Department of Social Sciences

Ebola in West Africa:

The Unintended consequences of the response to the western African Ebola crisis 2014-2016

Final Thesis towards a BA degree

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By: Agnes Helga Kristinsdóttir

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Abstract

Since 2014, an outbreak of Ebola virus disease has taken place in the western African countries of Sierra Leone, Liberia, and Guinea. With its high mortality rate and rapid incidence rate, the virus has crippled the communities of these countries and their governments. To amplify matters these governments are among the poorest in the world, tremendously vulnerable and with the weakest healthcare systems. This crisis has revealed the weakness of the global response to a health crisis in a developing country. The communication between the first international responders and the global health organizations and the actions taken at each point in time of the epidemic are the focus areas of this project. The central goal is tracing the course of decision making and actions of the main actors involved in responding to the Ebola epidemic of 2014-2016. This will be achieved through the method of process tracing: unveiling the causal mechanism between the actions taken by the actors and the unintended consequences that followed.

Key concepts: Ebola, Unintended Consequences, Process Tracing, The World Health Organization, western Africa.

Preface

This thesis is a final project towards a B.A. degree from the social sciences department of Bifröst University. The thesis provides 12-ECST credits and provides a B.A in PPE; Philosophy, Politics and Economics. The thesis was conducted during the spring semester of 2016 under the guidance of Magnús Árni Skjöld Magnússon.

I hereby declare that this thesis was carried out in accordance with the rules of Bifröst University on the writings of final projects.

Copenhagen 2nd of May 2016

Agnes Helga Kristinsdóttir

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1. Introduction

In 2014, an outbreak of Ebola, an infectious disease, took a hold of the lives of people in the West African countries of Sierra Leone, Liberia, and Guinea. The disease had a devastating death toll and the fast spread of it crippled the people and their governments, which are among the world's poorest. Moreover, their healthcare systems are equally vulnerable and weak. This all resulted in the deaths of thousands.

The focus of this project is on (1) the communication between the first international responders and the global health organizations, and (2) the actions during. As the severity of the epidemic escalated, the actions became more invasive as a means to stop the spread of the disease.

This research utilizes the method of process tracing to exact the actions of each actor in this case. It enables researchers who already know the outcome of the case (B) and the beginning (A) to fill highlight on what and how events occurred in-between those points and, specifically in this case, the actions made by each actor during the period leading to the spread of the Ebola virus.

The theory of unintended consequences, put forth by Robert Merton, explains that with every action taken, especially in a direct social context, there will be unforeseen consequences. This research will focus on the unintended consequences of the response to the Ebola outbreak in West Africa. Within that the focus, there will be an examination on the unintended consequences of the actions of the World Health Organization (The WHO), which had a leading hand in the response, among other NGO's. Reactions of other countries, more precisely the United States of America and the United Kingdom will be considered, i.e., the timing of aid and relief, as well as the potential role of the western media..

1.1 **Research Question**

The research in this thesis aims to reveal the main unintended consequences of the response to the Ebola outbreak of 2014-2016; tracing the steps made by each actor that led to the epidemic, how the unintended consequences of the actions of the actors affected

the communities of the western African countries, and what lessons, if any, are being learned. The research question of this thesis is:

"What are the unintended consequences of the response during the Ebola outbreak of 2014-2016?"

With the sub-question of:

"How did the actions of the actors lead to the spiraling epidemic?"

1.2 Methodology

1.2.1 Process Tracing

The method chosen for this research was determined by a number of factors.

While the focus is to examine *what* effects the response of a few main actors after the Ebola outbreak in western Africa had on the communities of the affected countries, it also aims to understand *how* the actors caused them, thus wanting to expose a causal relationship between actors and events. As a result, the method of process tracing was chosen.

Process tracing is similar to historical narrative, where the focus is on the chronological order of historical events centered around individuals, actions, and/or intentions (Beach & Pedersen, 2013), but with an analytical twist. Instead of a traditional case study, where a researcher seeks to answer exploratory, explanatory, or descriptive questions, process tracing aims to uncover not only **what** caused the identified change, but more importantly **how.** The emphasis is on causal mechanisms. This method is widely used in political science, especially in research regarding policy change (Beach & Pedersen, 2013).

Process tracing is a highly specific type of case study. The traditional case study method does have many advantages, especially when trying to obtain a deeper level of understanding on social phenomena, when researching rare phenomena and in adapting ideas and hypothesis that can be used in future testing (Yin, 2013). Case studies, however, have been widely critiqued for their lack of generalizability from the data collected (Yin, 2013), since it is often done on an individual or small group of people. Traditional case studies are also thought to carry a high risk of research bias, whereas a more positivist approach would aim to eliminate such bias. Case studies are looking into *what* happened and *why,* which can broaden an understanding, but it also makes it very difficult to determine any cause/effect relationship

from them. This weakens the validity of traditional case study research significantly (Yin, 2013).

Process tracing, originating in response to the softness of case studies, focuses on the causal relationships, which makes case study research more positivist in comparison. Process tracing increases our confidence (Beach & Pedersen, 2013). Moreover, it helps prove if our hypotheses are correct because we can emphasize causal mechanisms, meaning we can say at the end of our research with greater confidence that *this* is what caused the change. It must be emphasized that it does not enable us to be absolutely certain, but it increases our confidence with our convulsions, as well as the validity of the research (Beach & Pedersen, 2013).

Process tracing is an especially helpful method when examining individual and organizational behavior, complex causal relationships, imperfectly comparable cases, and deviant cases (Beach & Pedersen, 2013). Process tracing is also an appropriate method when dealing with complex cases that are thought to have multiple causality, feedback loops, and complex interaction effects. Therefore, the case being examined in this research fits very well within this method (Beach & Pedersen, 2013).

While there is a general agreement among scholars that process tracing methods are defined by the ambition to trace a causal mechanism, there is still considerable confusion regarding both the epistemological and ontological foundations of this method (Beach & Pedersen, 2013). For example, what types of causal mechanisms are being traced and to what degree process tracing case studies can be used in broader, mixed-method research design? This confusion has held back this method from being used to the fullest potential.

Recently, Derek Beach and Rasmus Brun Pedersen helped clear up the confusion on how process tracing should be used in practice, in their book *Process Tracing Methods: Foundations and Guidelines* (Beach & Pedersen, 2013). Process tracing can be differentiated into three variants within social science: Theory testing, theory building, and explaining-outcome. These three variants differ in many ways, whether they are theory- or case-centric, types of inferences being made, how causal mechanisms are defined, and if they can be useful in mixed-method designs (Beach & Pedersen, 2013).

This is an embedded single case study. The case of western Africa with multiple units of analysis (the role of different actors) within the case. The hypothesis being that certain events were caused by these actors that will then be conformed to the theory (Theory of Unintended Consequences).

An important part of process tracing is for the researcher to identify an uninterrupted causal path between hypothesized causes and observed outcomes (Beach & Pedersen, 2013). The type of process tracing that will be used to analyse the case at hand is called outcome-explaining, and therefore it is very important to look at a timeline of events to see how each event and actor played a part in the final outcome, e.g., examining how we got from A to B.

The outcome observed (B) is the *"Bad situation in western Africa following the outbreak,"* which is thought to have been caused by a chain of bad reactions and decisions made by key actors (e.g. Governments, The WHO, the public, western media) (Beach & Pedersen, 2013). With the outcome-explaining type of process tracing, we are looking to fully explain why B happened by working out the key factors of events (Beach & Pedersen, 2013).

This research uses the empirical test of the "Straw in the wind" to test its hypothesis, even though the "Straw in the wind" test is the weakest of the four hypothesis tests process tracing entails (Beach & Pedersen, 2013). The sources and references utilized during this research were of a wide scope which together strengthen the hypothesis: Official reports from NGO's, academic books, peer reviewed journal articles and newspaper articles. When conducting a research such as this, the researcher has to be careful of being bias. Especially when using this type of "Straw in the wind testing", since the researcher might have directly or indirectly influenced the direction of said *wind*. This sort of research bias is best avoided by being well-aware of the dangers involved in any *researcher-led* methods, which was a goal of the researcher throughout this research.

1.2.2 Unintended consequences

The law of unintended consequences is often discussed, but not that often defined. It means that the actions of everyone, from ordinary people to governments, always contain effects that are unanticipated or unintended. This has been widely known by social scientists for centuries, but it has not quite reached the table of popular opinion, and politicians tend to ignore it (Norton, n.d.).

An example of a positive unintended consequence is one of the most famous metaphors in social sciences, which is from Adam Smith's "invisible hand". In that metaphor, Smith argued that each individual that only seeks his own gain in life is led by an invisible hand to promote an end which was never any part of his original intention, and that end is the public

interest. The butcher and the baker are not working just out of the goodness of their hearts to feed us, they do their work from regard to their own self-interest (Norton, n.d.).

The first and most complete analysis of the concept of unintended or unanticipated consequences was done in 1936 by Robert K. Merton, (Norton, n.d.) one of the most influential sociologists of the 20th century. Merton was born on July 4, 1910, in South Philadelphia to immigrant parents from Eastern Europe. In 1931, he graduated from Temple College and after that he pursued graduate studies at Harvard University. He founded a variation of structural functionalism, is considered the originator of modern sociology of science, and is a prolific contributor to the conceptual and theoretical resources of several sociological disciplines (Mica, Arkadiusz, & Winczorek, 2012).

Merton's work that will be focused on in this essay has to do with the influential article titled "*The Unanticipated Consequences of Purposive Social Action*". Merton explained that unforeseen consequences had often been discussed, but that no systematic, scientific analysis existed; a task he was willing to take-on. The term itself 'unanticipated consequences of social action' is somewhat self-explanatory. Merton argued, however, that in order for a systematic analysis to be created it needed further specification (Merton, 1936)(p.894). In the paper, he specifically stated that he was dealing with isolated acts, i.e., that acts that were a part of a system of action, in order to simplify his analysis. In terms of the consequences themselves, he stated that *unforeseen* consequences are not necessarily undesirable for the actor, they were simply not intended, good or bad. The intended consequences, on the other hand, tend to be positive for the actor. Although the intended consequences are seen as positive to the actor, an outsider could see those same consequences as negative 'this is true even in the polar instance where the intended result is "the lesser of two evils" (Merton, 1936)(p.895).

One could argue that it is a matter of perspective. Merton specified even further when saying that the consequences of *purposive* action had to be limited to only those features of the resulting situation that would not have occurred, i.e., if the action had not been taken. Every consequence is a child of the action taken and the objective situation of each case. This in turn involves the problem of blame (i.e.,causal imputation). Merton divided the sum-total of concrete consequences into either consequences to the actor or consequences to others through the social structure, the culture, or the civilization. (Merton, 1936)(p.895). The reason given for using the term *purposive* Merton explains that actions involve motives and a

choice between multiple alternatives, although not all social action has a clearly stated motive or purpose (Merton, 1936)(p.896). He seeks to study the elements, which account for concrete deviations from rationality of action. For example, given a situation with a limited number of possible actions to take, an actor is going to use his rationality – given the evidence at hand – to make a decision that has the highest possibility of reaching his goal. The problem is that the goal might not be reached by this process of rationality, on the contrary, an act that might seem irrational might get the actor to reach their goal (Merton, 1936) (p.896).

Merton divides action into two groups: organized and formally organized. Organized action refers to actions of individuals distributively considered, and formally organized action is when individuals with the same goals in mind form an association and collectively act. The WHO's purposive social action would belong to the latter, given the scope of the organisation and the stated goals. It could be argued, however, that not the same exact goals are being pursued in each given case, because of the complicated nature of the organisation (Merton, 1936) (p 896).

These unintended consequences can be divided into three groups. First is *unexpected benefit*: this describes a positive and unexpected benefit of an action; *unexpected drawback*: this describes when a negative unexpected consequence appears, in addition to the desired effect of the policy; *perverse result* is when a direct social action has the exact opposite result than intended, often referred to as 'backfiring' (Merton, 1936). The Ebola outbreak in question, the responses and complicated nature of the consequences of actions taken by various actors will be looked at through the eyes of Merton.

In his article, Merton also identified five sources of unanticipated consequences, or causes. The first two were *ignorance* and *error*. By *ignorance*, as a cause of an unintended consequence, he meant that one can never understand the scope of a problem to an extent where you can foresee every possible outcome. That, according to Merton, makes it impossible to anticipate everything, thereby leading to an incomplete analysis of a social problem. *Error* can also result in an unintended consequence when an actor or a group of actors believe that a current problem can be resolved by taking the same action as have worked in the past. Their analysis of the problem is then flawed as the actions of the past may not apply to the situation at hand (Merton, 1936). The third source was the *imperious immediacy of interest*. This means that the immediate interests trump the long-term interests. This refers to, for example, when someone wants an intended action of a consequence so

much that he purposefully ignores any unintended effects of that action. The fourth source was *basic value*s, which refers to instances which may require or prohibit actions even if the result might be unfavourable in the long run. The long term consequences of these decisions may cause changes in the original *basic values* (Merton, 1936). The fifth source was *self-defeating prediction,* which refers to instances when the prediction of the public of a social development turn out to be false, because that prediction had in fact changed the course of history (Norton, n.d.).

"In some one of its numerous forms, the problem of the unanticipated consequences of purposive action has been treated by virtually every substantial contributor to the long history of social thought. The diversity of context and variety of terms by which this problem has been known, however, have tended to obscure the definite continuity in its consideration" (Merton, 1936).

1.2.2.1 Literary review; unintended consequences

The theory of unintended consequences has been used by a countless amount of scholars through the years. Before Merton wrote his theory, the concept had been addressed by classics of social theory and his 1936 paper refers to figures as varied as Machiavelli, Vico, Smith, Marx, Engels, Wundt, Pareto, Weber, Wallas, Cooley, Sorokin, Gini, Chapin, and von Schelting (Mica, Arkadiusz, & Winczorek, 2012).

In the 20th century, the most famous scholars that applied and adapted the theory to their own views were Karl Popper and Charles Tilly. Karl Popper mentions the notion of unintended consequences in his book from 1957: *The Poverty of Historicism.* Popper places unintended consequences in the front line of defence of "methodological individualism". He mentions them in relevance of being a negative practical effect of implementing historic ideas (Popper, 2002).

Merton's analysis points to the reasons why actions do not lead to the desired result, but Charles Tilly raised the question, sixty-years after Merton published his paper, of the other half of the problem, or: how is it possible that sometimes, despite all the unanticipated consequences, purposive social action leads, however, to the results desired? Tilly argued that "All life is filled with erroneous interactions, therefore with unanticipated consequences. But life also teems with error correction and responses, sometimes almost instantaneous, to unexpected outcomes" (Tilly, 1996) (van der Linden, 2010)

Famous modern sociologists Norbert Elias, Alejandro Portes, Anthony Giddens and Ulrich Beck also place unintended consequences at the central place of their perspective theories over the last quarter of the 20th century and into the 21st century (Mica, Arkadiusz, & Winczorek, 2012).

The theory of unintended or unanticipated consequences is interdisciplinary and therefore it has and can be utilized and interpreted in most academic researches. The theory can be used in a purely Mertonian way (as in this thesis), or the unintended focus can be shifted on other research/theories made by scholars on the subject (Mica, Arkadiusz, & Winczorek, 2012).

2. What is Ebola?

We begin with explaining what Ebola is to get a better understanding of the case at hand. Ebola is a highly fatal virus disease that causes hemorrhagic fever in humans and non-human primates. The official name is Ebola virus disease (EVD); it is previously known as Ebola hemorrhagic fever, because of the way it affects the body. It operates on a multi-system involvement; a tendency to destabilize the vascular system of the affected causing a hemorrhagic fever. Even though it is known for the hemorrhagic fever part, most patients die because of multi-organ failure or hypovolemic shock due to diarrhea. It is an acute disease with a mortality rate between 25% to 90% for documented outbreaks (Weyer, Grobbelaar, & Blumberg , 2015)

The outbreak of Ebola virus in 2014 was one of the most most vigorous and difficult to-date; it has also taken the most lives for an Ebola outbreak in history. This outbreak was the first one to reach outside of the African continent, and because of that this outbreak received more media coverage than its predecessors. This outbreak is also special in the sense that this time it was not only contained in rural areas, but because of a big migration to urban areas in the last few years (Stein, 2015)

2.1 History

The outbreak in 2014 was not the first outbreak of Ebola in Africa. The disease stretches all the way back to 1976. It was first discovered in Central Africa within 10-degrees of the equator. The first outbreak was really two outbreaks that happened at the same time, these

two outbreaks were caused by two different subtypes of the Virus. The Sudan Ebola Virus and the Zaire (currently, the United Republic of Congo) Ebola Virus. The first outbreak that happened in two towns in Sudan was thought to have originated among workers in a cotton factory and the culprit was thought to have been insectivorous bats that were found in the factory (Stein, 2015).

After that the outbreaks of Ebola was contained, or until 1994 when it reemerged. A group of researchers had dissected a body of a chimpanzee that they found in Tai National Park in Cote D'Ivorie. That lead to one of the researchers getting sick, and later testing showed that the Ebola virus was found in the tissue of the chimpanzee and in the researcher. The researcher luckily survived, but the same could not be said about a wild chimpanzee community in Tai National Park where 25% of the chimpanzees disappeared or were found dead. The culprit for this is thought to be fruit bats, which are one of the biggest dispensers of fig tree seeds, and before the epidemic there were reports of the chimpanzee community feeding on a fig tree. From 1994 until 1997, a number of outbreaks occurred (Stein, 2015).

2.2 The outbreak in 2014 -2016

2.2.1 First case

The outbreak of 2014 was officially recognized on March 23rd of that year, even though the first case actually happened in December of 2013. It was on the 26th of December in 2013, in rural Guinea in the village of Meliandou, that a two-year old boy became very sick with an illness that involved fever, vomiting and black stools. The boy died two days later on December 28th, researchers for The WHO later declared that this case to be the first case of the most vigorous Ebola epidemic to ever rage in Africa (Ground zero in Guinea: the Ebola outbreak smoulders – undetected – for more than 3 months, n.d.). The village of Meliandou is designated as the hot zone for the outbreak. As it is located very close to the boarders of Liberia and Sierra Leone, it did not take long for the disease to spread to their neighboring countries (Ground zero in Guinea: the Ebola outbreak smoulders – undetected – for more than 3 months, n.d.).

2.2.2 A state of Emergency

The WHO declared on the 8th of August 2013 that the Ebola outbreak in western Africa had become a public health emergency of international concern. At that time, the number of reported cases was 1,779 and the number of reported deaths was 961. With such a high mortality and an infection rate, the numbers increased alarmingly in a little over a month. With 4,507 reported cases and 2,296 deaths on September 14th, cases were now found in Guinea, Sierra Leone, Liberia and Nigeria. At that time of the outbreak the number of reported cases had already exceeded the number of cases from all previous outbreaks of Ebola (Stein, 2015).

2.2.3 Religious-cultural beliefs, and social conditions that make prevention difficult

Controlling the outbreak in the three mainly effected countries of Sierra Leone, Liberia, and Guinea has proved to be a daunting task. Professor of infectious disease epidemiology at the London School of Hygiene and Tropical Medicine David L. Heymann, who has kept his eyes close on Ebola since the first outbreak in 1976 says that "Educating populations is the best way to prevent transmission in the community" (Thompson, 2014). But doing just that can prove very difficult in communities that are already at risk and are deep rooted with superstition and a certain level of fear of the government (Thompson, 2014).

Cultural practices such as traditional funerals and preparing and consuming bush meat (for example bats and non-human primates which have been known to be a source of various zoonotic diseases) that were deep rooted in these communities that people were understandably reluctant to give up, were pivotal spreaders of the virus (Phua, 2015)

In frightening situations like this people often feel as their social, cultural and economic rights are being violated. There is a fear that often leads to anger and in communities like the ones in western Africa where superstition often overrules western medicine practices, people often resorted to physically assaulting the health workers that were trying to help them (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

West Africa can be described as very religious and it has some of the fastest growing Christian and Muslim populations in the world. And with so many people finding solace and reassurance in religion, especially in this crisis. There is a dire need to strike a balanced way

to make sure that people can practice their religion, without endangering others around them, and endangering global health security (Tambo, 2015).

Due to underreporting during the beginning of the epidemic rumours began to spred within the communites that the disease was being spred by the government, this lead to a silent spread of the virus, that remained hidden from health workers and contact tracers and by that eluded containment measeures. The high mortality rate of the virus has lead to a lot of people being reluctant to engage in contact tracing because of a fear of getting infected, to people who were infected to be fearful of presenting themselves to the treatment centers and health workers nervous and frightened to care for patients (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

3. Timeline of the outbreak

The aim of this chapter is to explain directly how the epidemic developed, to provide a deeper understanding of the case and to trace the actions taken by actors and what the unintended consequences of these actions were.

3.1 26. December 2013 – 6. August 2014

First case, town of Meliandou in Guinea 26th of December 2013. A group of children play in the forest and find reservoir of fruit bats, they kill some of the bats to bring home. The next day, a two year old boy falls ill and soon after that dies, his mother and sister also become ill and die. After that, the virus spreads in the village, and in surrounding villages (Mazumdar, n.d.) Three months after the first death or around March 21st 2014, the Guinean government starts to investigate these mysterious deaths. In those first three months it was thought that cholera was to blame for the deaths, Ebola wasn't considered because there had never been an outbreak in this area before. Blood samples were taken and sent to Europe to be analysed and came back with the diagnosis of Ebola. Since the ones infected had not been put in isolation the disease had been spreading freely for three months (Mazumdar, n.d.). Medicines Sans Frontiers (MSF) which has a lot of experience with the disease responds rapidly or on 22nd of March 2014 and sets up a field hospital in Gueckedou to treat the infected, because they know that in order to stop the spread of the disease the sick have to be isolated, as well

as the dead need to be buried with special precautions. It soon becomes clear that the virus has spread beyond these few villages as patients are arriving from other areas. The scale of the infection was hard for MSF to handle even with their previous experience of containing similar outbreaks (Mazumdar, n.d.).

The next day (23rd of March 2014) the WHO comes out with a notification of a "rapidly evolving" Ebola outbreak in Guinea, and that suspected cases are being investigated in Sierra Leone and Liberia (Zavis & Morin , 2014). MSF reported on 28th of March 2014 that the virus has reached Guinea's capital of Conakry, which has a population of over 2 million. This report was criticised by the Guinean government, as they believed that the epidemic was being controlled. The government's field teams stopped investigating deaths that were not clearly and definitely Ebola, and it insisted that only laboratory confirmed cases should be included in the death toll (Mazumdar, n.d.). On the 1st of April 2014 MSF reports that the spread of the epidemic is "unprecedented". The WHO spokesman counters and says that it is still relatively small (Goldsmith, 2014).People are mad and confused, healthcare workers face growing hostility from frightened and suspicious locals and that resulted in a treatment center in Guinea being attacked by an angry mob on the 4th of April (Goldsmith, 2014).

A funeral of a well-known healer on the 8th of April 2014 that attracted hundreds of mourners spreads the virus to two more countries. Funerals by western African tradition consists of the villagers washing and preparing the body for the burial, the traditions also include laying their hands on the body and each other during the funeral. Since the corpse of a person with the virus is highly infectious, these rituals become super spreaders of the Ebola virus (Mazumdar, n.d.). The WHO held a press conference in Geneva, where they declared that this was one of the most challenging Ebola outbreaks it had ever faced (Key events in the WHO response to the Ebola outbreak, 2015).

On May 5th 2014, WHO had sent assistance in the form of 112 experts to assist with the response in western Africa 87 to Guinea, 20 to Liberia and 4 to AFRO. One expert was sent to Sierra Leone, because even though there had been no confirmed cases there the risk stage was high (Key events in the WHO response to the Ebola outbreak, 2015).

It is decided by Sierra Leone's officials on May 24th 2014 that patients in Sierra Leone would be treated in a ward at Kenema hospital that had previously been used for treatment of Lassa fever. Soon the hospital got overrun with infected patients, and proper protocall was not in place so health workers didn't always wear protective clothing while caring for the patients,

and the bodies of the decided weren't properly removed. This led to hundreds of deaths in both patients and health care workers. This gave the clinic a very bad reputation among the locals which led to people to delay getting treatment until critically ill, and infectious (Mazumdar, n.d.). On June 4th 2014 a decision is made to close schools, cinemas and nightclubs in Sierra Leone to halt the spread of the virus (Sierra Leone shuts borders, closes schools to fight Ebola, 2014).

With the official death toll over 350 on June 23rd of 2014, the epidemic has become the most lethal one on record. MSF admits that the outbreak is out of control and puts out a plea for assistance in resources (Goldsmith, 2014). And according to the WHO more than 600 cases of the virus and 390 deaths have at this point been reported in Sierra Leone, Liberia and Guinea (Christensen, n.d.). A meeting is set up in Ghana on the 3rd of July 2014 to discuss the Ebola outbreak. It is attended by health ministers of 11 African nations. In the meeting they agree that a joint strategy with WHO is the best course of action (Christensen, n.d.). First case in Lagos, Nigeria is confirmed on the 25th of July 2014, where a Liberian government worker travels despite advice from medical officials not to, and with that spreads the disease to Nigeria (Zavis & Morin , 2014)

Stateside on 28th of July 2014 the CDC announces to the American population that there is little threat to them from Ebola, but sends out a health alert notice with global travel in mind (Christensen, n.d.) Back in western Africa schools in Liberia are closed down on July 30th 2014, and quarantines are enforced by military troops in the worst affected communities (Goldsmith, 2014).

Three days later (1st of August 2014) troops are sent to seal off the area on the mutual border of the three countries where about 70% of the infections have their origin (Zavis & Morin , 2014). In a meeting in Conakry attended by the presidents of the affected countries along with Dr. Chan, the director general of the WHO the discussion is focused on what they now believed was an extremely severe public health emergency. In the meeting Dr. Chan stressed the need for WHO to take high-level responsibility for the outbreak response (Key events in the WHO response to the Ebola outbreak, 2015). A pivotal milestone in the epidemic happened on the 2nd of August 2014 when an American missionary doctor who contracted the disease while working in Liberia became the first patient to be treated for Ebola in the U.S., this marked the first case treated outside of Africa (Goldsmith, 2014).

On the 4th of August 2014, the president of the U.S. held an event with African heads of state and government in Washington D.C. , absent were the heads of States of the affected western African countries and Ebola was not officially on the agenda. However, USAID declares their support along with The World Bank. The next day the second patient to be treated in the U.S. is flown to Atlanta for treatment, where the other missionary is also being treated (Zavis & Morin , 2014). On August 6th 2014, Obama holds a news briefing where he addresses that the affected countries of the outbreak have stated that the reason that this outbreak has not been halted sooner is because their public health systems have been overwhelmed and that they weren't able to identify the virus and isolate those that were infected quickly enough. He also states that a critical factor to its untypical and rapid spread has to do with mistrust between the public and health care workers (Christensen, n.d.).

3.2 8. August 2014 – 17 December 2014

The epidemic was at its height between these two dates and on the 8th of August 2014, the WHO emergency Committee declares that the epidemic has reached the status of a Public Health Emergency of International Concern. The chairman of the committee noted that the reasons for the difficult challenges with this outbreak were fragile health systems in the affected countries along with their lack of experience in handling the virus. That these are highly mobilized populations, and that there are a lot of misperceptions among the public in general about how the virus and how it spreads (Key events in the WHO response to the Ebola outbreak, 2015). Anja Wolz, the Emergency Coordinator for MSF said *"We are too late. In an Ebola outbreak, you need to be a step ahead. We are two steps behind"*. MSF announces that they have reached their limit in terms of available staff and The U.S. and U.K. say that they will increase their aid for the outbreak (Christensen, n.d.).

On the 12th of August 2014 the WHO gives their approval to the use of experimental drugs to treat Ebola and a Spanish priest dies in a hospital in Madrid from the virus (Goldsmith, 2014). By the 15th of August 2014 the death toll is 1.145 and the believed number of infected victims is 2.127. Between the 12th – 13th of August 152 new cases and 76 new deaths are announced by the WHO (Ebola virus disease update - west Africa, 2014). A state of riot appears on the 20th of August in Monrovia, the capital of Liberia. MSF staff were getting completely overwhelmed by the number of cases, so much so that their housing couldn't contain all the patients. While a larger clinic was being built, patients were put in isolation at

a deserted school, where there was no separation between the infected and the healthy, giving the virus a chance to spread freely there. Due to major understaffing of health workers the communication between them and the locals was very poor. That fed into a lot of fear and conspiracy theories. People eventually stormed into the school to retrieve their loved ones, and by that the virus was spread through the city (Mazumdar, n.d.). More Western aid workers get infected, these Western cases forced the epidemic into headlines worldwide (Mazumdar, n.d.).

The WHO launches a "Roadmap for Ebola" on 27th of August 2014. Its purpose was to serve as a guide for the outbreak response (Key events in the WHO response to the Ebola outbreak, 2015). The president of Liberia warns on September 1st 2014 that their health system is breaking under the stress of the epidemic and that they need more international support. The next day (2nd of September 2014) the WHO makes another warning about the seriousness of this epidemic and announces that they do not have enough staff to handle the growing number of cases (Key events in the WHO response to the Ebola outbreak, 2015) The first Ebola vaccine human safety trial on the drug Zmapp started with the endorsement of the WHO (Christensen, n.d.). The governments of the U.S. and the U.K announce on the 8th of September 2014 that they have plans to build treatment centers in Sierra Leone and Liberia (Key events in the WHO response to the Ebola outbreak, 2015).At this point funding pledges of aid increase.

A horrible incident happens in the Guinean village of Womme on the 16th of September 2014 when a team sent by the government to educate people about Ebola is attacked, eight journalists and officials are killed (Zavis & Morin , 2014). On September 18th 2014 Ebola is declared a threat to international peace and security by the U.N. Security Council (Zavis & Morin , 2014). The next day Freetown, the capital of Sierra Leone is put on a 3 day lock down, so that health care workers can go door to door to search for Ebola victims, do disease tracing and educate the public (Zavis & Morin , 2014). The first Ebola case that is diagnosed in the U.S. (September 25th 2014) (Zavis & Morin , 2014). The patient dies from the virus on October 8th (Goldsmith, 2014). U.S. president Obama gives a speech at a U.N. meeting about Ebola where he asks the world to provide more help and says that the outbreak is a growing threat to regional and global security (Remarks by President Obama at U.N. Meeting on Ebola, 2014).

On the 6th of October 2014 a nurse in Spain that was caring for an Ebola patient becomes the first person to contract the disease outside of West – Africa during this outbreak (Zavis & Morin , 2014). In the U.S. two nurses that cared for an Ebola victim are diagnosed with the virus (Zavis & Morin , 2014). Back in Liberia, health workers go on strike (Christensen, n.d.).

USAID claims on October 15th 2014 that they will provide 142 million dollars in humanitarian assistance grants and projects to aid in the fight against the virus in western Africa. Obama calls out other countries that have the financial means to help but don't (Christensen, n.d.). The WHO declares Senegal (October 17th 2014) and Nigeria (October 20th 2014) free of Ebola (Zavis & Morin , 2014), and on October 22nd 2014 the WHO issues an Ebola response report. In it among other things the WHO applauds Nigeria and Senegal for their response with the cases detected in their countries (Ebola Response Roadmap Situation Report, 2014). They claim that the "critical importance of preparedness" is a key factor, along with strong political leadership, early detection and strong response, strong partner organizations and good public awareness campaigns (Christensen, n.d.).

By November 14th 2014 the WHO reports that the death toll from the epidemic is 5177, out of 14.413 cases (Christensen, n.d.).

WHO's general director stated on December 17th 2014 that the WHO would continue to work with the governments of the affected countries, the development partners in the international community, and the international responders until there are no more cases (Key events in the WHO response to the Ebola outbreak, 2015).

3.3 28. January 2015 – Present time

In a situation report published by the WHO on January 28th 2015 it is stated that the response at that time had moved to a second phase. Now instead of the main issue being to slow down the transmission, the focus is set on ending the epidemic (Ebola Situation Report - 28 January 2015, 2015). The U.N. Development Group reported on March 12th 2015 that the economies in the worst affected countries had suffered greatly due to closing of boarders, flight cancellations, tourism activity, decrease in trade and foreign investment. Due to stigma, and fear some other African countries that had no cases of Ebola had also suffered economic

consequences related to the outbreak (West African economies feeling ripple effects of Ebola, says UN, 2015).

The WHO announces on July 31st 2015 that a new vaccine that was being tested showed extreme promise (World on the verge of an effective Ebola vaccine, 2015). On the 7th of August 2015 the WHO reports that the situation as the epidemic has slowed substantially down and that the aftermath is an "emergency within an emergency". The survivors of the virus suffer from multiple side-affects months to years after they have been declared clear of the virus. There is not sufficient data providing health care workers with information on what the best action of treatment is (An emergency within an emergency: caring for Ebola survivors, 2015). The epidemic receives less media attention as the immediate crisis has subsided and on December 29th Guinea is the first of the worst affected countries to be declare free of Ebola. The U.N. declares that the epidemic has orphaned over 22.000 children in West- Africa. The World Bank Group mobilizes 1.62 billion dollars for the response and recovery efforts (UN declares end to Ebola virus transmission in Guinea; first time all three host countries free, 2015).

The WHO declared the end of the epidemic on January 14th 2016, but warned that flare ups would be expected (Latest Ebola outbreak over in Liberia; West Africa is at zero, but new flare-ups are likely to occur, 2016). The next day a new case emerges in Sierra Leone (New Ebola case in Sierra Leone. WHO continues to stress risk of more flare-ups, 2016). The WHO claims on March 16th 2016 that the health authorities in Guinea, Liberia and Sierra Leone are effectively managing flare up cases in their countries (Guinea, Liberia and Sierra Leone "effectively managing" Ebola flare-ups, 2016). Two days later, two flare up cases of the virus in a rural village in Guinea were identified and confirmed (New Ebola cases confirmed in Guinea as WHO warns of more possible flare ups, 2016).

3.NGO (Non - Governmental Organizations) Support

The International support to stop the spreading of Ebola has come from all directions, from the United Nations, International organizations, national responses and support from charitable organizations, foundations and individuals who contributed. This chapter will focus on tracing and analyzing the actions of these actors and the unintended/ unanticipated consequences of those actions.

3.1 The World Health Organization (The WHO)

The WHO was a crucial factor in the battle against this epidemic. WHO was founded in 1948 and is a specialized agency within the realms of The United Nations. It is a member of the United Nations development group that works towards better public health in the world. Since WHO has been created it has taken the lead in the fight against a lot of big epidemiological outbreaks such as HIV/AIDS, malaria, tuberculosis, most recently the Zika virus that is emerging in South America and the subject of this thesis, Ebola. It also handles more common areas of public health such as sexual and reproductive health, food security issues, occupational health, and similar issues that are always current in the global health scale. WHO handles a lot of research, data and reporting on global health matters (About WHO, n.d.).

3.1.1 The WHO and Ebola

WHO first became notified on cases of this Ebola epidemic in March of 2014. The WHO summoned an emergency meeting in July of 2014 with health ministers from eleven countries. In that meeting WHO announced that they would collaborate on a strategy to coordinate technical support to fight the epidemic. When the meeting had taken place and the health ministers had presented documents and facts about the epidemic in their countries the members of the Emergency Committee came to the conclusion that the outbreak in West-Africa had become so severe that it was considered an "extraordinary event" and a public health risk to other states in the world (Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa, 2014). What makes WHO a critical figure in the response to the epidemic is that it is the only agency that has the authority to lead a global response to health crises (Cheng & Satter, 2015).

3.1.2 Criticism of the WHO's reactions

Although the WHO was at the front and center in the fight against Ebola, it has been criticized for not responding in a fast and sufficient enough manner and that because of that the epidemic became as unruly as it was (Cheng & Satter, 2015). There were a lot of diplomatic, and public relations problems that arose in regards to the WHOs reaction to the Ebola crisis that they are being criticized for. The affected countries have very poor economic

structures that depend largely on foreign investors and export of goods. In a story by the Associated Press where e-mails are revealed between the WHO staff and other parties it is shown that even though official personnel on site in the affected countries kept insisting that this epidemic was out of control and that additional assistance was needed, the WHO held off on declaring the epidemic a global health risk (which could have mobilized foreign support and aid faster) because that would mean harmful implications for the affected countries' economies (Cheng & Satter, 2015). The WHO admitted their shortcomings in April of 2015. They stated that they did not work effectively enough in their coordination with other partners, and there was confusion of who had which responsibilities and which roles. They mentioned in the statement that they admitted that their initial response was slow and insufficient and that they were not aggressive enough in informing the world about how severe the situation was. They have since then planned reforms to make sure that if an outbreak on that scale happens again that they will be better prepared (Miles, 2015). A panel of health experts that convened at a Harvard panel in 2015 concluded that the response of the WHO had been way too slow and they suggested 10 recommendations on how to prevent small outbreaks to turn in to big catastrophic outbreaks in the future. They went on to explain that in order to prevent future outbreaks there needed to be competent governance globally, and that demands strong political leadership and that the WHO needs to be properly financed and focused through good leadership and new better reforms within the organization (Moon, et al., 2015).

3.1.3 The unintended consequences of the WHO's response and actions

After reviewing the information experts have put forth about the WHO's response it can be argued that the unintended consequences of WHO's delayed response to declare Ebola a global health risk were for example that it gave the epidemic more room to spread, less financial means to attend to the patients and a delay in receiving more medical supplies and equipped staff (Moon, et al., 2015). As a result the media reacted slower than it would if the epidemic would have been declared a global health risk sooner. The *error* that the WHO made in predicting its level and method of aid in the first stages of the epidemic by assuming that it would be just like the other small scale epidemics that have hit African communities since the first outbreak in 1967 led to a lot of unexpected consequences (Moon, et al., 2015).

Surely the *imperious immediacy of interest* of the WHO which were to halt the outbreak by all means overrode the long term consequences of for example, education in the country. It can be argued that they in a way right in doing so as that was a condition of continuing the normal lives of these countries citizens, but the crisis that comes after is a very severe one as well that cannot be ignored by the international community.

3.2 Médecins Sans Frontiéres (MSF)

MSF or Doctors without Boarders has been a pivotal point of aid during the epidemic and the leading organization responding to the epidemic. It responded to the epidemic in Guinea, Sierra Leone and Liberia, the three worst affected countries, as well as the cases that came up in Nigeria, Senegal and Mali. In addition to that they responded to a separate epidemic that occurred in Democratic Republic of Congo in 2014 (Ebola , n.d.). MSF has in total spent over 96 million Euros on fighting the epidemic, and they employed nearly 4000 national staff and over 325 expatriate staff to fight the epidemic in the worst affected countries when the epidemic was at its peak. MSF lost staff in the process of trying to stop the virus but investigations have shown that the majority of these deaths, the victims/staff contracted the infections while out in the community and not in their treatment facilities (Key events in the WHO response to the Ebola outbreak, 2015).

It's staffers set up Ebola Management Centres and provided much needed help to the area, by for example helping people psychologically, by doing health promotion, surveillance and contact tracing (Ebola crisis update - 14 January 2016, 2016) .

3.2.1 MSF's critique of response efforts

MSF has critiqued the WHO for their slow and inadequate response. They claimed that "months were wasted and lives were lost". In a critical analysis report published by MFS in March of 2015 it accuses the WHO's Global Alert and Outbreak Response Network of ignoring desperate pleas made to them by MSF staff in Liberia in June of 2014. MSF emphasised in that plea that there was a chance for them to halt the epidemic in Liberia at that time if they would receive some much needed addition of aid form the WHO at that exact time. Marie-Christine Ferir, emergency coordinator for MSF said: *"It was early in the*

outbreak and there was still time. The call for help was heard but no action was taken." (Pushed to the Limit and Beyond; A year into the largest ever Ebola outbreak, 2015).

The WHO however did not set up a regional response coordinating hub until July of 2014, and by that time the second wave of the outbreak had already begun. The report noted that the outbreaks resurgence in July should not have been a surprise for anyone because all the elements leading to it were already present at the beginning of the outbreak in March. However the analysis, recognition and willingness to assume responsibility to respond robustly were not. A lot of responsibility fell on MSF in the early months to carry much of the response with only 40 staff members that had experience in working with Ebola at the start of the outbreak. A lot of frustration broke out and Brice de le Vingne MSF director of operations said that: *"We couldn't be everywhere at once, nor should it be our role to single-handedly respond,")* (Pushed to the Limit and Beyond; A year into the largest ever Ebola outbreak, 2015).

Even though MSF criticised the WHO for their response Joanne Liu head of MSF said tackling the outbreak was not the the WHO's sole responsibility. *"Since the beginning I've been asking member states to show political responsibility in responding, but they didn't and I think they've been let off the hook. It's very convenient to have a scapegoat like WHO,"* (Hussain, 2015).

MSF claimed that the world really woke up to the serious threat of Ebola when an American doctor and a Spanish nurse contracted the virus. MSF claimed that the governments of the affected countries refused to admit the scale of the epidemic and put needless obstacles in the paths of MSF workers trying to stop the spread (Doctors Without Borders slams global response to Ebola, 2015).

MSF states on their website that: *"The world… needs to learn its lessons from this epidemic. This Ebola response was not limited by lack of international means but by a lack of political will to rapidly deploy assistance to help communities. The needs of patients and affected communities must remain at the heart of any response and outweigh political interests"*. (Ebola , n.d.)

4 Governmental support

Support came from governments all over the world, either in direct support or through NGO's. In this chapter the focus will be put on the aid from the governments of the United

States and The United Kingdom as they were the most involved governmental supporters in fighting the outbreak.

4.1 The United States

The United States has offered a lot of their resources to help fight the epidemic. When the epidemic reached to the United States with the few cases it experienced, the U.S. massively increased their level of aid to help fight the epidemic. The Obama administration deployed about 4000 specialized military personnel to the affected countries in West Africa and pledged to donate 500 million dollars to help fight the epidemic (Goldstone & Brown, 2015).

The Center for Disease control or the CDC is a major operating component of the Department of Health and human- services in the United States. The role of the CDC is to protect the United States form health, security, and safety threats both foreign and domestic. The CDC got involved in fighting the Ebola outbreak in West- Africa because there was a threat of it spreading to the United States, because it takes a stand whether the disease starts domestically or abroad (Centers For Disease Control and Prevention , n.d.). The CDC has been involved in helping fight the outbreak form it's early stages when it activated its Emergency Operations Center (EOC) to find solutions and strategize to end the epidemic. The CDC staff has provided a lot of their resources including staffing, communication, analytics, management and other supportive measures. It has deployed personnel to the affected areas in West- Africa to assist in the field, whether it is with surveillance, contact tracing data management, health education for the locals and laboratory testing. Currently the CDC has 142 personnel deployed but in all they have deployed 2254 people (Ebola virus disease; CDC´s Role, n.d.). The CDC emphasized throughout the process of eliminating the process that there was no need for the general public in the U.S to be afraid, because there would be little risk that the epidemic would spread there. They did however send out a health alert notice with global travel in mind, especially for health care workers to take precautions and to prepare for the remote possibility that travelers form the affected countries might have contracted the disease while there and travelled to the U.S. while sick. Health care workers in the U.S. should know all the symptoms of Ebola and infection control and always ask patients about their travel history if suspicions arise (Christensen, n.d.).

4.2 The United Kingdom

The UK has played a leading role in the response, especially in Sierra Leone. It has pledged 427 million pounds of direct support to the outbreak response of the virus (Response in the UK, n.d.).

The UK has deployed hundreds of volunteer NHS staff to western Africa. A team of experts including epidemiologists to provide expert advice to the Sierra Leone Ministry of Health on managing the outbreak were also deployed by Public Health England. The UK supports more than 1.400 beds in treatment centers and has built six new treatment centers in Sierra Leone that are all operational at this time. Over 4,000 healthcare workers, logisticians and hygienists including Sierra Leonean Army and Prison staff have been trained in the UK-led Ebola Training Academy in Freetown by UK military staff (Response in the UK, n.d.).

5. Reactions of western media

When an infectious disease at a high contaminant level threatens to become and international problem, the role of the media is crucial. Communication channels that are widely accessed by the public can help in for example providing useful information, reducing unnecessary fear among the public, and put pressure on decision making to reduce exposure and susceptibility. The media can on the contrary also do more harm than good if the news coverage on public health matters get sensationalized then the original opportunity for disease prevention and health promotion has been lost (Basch, Basch, & Redlener, 2014).

Kofi Annan, former United Nations secretary general, made a statement that he was very disappointed with the response from the international community, saying that there was no need to wait for months to send more support. He was disappointed at states that had the means to help but didn't. He mentioned that if the epidemic had hit another region that it would have probably been handled differently. And that when looking at the evolution of the media stigma around the epidemic it wasn't really until the virus got to Europe and America that the international community woke up and started giving much needed aid (Ebola: Kofi Annan 'bitterly disappointed' by response to Ebola, 2014).

The reason that the western media took so long in react Ebola, or for Ebola to catch their attention seems to be because of multiple factors. The biggest reason seems to be because at the time that the outbreak broke out there were a lot of other big international stories for

example the Russia- Ukraine conflict, the Israel- Palestine conflict was heating up once again, the rise of the Islamic State in Syria and Iraq, and the World Cup in football was being held in Brazil. These stories were developing and capturing the media's attention, so one could argue that it came at an inconvenient time in the international media world and journalists have acknowledged that the other stories had a higher priority with them then the Ebola story. Another angle is that in reference to American media it has revealed some entrenched attitudes of Americans towards issues in Africa. Because matters in Africa rarely directly influence the average U.S. citizens life and due to the fact that there are very few U.S. organizations that are active in the continent, African news rarely surface in U.S. media, unless it affects the U.S. directly (Fahri, 2014).

That can be clearly seen at the coverage of the Ebola epidemic changed dramatically in the end of July 2014 when it was reported that two U.S. missionaries had contracted Ebola in Liberia and were to be transported to the U.S. for treatment. Media outlets from Good Morning America to local TV stations then started to cover the virus epidemic that was taking so many lives in West- Africa and the two missionaries that contracted the virus. This coverage was often sensationalized and evoked fear in common citizens in the U.S. despite the fact that the CDC kept repeating that there was very low risk that it would spread in the U.S (Fahri, 2014).

5.1 The unintended consequences of the reaction of the western media

When cases of Ebola emerged in the U.S. and Spain, the western media started to report more on the epidemic. Some of these reports were very inaccurate and did more harm than good.

The perverse result from finally getting western media coverage of the Ebola outbreak are that for example it has given free range to conspiracy theorists and fear mongers the chance the spread hysteria through the media. U.S. media outlets such as Fox News and CNN which have an extensive amount of viewers not only in the U.S. but also around the world can be found guilty of sensationalizing the outbreak. For example a CNN host presented a fiction writer as an authority on the virus, presented a segment where they claimed that the virus was "the ISIS of biological agents" and Fox News gave a doctor a significant amount of air time where he claimed that the CDC was lying to the American public about the severity of the virus and proclaimed that people needed to be scared (Mulholland, 2014).

This public fearmongering has resulted in people becoming paranoid and prejudice against Africa to rise, for example parents in Mississippi kept their children home from school after receiving the information that the principal of the school had recently travelled to Africa, even though the part of the continent he travelled to was nowhere near the Ebola outbreak. This fearmongering left academics and public health experts deeply troubled (Mulholland, 2014).

Satire News shows such as The Colbert Report, and Last week tonight with John Oliver do a good job of emphasising the problems that often come up with mainstream media and sensationalising. . In an October segment of The Colbert Report titled "Deathpocalypse Now: *Ebola in America: 50 States of Grave,"* Colbert shows a clip in which the hosts of the Fox News program *Fox & Friends* are discussing their doubt to whether the CDC and other authorities are telling the public the truth. Colbert mockingly agrees with them and proclaims*: "I won't be fooled into staying calm by the so-called experts with their so-called medical degrees."* (Mulholland, 2014).

6. Social Effects of Ebola in western Africa

This chapter focuses tracing how the communities of the affected countries have been affected by the outbreak, especially in regards to community, education and health care.

6.1 Community

The Ebola epidemic has disrupted the social factors of normal day to day life in the three western African countries of Guinea, Sierra Leone and Liberia and threatened the very social fabric that keeps these societies running. The outbreak has had many difficult socio-economic hardships and one of them is the fact that there is less money for food, so people have had to change their consumption habits, leading to a lot of people having to settle for eating less than before the outbreak. Along with dealing with the Ebola outbreak people have had to change their basic values and traditions, along with deep rooted communal behaviours like for example giving up caring for their family members that get diagnosed with the virus. The traditional way of burying their dead has had to change because their burying tradition (like described before) involve a lot of touching of the body, and if the body is infected with the virus, these burials if performed in the traditional way could infect a lot of people. There is

also a deep feeling of distrust between communities and the government in these countries which two of them have just recently recovered from long civil wars (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

The health systems(more on that later) in these countries who were weak before the outbreak got even weaker, with now even fewer people having access to health care including other care than Ebola, like family planning, infant care, antiretroviral therapies and urgent care of other endemic diseases in the region like malaria and cholera. There is a sense of fear of the situation and of the uncertainty of how the future will look like for them. A priority for the governments of these countries should be to build up trust between them and their citizens, and boost their hopes for a brighter future. For them to be successful in their recovery of Ebola and for future preventative measures to be successful there must be awareness of peoples expectations and feelings (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

Sayo Aoki an education specialist for UNICEF said that Ebola has changed how people behave socially, and that nobody shakes hands in public anymore and that the changes of these social norms has especially put a lot of stress on children saying: *"There's no cuddling, no hugging, no kissing. The simple joys of life have been taken away"* (Sifferlin, 2014).

Another big negative impact of the epidemic is when so many people are dying from the virus, a big number of them were parents. Over 16.600 (as of January of 2015) have lost either one or both parents or their primary caregiver to the virus. One out of four children that contracted Ebola survived, and most of these children became orphans. The stigma of the virus has become so great that sometimes it is stronger than family ties, which has led to many of these orphaned children being abandoned by their extended family, which would normally take care of an orphaned child in their family. This challenge and fear must be overcome so that these children affected by the epidemic can have a shot at a decent future. This calls for rekindling the reawakening, though carefully, of the kinship and extended family ties that were in place before the outbreak (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

6.2 Education

As mentioned above, this epidemic has been especially traumatic for children in the affected countries and the closure of schools in the countries, though necessary was a big step back for the progress that had been made in education in the years before. All the schools in the three countries were closed around June 2014 and didn't open until 19th of January 2015 in Guinea, Liberia on 16th of February and Sierra Leone in April of 2015 with hundreds of schools hours lost. These closings were a result of the governments acting on the *imperious immediacy of interest*. The *perverse incentives* of these school closings are that in its core they were made to protect children from being exposed to the virus but it has led to children being exposed to child abuse, mostly towards young girls, many of them having been forced into prostitution (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

Many students at university age who were enrolled in school or were planning on doing so before the epidemic will not be entering or reentering the classroom because of the number of parental deaths, and that fact that they now have to be responsible for providing for their families. The financial strain that was caused by Ebola greatly affects school attendance, with families pulling younger students out of school because they simply cannot afford the costs of it (Bordner, 2015).

Guinea is one of the most educationally impoverished countries is Africa with a youth literacy rate of 37,6% for males and 21,8% for females. Before the epidemic UNICEF reported that 26,5% of males and 17,4% of females regularly attended secondary school in the country. With the severe economic impact of the epidemic those numbers are predicted to go lower as in runaway inflation periods the cost of supplies and other mandatory things that families are required to provide if they have a child in school have become too much to bear financially (Bordner, 2015).

More than a decade of civil war was ended in Liberia in 2003. This civil war conscripted up to 15.000 children to serve as soldiers, put a halt to around 80% of school activity and destroyed a lot of school buildings. Liberia has made great strides in improving it's education and infrastructure since the end of it's civil war. Since the new administration with president Ellen Johnson Sirleaf took over the government has been spending more on education (2,8% of GDP) and the UNICEF youth literacy is much higher than in Guinea, or 63,5% for males and 37,2% for females (Bordner, 2015).

Sierra Leone has also been recovering from a decade long civil war which ended in 2001. Some students resulted to cross the border in order to Guinea and Liberia further their education during that time, because schools were shut down for such a long period of time. As in Liberia children were abused during this time and up to 10.000 children were conscripted as soldiers. The government has spent years trying to recover from this tremulous time, and they now spend 2,9% of their GDP on education and the UNICEF literacy rate is the highest out of the three countries or, 70,5% in males and 52,1% for females. The World Bank had projected a growth in the country's GDP for 2015 but revised estimates have concluded that it will be in minus (Bordner, 2015).

6.3 Health care

Because of the aforementioned civil war in Sierra Leone and Liberia, some of their most basic health infrastructures had been destroyed or severely damaged. That means that other infrastructure such as road systems, transport services and telecommunications are very weak especially outside of the capitals. This came as great obstacles during the epidemic as there was little to no existing system and infrastructure to treat people even without the Ebola threat, so when you added that element to the equation it was almost guaranteed that these weak systems wouldn't handle more stress. With the road systems being weak there was a lot of delays in transportation of patients to be treated in treatment centers, of sending samples to labs to be examined, public information campaigns and the communication of alerts (Factors that contributed to undetected spread of the Ebola virus and impeded rapid containment, 2015). *"Our health infrastructure was not designed to cope with the kind of outbreak that we had,"* acknowledged Bernice Dahn, Liberia's minister of health (McKay, 2015).

As if all of this wasn't a dire enough situation there is also a severe shortage of health care workers in this region, which before the epidemic there had only been a ratio of one or two doctors per nearly 100.000 people (Factors that contributed to undetected spread of the Ebola virus and impeded rapid containment, 2015). This ratio has been severely diminished by the epidemic, as a large number of these doctors were infected by the virus and died. Most health workers that were infected in during the epidemic were infected at the start, but infections began to increase again in the last few months of 2014. Some evidence suggest that with fewer cases appearing, people perceived that the risk had gotten lower and then the precise measures for personal protection began to lapse. People began behaving as it was now okay

to stop the frequent hand washing and keeping a safe distance from others. Other reasons might be that health personnel experienced exhaustion from being over worked (Factors that contributed to undetected spread of the Ebola virus and impeded rapid containment, 2015).

These countries are in dire need of human resources in their health care systems. There is only one medical school in Liberia, and only 117 doctors in its public health care system. Health professionals say that it is difficult attracting the next generation to the profession is a difficult task. *"It's not attractive to be a doctor,"* says Odell Kumeh, the county health officer for Maryland County in Liberia. *"At the end of the day, you get little money."* (McKay, 2015). That combined with the risks of infectious diseases in the area don't make it any more attractive to choose as a profession (McKay, 2015).

"There are more people who are going to die from Ebola, but not have Ebola," says Paul Farmer, a Harvard professor and co-founder of the Boston-based charity Partners in Health (McKay, 2015).

Around the world, there are high hopes that the western African health care systems can be built up to a sustainable level and the collaboration between the governments and communities of these countries are essential in achieving that goal. What complicates matters financially is that millions of dollars that have been donated through foreign aid are still only designated for emergency Ebola purposes. Bernice Dahn, Liberias Health minister says that: *"There's a need to transition the funding to support routine health-care services and to strengthen the health systems,"* (McKay, 2015).

Another big health problem the countries are facing post Ebola is that the number of pregnant girls are on the rise, this is assumed to be because of the quarantines and schools being closed like mentioned before. According to local OB's and midwives, the numbers of women that are dying in childbirth have also gone up in Sierra Leone and Liberia, these countries had soaring maternal mortality rates even before the Ebola outbreak. This is happening at the same time as surviving victims of the virus are suffering with various aftereffects that need medical attention. Because the outbreak cut off many childhood vaccination programs as all resources for the time of the outbreak were focused on halting the spread of the virus, measles and whooping cough outbreaks have sprouted in the region (McKay, 2015).

"Full recovery in the three countries will not happen if we don't strengthen the health system," Said WHO Assistant Director General for Health Systems and Innovation Marie-Paule Kieny (McKay, 2015)

7 Discussion and Conclusion

Ebola is a viral disease that has been ever present in the lives of African people since the first known outbreak of 1976. Until this latest outbreak, the disease had traditionally been predictable and, even though the vaccine for it has not yet been found, it has not been a highly talked about virus, no more than the more common Malaria or Dengue fever. If the origin of the epidemic is traced back, it starts off with Ebola being discovered in a town bordering three countries: Liberia, Sierra Leone and Guinea (Stein, 2015). Populations are on the move to seek service in all three countries, partly resulting from the civil wars experienced in the last two decades (Bordner, 2015). This leads to the virus easily spreading between the countries.

It was now up to the individual governments, working together with the WHO and numerous other NGO's, to contain this outbreak (Christensen, n.d.). The fact that people in that area were not diagnosed with Ebola rapid enough in the early period led to the virus having time to spread. As the countries' healthcare systems and infrastructures were extremely weak (even before the epidemic) made the virus more difficult to contain. Additionally, the fact that there was a low level of education in all three countries and inhabitants relied more on cultural superstitions concerning medicine and burials of the dead placed great obstacles on the shoulders of health care workers, leading to unanticipated consequences such as health care workers being attacked and in some cases killed (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

The timing of decisions made by the WHO (e.g., declaring an international health care emergency because of the virus) led to unintended consequences that could be argued to have delayed media publicity and funding.

In regards to the main research question (i.e., *what the unintended consequences of the response* or *how the response was conducted* and *how the decisions of the actors lead to the epidemic spiraling*) is composed into four-steps.

Every decision or action an actor makes, especially in a complex case like this, is bound to have unintended and/or unanticipated consequences. Many of the decisions that had to be made during this crisis can be argued to be led by the *imperious immediacy of interest*, meaning that the immediate interests trump the long-term interests. This refers to, for example, when someone wants an intended action of a consequence so much that he deliberately ignores any unintended effects of that action (Merton, 1936). This can be argued to be the main type of unintended consequence of the response during the outbreak. The importance of halting the spread of the virus at any cost overrode other important issues.

1. The decision made by the governments to keep the epidemic quiet in the beginning, as to not, for example, chase away foreign investors, had the unintended consequences of a *perverse result* meaning that a direct social action has the exact opposite result than intended, often referred to as "backfiring" (Merton, 1936). Had they not made the error in thinking that this would be a small scale epidemic because the epidemics that had come before, though never in this region, were relatively small the course of events might have turned out differently. Trying to keep the epidemic quiet and not giving organizations such as MSF their full cooperation led to not only foreign investors backing out of the country but also in losing the lives of their citizens (Doctors Without Borders slams global response to Ebola, 2015).

2. The decisions made by the WHO, which is the only agency with the authority to lead a global response to a health crisis, during this epidemic have led to unanticipated and unintended consequences (Cheng & Satter, 2015). The WHO, which has taken a lot of criticism for how it coordinated it's response during the outbreak, has taken responsibility for their slow response to declare the outbreak a global health issue. They have made an effort to make new reforms that have drawn from and taken into consideration all of their actions in during this epidemic (Miles, 2015). It has been argued that the unintended consequences of their delay in declaring the epidemic a global health issue gave the virus more time to spread and aid workers less resources for which to work (Cheng & Satter, 2015).

3. The actions of the western media (especially U.S. media) had the unintended consequences of *perverse results*. It could be argued that more western media

attention would have, for the most part, shed a light on the situation, and therefore summoned more support in the form of international aid, which eventually did occur. But it also left room for fear-mongering and conspiracy theories to develop in different mediums for the world to see. This can be argued to have led to discrimination against African people and countries, not only the affected countries of this particular case, but the continent (Mulholland, 2014).

4. The decision made by the governments of the countries to close down schools, even if they were led by the imperious immediacy of interest, led to *perverse results* as that decision halted children's education in the area and led to child abuse, for example many girls being sold into prostitution (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

The *basic values* of the inhabitants of these western African countries have shown to be a major factor, combined with the fragile infrastructure of these states. The level of education in these countries is very low, and superstition and traditional cultural practices that served as a catalyst for the spread of the virus, proved to be an obstacle that is immensely difficult to overcome. The fact that schools had to be closed for nearly a year, impeded with the long term goal of getting better and more widespread level of education in these countries that would eventually provide a better knowledge to the general public as to how viruses like these spread (Socio-Economic Impact of Ebola Virus Disease in West African Countries; A call for national and regional containment, recovery and prevention, 2015).

Every crisis that arises or problem that needs a direct social action can be said to exist in isolation. The specific case of the Ebola outbreak in western Africa in 2014 is no exception. The outcome of the actions taken would have been different had the epidemic happened anywhere else in the world at any other time. The weak infrastructure of the states themselves; health care, education, economic and government, contributed greatly to the perceived failure to act fast and effectively. The international organizations, who are the leaders in global health governance, failed to correctly analyze the situation and, even though they did succeed in the end, the weakness of the global response to a health crisis in a developing country was revealed.

This research certainly has its limitations and is by no means an inexhaustible listing of the unintended and/or unanticipated consequences of each action of actors. To conduct such a detailed research conditions of the thesis would have had to be of another nature.

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