed the rapid spread of the disease on the failure of both national and international actors to respond quickly to the outbreak. Ifediora and Aning (2017), conversely, argued that the remarkable international response to the EVD outbreak eventually contributed significantly to the stopping of the spread of the disease in West Africa.

According to Taylor (2015), at the peak of the pandemic, China announced that it was sending $5 million worth of medical supplies to the affected countries (p. 50). The Ebola situation was the first time China had extended humanitarian support to nations ravaged by public health emergency. It is important to underscore that while other countries were withdrawing their staff from the impacted countries, China sent three teams of infectious diseases experts to the affected countries (Taylor 2015), According to OCHA as referenced by Thomas (2016), by the end of 2014, over 62 countries had promised and dedicated US$2.3 billion to the Ebola response in West Africa, including US$806 million specifically for Liberia. The United States Government announced a US$319 million response plan; the World Bank announced US$105 million in funding for West Africa. The United Nations also outlined nearly US$1 billion in funding needs (Thomas, 2016),

According to Bappah (2015), The Economic Community of West Africa States (ECOWAS) played a significant role by mobilizing funds and sending health

experts to its member countries that were affected by the Ebola crisis. However, the roles played by other well-endowed organizations such as the World Health Organization (WHO) and the United Nations (UN) agencies, largely overshadowed the efforts of ECOWAS.

Regarding the United Nations, in September 2014, the global body declared the EVD as a threat to international peace and security. The UN went further to establish the UN Mission for Ebola Emergency Response (UNMEER), with the objective to stop the outbreak, treat the infected, ensure essential services, preserve stability, and prevent further outbreaks (Ifediora & Aning 2017). Davies, and Rushton (2016), nevertheless, argued that the United Nations Mission in Liberia (UNMIL) that was already in place before the outbreak of the epidemic could have done more to contain the EVD. Davies and Rushton (2016), however, conceded that many factors such as the views of Troop Contributing Countries (TCCs), the competencies of the mission as well as actions of the host government among others inhibited the ability of UNMIL's contribution. It is important to point out the fact that UNMIL and many other UN Peacekeeping missions have generic responsibility of safeguarding security of civilians and humanitarian actors. However, peacekeeping missions (UNMIL included) are usually not necessarily well equipped with skilled personnel and resources to deal with a medical epidemic with the magnitude of the Ebola crisis.

In spite of some of the positive roles played by the international community in dealing with the epidemic, scholars believe there are a lot of lessons to be learned from the global response if future pandemics are to be managed efficiently (Bappah, 2015; Ifediora & Aning 2017). Bappah (2015), argued that some of the mistakes

made by ECOWAS included the dependence on weak and poor health institutions in the affected countries as well as the failure of the ECOWAS leadership to realize that the health personnel in the affected member states were strained and therefore required additional hands rather than money. Further, it was evident that the ECOWAS inter-governmental decision-making process was unnecessarily long in responding to emergencies. Bappah (2015), however, drew plausible lessons learned from the crisis. It was identified that ECOWAS needed to improve on its regional emergency response strategy. Bappah (2015), also highlighted the importance of the need to accelerate decision making during emergencies and finally suggested the reliance on a competent health emergency response mechanism to deal with future regional pandemics vibrantly. Ifediora and Aning (2017), were also of the view that among other issues, "internationalization of risks and threats will have little effect if regional arrangements lack adequate capacity to fulfill their roles within the global collective security architecture" (p. 237).

Involvement of Military from Britain and United States

United States Troops in Liberia

At the peak of the crisis, countries such as the United States and Britain supported the response effort with military contingents in Liberia and Sierra Leone respectively (Smernoff, 2013; Anderson & Beresford, 2016; Thomas et al., 2017). According to the White House Press Secretary, as referenced by Thomas et al. (2016), as the crisis continued to raise significant security concerns in West Africa, President Obama committed the whole US government to end the Ebola outbreak. Later, the President announced US$319 million for the response, making the West African Ebola crisis a

National Security Priority. The United States strategy encompassed the deployment of up to 3,000 military personnel to build 17 Ebola Treatment Units with 1700 beds and provide logistical support to West Africa as part of Operation United Assistance (Thomas et al.,2016; Adler et al., 2018).

As part of the effort of the US in responding to the epidemic, US troops were sent to West Africa to support a cross-section of activities. These activities included constructing mobile and fixed lab capacity and capability to diagnosing EVD, training indigenous nationals in the appropriate application of personal protective equipment (PPE), erecting Ebola Treatment Units, delivering logistic support, and safeguarding security (Sipos et al., 2018). According to Nevin and Anderson (2016), the preliminary response began with the U.S. Africa Command stating their arrival at the Roberts International Airport (RIA) on 18 September 2014 with seven soldiers and a single forklift. A few days afterward, 45 personnel arrived in Liberia, set up a command headquarters, and were joined by 100 more personnel by 25 September. Later, on 30 September, the Pentagon announced significant plans of deploying 1400 troops in October and by October 3, deployment instructions had been issued for an additional deployment of up to 3,200 personnel (Nevin & Anderson, 2016).

In spite of the positive impact, the US deployment of troops may have made in combating the EVD in Liberia, Kim (2014), attempted to impugn what in his view was a double standard approach of the United States in dealing with more important global issues such as the EVD. Kim (2014), argued that Secretary of State, John Kerry had rallied a global coalition for a mission of “utmost urgency” to battle the Islamic State of Iraq and Syria (ISIS), which according to Kerry was a cancer, a disease that

every civilized country should be responsible enough to stamp out before it spreads. According to Kim (2014), however, regarding a real disease, the United States had delayed the much needed response even after the disease had killed up to about 1,552 people by the time Kerry was still soliciting global coalition to fight ISIS.

It must be understood that although the Ebola epidemic of 2014 in West Africa posed a considerable threat to not only West Africa, but also the entire Africa and indeed the rest of the world. In my view it is incongruous to compare the United States response to the Ebola epidemic, and the soliciting a global coalition against ISIS. It is important to point out the fact that countries have their threat profiles and priorities in their foreign policies and their attempts to take leadership roles in global affairs. Such priorities may dictate a country's priorities in responding to different security threat scenarios. Arguably, it would have been appropriate if the United States' response to the Ebola epidemic had been swifter. However, to compare the response of the Ebola epidemic to a global response to ISIS reduces the importance of response to epidemics by world leaders into a different arena of global politics.

British Troops in Sierra Leone

In Sierra Leone, as the crisis became more complex and difficult to handle, The UK Ministry of Defense, and later other friendly countries including Canada and Ireland committed troops in support of DFID assistance programs (Forestier et al., 2016). According to Reece et al. (2017), The British military played very important roles in shaping the UK's Ebola response in Sierra Leone. The British Military set up the military Ebola Treatment Centre (ETC), at Kerry Town about 31 km from Freetown, the first in-country facility, devoted to the treatment of both international

and local medical professionals. The facility was staffed and supported by several nurses, medical and operational personnel from both the British National Health Services and the military. The military also provided both military and civilian personnel involved in the Ebola response with force protection measures to mitigate the Ebola Disease risk involved in the operation (Forestier et al., 2016).

Further, the Royal Engineers assisted and advised on the construction of ETCs. The Royal Navy ship RFA Argus also provided logistical support and offshore treatment for non-Ebola related sicknesses (Reece et al., 2017). The Navy further provided support for the transportation of medical equipment and supplies to Sierra Leone. The military response to the Ebola crisis in both Liberia and Sierra Leone may be seen as among the major contributory factors in successfully bringing the EVD under control. Sandvik (2015), however, argued that considering the deployment of military personnel, strategies and tactics as the main reason for success is prejudiced, because it does not only degrade the spirit of the nationals of Ebola affected countries, but also the efforts of local health workers and other humanitarians to control the outbreak. Sandvik (2015), further emphasized that when such humanitarian crisis are described as ‘national security’ issues as was the case of the 2014 epidemic before the deployment of the military, it is easier to conceal evidence from the public, thereby, making it extremely difficult to assess the actual effectiveness of the response.

It is clear that in spite of the roles played by both the United States and British militaries in Liberia and Sierra Leone respectively, it is not known if part of the

efforts or resources of these militaries were channeled to assist the non-medical emergency management agencies to coordinate the response to the Ebola crisis.

Summary

The purpose of chapter two was to critically examine the significant issues relating to the Ebola outbreak in Liberia and Sierra Leone. In this chapter, the researcher briefly highlighted some literature on the theoretical framework for the study, and after that, delved deeper into the real issues about the Ebola outbreak in Liberia and Sierra Leone in 2014 - 2015, with the view to finding gaps in the literature as a basis for this study. The key themes that were identified in the available literature includes history of the Ebola virus; the socio-political factors that led to rapid spread of the virus; the failure of system in Liberia and Sierra Leone that contributed to the spread of the disease; and the effect the outbreak had on the socio-economic development of Liberia and Sierra Leone. Other thematic areas that were identified in the available literature included the international panic and stigmatization of Africans because of the outbreak in West Africa; and the potential for the Ebola virus to be weaponization for bioterrorism. The reviewed literature also covered the response of governments of Liberia and Sierra Leone to the crisis, the response of the international community and then the involvement of the military from Britain and the United States.

After the review, the researcher realized that not much was known about the roles played by the non-medical emergency management agencies such as NDMA and The Disaster Management Department of ONS of the Republic of Sierra Leone, the agencies that have the primary responsibility of coordinating emergency

management in the respective countries. Further, the researcher observed that a gap remains in the available literature on the roles that may have been played by emergency management agencies in the West African region in support of the international community's efforts in responding to the crisis in Liberia and Sierra Leone. The researcher filled this gap in knowledge by describing and documenting the specific roles played and should have been played by non-medical emergency management agencies of Liberia and Sierra Leone, and such agencies in West African countries in responding to the 2014 Ebola epidemic.

Chapter 3 focused on the research methods and procedures that were used to answer the questions to the gaps raised in the available literature. The chapter further gives clarity on the respondents to the research question, delves deeper into the issues of ethics and gives details of the data collection and analysis. Chapter 3 set the stage for the research to be conducted, leading to discussions on the finding, and subsequent recommendations in Chapters 4 and 5.

Chapter 3: Research Method

Introduction

In this study, the researcher explored the roles EMA play in managing epidemics that afflict countries and transcend national boundaries. The purpose was to enquire about the role nonmedical EMAs in Liberia and Sierra Leone played in managing the Ebola crisis of 2014, and if no significant roles were played, what roles such agencies should have played in managing this crisis. Chapter 3 includes research questions, research method, and methodology information. The researcher also highlights procedures for recruitment of participants for the study and how data were collected and analyzed. The chapter also highlights issues of trustworthiness. The researcher also discussed ethical issues and protection of participants as well as the role of the researcher.

Research Design and Rationale

Research Questions

RQ1: What roles did nonmedical EMAs in Liberia and Sierra Leone play when responding to the 2014 Ebola crisis?

RQ2: What roles should nonmedical EMAs of Liberia and Sierra Leone and similar agencies in West Africa have played when responding to the 2014 Ebola crisis?

Research Tradition

According to Creswell (2014), research methodologies are approaches and processes for research that involve broad assumptions, painstaking methods, and the collection of data and subsequent analysis. The research method also refers to the

overall plan that a scholar chooses to incorporate various parts of the study in a comprehensible and analytical way, to ensure that the research problem is adequately addressed. Yin (2014) identified three main research methods: qualitative, quantitative, and mixed research methods. The Robert Wood Johnson Foundation (2008) defined qualitative research as "a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live" (para. 4). Qualitative research fundamentally deals with witnessing a phenomenon from the viewpoint of the people being studied.

According to Lambert and Lambert (2012), different approaches to qualitative studies include phenomenology, grounded theory, and ethnography. In addition to the traditional and well know qualitative methods, other scholars have also identified generic qualitative inquiry as suitable for dissertations (Kennedy, 2016; Percy et al., 2015). Percy et al. (2015) said "generic qualitative inquiry investigates people's reports of their subjective opinions, attitudes, beliefs, or reflections on their experiences, of things in the outer world" (p. 78). According to Kennedy (2016), the generic qualitative inquiry does not involve committing to a specific methodology or philosophical viewpoint.

For this generic qualitative inquiry, the researcher used the pragmatic descriptive approach to describe the experiences of EM experts in Liberia and Sierra Leone who witnessed the Ebola crisis that ravaged the Mano River region of West Africa. In addition to EM experts from Liberia and Sierra Leone, the research also described the skills of EM experts from the Ghana NADMO and subject matter experts from the KAIPTC

Justification for Choice of Qualitative Method

According to Marshal (1996), the choice of a research methodology should not necessarily be an issue of preference of the researcher but should be determined by the research questions. Percy et al. (2016) emphasized that sometimes when the more traditional qualitative approaches such as ethnography, case study, grounded theory, and phenomenology are not suitable for one reason or the other, scholars should consider a more generic qualitative inquiry approach. Percy et al. (2016) said that "though phenomenologists explore people's opinions, beliefs and feelings among others; the phenomenologist's curiosity is in the inner dimension, qualities, and structures (essences) of those cognitive processes, but not in the external content that may trigger the cognitive processes" (p. 77). It is significant to emphasize that this study seeks to investigate the external professional opinions and views of respondents in answering the research questions and not necessarily their lived and internal psychological experiences during the Ebola crisis. Consequently, the generic qualitative inquiry offers the best approach for the study.

Additionally, a generic qualitative inquiry is suitable because it is aligned with the research problem, purpose statement, and research questions. This research methodology also offered the researcher the opportunity to collect pertinent data to be able to understand the opinions and feelings of EMs who endured the Ebola crisis in Liberia and Sierra Leone and how, in their view, the crisis should have been managed from a nonmedical expertise point of view. Regarding sampling and data collection, the purposeful sampling method was used. Only a targeted group of EM professionals participated.

Role of the Researcher

According to Simon (n.d.), in a qualitative study, the researcher is seen as the instrument to collect data. Data collection is therefore facilitated mainly through the researcher. Creswell (2014) posited that in the course of data collection, the researcher is responsible for "setting the boundaries for the study, collecting information through unstructured or semi-structured observations and interviews, documents, and visual materials, as well as establishing the protocol for recording information" (p. 189). The researcher's responsibility in this study included the collection of data through interviews with EM experts, transcribing, coding and subjecting the evidence to analysis to arrive at credible findings and conclusions.

According to Greenbank, as cited by Simon (n.d.), the qualitative researcher should describe relevant aspects of self, including any prejudices, assumptions, expectations, and experiences that qualify his or her ability to conduct the research. The researcher worked in Liberia during the peak of the Ebola crisis of 2014. During the period, the researcher expected the lead EMAs in Liberia to take a lead role in managing the epidemic. However, the researcher did not see much of the roles played by the NDMA of Liberia. This observation may prejudice the researcher's views about the findings of the research.

Research Methodology

Logic of Participant Selection

Although many other professionals experienced the Ebola crisis in Liberia and Sierra Leone, this study employed stratified purposeful sampling and targeted only specialists in emergency management. Participants included a total of 12 emergency

management professionals in Liberia NDMA, Sierra Leone ONS, Ghana NADMO and a subject expert from the KAIPTC in Accra, Ghana. The researcher reached saturation after interviewing three participants each from Liberia, Sierra Leone, and Ghana. The researcher ensured that the interviewees cut across the agencies earlier indicated in the three countries, to ensure that the findings of the research will be quality, transferable and representative of the West African region.

Criteria for Selection of Participants

The primary criterion for selecting participants in Liberia and Sierra Leone was the presence of participants in these countries during the Ebola Crisis of 2014. There was a possibility that new subject matter experts may have joined the emergency management agencies of Liberia and Sierra Leone after the epidemic. Such people may not necessarily have lived through the crisis as emergency management experts and as such may not have the real experience that this research seeks to unravel to answer the research questions.

The criteria that was used to select participants in Ghana was, being an emergency management expert from the NADMO, with experience or training in managing epidemics, or being a subject matter expert from the KAIPTC. These criteria ensured that the questions on emergency response capacities in the West African sub-region were adequately answered.

Sampling Methods

Marshall (1996) acknowledged three main methods in the careful choice of a sample for qualitative research. These include convenience sample, judgment sample and theoretical sample. For this study, the researcher used judgment sampling, also

known as purposeful sampling. Marshall (1996), opined that the appropriate size of a sample for a qualitative study is one that effectively answers the research question. According to Crossman (2017), purposive or judgment sampling is a non-probability tester that is carefully chosen due to special characteristics of a population and the purpose of the study. Purposive sampling is typically employed when the scholar needs to speedily reach a targeted sample, or when the focus of the study is not focused on sampling for proportionality.

Critical case sampling which is a type of purposive sampling will be used in this study. Critical case sampling is used when the researcher chooses a case for study because it is expected that studying it will reveal insights that can be applied to other cases. As a result, the researcher considered critical case purposive sampling as most ideal for this study as the sample size will be non- probability and was focused on just a beset group of emergency management experts in Liberia and Sierra Leone and Ghana.

Data Collection

This generic qualitative inquiry typically used data collection techniques that elicit participants' reports, views and ideas about how emergency management agencies should have handled the Ebola crisis of 2014 but not how “internally” they individually felt about the crisis. The research relied mainly on face-to-face and telephone interviews with management experts from Liberia NDMA, Sierra Leone ONS, Ghana NADMO and subject experts from the KAIPTC in Accra Ghana. According to Wyse (2014), employing face-to-face interviews in research ensures improved screening of participants. For instance, the individual being interviewed

cannot provide false information during screening questions such as gender, age, or race (para 2). When face-to-face interviews are used to collect data, the emotions and behaviors of the interviewee can be adequately captured. Although face-to-face interviews was the most appropriate data collection method for this study, the researcher also used telephone interviews with some of the respondents due to the inability of the researcher to travel to Liberia and Sierra Leone.

To ensure that data was captured accurately, the researcher had an assistant who helped during the interviews to also record all that transpired during the sessions. The researcher also record all sessions, with voice recorders to ensure that all comments were properly captured. After each interview session, the researcher playback the recorded version to the interviewees to ascertain if they wanted any portions of what they have said changed. This gave the interviewees the opportunity to correct their comments and ensure the accuracy of the data collected. The researcher also rely on data from media reports, videos and other internet resources on the 2014 Ebola epidemic.

Data Analysis Plan

Thematic analysis offers a method of data analysis that is malleable and well suited for many research approaches. According to Percy et al. (2016), there are three types of thematic analysis, namely inductive, theoretical and thematic analyses with constant comparison. This research employed the inductive method to analyze the data. Percy et al. (2016), posited that inductive analysis requires the researcher to set aside all pre-understandings of the issues before the analysis begins. It further requires that data collected from each be analyzed individually. Percy et al. (2016), provided a

systematic approach to conducting inductive analysis. This approach which the researcher used is explained below.

The researcher took time to peruse and acquaint himself with all data collected from each respondent, and intuitively, highlight any sentences, phrases or paragraphs that appeared significant. After that, the researcher reviewed all the highlighted and used the research questions to decide if the highlighted information was related and relevant to the research questions. Subsequently, the researcher eliminated all highlighted data that were unrelated to the research questions and stored that data in a separate file. Then the researcher did a simple coding of the data with serial numbers and pseudonyms to be able to keep track of individual information in the data.

Further, all items of the data that were related or connected were clustered to develop a pattern. Each pattern was described in a phrase that sums it up. As patterns begin to emerge, the researcher identified items of the data that corresponded with the specific pattern. These patterns were placed in the previously assembled cluster that manifests that pattern. Furthermore, the researcher took all the patterns and looked for predominant themes. This process included combining and clustering the related patterns into themes. After all the data had been analyzed themes arranged and paired with their corresponding supporting patterns on a matrix. Codes or descriptors for each of the data clusters were included in the matrix for further analysis. For each theme, the researcher wrote a detailed abstract analysis, describing the scope and substance of each theme. The process was repeated for data from each participant. After that, the researcher combined the analysis of data for all participants including patterns and themes that were consistent across the participants' data.

Trustworthiness Issues

Burkholder et al. (2016), elucidated that trustworthiness is the qualitative term usually used instead of validity for quantitative studies (Kindle Locations 2153-2154). According to Lincoln and Guba (1985), trustworthiness is the degree of confidence a researcher can have in the findings of a study. Trustworthiness in a qualitative study is about establishing, credibility; transferability dependability and confirmability to ascertain the truth and accuracy of the research findings.

Credibility

Lincoln and Guba (1985), specified methods such as prolonged engagement, persistent observation, triangulation, peer debriefing and thick description in establishing the credibility of research. Burkholder et al. (2016), also, theorized that in a qualitative study, the researcher does not need to use all the strategies related to credibility but instead choose the plan or strategy most suitable for the study (Kindle Locations 2249 - 2251). For this research, triangulation was used to establish the credibility of the findings. Creswell (2014), suggested that data should be collected from numerous sources to include interviews, observations and document analysis. For this study, the researcher used different types of methods such as gathering data through interviews. The researcher also relied on media publications and document analysis of other available data from open sources. The researcher also cross-verified information from different sources to ensure that the research findings are reliable, cogent and credible.

Transferability

Transferability refers to the researcher's demonstration of how the findings of the research can be applicable in other contexts. The findings of this study would apply to other scenarios of the management of epidemics by non-medical emergency management agencies around the globe. In DeVault's (2017) view, purposive sampling can be used to address the issue of transferability since explicit data is exploited in relation to the context in which the data collection occurs. The sampling method employed by this study is purposive sampling, and that should make the findings of this research transferable.

Dependability

Dependability is the extent to which the research findings can be replicated with consistency by other researchers based on the information from this study given the same resources used for this research. To this end, participants were given the opportunity to review the analysis of their responses to ascertain that their thoughts and responses were accurately captured and properly analyzed. Other researchers and subject area experts from the KAIPTC were relied upon to confirm or corroborate the research findings.

Confirmability

Confirmability refers to the extent to which the results could be confirmed or corroborated by others. One method of establishing confirmability is ensuring an efficient audit of the entire research process to ensure that the research findings accurately conforms to the responses of the interviewees. While this may not be established and spelled out in this research, the committee chair and other committee

members assigned to this study ensured efficient auditing of the process to ascertain the process used to arrive at the research findings.

It is noteworthy that confirmability also refers to the degree of neutrality of the researcher concerning the findings of the study. Bearing in mind the researcher's potential bias and preconceived thoughts, the researcher remained a passive participant during the interviews; the researcher only asked questions and allowed the respondents to do more of the talking while he recorded. The researcher only asked questions to clarify areas that required clarity.

Ethical Issues

At all stages of the research process, scholars are faced with ethical challenges ranging from who to be selected to be interviewed through the approach to be used in collecting data to what information to include or exclude in the research. If ethical standards of research are not adhered to, the researcher risks endangering the privacy of his/her respondents and exposing them to harm. According to Ravitch (2016), the privacy of an individual is linked with discretion and "entails decisions about how and what data related to participants will be disseminated" (Kindle Location 7325). A researcher, therefore, has a vital responsibility of ensuring the protection, the privacy, and confidentiality of respondents of a study. Considering that data will be derived from emergency management experts in Liberia and Sierra Leone, whose agencies probably should have done more in containing the epidemic, there will be the requirement to protect their privacy and keep them anonymous in the research since that could jeopardize their careers.

To ensure that respondents participate in a voluntary manner, the researcher asked all participants to sign an informed consent form and informed participants that at any point in the process, they were free to withdraw their participation. Participants were also informed of the purpose of the research and made to understand that the interviews were being recorded. Pseudonyms and nicknames of participants were used throughout the study to further ensure confidentiality of participants.

Further, to avoid making serious ethical mistakes in this study, the researcher sought clearance and direction from the Institutional Review Board (IRB) of Walden throughout the research process. Most importantly, IRB approval was sought before participants were recruited for subsequent data collection and analysis.

In the course of the study, the researcher, as a staff of the United Nations, consulted the United Nations Ethics Office to be able to interview UN personnel who played critical roles in responding to the Ebola epidemic in Liberia. The Ethics Office, however, discouraged the researcher and raised an issue of potential conflict of interest. The researcher complied with the Ethics Office's advice and only relied on open source information concerning the roles of the United Nations in managing the crisis. Therefore, although the researcher remains a staff of the United Nations, the discussions, findings and recommendations of this study should not be misconstrued as a position of the Organization but merely a personal academic work.

Summary

This chapter described and justified the research methodology, how research participants were recruited, data collection and analysis methods, ethical issues and how they are addressed, as well as issues of trustworthiness relating to the research

findings. Having exhausted the key areas and the general methodology to be employed in the conduct of the study, this chapter set the stage for Chapter 4, the study and results, and subsequently Chapter 5, summary, conclusions and recommendations.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to learn about the roles played by nonmedical EMAs in Liberia and Sierra Leone in response to the Ebola crisis of 2014 at the national level. The study also explained roles played by such similar agencies in West Africa when managing this epidemic. Chapter 4 presents data analysis and findings involving the two main research questions:

RQ1: What roles did nonmedical EMAs in Liberia and Sierra Leone play when responding to the 2014 Ebola crisis?

RQ2: What roles should nonmedical EMAs of Liberia and Sierra Leone and similar agencies in West Africa have played when responding to the 2014 Ebola crisis?

Initially, RQ1 targeted respondents from Liberia and Sierra Leone, whereas participants from Ghana only answered RQ2. Six interview questions were considered for each of the research questions. However, in the course of the data collection, all respondents were asked interview questions for both RQ1 and RQ2.

For RQ1, the interview questions involved participants' experience in crisis response to an epidemic such as the Ebola crisis. The researcher also sought to find any strategies that participants thought their agencies should have used in responding to the crisis, and which other agencies participants thought should have played key roles in the response.

For RQ2, the interview questions involved respondents' agencies during the Ebola crisis and the strategies that were used. The researcher also sought to find any

plausible strategies that were not used but could have been used by EMAs. The researcher further wanted to know if any other EMA in West Africa assisted in the Ebola response, how the response of participants' agencies helped in dealing with the Ebola crisis, and how ECOWAS' response helped in dealing with the crisis. In this chapter, the researcher explains the setting for the research, demographics, data collection, and data analysis. Subsequently, evidence of trustworthiness is discussed along with results and a summary.

Setting

The researcher used purposeful sampling in identifying potential participants. Following IRB approval, the KAIPTC nominated and introduced the researcher to 19 EM experts across Liberia, Sierra Leone, and Ghana, all of whom the researcher contacted through WhatsApp. Out of the 19, 12 indicated their willingness to participate in the study. They sent the researcher their email addresses through WhatsApp, after which the researcher sent consent forms to them through email. The researcher collected data through face-to-face interviews with four participants in Ghana and telephone interviews with seven participants in Liberia and Sierra Leone. KAIPTC made a conference room available to the researcher where all face-to-face interviews and six telephone interviews were conducted. Two telephone interviews were done from the researcher's car. All interviews were conducted at a convenient time for participants, and the researcher ensured that confidentiality was guaranteed. Participation in the study was voluntary, and the researcher ensured that there were no undue pressures on participants to influence their participation.

Demographics

Out of the 19 experts that were contacted, 12 indicated their willingness to participate in the study. Although specific demographic information was not collected, all participants were adults and above 18 years of age. Eleven of the participants were EM experts who worked in the EMAs of their respective countries during the Ebola crisis of 2014. All participants from Liberia and Sierra Leone practiced as experts in their countries during the crisis. The four participants from Ghana, however, did not practice in Liberia nor Sierra Leone, but were involved in Ebola preparedness and ready for a response should there have been any case of Ebola in Ghana. One of the participants was a subject matter expert and course director at KAIPTC, the institution that has been at the forefront of training EM experts in West Africa before and after the 2014 Ebola crisis. Consequently, diverse opinions research questions contributed significantly to the findings of the study. Table 1 indicates the demographic breakdown of the participants.

Table 1

Participant Demographics

Participants	**Pseudonym**	**Gender**	**Emergency Management Expertise**	**Country**
Participant 1	Akosa	Male	Assistant Director of the Disaster Management Department	Sierra Leone

Participant 2	Adwoa	Female	Research Officer Disaster Management Department	Sierra Leone
Participant 3	Kuku	Male	Deputy Director of Disaster Risk Management Department	Sierra Leone
Participant 4	Mpiani	Male	Disaster Management Logistics Officer	Sierra Leone
Participant 5	Kwarteng	Male	Assistant Director Serious Organised Crime Coordination Department	Sierra Leone
Participant 6	Yeboah	Male	Assistant Coordinator Emergency Response Logistics and Recovery	Liberia
Participant 7	Dwomoh	Male	Manager for Risk and Early Warning	Liberia
Participant 8	Takyiwa	Female	Coordinator for training	Liberia
Participant 9	Dada	Male	Course Director of Disaster Management	Ghana
Participant 10	Appiah	Male	Director Migration	Ghana
Participant 11	Nyantakyi	Male	Director Geological Nuclear and Radiological Disasters	Ghana

Participant 12	Birago	Female	Director Disease Epidemics/ Pests and Insect Infestations Disasters	Ghana

(Table continues)

Note.

** For reasons of confidentiality, pseudonyms are used instead of the actual names of respondents.*

** Listing of participants is not necessarily according to the chronology of when they were interviewed*

Data Collection

Data were collected from 12 emergency management experts within 2 months across three countries, using a semi-structured interview method. Each interview took approximately 50 minutes or less. At the beginning of each interview, the researcher briefly discussed the consent form and asked if participants were comfortable being part of the study, before seeking their final consent. The researcher also informed all participants that the interview was being audio recorded and reassured participants of the full confidentiality of the process. The researcher emphasized that participation was voluntary, and participants were free to cease to be part of the process at any point if they lost interest in the study and wish to stop participating. Data were mainly collected through face-to-face and phone interviews. In three of the face-to-face interviews, and two telephone interviews, the researcher had a Walden Doctoral student as a research assistant who helped with the data collection.

Table 2

Data Collection Method

Participants	Face-to-Face	Telephone	Email	Location
Akosa		X		KAIPTC
Adwoa		X		Researcher's Car
Mpiani		X		Researcher's Car
Kwarteng		X		KAIPTC
Takyiwa		X		KAIPTC
Yeboah		X		Researcher's Residence
Dwomoh		X		Researcher's Car
Birago	X			Participant's Residence
Dada	X			KAIPTC
Appiah	X			KAIPTC
Nyantakyi	X			KAIPTC
Kuku			X	

Data Analysis

In this generic qualitative inquiry, the researcher used the inductive thematic analysis approach. According to Percy et al. (2015), the inductive analysis is driven by information and it discourages the fitting of data into any pre-existing categories. Thomas (2003) posited that the fundamental purpose of the inductive analysis methodology is to enable a study's results to develop from the common, dominant, or

major themes enclosed in raw data, without the limitations imposed by structured approaches (p. 2). According to Percy et al., (2015), the inductive analysis method requires that the researcher sets aside all foreknowledge of the issue being investigated before the analysis begins. Data gathered from each respondent such as interviews and open-ended questionnaire among others are analyzed exclusively. After subjecting the data collected from each individual to thorough analysis, the repeating patterns and themes from all individual data are synthesized together into a combined synthesis with the view to understanding the implications of the themes in relation to the research question.

Percy et al. (2015), outlined the following 12 important steps to follow when using inductive analysis:

> 1. Review and familiarize yourself with the data collected from each participant (interviews, journals, field notes, records and documents). Read the documents and highlight intuitively any sentences, phrases, or paragraphs that appear to be meaningful. During this process the researcher immerses him/herself in each participant's data individually.
> 2. Review the highlighted data and use your research question to decide if the highlighted data are related to your question. Some information in the transcript may be interesting, but not relate to your question.
> 3. Eliminate all highlighted data that are not related to your question. However, start a separate file to store unrelated data. You may want to come back and reevaluate these data in the future.
> 4. Take each piece of data and code it. The code can be very simple, like a serial number or an address – simply a way to keep track of individual items of data.
> 5. Cluster the items of data that are related or connected in some way and start to develop patterns. For each distinct pattern you discern, describe it in a phrase or statement that sums it up. If feasible or useful, assign a second level code to the patterns too. Note that the words describing the patterns are no longer the words of the participants, but your own. In field-specific research (e.g., psychology), attempt to make these words meaningful to specialists in the field (e.g., psychologists).
> 6. As you start to see patterns, identify items of data that correspond to that specific pattern. Place them in the previously assembled clusters

> (see 5) that manifest that pattern. Direct quotes taken from these data (transcribed interviews, field notes, documents, etc.) will elucidate the pattern. (The name or descriptor of your pattern thus is a more abstract phrase, whereas the data themselves are direct words from participants.)
> 7. Take all the patterns and look for the emergence of overarching themes. Themes are "patterns of patterns." This process involves combining and clustering the related patterns into themes. As you see meaningful themes across patterns, assign a yet-more-abstract descriptor to the theme. Use standard psychological language and terms. This will be a third level of abstraction, supported by the patterns, in turn illustrated by the direct data.
> 8. After all the data have been analyzed, arrange the themes in a kind of matrix with their corresponding supportive patterns. (The patterns are used to elucidate the themes, just as the word data are used to support and illustrate the pattern descriptors). In the matrix, include the codes or descriptors for each of the data clusters. Thus, the supporting layers of words/text can easily be accessed when discussing an individual theme in your final report.
> 9. For each theme, write a detailed abstract analysis describing the scope and substance of each theme.
> 10. (Complete this process for each participants' data)
> 11. Then combine the analysis of data for all participants including patterns and themes that are consistent across the participants' data.
> 12. Finally, the themes are synthesized together to form composite synthesis of the data collected regarding the question under inquiry. (pp. 80 – 81)

The researcher used the thematic inductive analysis approach provided by Percy et al, (2015) to analyze all the data collected. As suggested in the thematic inductive analysis approach, the researcher engrossed himself in each individual data collected from participants. The researcher subsequently highlighted all relevant phrases, sentences, and paragraphs that were relevant to the research questions. Then the less relevant data were deleted and saved separately. The relevant data were then put on an excel sheet for critical scrutiny and coding. The researcher grouped all the data that were related and developed categories from the individual data. The researcher then subjected the categories to further analysis for emerging themes. For

each theme derived from each respondent, the researcher wrote a brief abstract of what the participant meant, with direct quotations from the interview.

The process was repeated for all 12 respondents. Subsequently, the researcher moved all the themes and written abstract of each respondent on a single spreadsheet for a more detailed analysis to synthesize what all the respondents said, to answer the research questions. Nine themes emerged from the transcribed data. These included; coordination, communication, the inclusion of traditional and religious leaders; the whole society approach; and control of the movement of people and cultural practices. Other themes included autonomy, planning; border control; and ECOWAS.

The researcher further used NVivo software to assist in the generation of frequently used words that emerged from the data collected from all respondents (see Figure 1).

Figure 1. Word cloud obtained from data analysis using NVivo.

Evidence of Trustworthiness

Burkholder et al. (2016), said that trustworthiness is the qualitative term usually used instead of validity for quantitative studies. According to Lincoln and Guba (1985), trustworthiness is the degree of confidence a researcher can have in the findings of a study. In this generic qualitative inquiry study, trustworthiness was established through credibility, transferability, dependability, and confirmability to ascertain the truth and accuracy of the research findings.

Credibility

Lincoln and Guba (1985), specified methods such as prolonged engagement, persistent observation, triangulation, peer debriefing, and thick description in establishing the credibility of the research. Burkholder et al. (2016), said that in a qualitative study, the researcher does not need to use all the strategies related to

credibility but instead choose the plan or strategy most suitable for the study. For this research, the researcher used triangulation to establish the credibility of the findings. Creswell (2014) suggested that data should be collected from numerous sources to include interviews, observations, and document analysis. For this study, the researcher interviewed different emergency management experts from across three different countries. Saturation was reached after interviewing three respondents each from Liberia, Sierra Leone, and Ghana. The researcher also relied on official open-source documents from emergency management agencies as well as media reports to triangulate the data collected from respondents. The researcher also cross-verified information from among respondents during the member checking process to ensure that various respondents held similar views on the data. These processes ensured that the research findings are reliable, compelling, and credible.

Transferability

Transferability refers to the researcher's demonstration of how the findings of the research can be applied in other contexts. The findings of this study would apply to other scenarios of the management of epidemics by non-medical emergency management agencies around the globe. According to DeVault (2017), purposive sampling can be used to address the issue of transferability since explicit data is exploited concerning the context in which the data collection occurs. The researcher used a purposive sampling method and targeted only emergency management experts who played key roles in their respective countries during the Ebola crisis of 2014 in West Africa. The professional views and opinions from these experts make the

findings of this study transferable to the management of epidemics by non-medical emergency management agencies elsewhere across the globe.

Dependability

Dependability is the extent to which the research findings can be replicated with consistency by other researchers based on the information from this study, given the same resources used for this research. To this end, the researcher ensured that participants were given the opportunity to review the analysis of their responses to ensure that their thoughts were accurately captured through transcript review. This is an indication that if another researcher contacts the same participants and asks the same questions, the researcher is likely to get the same or very similar responses from the respondents. Further, the researcher also ensured the dependability of the findings by abiding by all the data analysis tenets of generic qualitative inquiry. As a result, if another researcher has the same resources and uses the same approach, that researcher is likely to arrive at the same findings as that for this study.

Confirmability

Confirmability refers to the extent to which the results could be confirmed or corroborated by others. One method of establishing confirmability is ensuring an efficient audit of the entire research process to ensure that the research findings accurately conforms to the responses of the interviewees. While this may not be established and spelled out in this research, the researcher's committee chair and other committee members ensured efficient auditing of the process to ascertain the process used to arrive at the research findings.

It is noteworthy that confirmability also refers to the degree of neutrality of the researcher concerning the findings of the study. Bearing in mind his potential bias and preconceived thoughts, the researcher remained a passive participant during the interviews. The researcher only asked questions and allowed the respondents to do more of the talking while the researcher recorded. The researcher only asked questions to clarify areas that required clarity. Further, the researcher approached the data analysis with an open mind and cleared himself of all foreknowledge of the Ebola crisis, to ensure that there were absolutely no biases in the data analysis.

Results

In this section, the researcher presents the findings of the study after a thorough analysis of all the data collected. As indicated in earlier sections, data was collected from 12 emergency management experts from Liberia, Sierra Leone, and Ghana through face-to-face and telephone interviews. The interviews were guided by six questions for each of the two main research questions. The themes, which emerged from RQ1 included coordination, communication, and inclusion of traditional and religious leaders. Other themes were the whole society approach and control of the movement of people and cultural practices. Themes that emerged from RQ2 were autonomy, planning, border control, and ECOWAS. In this section, the researcher presents a discussion and a descriptive narrative of the themes under the two main research questions with direct quotations from the respondents.

RQ1

RQ1: What roles did nonmedical EMAs of Liberia and Sierra Leone play when responding to the 2014 Ebola crisis?

Five main themes were identified. These were coordination, communication, and inclusion of traditional and religious leaders, whole society approach, and control of the movement of people and cultural practices.

Theme 1: Coordination

Coordination remained a dominant theme that runs through the data from many of the respondents across the three countries where the data was collected. Most of the respondents alluded to the fact that the central and key roles that were played by the emergency management agencies were coordination. Agreeably, coordination remains the central role of emergency management agencies during a crisis. Although in Liberia and Sierra Leone, the emergency management agencies functioned as departments under the Ministry of Internal Affairs and the ONS respectively, these departments somehow played coordination roles during the response to the Ebola epidemic of 2014.

Akosa gave a brief legal backing to the constitutionally mandated role of the ONS in coordinating crisis in Liberia. According to him, “the ONS is the statutory body for the coordination and management of disasters whether manmade or natural as provided for by the National Security and Central Intelligence Act 2002.” Coordination became even more crucial in Sierra Leone when it was realized that the Ministry of Health could no longer deal with the crisis. The ONS later took a leadership role in the coordination efforts with its structures in the provinces. According to Akosa, "ONS coordinators were in all the 14 administrative districts of the country. ONS had coordinators deployed in all districts. These coordinators were very instrumental in the coordination and management of the Ebola outbreak. Some

of them were visible and provided strong leadership, while others did not. Pujehun is a case of where the coordinator there provided astute leadership."

Adwoa emphasized the crucial coordination role, which was played by the ONS. She indicated that the ONS brought together all key stakeholders and coordinated their activities. She stated that the ONS had coordination meetings with key government stakeholder agencies and ministries to respond to the crisis appropriately. She noted, “We held out meeting, the National Security Council (NSC), National Communication Coordination Group (NSCCG), and it involved all the setup. It involved the Republic of Sierra Leone Army (RSLAP), the Sierra Leone Police (SLP) Sierra Leone Fire Force and Correctional Center, Immigration, and all the rest of them.” Adwoa also indicated that the ONS coordinated the response activities of the international governmental and non-governmental agencies. She said, "we moved with partners (both national and international partners), with the WHO, MSF, UNICEF, among others. UNICEF was providing water and sanitation and dealing with children. They have to save the children, we have the street child, a lot of international organizations, and we have the UNDP, WFP, a host of them. We called them all to coordination meetings."

Mpiani buttressed the fact that the ONS played a key leadership role in the coordination of the response to the crisis. He indicated, "At the district and provincial levels, the ONS, together with other local and international partners, provided leadership of the district Ebola response centers and the command centers where we established the coordination of the Ebola response. So basically, this is the roles we played in the Ebola response."

Kwarteng rather emphasized the important strategic coordination role the ONS played. He averred that the ONS provided strategic coordination advice to the Government to declare a state of emergency. He noted that “So basically what we did as a security agency, as a non-medical emergency agency, was to provide coordination and strategic advice to the government of Sierra Leone to first declare a national health emergency."

In Liberia, all the respondents emphasized the important coordination roles that the emergency management agency played. Takyiwa highlighted that the NDMA has the sole responsibility of coordinating the response of all emergencies in the country. However, during the crisis, that role was limited. She stated, "We have the sole responsibility of being the coordinators of any national emergency, but at the time of the crisis, the role played was more limited. We served as the co-chair of the national task force that was set up by the President."

Theme 2: Communication

According to some of the participants, during the crisis, the uninformed public churned out several misleading information. It was after the emergency management agencies of the respective countries intervened and changed the message that the rate of infections began to go down. Adwoa indicated that messages were repackaged and directed to the people in a bid to educate the public on preventive measures. She noted, “We came out with short messages like wash your hand, wash your hand every day and don't shake hands with people." According to Adwoa, most of the people in Sierra Leone were of the view that the main symptom of Ebola was blood oozing from the patient. However, in her view, people needed to be tested as soon as they

saw any sign of bad health, and sick people did not have to wait until they saw blood before they are tested. To buttress her point, Adwoa stated: "We had to tell the people that it was not only blood that you will see that you can say is Ebola, but you also need to be tested."

Further, the general belief among the populace was that when people are infected, and they go to the holding center, they will die. This misinformation kept many infected people who could have received proper care away from the holding centers, a situation that led to the death of many. Adwoa indicated, "Whenever somebody is affected, people will say when you go to the holding center, you will die. Therefore, the ONS sent people there. People were saying when you get the virus; you will be vomiting blood. Therefore, when people are not vomiting blood, they think they are okay. So, it was the ONS that change the narrative for people to be encouraged to seek care at the holding centers and prevent further spread of the virus".

Kwarteng shared a similar opinion that the ONS had to correct some wrong information that was in the public domain. He indicated, "There was this kind of distortion of information that was flowing into the public domain that there was no Ebola, like the moment you contact Ebola you are dead. A lot of people the moment they feel sick instead of calling to seek services, they were wasting away, and so we ensured that communication became a key concept. Messages were sent through videos, using radio, nontraditional methods, traditional methods, and everyone was on board to get the population to understand why they needed to seek help when they fell sick."

Mpiani highlighted that one of the key roles the ONS played was providing information on safe practices. He averred that "the role my agency played was to provide information on safe practices such as public gathering, washing of the dead, burying of the dead, the activities of traditional healers, the selling and eating of bushmeat, strike action for health workers, communities that were resisting burial of Ebola victims among others".

In Liberia, the situation was similar. At the beginning of the crisis, the public was misinformed into believing that as soon as a person gets the Ebola virus, he or she will die. This misinformation rather kept people living in denial even when they had contracted the virus. According to Takyiwa, "the messages that were being sent out at the beginning of the Ebola response were not messages that were clear enough." According to her, "such messages as if you have a virus, you will die. If you are exposed to the virus, you will die. If you come in contact with someone who has the virus, you will die the messages that scared people away" At the later stages, the NDRC intervened and changed the wrong message. Takyiwa said, "at the latter part of it, the messages were revised. Revised in a sense, when you come in contact with the virus or come in contact with somebody who has the virus, and you report yourself to the health worker or a health facility or a nearby center, you have a possibility, or there is a possibility you will not die."

Yeboah emphasized on how the NDRC used strategic communication to reduce the rate of infections. He indicated that initially, the message that was churned out was that people would die if they touched anyone with the Ebola virus. Yeboah stated, "The first messaging was if someone has the Ebola, if anyone touches the

person, that person gets infected and died" However, later, the NDRC intervened and changed the message. Yeboah further indicated that the message was later changed. He said, "later the messaging had to be redesigned to say look if you just wear the plastic hand or the PPE and touch stuff or infected people, that person will survive it does not mean you will die. So you see that was the role of the NDRC under the ministry of internal affairs then."

Dwomoh buttressed the fact that the message out in public was counterproductive to the efforts being made to solve the Ebola crisis in Liberia. The wrong message led to people escaping from the treatment centers and unknowingly infecting people. Dwomoh stated that the "NDRC had to go and re-coin the message because the message "when you attract the virus you die" was also resulting in people escaping from treatment centers, and then the transmission was increasing. So, when we changed the message, the new message now became you contract the virus and seek early treatment, there is a possibility for survival."

Respondents from Ghana rather emphasized the importance of communication in dealing with epidemics. Birago indicated that the NADMO engaged other stakeholders such as the Ghana Education Service (GES) and the Ministry of Health to educate and inform the public on the Ebola virus to prevent any spread of the virus had entered Ghana. Birago stated, “When it comes to awareness, building and creating awareness and sensitizing the public, we had GES taking care of the schools. Now we had Ministry of Communication and information, coming in to play the role of public education, you know creating that public awareness, all right, making sure that the airwaves were saturated and actively engaged in offering education as far as

Ebola prevention and preparedness was concerned. Also, as far as anything that had to do with Ebola education was concerned, NADMO engaged the Ministry of Education, Ministry of Communication, to play that integral role."

Appiah indicated that in Ghana, NADMO was used in strategic communication to sensitize the public about the Ebola Virus. He stated, "we were given more of a role of community sensitization, information sharing, and so on because aside from everything, NADMO is much diversified. We have staff all the way to the communities. Therefore, they thought that it was easy for us to reach the various communities to disseminate information. So we were more into communication strategies to reach out to the public."

Theme 3: Inclusion of Traditional and Religious Leaders

The respective disaster management agencies in Liberia and Sierra Leone employed a strategy to include leaders in the societies to respond positively to the Ebola crisis. This strategy contributed significantly to reducing the rate of infections in both countries. Some of the respondents indicated that the inclusion of traditional leaders was done later. However, it significantly led to bringing the crisis under control

According to Kwarteng, “At the initial stage, we didn’t have the traditional authorities fully involved. We should have done that at the very beginning, especially when the crisis emanated from the remotest part of the country, we should have had the buy-in and active involvement of the local chiefs at that level. However, we later included them in the response, and when we did, the people felt a part of the response

effort, especially when the communities saw their traditional leaders getting involved."

In Dwomoh's opinion, the traditional authorities should have been included from the very onset of the crisis to avoid more deaths. He stated that "what we did was to recruit from the National Traditional Council. We brought chiefs and elders in, provided them pieces of training and adequate information on the treatment of the virus and mode of transmission, and why there was, need to suspend traditional cultural practices. Dwomoh stressed that though this strategy comes in a bit late, it helped reduce the rate of infections and deaths significantly. Dwomoh noted, "What I think we should have done differently was to get the traditional and religious people involved in the crisis response from the onset. It was later we got them involved by then we had lost thousands of people.

Birago shared the same opinion that the inclusion of traditional authorities in response to epidemics is extremely important in awareness creation. She noted, "Actively engaging community-based authority, traditional authorities, and leadership within our communities to create awareness and mobilize community support for Ebola preparedness was crucial. Something that we need to continue to build on because any crisis starts within the community, so we need to build capacity within our communities to be able to respond to any crisis. She recollected that this approach helped significantly in the response. Birago further indicated, "If my mind serves me right, I think one thing we tried doing was engaging our traditional authorities to support Ebola awareness creation. As part of this sensitization and awareness creation, we actively involved the traditional authorities and community leaders

within our country. I think that was one thing which was very instrumental. Learning lessons from Sierra Leone and Liberia, we knew that, but for the timely intervention of these people, these particularly identified people within our communities, it would have been worse than what we ever saw."

Takyiwa mentioned that traditional authorities were included in the response as a strategy to get the community on board to help reduce the rate of infections and deaths. She indicated, we also had involvement of the chiefs, the town superintendents, and District Commissioners all involved in the Ebola response process.

Yeboah saw the involvement of the traditional authorities as a plausible strategy in responding to the crisis, due to the power the traditional authorities and town chiefs wield in the communities. Yeboah saw the best way to deal with the rate of infections was to get the traditional leaders involved to communicate with their people to stop such practices that were detrimental to the health and lives of the people during the Ebola crisis. Yeboah noted, “One of the strategies we used was to inform the traditional chiefs in responding to Ebola because in Liberia the traditional chiefs hold a very important role. In Liberia, when someone dies before burying of bodies, then they go to bathe the body, then go and have rituals, these practices needed to be stopped during the Ebola crisis." The traditional leaders helped in stopping these practices to prevent further spread of the virus.

Theme 4: Whole Society Approach

Some of the respondents indicated that one of the plausible strategies that the emergency management agencies employed in combatting the Ebola crisis was the

wholes society approach. It is essential to underscore the fact that during a crisis, getting the whole society involved in dealing with the crisis help significantly in the response. Takyiwa noted, "I think now disaster management we have something called the Whole of Society Approach, I think that that was not done in the beginning. However, later in the response, we engaged the business community, school administrators, the local leaders, all to form a part of the Ebola response." According to Yeboah, it was necessary to engage all segments of the society at the national and regional levels by engaging all stakeholders, including teachers, opinion leaders, other religious bodies, and the churches. This was necessary because the churches and religious bodies were involved in praying for the dead, and they needed to modify their procedures to prevent further spread of the virus."

From Birago's perspective, "In Ghana, an all-inclusive approach in dealing with an epidemic such as the Ebola crisis is absolutely necessary to be able to control possible infections and subsequent spread. Birago mentioned that "so in terms of strategy, it is a holistic kind of approach making sure that every sector or every level of our society was actively involved and engaged in making sure that we were able to prevent the Ebola crisis in Ghana. Therefore, it was a holistic approach from national to regional as well as within our settings into community levels to prevent infections. Birago further indicated that the multi-sectoral approach had been a key strategy in Ghana in dealing with various forms of disasters. She mentioned that "That is our strategy — multi-sectoral approach in responding to emergencies in this country. We always have a lead technical agency, but other sectors come to support. We need to

strengthen that system, before, during, and after the crisis, and then we learn lessons, and we build upon it. And so that cycle goes on."

Theme 5: Control of Movement of People and Cultural Practices

In responding to epidemics such as the Ebola crisis of 2014, it becomes imperative to control the movement of people to prevent and to reduce the spread of the virus. In both Liberia and Sierra Leone, emergency management agencies, through the sector ministries under which they operated at the time of the crisis, ensuring that the movement of individuals who were suspected to be infected with the virus was restricted and confined. According to Akosa, "method that was adopted by the response team to contain further spread of the virus was to quarantine people suspected to have come into contact with an infected person. Persons suspected of coming into contact with an infected person were quarantined in holding centers."

Additionally, movement of the wider population was restricted to ensure that the infections of the virus was contained and restricted. The security agencies were brought in by the emergency management agencies through the respective sector ministries to ensure this strategy. According to Akosa, people's movements were restricted, so there were checkpoints created in several places in the country, and we also have security personnel again managing the streets" Adwoa indicated that there was total Lockdown of some communities to prevent the spread, According to her "we invoked something we call Lockdown. During Lockdown, nobody moves out, but the ONS will make passes for people, stakeholders who might work during the Lockdown. For instance, during the lockdown, the Ministry of Health will be allowed

to play its medical role by bringing their nurses that will go from house to house to check people."

Further, public gatherings were prohibited in Sierra Leone during the crisis. According to Akosa, “The ONS ensured that consistently kept our eyes on public gatherings and ensured where ever there were public gatherings. The ONS tried to bring to book whosoever was organizing public gatherings. The ONS had staff and district coordinators in all the districts. All the districts had command centers, and our personnel was part of that arrangement.”

To halt the spread of the Ebola virus, the emergency management agencies did not only have to restrict the movement of people but also significantly alter the cultural and religious practices of the citizens. Burial of the dead and its associated cultural practices were altered. According to Akosa, “During the Ebola outbreak, there was a moratorium that people should not carry out burials, but they must alert the burial team. So such breaches of burials were reported to the Ebola response center for quick action. The ONS was responsible for dealing with such breaches.”

In Liberia, it was customary for the dead to be bathed before burial, a practice that increased the spread of the virus. Both Muslims and Christians practiced this custom. According to Yeboah, due to the harmful nature of this custom, the NDRC under the Ministry of Internal Affairs went out and called all the churches and religious bodies to stop burying their dead through traditional means." A system of cremation, which was viewed as a safer practice, was introduced. According to Dwomoh, "A system of cremation was introduced, so instead of burial, we were cremating bodies. This strategy did not go down well with a lot of people in the

country, and there was a plan to demonstrate during the outbreak. Therefore, when we got that information, we decided to go back from cremation to dignified burial practice, so we would allow families to come and to witness the burial ceremonies of their loved ones but under the rightful eye of the greater community involved in burials."

RQ2

RQ2: What roles should the non-medical emergency management agencies of Liberia and Sierra Leone and similar agencies in West Africa have played in responding to the 2014 Ebola crisis?

Four main themes emerged in answering RQ2. These were autonomy, planning, border control, and ECOWAS.

Theme 6: Autonomy

Prior to and during the Ebola crisis of 2014 in Liberia and Sierra Leone, it was evident that there were no independent emergency management agencies in Liberia and Sierra Leone. All the participants from Liberia and Sierra Leone indicated that the mandated emergency management agencies were in existence but under a government ministry. In Liberia, the emergency management agency existed under the name NDRC, which was under the Ministry of Interior. Similarly, in Sierra Leone, the emergency management agency existed and still exists as a department under the ONS. Most of the participants indicated that the lack of autonomy significantly affected the competence of the emergency management agencies in carrying out their mandated tasks.

Akosa elucidated that disaster management agency, as an entity, exists only as a department within the ONS under the National Security and Central Intelligent Act of 2002. In spite of that issue, when the crisis began in Sierra Leone, the legally mandated institution, the ONS, was not used; instead, the government created another body to manage the crisis." He stated, "During the Ebola outbreak in Sierra Leone, there was a constitutional boycott as the government then did not use the statutory body but rather created an ad-hoc body referred to as the National Ebola Response Centre (NERC)." In Akosa's opinion, "if there were an autonomous emergency management agency with a clearly defined mandate, and left to operate independently at the time of the crisis, the agency would have done a more professional job in the initial response."

Takyiwa, for instance, indicated that "if there was this autonomy that there was an agency for crisis and disaster management in Sierra Leone, the health people would not have just gone ahead to think that they were in charge. The agency would have just come in swiftly at the initial stages and coordinate everything to save lives. However, because they did not know what to do at that time, they could not put the situation under control, people were just dying. If we had an autonomous agency, the situation would have been under control."

Mpiani shared a similar view and indicated, "Well, during the whole Ebola process, the ONS has a constitutional mandate, under the National Security and Central Intelligence Act, but during the Ebola crisis, it was different. It was torn apart. They rather set another body, which was the National Ebola Center (NAC), which was not constitutional, to play the role and attain leadership. If we had an autonomous

emergency management body, our roles would have been better played when the crisis happened”

Kwarteng was also of the opinion that if there was an autonomous emergency management agency in Sierra Leone, the Ebola crisis would have been better dealt with. He opined that "we do not have an autonomous agency. What we have is a Department for Disaster Management within the ONS. It is just a department. If we had an autonomous agency, our response to the crisis would have been more effective at the initial stages because we would have had the funds, we would have had the human resource capacity. Because if people are now into that department, everyone within the department will be trained adequately in the area of responding and managing disaster issues. But as it is, just a unit of four people, five people within the department is a difficult thing."

Kuku emphasized, “The National Security and Central Intelligence Act 2002, mandates the ONS as the National Coordinator of all forms of emergency, either man-made or natural.” According to him, “during the crisis, after the President of the country has declared a state of emergency, the ONS coordinates all forms of emergency, using strategic leadership through the Strategic Situation Group (SSG) Command. The ONS also the National Situation Room, where all information pertaining to the emergency is filtered on a daily basis. The ONS also analyzes such information in consultation with other Ministries and Departments. The ONS thereafter briefs the President on the incident and make recommendations to lessen the effect of the threat.”

For Liberia, the respondents expressed the same sentiments that the current NDMA was not in existence at the time of the crisis. Rather, there was NDRC under the Ministry of Internal Affairs. All the respondents alluded to the fact that if an autonomous NDMA were in existence at the time of the crisis, the response would have been more effective and properly coordinated. Takyiwa, for instance, indicated that “During the Ebola crisis it was not an agency. It was not an autonomous body. It was referred to as the National Disaster Relief Commission, NDRC, and that relief commission had an office under the Ministry of Interior. Therefore, at that time, it was not an agency. We played a role, but it was not the exact role, as the agency, as an autonomous body, should play, but we played a role during the Ebola outbreak. So whatever role we played was being played through the Minister of Internal Affairs who is now the current chair of the board of Directors of the NDMA."

Yeboah also buttressed the fact that the NDMA was not in existence at the time of the crisis. According to him, "in 2014, NDMA had not been legally established as an agency. What we had before was the NDRC under the Ministry of Internal Affairs. It was a department under the Ministry of Internal affairs, and it was actually the NDRC who was then in place at the Ebola crisis under the Ministry of Internal Affairs." Yeboah was further of the view that having an autonomous disaster management agency in Liberia prior to the crisis would have been crucial in the initial national response. He indicated that "because we were not an autonomous agency, other stakeholders usually dealt with the Ministry of Internal Affairs rather than dealing directly with us. This state of affairs significantly hampered our response capabilities."

Dwomoh highlighted that the National Disaster Management Act was only passed in 2016. He gave a historical perspective that prior to that, there had been an Executive Order in 1976 by the then-president to establish the NDRC. According to Dwomoh, “the National Disaster Management Act was not passed at the time of the Ebola crisis; the Act was passed in 2016, which officially established the NDMA. But then there was Executive Order by then President of Liberia in 1976 establishing the NDRC to deal with dire situations at then. This commission existed under the Department of Operation at the Ministry of Internal Affairs.” He also indicated, “when the Ebola crisis broke out in 2014 the President Ellen Johnson Sirleaf re-commission the NDRC to lead on the Ebola crisis.” In his view, if there had been an autonomous emergency management agency with the sole role of coordinating all disaster response in Liberia before the crisis, the experts in that agency could have acted more independently to appropriately respond to the crisis before it could get out of hand. To buttress this point, Dwomoh indicated, "according to the law, the disaster agency is responsible for coordinating all disaster-related activities in the country."

Theme 7: Planning

Some of the respondents indicated that prior to the crisis, there were no emergency response plans in place is not only Liberia and Sierra Leone, but also in other countries in West Africa. Most of the respondents shared the view that if emergency management agencies had very comprehensive plans in place before the Ebola epidemic, the crisis could have been better managed to save lives. In Sierra Leone, there were no plans in place to deal with the epidemic because no one thought about Ebola. This state of affairs led to confusion at the beginning of the crisis.

Akosa noted, "Nobody knew we were going to have Ebola, so we did not plan on how we were going to respond to it. In fact, from the beginning, there was a lot of confusion as to what to do, what to manage, and what not to manage. At the time the Ebola broke out, there was no comprehensive plans and policies to respond to it." Kwarteng indicated that due to a lack of planning when the crisis began, it was not taken as seriously as it should have. Kwarteng noted, "The structures and plans were not in place to respond to the crisis of that nature mainly due to the fact that disease was affecting the country for the very first time. We had heard of Ebola in remote places as the case may be, and there were a whole lot of challenges around even the reality of the disease. Therefore, at some level, it was not treated with the seriousness it deserved."

In Liberia, however, there was a National Influenza Plan in place prior to the crisis, but it was only in a draft form. This plan was developed after the crisis began. Takyiwa intimated that "we had a draft National Pandemic Influenza Preparedness and Response Plan. So, the first thing that we did was to develop an Ebola Preparedness and Response Plan out of the draft document that we had." Yeboah was of the view that "Prior to the crisis, what my agency should have done was to plan. We needed to plan for any kind of disaster management response. We should have planned. We should have done a whole pandemic plan and who responds to what in case of emergency, but we failed to do so" Dwomoh buttressed the fact that after the crisis, the NDMA should have immediately developed a pandemic plan to deal with future occurrences. He stressed, "There was no response plan in place prior to the

crisis. So after the crisis, we should have gone to prepare an epidemic response plan, and that should have been an immediate step after the outbreak by the NDMA."

Joint planning among West African Countries for epidemics is very crucial in responding to such epidemics that transcend the boundaries of countries. Birago stressed the importance of such planning by emergency management agencies in West Africa due to the fact that no such joint plans exist even after the Ebola crisis. Birago mentioned that "So until we get these things right, where we are meeting regularly, we are networking and we are training together, trust me, we will not be able to respond appropriately to epidemics like the Ebola crisis. For now, my strong antidote to a crisis is that we should be able to work before, we need to have that working relationship with all the technical agencies, in the respective countries, do our plans together, do training together, have memorandum of understanding, begin to look at the resources that we need and advocate strongly for it. These are preparedness. Once we get this right, the response will be easy."

Appiah was emphatic that there were no plans in place in Liberia and Sierra Leone prior to the crisis. In his view, it would have been appropriate if other emergency management agencies had rallied to support these countries to plan and respond to the crisis. Appiah noted that "Liberia and Sierra Leon did not have any disaster management plans. When the Ebola started and was simmering, we could just have gone out there to help them to develop a plan, a very simple plan to manage the situation, but we stayed away."

Theme 8: Border Control

Managing the border with other countries is very crucial in controlling epidemics such as Ebola Virus Disease, which transcend international boundaries. It is crucial that once there is an outbreak in a neighboring country, other countries coordinate and collaborate to control the movement of people across borders to prevent further spread of the disease. It is imperative that when epidemics break out, the authorities coordinate and quarantine the epicenter to avoid further spread. In West Africa, when the disease broke out in Guinea, the authorities in Liberia and Sierra Leone were slow in coordinating and controlling the movement of people among these countries. This situation led to the spread of the disease from Guinea to Sierra Leone and Liberia. According to Akosa, “The borders between Sierra Leone and Guinea, Sierra Leone and Liberia are very porous, and for that reason, efforts should have been made to coordinate with the other countries to control the movement of people to prevent a spread of the disease at the very beginning of the crisis. Akosa further indicated that the Kailahun District, where the disease was first recorded in Sierra Leone, should have been quarantined as soon as the first EVD case was recorded. He noted "Kailahun District borders with Guinea and Liberia. The very first positive case of the Ebola virus in Sierra Leone was recorded in that district. Lots of lives and resources would have been saved had the disease been contained in that district by quarantining the few people who had been exposed to the positive case. The district wasn't quarantined that led to the spread of the virus to other districts."

From Adowa’s perspective, in March, a passenger came in; you know, we have this border between Sierra Leone and Guinea, where people do the exchange of

goods they come to buy. So, we had this woman who came to the midwife having the virus, and after treating her, the virus stated in Sierra Leone. I think as soon as there was an outbreak in Guinea, we should have moved quickly to control our border with Guinea and Liberia to prevent a possible spread to Sierra Leone" Mpiani shared a similar opinion and indicated "Prior to the crisis, we should have controlled our border movement. Our border is so porous. According to the information we got, it was a woman who visited her uncle, later went to a funeral, got the disease, and later passed it on to everybody. So prior to that, we should have had in place washing of hands and checking people that come in and go out of the country."

Kwarteng emphasized on the fact that the emergency management agencies and authorities did not act fast enough to prevent the spread of the disease from neighboring countries. Kwarteng mentioned, “I think also the Ebola did not just come to Sierra Leone all of a sudden, it came from neighboring countries, Liberia and Guinea. We did not engage our counterpart. We should have engaged them from the onset and control our borders to prevent a spread into Sierra Leone. We waited left our borders open, porous, considering the nature of the socio-economic relationship between Sierra Leoneans and Guineans and even Liberia; we could have been alerted to know that once this thing happening in Liberia, there is 90 to 99% chance that it will happen in Sierra Leone."

In Liberia, Yeboah was of the opinion that "once there was an outbreak in the neighboring countries, the National Repatriation Commission should have worked with the NDRC and Ministry of Health to prevent unnecessary movement of people to

prevent a spread of the virus. However, that important role was not taken seriously and was rather left for foreigners.

Theme 9: ECOWAS

Some of the respondents indicated that disaster management Agencies from sister West African countries did not directly move into Liberia and Sierra Leone during the crisis. The situation was mainly due to the very high infections and fatality rate of the Ebola virus. Adwoa indicated that no emergency management agency from West African Country directly moves into Sierra Leone to support during the crisis. However, after the epidemic, some emergency management experts moved in to offer their assistance. She stated, "They didn't come at that time, but after the whole crisis, they were coming from Ghana, Nigeria, and all that." Mpiani indicated that sister West African countries supported the response but from afar. He indicated, "Well, they were supporting us. Because it was possible for them to be infected, so they supported us with materials and other equipment." He clarified that "We have the ECOWAS management team that is responsible for epidemics and disasters. We had a consultation with them, and they supported us. They helped us financially and with other materials."

Takyiwa, however, indicated emphatically that, to the best of her knowledge, she "did not see another disaster management agency from other West African countries coming to Liberia to support the ministry, during the crisis." Yeboah also indicated ardently that no emergency management agencies from any other country came to Liberia to support during the crisis. He stated emphatically, "as far as I remember, no emergency management agencies came into Liberia to support during

the crisis, probably due to the fear of the possibility of being infected by the virus." From Dwomoh's perspective, no emergency management agency from West Africa moved to Liberia to support it. However, at the initial stages, Liberia sent emergency management experts to Sierra Leone to support the response in that country. He noted, "Actually, no agency from West Africa came into Liberia. There was a point in time we had to dispatch professionals to Sierra Leone to support their response." Nyantakyi was also emphatic that "Ghana did not send emergency management experts to any of the affected countries. I also think no country in West Africa sent emergency management experts to affected countries."

Birago also buttressed the fact that no emergency management agencies were dispatched to Liberia and Sierra Leone to support in response to the crisis. She emphasized, "ECOWAS response was a far cry from which should be expected because it's like nobody paid attention to the countries that were facing the Ebola crisis. It was all because of the fear of the unknown. Not so much was known about EBOLA, and everybody was afraid as it was killing, so nobody came out to support the affected countries."

According to Dada, ECOWAS was caught unawares by the crisis in 2014. Several of the countries in ECOWAS During the outbreak in 2014 were unprepared for such an epidemic. He indicated, "The whole West Africa sub-region was caught unawares. The infrastructure and education to create awareness were nonexistence. The capacity of stakeholders in emergency response was low; hence, they didn't have the expertise to respond effectively until the international community came in to assist."

Significantly, some of the respondents indicated that although emergency management agencies from sister West African countries did not directly move in to support, the respective countries provided some other forms of support during the crisis. Kwarteng, for instance, indicated that "ECOWAS supported a lot. Of course, they helped in coordinating international support for expertise in terms of nurses from countries abroad, from countries within Africa to lend their expertise to Sierra Leone. Kwarteng further indicated that the Ghana NADMO provided training support through the KAIPTC. Kwarteng recalled that “prior to the Ebola crisis, NADMO, through the KAIPTC, has been providing a lot of support, training support to Sierra Leone and especially officials from the and other assigned security agencies.” Dwomoh indicated that ECOWAS did not directly send emergency management experts; however, the regional body supported other countries with an early warning during the crisis.

Summary

This chapter covered the essentials of how the study was conducted. The researcher's discussion setting for the research, the demographics, data collection, and data analysis. The researcher further discussed evidence of and the results of the analyzed data. Five themes each emerged from both research questions. The themes, which emerged from RQ1 included coordination, communication, and inclusion of traditional and religious leaders. Other themes were the whole society approach and control of the movement of people and cultural practices. Themes that emerged from RQ2 were autonomy, leadership in coordination, planning border control, and ECOWAS.

RQ1 sought to find answers to the roles that were played by the non-medical emergency management agencies of Liberia and Sierra Leone in responding to the 2014 Ebola crisis. The researcher discussed five dominant themes, including coordination, communication, the inclusion of traditional and religious leaders, the whole society approach, and control of the movement of people and cultural practices, to answer RQ1. The inquiry revealed that during the crisis, the roles, which were played by the emergency management agencies in the respective countries, included coordination and communication. The individual agencies also used strategies such as the inclusion of traditional and religious leaders, the whole society approach, and control of cultural practices and movement of people to effectively respond to the crisis

RQ2 sought to address the roles that should have been played by the non-medical emergency management agencies of Liberia and Sierra Leone and similar agencies in West Africa in responding to the 2014 Ebola crisis. The researcher identified four themes in answering this question. These themes included were autonomy, planning, border control, and ECOWAS. For RQ2, the study discovered that the emergency management agencies in Liberia and Sierra Leone lacked autonomy and operated under government ministries under the names NDRC, and Department of Disaster Management in the ONS, respectively. It was also evident that before the Ebola crisis, there were no plausible Ebola response plans in place not only in Liberia and Sierra Leone but also at the sub-regional level of ECOWAS. Additionally, the research established that emergency management agencies from

ECOWAS member states did not move to Liberia and Sierra Leone to support their counterparts in the response during the crisis.

In Chapter 5, the researcher interprets the findings from the respective themes under the two main research questions based on the professional experience of the respondents. The researcher subsequently discussed the limitations of the study after he makes recommendations for future studies. Afterward, the researcher discusses the implications for social change as well as implications of the findings and recommendations for policy-making and professional practice. Finally, the researcher summarizes the entire research in the conclusion of the study.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

The Ebola crisis of 2014 was arguably the worst infectious epidemic in West African history. Due to the nature of the epidemic, the initial response was more of a medical response than it should have been. Although EMAs in afflicted countries played key roles during the response, not much is known about the exact roles they played and what roles they should have played from the perspective of EM experts.

The researcher sought to explain roles that were played or should have been played by mandated nonmedical EMAs in Liberia and Sierra Leone during the Ebola crisis of 2014. The researcher also sought to find other roles that were played by similar nonmedical EMAs from ECOWAS member states who assisted Liberia and Sierra Leone during that crisis. The researcher used the generic qualitative inquiry as the study's methodology, with a focus on the pragmatic descriptive method. Data were collected through interviews from EM experts from Liberia and Sierra Leone who were part of the Ebola response in their respective countries during the 2014 crisis. Data were also collected from EM and subject matter experts from Ghana.

The study revealed that at the beginning of the crisis, the Ministries of Health of the respective countries perceived the epidemic as a mere health crisis. The results further revealed that the main roles played by the EMAs included coordination and communication. The involvement of traditional and religious leaders, adopting a whole society approach, and controlling the movement and cultural practices of the population were identified as among the strategies used by EMAs in responding to the crisis.

The results of the study revealed that prior to and during the 2014 Ebola crisis, EMAs in Liberia and Sierra Leone had no autonomy, but rather operated under other government agencies. It was evident that in Liberia, the EMA operated under the Ministry of Internal Affairs with the name NDRC. In Sierra Leone, the disaster management agency operated as a department under the ONS. Furthermore, the study revealed that planning and border control were key strategies that should have been used by EMAs when responding to the 2014 Ebola crisis. Additionally, EMAs from ECOWAS member states did not move to Liberia and Sierra Leone to help those countries during the crisis, possibly due to the fear of being infected by the virus . However, EMAs such as NADMO from Ghana, through the KAIPTC, helped to build the capacity of EMAs in West Africa through training after the crisis.

Interpretation of the Findings

The researcher used the generic qualitative inquiry to investigate the roles that were played and should have been played by nonmedical EMAs in Liberia and Sierra Leone, as well as similar agencies from ECOWAS member states. Respondents not only gave accounts of the roles their agencies played but also professional opinions on what roles they thought the EMAs should have played during the Ebola crisis. Themes which emerged from RQ1 included coordination, communication, and inclusion of traditional and religious leaders. Other themes were the whole society approach and control of the movement of people and cultural practices. For RQ2, themes that emerged were autonomy, planning, border control, and ECOWAS.

The functionalist theory was the framework upon which this research was based. The theory enabled the researcher to look critically at the respective roles of

stakeholders in response to the 2014 Ebola crisis, with a focus on nonmedical emergency management agencies. In light of this, the researcher identified the roles that emergency management agencies in Liberia and Sierra Leone played or should have played in the 2014 Ebola crisis.

RQ1

RQ1: What roles did nonmedical EMAs of Liberia and Sierra Leone play when responding to the 2014 Ebola crisis?

Theme 1: Coordination

Among the key responsibilities of EMAs during disasters is coordination. The EMAs in Liberia and Sierra Leone played important coordination roles, but such roles were delayed due to the initial perception of the epidemic as a health crisis. Key among the coordination roles played by EMAs included offering strategic coordination advice to respective governments and bringing to the table important government stakeholders such as ministries, departments and agencies to work together to respond to the crisis.

Between July and September 2014, the Government of Sierra Leone established an Emergency Operations Center (EOC) which was primarily used for the coordination of activities relating to the Ebola response. The EOC was mainly managed under the Ministry of Health and Sanitation and was overseen by the Minister for Health or the Chief Medical Officer. However, the ONS, an agency that is mandated to coordinate emergency management in the country ,could have better managed this oversight and coordination responsibility due to their links with all important stakeholders in crisis coordination. According to Gbla (2018), because of

the failure of the EOC, the government established the NERC, which included several other stakeholders including security agencies.

In Liberia, in spite of the existence of the NDRC, the president set up a task force to coordinate the response to the crisis. The president chaired the coordination task force and made the Head of Disaster Relief Commission a cochair. Due to the personal involvement and show of interest of the President, coupled with the fact that the cochair was the appropriate office responsible for coordination of disasters, the strategy worked and contributed to the effective response to the epidemic.

Initial coordination is crucial in response to every crisis, including what may be perceived from the beginning as a health crisis. It is important for mandated EMAs if properly set up and trained to be given a free hand to coordinate with all key stakeholders to be able to respond appropriately to epidemics such as the Ebola crisis before they escalate to the level where infections get out of control.

The role of EMAs in coordinating epidemics such as the Ebola crisis highlights the importance of the need for institutions to play their mandated roles and allowing other agencies to play their key functions to maintain a state of balance and social equilibrium for the whole. The relegation of the ONS in Sierra Leone and NDRC of Liberia to the background and interference with their mandated roles by other institutions during the Ebola crisis contributed significantly to the initial confusion and subsequent loss of lives.

Theme 2: Communication

Communication is extremely important in crisis response. At the beginning of the Ebola crisis, a lot of misinformation was put in the public domain by various

groups, either maliciously or unknowingly. Such misinformation increases the spread of the disease and fatalities. Respondents noted that at the beginning of the crisis, the population was misinformed about the EVD; it was after the emergency management agencies got involved and changed the message before the rate of infections began to go down. Previous studies found in during the review of literature revealed that inadequate and misleading public education significantly contributed to the spread of the virus. Among the misinformation that put in the public domain was that people should not eat bush meat, and a consumption ban was subsequently put in place in Guinea. This research revealed that beyond the misinformation on bushmeat, other wrong information that was out in the public domain in Liberia and Sierra Leone included; "When people are infected, and they go to the holding center, they will die;" "if you are exposed to someone who has the virus, you would die." Another negative information was "the moment you contract Ebola, you are dead."

This misinformation kept many infected people who could have received proper care away from the holding centers, a situation that led to the death of many. The emergency management agencies later changed and repackaged the communication to; "when you come in contact with the virus or come in contact with somebody who has the virus, and you report yourself to the health worker or to a health facility or to a nearby center, you have a possibility, or there is a possibility you will not die." Another information was “If you just wear the plastic hand or the PPE and touch the stuff or infected people, that person will survive; it does not mean you will die;" and also "when you contract the virus and seek early treatment, there is a possibility for survival."

These communication and public education interventions from EMA significantly reduced the rate of infections. It is important to underscore that during the initial stages of infectious epidemics, emergency management agencies must collaborate with other institutions to ensure that the correct and accurate information is put in the public domain to ensure that the population is well educated on the risks involved, the right help available, and how much help can be received. This will reduce infections and reduce fatalities.

Theme 3: Inclusion of Traditional and Religious Leaders

Available literature on previous studies did not highlight the importance of including traditional and religious leaders in response to the Ebola crisis. In this study, however, the respondents indicated that one of the key strategies their agencies adopted was the inclusion of traditional and religious leaders in the response. The traditional leaders were used to mobilize the communities to create awareness and mobilize the communities to support the response to the Ebola crisis. It is important to note that identifying opinion leaders to get communities to support emergency management agencies in response to any disaster is crucial. Emergency management officials need to understand that they have their roles as emergency management experts, but without the buy-in of the communities, whatever plans irrespective of how well thought out it might not yield the expected results if they do not have the full support of the affected communities. Emergency management experts, therefore, need to identify popular opinion leaders within communities and include such leaders in their response plans even before a disaster happens.

Bearing in mind the theoretical framework, which guided this study, policy makers need to understand the interconnectedness of various segments of society and bring them together to achieve positive outcomes for the whole. In this study the responses from the participants did not only highlight the importance of recognizing the roles of other vital institutions such as traditional and religious leaders, but also bringing such institutions together and allowing them to play their crucial roles in response to the Ebola crisis.

Theme 4: Whole Society Approach

Engaging all the different facets of society is crucial in response to epidemics that have a high rate of infection and a very high fatality rate. In this study, the respondents indicated that employing the whole society approach helped in the response. The functionalist theory states that, “society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole" (Mooney et al., 2007, p. 1). Bearing this theory in mind, EMAs need to understand that every society has its peculiarities. And it is significant for EM experts to identify the peculiar structures of the society and use those peculiarities in the emergency response. In responding to epidemics, a holistic kind of approach is necessary for making sure that every sector or every level of society is actively involved in preventing further spread of the epidemic. A holistic approach from national to regional as well as within the community levels is of utmost importance in managing crises such as the Ebola epidemic of 2014.

The level of involvement should be based on what each segment of the society can do, and those segments should be included in the response plan. In Liberia,

though this was done later, the emergency managers agencies identified that the business community, school administrators, the local leaders, teachers, opinion leaders, religious bodies, and churches all had roles to play in the Ebola response. The inclusion of all these stakeholders contributed significantly to reducing the rate of infections.

Theme 5: Control of Movement of People and Cultural Practices

Among the first measures to be put in place when managing epidemics that spreads easily and has, the high mortality rate is to strictly ensure that the movement of people is controlled to contain and localize the disease before it spreads further. Previous literature on Ebola revealed that at the peak of the outbreak, Liberia and Sierra Leone governments rolled out measures including the imposition of a state of emergency, and quarantining large areas, to begin to tackle the epidemic. The respondents corroborated this assertion and indicated that although this measure was introduced later by the emergency management agencies, it was an important measure, which helped in reducing the spread of the virus in those countries.

In addition, cultural practices, which are inimical to the response plan, need to be controlled or discouraged. According to Gbla (2018), many sociocultural and customary practices such as shaking hands, traditional ways of nursing the sick, initiation rites, and burial rituals were identified as major causes of the rates of Ebola transmission. Respondents in both Liberia and Sierra Leone indicated that the emergency management agencies played crucial roles in getting the communities to understand and subsequently changing such religious and cultural practices such as bathing of the dead, and dignified burial practices to halt the spread of the virus.

Significantly, when epidemics break out, it is important for emergency management agencies to quickly identify cultural and religious practices that may be inimical to the response plan. As part of the immediate response to epidemics, EMAs need to educate the population well enough to prevent further spread resulting from such practices.

RQ2

RQ2: What roles should nonmedical EMAs in Liberia and Sierra Leone and similar agencies in West Africa have played when responding to the 2014 Ebola crisis?

Theme 6: Autonomy

In this study, EMAs in both Liberia and Sierra Leone lacked autonomy during the crisis, a situation that contributed largely to the high mortality during the Ebola crisis. Significantly, the mandated EMA in Liberia operated under the Ministry of Interior as the NDRC. In Sierra Leone, the EMA operated and continues to operate as a Department under the ONS. Respondents were of the professional opinion that as at the time the Ebola crisis began if the EMAs were properly set up with the appropriate autonomy and logistics support, these agencies could have contained the epidemic before it spiraled beyond control.

It is important to underscore that even within the ONS, the emergency management agency operates as just a department. Respondents were of the professional view that if there were an autonomous emergency management agency in Sierra Leone, the agency would have had the power to advise decision-makers against putting the management of the Ebola epidemic under the Ministry of Health. In

Liberia, All the respondents alluded to the fact that if an autonomous NDMA were in existence at the time of the crisis, the response would have been more effective and better coordinated.

It is imperative for politicians, policy, and decision-makers to understand that disaster management agency, like any other professional body, has its roles to play as a unit of society. When such agencies are given a free hand to perform their mandated roles, in the society, their efficiency and experience increase with time to be able to discharge their responsibilities to develop societies efficiently. Further, keeping emergency agencies under government ministries dwarf the efforts of the emergency management experts, especially if the political authority finds the professional work of the emergency mangers as politically incorrect.

Theme 7: Planning

This research found that Ebola was never anticipated in Liberia and Sierra Leone before the epidemic struck. As a result, no plans were in place to contain such an epidemic in these countries. Some respondents from Sierra Leone were emphatic that there were no response plans available to fall on during the crisis because Ebola was never anticipated. This state of affairs led to confusion at the early stages of the response leading to wrong decisions and subsequent fatalities. In Liberia, however, a National Influenza Plan was partly in place but in draft form. This plan was taken out of the shelves and updated at the peak of the crisis to respond to the epidemic.

The correct identification of potential threats and hazards that could affect a country is important in preparing a requisite response plan. This research revealed that the consequences of the absence of an anticipated and a well thought out plan lead to

initial confusion and increased fatalities when an epidemic strikes. When emergency management agencies in countries are well set up and resourced, they can remain focused, undertake their unique mandated tasks as important segments of society, and contribute positively to the entire society.

Policy and decision-makers must recognize the unique and important roles emergency management agencies play in society and resource such agencies appropriately. It is important for emergency management agencies to do a more detailed analysis of global emergency issues and update their national disaster plans accordingly before epidemics strike. Such an approach will prevent initial confusion and subsequent mass fatalities when an epidemic such as the Ebola Virus Disease strikes.

Theme 8: Border Control

Previous studies indicated that African countries such as Cameroun, Gambia, Ivory Coast, Kenya, Nigeria, and Senegal stopped or limited air travels form all Ebola-infected countries (Gronke, 2015 p 16). Other countries such as South Africa refused entry to non-citizens and others on permanent residence status traveling from the infected countries (p. 16). These moves were viewed as a mere response to unfounded panic and stigmatization of nationals of the infected countries. However, respondents thought that the disaster management agencies of Liberia and Sierra Leone should have acted early enough to control movement across their borders to prevent the spread of the disease. This view does not only corroborate the findings of the research regarding border controls but also leads to the fact that although other countries acted out of ignorance, fear, and stigmatization, such moves by these

countries were justified to the extent that it prevented the spread of the virus to their countries. Further, Liberia and Sierra Leone, whose nationals were stigmatized and prevented from entering other countries, would have put in the same measures to prevent other nationals from entering their countries if they had the opportunity to prevent other infected nationals from entering their country.

Among the revelations of this research was the fact that the emergency management agencies should have coordinated with other stakeholders and counterparts in the other infected countries to control the movement of people across the borders. The research revealed that due to the porous nature of borders between the infected countries, people moved uncontrollably from one country to the other, and in the process, spread the Ebola virus.

When dealing with epidemics with high infectious and fatality rates such as EVD, emergency management agencies must collaborate with their counterparts to prevent the movement of people across borders to prevent further spread of the disease. Further, when epidemics such as the Ebola crisis happen elsewhere, it will be necessary for emergency management agencies to immediately coordinate with the appropriate agencies and put in border controls to prevent free movement of people from the infected countries to avoid transporting the disease across countries.

Theme 9: ECOWAS

Most of the respondents indicated that no emergency management agencies from sister West African countries moved in to help during the Ebola crisis, possibly due to fear of being infected. The respondents, however, indicated that NADMO of Ghana assisted with training and building the capacity of emergency management

expertise in West Africa after the crisis through collaboration with the KAIPTC. The study further revealed that, like the infected countries, ECOWAS as a sub-regional body was caught unawares when the crisis began. ECOWAS had no plans in place to deal with an epidemic at the magnitude of the Ebola Crisis. It is important EMAs of West African countries to come together not only to develop emergency plans together but also draw memoranda of understanding among themselves and have joint simulation exercises and pieces of training to be able to respond to a crisis in the sub-region appropriately.

Limitations of the Study

The study was qualitative in nature with a focus on descriptive methods. The respondents were drawn from emergency management experts at different levels on the respective hierarchies of their organization. Although the study produced credible and detailed data on the roles of emergency management agencies during the Ebola crisis of 2014, the study unavoidably has some limitations. One of the key limitations of this study is the fact that the responses from participants were based on the subjective professional experience from the limited roles they played during the Ebola crisis. The responses from participants were, therefore, quite subjective and may not represent the actual state of affairs as far as leadership and decision making in the respective emergency management agencies were concerned.

Another limitation of the study was that the researcher could not determine the level of bias of the respondents since the researcher did not collect data on how the Ebola crisis may have individually affected the respondents. There remains the possibility that respondents whose loved ones may have died because of the Ebola

crisis would be less objective considering the roles they thought their agencies should have played during the crisis.

In addition, although the researcher invited seven emergency management experts from Liberia to be part of the study, only three of them willingly participated. Consequently, the professional views from respondents from Liberia may not wholly represent the functions of the emergency management agency of Liberia since other EM experts in Liberia who are in the majority may have different views regarding the roles played by their agency. In Sierra Leone, five out of seven emergency management experts participated. Therefore, a possibility remains that the other experts who did not participate in the study may hold contrary views to the responses from the participants. Furthermore, the researcher did not collect any data from the ECOWAS secretariat during the study. Therefore, the data collected from respondents in Liberia, Sierra Leone, and Ghana may not be an accurate position of ECOWAS regarding the roles ECOWAS played during the crisis.

Additionally, the researcher could not determine if the respondents were truthful with their responses. Further, other stakeholders who played vital roles in response to the Ebola epidemic in Liberia and Sierra Leone were not included in the study. Consequently, there were no counter or corroborative views of other experts outside of emergency management organizations in Liberia, Sierra Leone, and Ghana, who may have played critical roles during the Ebola crisis.

In spite of these limitations, the results of the study are credible and trustworthy, because the data collection method and analysis were thorough. Data collection and analysis were also subjected to scrutiny by the supervising committee

of this study. Further, the researcher ensured that issues of trustworthiness were properly addressed in the study.

Recommendations for Future Research

The data collected during this study revealed that at the onset of the Ebola crisis, there was confusion and lack of direction due to misunderstanding and classification of the Ebola crisis as a health issue. This led to the ministries of health of the respective agencies assuming leadership in coordination. Previous studies did not address the actual relationships that existed between the respective ministries of health and emergency management agencies. In addition, this study does not address the level of cooperation that existed between disaster management agencies and respective Ministries of Health in Liberia and Sierra Leone before the Ebola crisis. It is therefore recommended that future research should focus on the level of coordination and cooperation that exists between emergency management agencies and ministries of health in the respective countries, with the view to streamlining that relationship to ensure effective leadership in coordination during a response to epidemics.

Additionally, during the data collection, the researcher observed that some of the respondents were keen on describing their personal experiences, loss of their loved ones to the Ebola Virus, and the trauma emergency management experts went through during the Ebola crisis. During the review of the literature, the researcher did not come across any research on the trauma emergency management experts went through in the performance of their duties during the Ebola crisis. It will be worthwhile for a further study into the psychological trauma emergency management

experts went through during the 2014 Ebola crisis, and the impact such trauma may have had on the performance of their duties.

Implications

Implications for Social Change

This study may contribute to social change in the area of policymaking at both international and national levels as well as for various emergency management experts in various countries. The findings and recommendations of this study stipulate policy direction for ECOWAS at the international level concerning developing SOPs and MOU to bind disaster management agencies to respond to epidemics in various member states. At the national level, the findings and recommendations provide insight into giving autonomy to emergency management agencies and delinking these agencies from government ministries. At the organization level, the study highlights the importance of emergency management agencies to plan for unfamiliar hazards and establishing their authority at the initial stages of epidemics to lead the coordination efforts during the response to unfamiliar disasters.

All these policy directions would contribute positively to social change through how non-medical emergency management agencies would respond to epidemics that afflict countries and transcend international boundaries in the future. Significantly, this study contributes positively to the body of knowledge on how emergency management agencies responded to the 2014 Ebola crisis in Liberia and Sierra Leone.

Implications for Policymaking and Professional Practice

As already mentioned in the impact this study will make on social change, the findings, recommendations of this study highlight the importance of this research for policymaking both at county and ECOWAS sub-regional level as well for professional practice by emergency management experts.

Delinking EMAs from Government Agencies

Delinking EMAs from government ministries and giving them autonomy is crucial for an effective and professional approach to emergency response. Keeping EMAs under government ministries dwarfs the efforts of the emergency management experts when emergencies occur. When such agencies are given a free hand and the autonomy to perform their mandated roles in the society, their efficiency and experience increase with time in the discharge of their responsibilities to develop societies. It is important for politicians, policy, and decision-makers to understand that disaster management agencies, like any other professional body, have their roles to play as important components of society.

Policymakers in countries that still have their emergency management agencies operating as departments and directorates under government ministries should, therefore, make efforts to have appropriate legislation passed to establish autonomous emergency management agencies and resource them appropriately to play their roles as important components of society.

Planning for Unfamiliar Hazards

Planning for disasters is an extremely important part of emergency management. Emergency management agencies must develop comprehensive plans to

include all stakeholders and exercise such plans before disasters occur. Although an all-hazards approach to emergency management may suffice, when unfamiliar disasters occur, initial confusion among stakeholders in disaster management leads to several fatalities. Disaster management experts must, therefore, study the global trend of disasters and identify unfamiliar hazards in their countries that have the potential to not only afflict their countries but also has the potential to transcend international boundaries, and accordingly plan for them.

Beyond planning, early warning mechanisms, timely information sharing, and effective border control are crucial in responding to epidemics that transcend international boundaries. Governments and policymakers should, therefore, adequately resource emergency management agencies to be able to deal with cross border epidemics effectively.

Timely Initial Leadership in Coordination

At the onset of the Ebola crisis, the Ministries of Health of Liberia and Sierra Leone took leadership in the coordination to the response. In Sierra Leone, it was not until the Ministry of Health was overwhelmed that a decision was made to set up the National Emergency Response Center, which was later managed by the ONS. It is imperative for policymakers and emergency management experts to exert their authority and take the early lead in coordinating the response to epidemics. All stakeholders, including respective ministries of health, should realize that in emergency management, playing their properly ascribed functions in society for which they have been trained, leads to the collective success of a disaster management response plan.

According to the functionalist theory, upon which this study is based, "society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole" (Mooney et al., 2007 p. 1). Ministries of Health should play their roles in case management and focus on the treatment of infected people, and leave the broader leadership in coordination to the competent emergency management professionals to handle. This can be achieved through the engagement of all stakeholders, ineffective planning for unfamiliar emergencies.

Development of MOU and SOPs on EM for ECOWAS Member States

In this study, it was evident that there are no sub-regional emergency management agencies in West Africa. It was equally clear there is no mechanism in place that bound emergency management agencies from respective ECOWAS countries to respond to epidemics in other member states and disasters that transcend international boundaries. ECOWAS as a sub-regional body should engage emergency management experts from member states to develop comprehensive Standard Operations Procedures and Memorandum of Understanding among the member states to commit them to respond to emergencies in the sub-region. Furthermore, disaster management agencies in West Africa should hold joint pieces of training and exercises to prepare themselves in readiness to respond to the crisis in the sub-region. Additionally, ECOWAS should set up an emergency management standby body as part of its headquarters to coordinate a response to disasters that affect member states.

Conclusion

This generic qualitative inquiry focused on the roles emergency management agencies played or should have played during the Ebola crisis of 2014. I had served in

Sierra Leone as a solider almost two decades ago and as an international civil servant in Liberia at the peak of the Ebola crisis. Therefore, when I embarked on this journey in my quest for higher academic laurels, I decided to conduct this study to contribute my quota to the body of knowledge in emergency management in these two wonderful countries. The researcher identified participants through purposive sampling and collected data from emergency management experts in Liberia and Sierra Leone, as well as Ghana through interviews. All the respondents willingly participated and provided very useful information for further analysis. I subsequently used an inductive thematic analysis approach to analyze the data. The findings of the research indicated that during the crisis, the roles, which were played by the emergency management agencies in the respective countries, included coordination and communication. The respective agencies also used strategies such as the inclusion of traditional and religious leaders, the whole society approach, and control of cultural practices and movement of people to effectively respond to the crisis.

The research also established that the emergency management agencies in Liberia and Sierra Leone lacked autonomy and operated under government ministries under the names NDRC, and Department of Disaster Management in the ONS, respectively. The findings also showed that prior to the Ebola crisis, there were no plausible Ebola response plans in place not only in Liberia and Sierra Leone but also at the sub-regional level of ECOWAS. Respondents further indicated that border control was a strategy that should have been used to prevent the spread of the Ebola Virus Disease to other infected countries when the outbreak started in Guinea. Finally, the research established that emergency management agencies from

ECOWAS member states did not move to Liberia and Sierra Leone to support their counterparts in the response during the crisis.

The recommendations in the studies include: the need to delinking emergency management agencies from government agencies, the requirement to plan for unfamiliar hazards; the importance of timely initial leadership in coordination; and the need for ECOWAS to development MOUs and SOPs on emergency management for the ECOWAS Member States. This research is significant and may provide policy direction to policymakers at the international and country levels as well as guidance for emergency management experts.

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Appendix A: Invitation Letter to Participants

Dear ... (name of participant) .....

My name is Eugene Owusu Afrifa, and I am a doctoral student of Public Policy and Administration (Emergency Management) at Walden University of the United States of America. I am conducting a research on the topic "Ebola Outbreak in Liberia and Sierra Leone: Role of Non-Medical Emergency Management Agencies" I obtained your contact information from the Kofi Anan International Peacekeeping Training Center. I would like to invite you to participate in this study as a respondent. If you agree to participate, I will arrange an interview at a time and neutral public location of your convenience. The interview would last for about 45 minutes and will be very formal. My goal in this study will be to learn about the roles played by the mandated non-medical emergency management agencies in Liberia and Sierra Leone, at the national level, and such similar agencies at the regional (West Africa) level in managing the Ebola epidemic of 2014. I can assure you that I will share the results of the study with you. In addition, please note participation in this study is optional, and you may withdraw at any point of the process.

I have provided further details of the study in the attached consent form. Your signature on this form means you understand the information I presented and you want to willingly participate. Please do not hesitate to contact me for any further clarification.

Thank you.

Appendix B: Consent Form

RQ1

Dear ..... (Name of respondent).....

You are invited to take part in a research study about roles played by emergency management agencies during epidemics. The title of the study is "Ebola Outbreak in Liberia and Sierra Leone: Role of Non-Medical Emergency Management Agencies"

The researcher is inviting emergency management experts from Ghana, Liberia and Sierra Leone. This form is part of a process called "informed consent" to make you understand this study before deciding whether to take part.

Eugene Owusu Afrifa who is a PhD student at Walden University is conducting this study. You might already know the researcher as a professional field security coordination officer of the United Nations, but this study is completely different from that role.

Background Information:
The purpose of this qualitative study is to learn about the roles played by the mandated non-medical emergency management agencies in Liberia and Sierra Leone, at the national level, and such similar agencies at the regional (West Africa) level in managing the Ebola epidemic of 2014

Procedures:
The interview will be audio recorded, and if you agree to be in this study, you will be asked to:

- Sign the informed consent form to indicate your willingness to participate in the interview process
- Grant a face-to-face interview with the researcher for about 45 minutes at a time and location convenient to you or via telephone.
- Discuss your understanding of the 2014 Ebola crisis in Liberia and Sierra Leone, and how it was managed by non-medical emergency management agencies.
- Review the transcript of the recorded interview discussion to validate and correct your answers.

The main research question is: How did the non-medical emergency management agencies of Liberia and Sierra Leone respond to the 2014 Ebola crisis?

Sub questions will include:

- What is your understanding of crisis response to an epidemic such as the Ebola crisis?
- What role did your agency play in responding to the Ebola crisis?
- If your agency played any roles what strategy did they use?
- What roles do you think your agency should have played in responding to the crisis?
- Which other agencies do you think should have played key roles in the response?

Voluntary Nature of the Study:
This study is voluntary. You are free to accept or turn down the invitation. Any person or organization will not treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as recall of crisis experiences and being stressed. Being in this study would not pose a risk to your safety or wellbeing.

Although the research may not benefit you directly as an individual, it will contribute immensely to policymaking at national and regional levels with regard to the roles emergency management agencies would play in the management of future epidemics in countries as well as those that afflict a region such as West Africa.

Payment:
There are no payments or special gifts for participants for granting the interview. However, there will be an immediate cash reimbursement of up to an equivalent of Fifty US dollars (USD$50) for transportation to an agreed venue outside of your office premises.

Privacy:
Reports coming out of this study will not share the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. The researcher will not use your personal information for any purpose outside of this research project. Data will be kept secure with data security measures including password protection, data encryption, use of codes in place of names, and storing names separately from the data. Data will be kept for at least five years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Further, if you have questions later, you may contact the researcher via telephone number +234 (0)909 442 4211 or via WhatsApp on +233244 224 248. You may also reach the researcher via email address as

eugene.owusuafrifa@waldenu.edu. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at +1 612-312-1210. Walden University's approval number for this study is 07-10-19-0662843 and it expires on July 9, 2020.

The researcher will give you a copy of this form to keep.

Obtaining Your Consent

If you understand the study well enough to decide it, please indicate your consent by signing below.

Printed Name of Participant	
Date of consent	
Participant's Signature	
Researcher's Signature	

Thank you.

Consent Form: RQ2

Dear ..... (Name of respondent).....

You are invited to take part in a research study about roles played by emergency management agencies during epidemics. The title of the study is "Ebola Outbreak in Liberia and Sierra Leone: Role of Non-Medical Emergency Management Agencies"

The researcher is inviting emergency management experts from Ghana, Liberia and Sierra Leone. This form is part of a process called "informed consent" to make you understand this study before deciding whether to take part.

Eugene Owusu Afrifa who is a PhD student at Walden University is conducting this study. You might already know the researcher as a professional field security coordination officer of the United Nations, but this study is completely different from that role.

Background Information:

The purpose of this qualitative study is to learn about the roles played by the mandated non-medical emergency management agencies in Liberia and Sierra Leone, at the national level, and such similar agencies at the regional (West Africa) level in managing the Ebola epidemic of 2014

Procedures:
The interview will be audio recorded, and if you agree to be in this study, you will be asked to:

- Sign the informed consent form to indicate your willingness to participate in the interview process
- Grant a face-to-face interview with the researcher for about 30 minutes at a time and location convenient to you or via telephone.
- Discuss your understanding of the 2014 Ebola crisis in Liberia and Sierra Leone, and how it was managed by non-medical emergency management agencies.
- Review the transcript of the recorded interview discussion to validate and correct your answers.

The main research question is;

How effective was the emergency management response to the Ebola pandemic at the national and regional levels?

Sub questions will include

- If your agency played any key roles, how successful were the strategies used?
- Could there be any other plausible strategy that was not used or could have been used?
- Did other emergency management agencies in West Africa assist in the response?
- Was there any intervention from the Economic Community of West Africa States (ECOWAS)?
- How did your response help in dealing with the crisis?
- How did ECOWAS response help in dealing with the crisis?

Voluntary Nature of the Study:
This study is voluntary. You are free to accept or turn down the invitation. Any person or organization will not treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as recall of crisis experiences and being stressed. Being in this study would not pose a risk to your safety or wellbeing.

Although the research may not benefit you directly as an individual, it will contribute immensely to policymaking at national and regional levels with regard to the roles emergency management agencies would play in the management of future epidemics in countries as well as those that afflict a region such as West Africa.

Payment:
There are no payments or special gifts for participants for granting the interview. However, there will be an immediate cash reimbursement of up to an equivalent of Fifty US dollars (USD$50) for transportation to an agreed venue outside of your office premises.

Privacy:
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Contacts and Questions:
You may ask any questions you have now. Further, if you have questions later, you may contact the researcher via telephone number +234 (0)909 442 4211 or via WhatsApp on +233244 224 248. You may also reach the researcher via email address as eugene.owusuafrifa@waldenu.edu. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at +1 612-312-1210. Walden University's approval number for this study is 07-10-19-0662843 and it expires on July 9, 2020.

The researcher will give you a copy of this form to keep.

Obtaining Your Consent

If you understand the study well enough to decide it, please indicate your consent by signing below.

Printed Name of Participant	
Date of consent	

Participant’s Signature	
Researcher’s Signature	

Thank you.