### Impact of Ebola Virus Disease on School Administration in Nigeria

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### Abstract

This study is focused on the impact of Ebola Virus Disease (EVD) on school administration in Nigeria. Two hypothesis were formulated to guide the study. A questionnaire titled Ebola Virus Disease and school administration (EVDSA) was used to collect data. The instrument was administered to one hundred and seventeen (117) teachers and eighty three (83) school administrators randomly selected from the three (3) regions in the federal republic of Nigeria. This instrument was however validated by experts and tested for reliability using the test re-test method and data analyzed using the Pearson Product Moment Correlation Coefficient. The result shows that there is a significant difference between teachers and school heads in urban and rural areas on the outbreak of the EVD. However, there is no significant difference in the perception of teachers and school heads in both urban and rural areas on the effect of EVD on attendance and hygiene in schools. Based on these findings, recommendations were made which include a better information system to the rural areas and the sustenance of the present hygiene practices in schools by school administrators.

### Introduction

The school and the society are knitted together in such a way that whatever affects the society will invariably affect the school. When there are social unrest in the society, the school attendance may be affected. Magaji (2010) noted that the fear of Boko Haram in Nigeria coupled with wanton destruction of lives and properties by the insurgents, many children were forced out of school and several schools were also forced to close down. Even natural disasters in the society such as 2012 flood disaster in Nigeria, many schools were closed down and near make-up schools were opened at the various rehabilitation camps. Religious riots and communal clashes also affect the school. Ogunsuji (2010) stated that the school cannot be divorced from the society, when the society is peaceful and calm, the school will also witness a high degree of peace and commitment. Any epidemic in the society will adversely affect the school as no school can open in the face of such epidemic especially when it is contagious.

The Ebola disease, like a whirl wind came into the health history of Nigeria on the 20<sup>th</sup> July 2014 (WHO 2014) when a Liberian – American man known as Patrick Sawyer flew from Liberia to Nigeria commercial city – Lagos. The man was seriously ill when he arrived Lagos and died five days later (News Agency of Nigeria 2014).

The Nigerian government observed that all who came in contact with Patrick Sawyer had signs of infections and this trigger the health ministry and the federal government to increase a high power surveillance at all entry points to the country. The detected and suspected cases were quickly quarantined.

On the 6<sup>th</sup> August 2014, the Nigerian Health Minister announced the first death who incidentally was the first known nurse that attended to the Liberian. The other five newly confirmed cases were quickly quarantined and treated in isolated wards. On the 19<sup>th</sup> August 2014, it was also reported that Dr Anieyo Adadevoh, the medical doctor who treated Patrick Sawyer has also died of Ebola Virus Disease (EVD) (Guardian 20<sup>th</sup> August).

However, the federal government as well as the entire nation praised the medical doctor posthumously for not allowing Patrick Sawyer out of his hospital as the index case of EVD as soon as he diagnosed him of EVD.

From 20<sup>th</sup> July, 2014, Nigerians live in great dread of the Ebola virus Disease. This disease created fear, suspicion and high apprehension to all citizens. As an African nation already used to the extended family system and communal living, this disease created much panic such that handshake and any form of body contact almost became an abomination. Schools were closed and the entire nation lived in great fear.

The Ebola Virus Disease (EVD) causes an acute serious illness which is often fatal. Whiteny (2014) explain that the history of EVD dates back to 1976 in two simultaneous outbreak. The first outbreak was noticed in Zara, Sudan and in Yanabuku, the Democratic Republic of Congo. It occurred in a village near the Ebola river which the disease took its name.

The most severely affected countries are Guinea, Sierra Leone and Liberia. Although there are isolated cases in most others parts of the world. The World Health Organization report of 2012 noted that during 1994-1996, no less than five independent sites of Ebola virus transmission were identified. Cote d'Ivoire in 1994, 1995 and 1996.

Mcdonald (2013) explained that the Ebola virus belong to the family of filouiridae which includes three genea: Cueva Virus, Marburg Virus and Ebola Virus. There are five species of Ebola Virus that have been identified, Zaire, Bundibugyo, Sudan, Reston and Tai - forest. The first three, Bundibugyo Ebola Virus (BEV), Zaire Ebola virus (ZEV) and Sudan Ebola Virus (SEV) have been associated with large outbreaks in Africa. The 2014 outbreak in most parts of West Africa belongs to the Zaire species (Henn 2014).

The virus (EBO-Z) which is the Zaire subtype and (EBO-c1) which is the Cote d'Ivoire subtype were both involved in previous Ebola virus transmission in Africa. The EBO –c1 according to Fenlint (2011) was discovered when ethnologists in the Tai- forest of Cote d'Ivoire noted that members of a chimpanzee troupe began to experience an unusually high mortality. One of the study group scientist was infected and taken to Switzerland and this provided the best clinical case of Ebola Virus.

The EBO- z on the other hand also circulated around the Gabon and three separate outbreaks in both human and non human primates occurred. (Lyod 2011) notable among the discovery was the role of the dead in the transmission and this led to barrier nursing.

This disease almost ravaged the country if not for the timely intervention of the various agencies of government. The National Orientation Agency which is an organ of the federal government of Nigeria set aside for the proper orientation of the entire Nigeria citizens had to spread the gospel of the prevention and early report of any suspected case of EVD to the nearest hospital. Posters were mounted in the various Nigeria languages warning the Nigerian citizens on how best to prevent EVD and the symptoms of EVD.

The media houses both print and electronic were also actively involved in the crusade of spreading information to the people on the prevention of EVD. Radio giggles and television broadcast were not left out.

The ministry of information in collaboration with the ministry of health were able to reach out to the rural communities and within a limited space of time, the entire nation were better informed about EVD. Most people who could afford it bought hand sanitisers, water and soap were provided schools were closed down during the period, infrared thermometers were also made available in most public places to check the health status of individuals. People started avoiding bush meat as it was to be are carriers of the virus especially monkeys and bats, people became careful in shaking hands and other unwholesome body contact, people avoided crowded places and most people dreaded the hospitals during this period. Any sudden increase in temperature, becomes suspicious. The entire nation lived in uncertainty and great fear.

On the 20<sup>th</sup> of October 2014, it was so consoling when the ministry of health confirmed and pronounced that the World Health Organization has declared Nigeria Ebola free. (NANS 2014).

This disease had a record of 19 cases and 7 deaths. Four (4) of the death were healthcare workers who had cared for the Liberian –American. In all, 52 persons were recorded to have had contacts and were followed up and having completed the mandatory 21 days of incubation of the virus and no new case was recorded, the WHO officially declared Nigeria Ebola free. The European centre for disease control and prevention (ECDC) acknowledged Nigeria's positive role in combating the disease.

However, during this period, schools in Nigeria were about to resume for a new academic session on the  $9^{th}$  of September, and with the ravaging stories of EVD, the federal government was forced to order that no school should resume until the Ebola situation is brought under control.

There was that assumption that the children in school cannot do without body contact and the government also decided to put in several health practices. Sanitizers, water, soap and thermometers are to be provided in schools before resumption can be announced.

This precautionary measures posed a serious challenge to the school administrators as most of the schools are located in the rural areas. Most parents also decided to lock up their children from attending school during the said period even through most of the private schools were attempting to resume not minding the government pronouncement. The attendance of the school children were badly affected and hygiene was introduced to schools and this is considered to have posed several challenges to the school administrators.

### The Objective of this Study

The objective of this study is to investigate the impact of the Ebola Virus Disease (EVD) on school administration with particular reference to attendance and hygiene practice in schools. The study sought to test the following hypothesis.

- 1. There is no significant difference in the attitude of teachers and school administrators in rural and urban areas on the outbreak of Ebola virus disease.
- 2. There is no significant difference in the effect of the Ebola virus disease outbreak on school attendance and hygiene in urban and rural schools.

### Methods

The population of the study include all the teachers and school administrators in Kaduna state in the Northern Nigeria, Ondo State in the South West and Enugu in the South Eastern Nigeria. The sample for the study includes a purposive sampling of teachers and school - heads in both the urban and rural villages in the selected states. One hundred and seventeen (177) teachers and eighty three (83) school heads were randomly selected from both the urban and rural areas.

The instrument for the study is a questionnaire with twenty (20) items. This was validated by five experts in test and evaluation as well as seasoned school administrators in Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria. The instrument was further subjected to a reliability test using ten (10 respondents who were not originally included in the sampled population. The data collected were analyzed using the Pearson Product moment correlation coefficient and it was established at 0.83 which shows that the instrument is reliable. The two hypothesis raised for the study were analyzed using the t-test statistical analysis.

However, the questionnaire were personally administered by the researcher and other research assistants.

**Ho:** There is no significant difference in the attitude of teachers and school administrators in rural and urban areas on the outbreak of the Ebola Virus Disease.

This research hypothesis was answered with items 1-10 in the questionnaire in the questionnaire.

# Table 1: Attitude of Teachers and School Administrators in Urban and Rural Areas on the Outbreak of Ebola Virus Disease (EVD)

Variables	n	Х	S	t-cal	t-crit
Teachers	117	12.3	7.09		
				2.93	2.41
School administrator	83	8.2	4.11		

Significant at 0.05

Since the calculated t-value of 2.93 is greater than the table value of 2.41, it holds therefore that there is a significant difference in the attitude of teachers and school administrators in urban and rural schools on the outbreak of the EVD.

 $H_{02}$ : There is no significant different in the effect of the EVD outbreak on school attendance and hygiene in both urban and rural schools.

This research hypotheses was answered with items 11 - 20 in the questionnaire.

Variables	n	X	S	t-cal	tcrit
Teachers	117	11.7	6.11		
				2.11	2.41
Hygiene	83	8.9	5.32		

Significant at 0.05

The calculated t-value is 2.11 while the critical value is 2.41. Since the calculated value is less than the critical value, it holds therefore that there is no significant difference in the effect of EVD outbreak on school attendance and hygiene in both urban and rural schools.

### Discussion

From the results of the analyzed data, the teachers and the school administrators in urban and rural schools differ in their perceptions on the outbreak of the Ebola Virus Disease. While teachers and school administrators were exposed to the media publication of the EVD and they also had the opportunity to listen to current issues concerning the disease, those in the rural areas first heard the news of Ebola as mere rumour and it had to spread by words of mouth which was subject to distortion or over exaggeration. In the rural areas, as a result of their sketchy information of the EVD, many believed that bathing will salt and water or chewing enough 'bitter kola' would help to prevent Ebola and this became a common practice in most rural villages in Nigeria. So the perception of teachers and school administrators inrespective of their level of education differ considerably as those in urban areas were more exposed to information than those in the rural areas.

The findings also revealed that there is no significant difference in the effect of EVD on school attendance and hygiene in both urban and rural schools. Even though the information about EVD was sketchy in the rural area and more pronounced in the urban areas, it was however dreaded by both urban and rural dwellers, so to avoid untimely death, many parents prevented their children from attending school during this period and several measures were put in place to improve on the hygiene of the people. Schools were hurried to provide clean water and soap for children to wash their hands. The temperature of the children was checked before entering the classes. School administrators were saddled with the responsibilities of providing some basic facilities that will improve on the hygiene of the staff and students. The school environment were to be kept clean always and pupils were strictly monitored. The federal government declared that schools were to be closed during the period and school administrators grabbled to meet up with the lost periods upon resumption to be able to prepare students for the external examinations. The urban and rural schools were equally shut down during the period thereby affecting the school attendance for that year.

### Conclusion

The EVD has affected school administrator both positively and negatively. In terms of attendance, schools were shut by the federal government during the epidemic, parents were also scared to send their children to school. This affected the school syllabus during the period. School administrators have to make frantic efforts to cover the lost ground. Parents in worst hit areas like Lagos and Port-Harcourt even attempted relocating their children to other states.

However, the Ebola Virus Disease brought back the ancient practice of hygiene in schools; where washing hand basins were strategically located in virtually all classes for teachers to wash their hands after lectures.

Morning inspection during assembly where teachers are expected to go round to check the neatness of the children. Water was provided and students were made to wash their hands before entering the school premises and body temperature checked. This to a reasonable extent impacted on the hygiene of the staff and students.

### Recommendation

Based on the findings the following recommendations are made

- The act of hand washing and general school hygiene should be maintained.
- Emphasis should be placed not just on the personal hygiene of the students but also on the school environment.
- Much publicity and better means of prompt information dissemination should be advocated for the rural areas in Nigeria.
- School administrators should be provided with adequate fund to maintain the tempo of hygiene as a result of EVD.
- Students should be encouraged to attend school promptly especially when any natural disaster has been put in check by the appropriate authorities.

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