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RESEARCH ARTICLE

EBOLA CRISIS IN LIBERIA: CHALLENGES AND LESSONS LEARNED- A FLASH BACK

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ABSTRACT

This research work revealed the health status of Liberia as being weak with regards to the fight against emerging diseases, especially those of strange nature to the health system of the country. The Ebola epidemic in 2014 witnessed the closure of almost all health facilities in the country; as a result of lack of trained, and specialized health professionals, the EVD killed several thousand persons. Several factors were responsible for the rapid spread of the disease. Those factors included denial, traditional cultural practices, ignorance and lack of facilities and manpower. Additionally, weak coordination from the onset as well as lack of logistical support exacerbated the situation. There were several lessons learned as a result of the Ebola epidemic. One major lesson learned is community involvement in the discharge of primary healthcare activities. As communities took ownership of healthcare activities in the fight against the disease, the disease condition came under control and death rate reduced drastically.

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INTRODUCTION

Ebola is a deadly hemorrhagic disease with an incubation period of twenty-one (21) days. The signs and symptoms usually begin to show between the second day and the twelve day of infection. Though several attempts are being made since the discovery of the disease in 1976, to date there is no scientific evidence of a cure for the Ebola Virus disease (EVD). Signs and symptoms of the EVD are similar to those of other diseases such as cholera, malaria and typhoid.

Background

The EVD broke out in Liberia in March, 2014 when an individual with the virus travelled from Guinea to Liberia. The disease broke out in Guinea in December, 2013; it was not detected as EVD in Guinea until three months later when it was already on its way to Liberia. Since March, 2014, there have been cases of EVD in Liberia. The Ebola crisis reached its peak during the months of August, September, and October, 2014. A gradual decline of new cases began in November, 2014 despite the earlier pronouncement by the United States Center for Disease Control (CDC) that ten thousand persons per week would be infected in Liberia during the month of November, 2014.

This pronouncement by the CDC at the time created a serious panic and posed a great challenge to all stakeholders in the fight against the EVD.

Challenges

There were several challenges faced by the Incident Management System. The following are major challenges among the many challenges faced by the Incident Management System:

- Encounter with a strange disease for the first time with no experience of the management of such disease: There was no trained manpower to fight against the disease. Local practitioners had no experience in the fight against the disease.
- This led to the death of several health practitioners due to ignorance and inexperience in the management of the disease. As a result of this, 99% of the health facilities in the country closed down for fear of the disease; thus a total collapse of the health system was inevitable.
- State of denial: Persistent denial of the existence of the Ebola virus disease (EVD) by community residents gave rise to the rapid spread of the disease and subsequent deaths.
- Traditional and cultural practices: Traditional, cultural and some religious practices regarding the care for dead bodies such as bathing the dead with no precautionary measures posed a serious challenge. The observance of

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religious rituals by the Muslims over the dead such as the washing of feet with the water used to bath the body in the belief that this brings blessings to all those who participate in such ceremony helped to spread the disease faster. This led to many deaths among the Muslims.

- Inadequate logistical arrangements: Inadequate logistical arrangements at the time was another factor to contend with. For example, only one vehicle was available at the time for the transfer of the sick to the treatment unit. This was exacerbated by the situation of hard -to - reach areas as a result of the heavy down pull of rain in the country at the time.
- The lack of bed space in the treatment unit: This situation presented itself such that there was a time when patients waited outside of the treatment unit for others to die in order to be admitted.
- Lack of effective coordination as a result of the lack of management system structure in the early days of the disease outbreak was another challenge. As a result of the lack of coordination at the time, services provided could not yield the desired results.
- Very slow and late response by the international community: It took much time for the international community to prepare for the response. As such many lives were lost before the international community began to respond.
- The lack of facilities for laboratory analysis served as hindrance for supportive treatment. A case must be diagnosed before treatment is initiated. At the onset and deep into the crisis, there was no laboratory facility in country for the testing of specimen to diagnose the disease. Specimens had to be flown out of the country for analysis. Even when the international community began to respond, there was only one testing center located at the Liberia Institute of Biomedical Research (LIBR) in Margibi County. The center could not cope with the many specimens received daily from all over the country. Laboratory results were therefore delayed for several days. People died even before their results were known.
- Collapse of the health care delivery system was another major challenge during the Ebola crisis. All major public and private health facilities in the country closed down. There was no health facility open to the public to provide regular treatment as was the case prior to the outbreak of the disease. Many people died of other illnesses because of the closure of health facilities in the country.
- Economically, the country suffered a serious setback and has yet to fully recover. Many investors fled the country as a result of the outbreak of Ebola thereby creating economic instability in the country, with increased rate of unemployment. To date many people are still jobless as a result of the Ebola crisis.

Lessons Learned

The greatest lesson learned as a result of the Ebola epidemic is that Liberia had a very weak health system- a system with no capacity to contain the EVD and any other disease of similar nature. This is in terms of manpower, infrastructure, equipment, logistics and the like. About 99% of the health facilities have very poor laboratory facilities. There are very few specialists. One example is the lack of clinical

pharmacists throughout the country at the time; (only now there are just three (3) Clinical Pharmacists, who just graduated in March 2017 from the West African Postgraduate College of Pharmacists (WAPCP). Most health practitioners, especially physicians, are only general practitioners. Capacity building of all forms is the surest way to strengthen the healthcare delivery system of Liberia. This situation of the weakness of the health system of Liberia, the Health Minister then, (Dr. Walter Gwengale) at the time, blamed it on the inadequate budgetary allotment by government. In his own words he said: "The lack of budgetary support to the Ministry of Health shows the weakness of the health system." Community involvement in the fight against the disease proved to be very helpful, and a great lesson. Public awareness in all manners and forms provided great relief. The media institutions, though engaged late in the struggle against the disease, enabled individuals, families, groups and organizations alike to protect themselves and the society as a result of daily publications of health messages. There is currently a massive awareness program ongoing with the involvement of several stakeholders including musical artists. In addition, the government instituted a measure of daily press briefing headed and moderated by the Authorities of the Ministry of Information. In this press briefing, stakeholders are given the opportunity (one at a time) to make presentations regarding their own efforts toward the fight against the disease. Some of the stakeholders include donor agencies such as UNICEF, WHO, UNFPA, religious groups such as the Association of Evangelicals of Liberia (AEL), Council of Churches, and the like. This helped to build team work spirit and strengthen coordination and collaboration.

Achievements /Success Stories

There are several success stories to be told to date regarding the fight against the EVD. Currently, there are close to one thousand (1000) registered survivors that were admitted into the Ebola Treatment Units (ETU), tested positive, given supportive treatment and later discharged because they were tested negative at least twice after the supportive treatment. Many of these survivors are kids whose parents lost their lives to the EVD. In the absence of defined treatment protocol, many persons have survived from the disease as a result of the many strategies put in place to fight against the disease. One of such examples is the child survivor, only named Patrick, below.



Figure 1. Ebola awareness messages on a bus stop along the major street leading to the city of Monrovia from the Roberts International Airport (RIA)

One great success story was the acceptance and subsequent display of Ebola awareness messages on private residential

buildings, public buildings, vehicles, etc. As a result of persistent and continuous public awareness activities, the state of denial no longer exists. Below is a public bus stop that carries many Ebola awareness messages for public consumption. Donations from all walks of life in cash and kind created a good atmosphere and a balance to effectively fight the disease. Donations came from the international community as well as local groups, local banks, individuals and the like. One of such is the donation by a local tribal group who donated a vehicle (see photograph below).



Figure 2. A vehicle donated by the Fula Community (a tribal group) for use by the National Taskforce in the fight against Ebola



Figure 3. Patrick, 6 years old holds his certificate; stating that he is now Ebola-free

The construction of Ebola Treatment Units (ETU) around the country helped solve the problem of no bed space which initially led to rejection of patients and many deaths. Monrovia city (in Montserrado County) and its environs hosted up to six (6) Ebola Treatment Units. At least one (1) ETU was constructed in each of the other fourteen (14) counties. Initially, nine (9) ETUs were constructed in six counties outside of Montserrado County, with Margibi County receiving three (3) of the ETUs. Below are photographs of some of the ETUs. The establishment of the Incident Management System (IMS) with a clearly defined command structure improved coordination and service delivery.



Figure 4. China ETU constructed in Samuel K. Doe (SKD) sports complex compound; it is being run by Chinese health professionals. It is the latest ETU to be dedicated



Figure 5. Main Entrance of the China ETU at the S.K.D. Sports Complex – a partial view



Figure 6. Partial view of the MSF run ETU with several ambulances parked at the entrance

The IMS is headed by Hon. Tolbert G. Nyenswah, who served in the Ministry of Health and Social Welfare as Assistant Minister for preventive services. Hon. Nyenswah provided some basic information that gave additional substance for the development of this article.



Figure 7. Rear view of the China ETU at the SKD Sports Complex

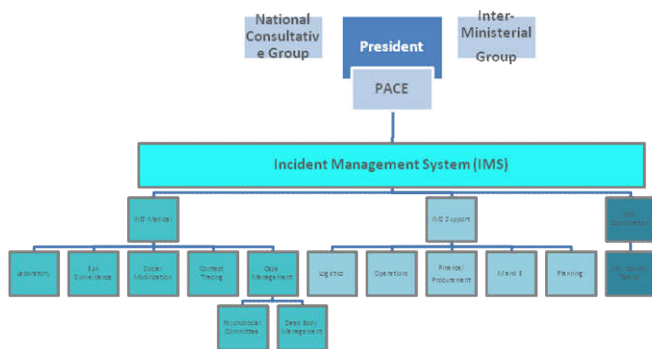


Figure 8. Coordination, Control and Command Structure



Figure 9. Hon. Tolbert G. Nyenswah, Head of the Incident Management System (IMS) – Now Director of the “Liberia Public Health Institute”

Hon. Tolbert Nyenswah exhibited high degree of leadership competence. At the onset of the fight against the disease, he appealed to the citizenry and residents alike to take ownership of the fight against the disease as the outbreak was everybody business. As a result of his persistent call for collaborative efforts, everyone became involved in the fight against the disease at all levels where opportunities are provided. Currently, he is again appealing to residents to remain vigilant in the fight and make no room for complacency. There is a tendency as a result of no outbreak of the disease that people

are rapidly returning to their normal behavior of hands shake, hugging, over crowdedness in vehicles, public gathering for merry making and so forth. There is visible evidence of adherence to the instructions given by the Ministry of Health regarding preventive measures. Everywhere around the country there were hands washing stations before the entrances of buildings (private or public). It is required by the health authorities that people wash their hands as frequently as possible which is one of the surest means of preventing Ebola. See photographs below.



Figure 10. Hands washing station at the entrance of supermarket



Figure 11. A lady was seen washing her hands before entering the supermarket

Community involvement and support in the fight against the disease has proven very well. All communities are involved in mobilization, contact tracing, reporting about deaths and sick people in communities and the like. The community involvement has helped to establish a communication chain from the individual level, to family level, to Ebola call center and finally to the treatment unit. Community leaders have taken charge; and they usually play a very significant role in community health awareness and education. Currently there are ten (10) testing centers available in the country as opposed to only one (1) center at the onset of the crisis. The availability of more testing centers has solved the problems of uncertainty and delay in the provision of supportive treatment. Empowerment / Capacity Building –training of health workers and improved logistical arrangements have improved the management of the disease and general healthcare delivery services.



Figure 12. United Nations military personnel seen immediately after washing his hands to enter a pharmacy store in Monrovia



Figure 13. A client washing his hands before entering a pharmacy store

country and affected every sector of national survival. The period between July and November witnessed the closure of several businesses in the country, the departure of investors and subsequent loss of jobs. The Government of Liberia declared a state of emergency, ordered the closure of schools, entertainment centers, and the quarantine of grossly affected communities. The Government imposed restrictions on several social activities aimed at stabilizing the disease, thereby breaking the transmission.

Some of these measures included the restriction in the number of persons riding in vehicles as opposed to the usual Liberian practice of passengers sitting on each other's laps, ban on public gathering and the like. All state securities were empowered to enforce all measures instituted by government such as increased border patrols, street patrols, monitoring of video clubs and all entertainment centers, seating restrictions in terms of distances from one another during church services and the like. These measures, though difficult to enforce 100 %, brought some level of sanity in the struggle to fight the disease. Fighting a disease of strange nature has not been an easy task for health professionals in Liberia. The response of the international community with the United States of America playing a leading role in providing financial support and manpower, followed by contributions from ECOWAS, the AU, and other friendly governments and groups brought a great relief to the people of Liberia. The willingness, commitment and availability of health workers to provide health care services have made a great difference in stabilizing the disease. The establishment of taskforces in communities, churches, mosques, workplaces and everywhere possible to fight the disease is producing a much needed result. Basically, all community structures are involved in the fight against the disease. This helped to slow down the spread of the disease.

The Trend of the Disease

The disease started with a single infected individual who crossed over from Guinea in March, 2014.

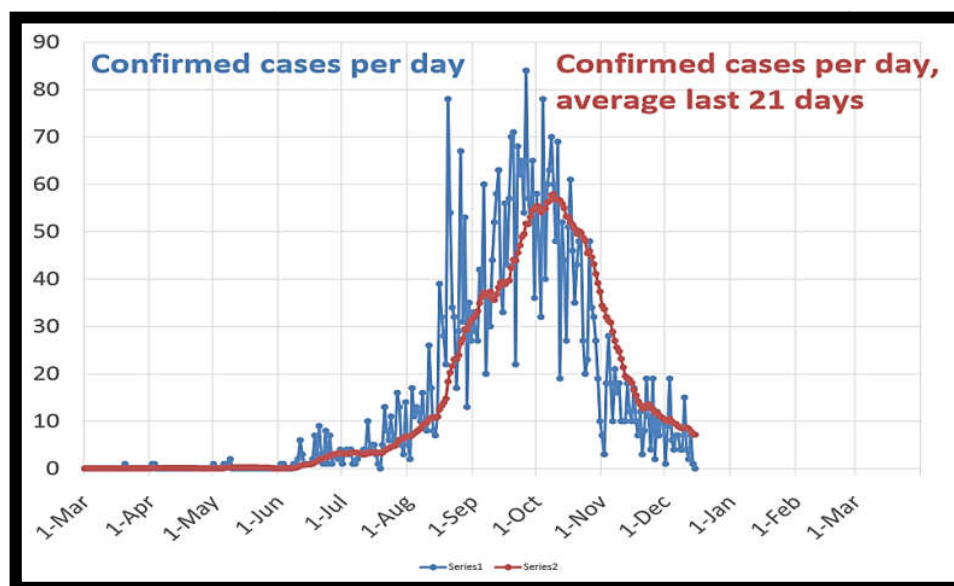


Figure 14. The Trend of the Disease in Graphic Representation

DISCUSSION

The fight against the EVD is a real war, though not necessarily a gun battle. The EDV war paralyzed the fabrics of the

By June, 2014, the number of cases began to rise steadily and the latter part of July, 2014 witnessed the massive increase with hundreds of daily deaths at the Ebola Treatment Units (ETU), street corners, in communities, churches, mosques, etc.

The entire country became terrified between July and November, 2014 with thousands of deaths. Over three thousand persons lost their lives to Ebola in Liberia. The graph below shows the trend of the disease. As a result of the level of stability being experienced in the fight against the disease, Liberia has seen the need to share success stories with the neighboring countries to the extent of sending experienced health workers to Sierra Leone to help fight the disease. Hon. Saah Joseph, from a local charity organization called First Responder, took a twenty man team of health workers to Freetown, Sierra Leone to provide health services to the people of that country. This was based on the fact that unless our neighboring countries were free of Ebola, Liberia would continue to experience cases of Ebola. This is primarily because our borders with our sister countries are very porous; there is continuous cross border trade as well as massive movements across countries despite the pronouncement for the closure of the borders at the time, which placed restrictions on the movements of people across borders.

Conclusion

The restoration of full healthcare services is a major challenge to government and all stakeholders. The spoken words of the President of Liberia had been recorded as follows: “The restoration of health serves depends on the economic recovery of the country”. The President, Madam Ellen Johnson Sirleaf, further indicated that the Ebola epidemic has exposed the weakness of the health system of the country. Restoration of the health system therefore, is a business of all well-meaning residents and donors alike. This has to be a collective responsibility for the safety of the populace. The most important way to restore and improve the health system is to place emphasis on capacity building through training, both in-service and pre-service programs.

The government of Liberia with the support of her partners has the challenge of human resource development. Liberia will experience a great deal of sanity in the years ahead if human resource challenge is adequately addressed.

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