

**MANAGEMENT OF HEALTH FOR SUSTAINABLE SCHOOL SERVICE
DELIVERY: LESSONS FROM TEACHERS' AND PARENTS' PERCEPTIONS
OF THE OUTBREAK OF EBOLA VIRUS DISEASE**

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Abstract

This study examined teachers' and parents' perception of the impact of the outbreak of Ebola Virus Disease (EVD) on school attendance and hygiene in Yenagoa Local Government area of Bayelsa state, Nigeria. The sample for the study consisted of 120 teachers and 120 parents selected randomly in equal proportion from both rural and urban areas. A questionnaire of ten items titled "Teachers' and Parents' Perception of the Impact of the Outbreak Of Ebola Virus Disease (TAPPIOEVD) which had a reliability coefficient of 0.86 was used to elicit responses from the respondents. Result of the study revealed that both parents and teachers were of the opinion that the outbreak of Ebola Virus Disease provoked the health consciousness of both the government and school administrators resulting to the improvement of the hygiene condition of the school. This was reflected in their mean scores which were above the criterion mean for all the items on school hygiene. Parents and teachers also perceived that the school attendance in most schools was also adversely affected as most parents withdrew their children from school for fear of the virus. The implication of these findings is that sustainable development in the society which is a product of sustainable school service delivery is dependent to a large extent on the effective management of the health of the pupils and students by all stakeholders who are involved in the business of education. Recommendations made in the study include ensuring that every school has a

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One of the essential social amenities government provides for her citizens is education. This is because education is the bedrock of development in any society. The government also partners with private individuals by giving them the authority to assist her in this responsibility by opening their own schools. As a sub-set of the society, the school cannot be divorced from the happenings in the society. There is a link between the school and other institutions in the society such as the religious, family, legal and health institutions. In Nigeria for instance, religious riots have often led to the closure of schools in some parts of the country. Magaji(2010) noted that most schools in the North - East of Nigeria were forced to close down especially with the much advertised kidnap of the chibouk girls. This made most parents to relocate their children; there was also a high drop out rate that affected school attendance. Similarly cases of epidemics especially contagious ones often have direct effect on the schools. Hence, Adeola (2012) reported that the 1952 small -pox outbreak in most parts of the country forced the colonial government to close down schools until a team of experts from the British colony came into address the issue. It is said that health is the only valuable thing in life and only the sick knows that a healthy man is the man who wears the crown. These figurative expressions show how important health is to all mankind and even animals. Health is very important because no individual can achieve much in the absence of good health. This is why both Government and Non- Government Organisations of every nation make all efforts to ensure the health of their citizens. Also in education, a teacher cannot be effective in the performance of his duties if he is unhealthy.

Similarly, a student who is unhealthy either mentally, physically or emotionally may be irregular in school attendance or may also subsequently achieve little or no success in his academic pursuit. Health experts have also attributed poor health condition to various factors which include bad eating habits, home environments and poor hygienic conditions. Poor health condition of students and teachers will adversely affect the outcome of the process of education and subsequently the development of the society.

This study is therefore focused on the impact of the outbreak of Ebola Virus Disease (EVD) on school attendance and hygiene as perceived by parents and teachers and the implications of the lessons from it for the management of health for sustainable school service delivery.

Review of Literature

Among all the several natural occurrences that have been affecting school attendance in Nigeria, the Ebola Virus Disease outbreak has been reported to have resulted to more panic among parent, teachers, school owners and administrators. This is because the EVD outbreak in 2014 is the most widely spread epidemic in history and has caused significant mortality with reported cases of fatality rate of about 71%(UNDP,2014).

Ebola Virus Disease (EVD) epidemic in Nigeria, Guinea and Sierra Leone is the largest, deadliest and most complex and challenging Ebola outbreak in history. Anyanwu, (2013) stated that the outbreak was first reported in 1976, in Yambuku, a village in the Democratic Republic of Congo. From that time till now, over 20 Ebola outbreaks have occurred mainly in the East and Central African countries including Gabon in 1996 where 21 of 31 cases resulted in death.

World Health Organization (2014) also reported that the first known infection which occurred in 2013 concerned an 18 month old boy who died on the 26th December 2013 in Meliandou, a remote village located in Guekedou, not far from Sierra Leone and Liberia borders.

Liberia recorded its first case in Foya District (Loya County) on the 30th March and by 2nd April, 2014, the virus was transmitted to the people in Monrovia and 209 confirmed cases and 131 deaths were later recorded in Liberia on 17th April. The neighbouring countries of Senegal and Mali were not spared (Blyther, 2014).

The first known case of Ebola Virus Disease (EVD) in Nigeria, as opined by Dixon and Schaffer (2014) was noticed on Patrick Sawyer who travelled from an Ebola affected country (Liberia) to Nigeria on July 17, 2014. He was confirmed positive for acute Ebola Virus infection at the Lagos University Teaching Hospital and later died on July 25.

WHO(2014) stated that out of 19 cases, seven (7) death cases were confirmed alongside Patrick Sawyer and four (4) of the death cases were health workers who had cared for Patrick Sawyer. The outbreak of Ebola Virus Disease therefore brought fear and panic among Nigerians. It also affected all facets of the society adversely.

The economic impacts of the outbreak include loss of Gross Domestic Output, threat to food security, fall in employment and livelihoods, and decline in foreign investment (UNDP, 2014). For instance, in December 2014, World Bank estimated Sierra Leone's growth as 2.0 percent down from pre- Ebola estimates of 8.9 percent (World Bank, 2014).

The outbreak as opined by Piot(2014) also had an impact and implications for food security such as increase in price, reduced food trade, restrictions on movement and expected reductions in domestic harvests. To this effect, Welthungerhilfe (2014) noted that in Sierra Leone between 1.55-1.79 million people are likely to be exposed to undernourishment as a result of the crisis.

When EVD was sighted in Nigeria, the Federal Government also directed the the various Ministries of Education to shift the resumption date of schools until the

Ebola situation was put into proper check. This directive was carried out by both public and private schools and this affected school attendance for that term.

Haninan (2014) also noted that the fear of the Ebola Virus was not intense in rural areas as the pupils were found going about their normal activities without any fear. However, schools were closed and school administrators could not force children to classes because aside from the fact that it was a Government directive, parents on their own also locked up their children from attending school. Haninan (2014) also noted that in urban areas, the dwellers were more at home with news of EVD and the risk factor and most parents prevented their children from resuming school even when the World Health Organization declared Nigeria Ebola free, while in rural areas, she noted that the fear of Ebola was not intense as the pupils were found going about their normal activities without fear.

The outbreak of Ebola Virus also brought significant effect on school hygiene. The Federal Government through the ministry of health directed that all schools must provide water in a bucket with running tap for teachers, pupils and students to wash their hands before entering the school compound. Soap and hand sanitizers were also provided for use in schools. Ayinde(2014) observed that if the culture of hand washing can be inculcated in the rural child, the hygiene condition of their environment might improve.

In addition to hand washing, infra-red thermometers were used to check pupils' temperature before entry into the school compound. School administrators were also advised to strictly take a daily healthy history of pupils. Mardin (2013) stated that the beauty of an American school is that the health history of every child is of paramount interest to the school health officer and school administrators. However, this has been a neglected area in many Nigerian schools before the advent of Ebola Virus Disease. Ayomide (2015) thus noted that the school hygiene was highly improved and after some time began to decline because Government failed to keep on monitoring and inspecting the schools to ensure compliance.

Statement of the Problem

The outbreak of the Ebola Virus Disease set fear and panic to both parents and teachers as handshake and other body contacts could be a way of transmitting the disease. Parents and teachers were very disturbed because the school is a place of social interaction. They wondered if the school authority and the government would be able to guarantee the health condition of the pupils and students. Though the panic affected every member of the society and other institutions, the worry over the safety of the children in school was more because of their age and the nature of the school environment. This study therefore seeks to evaluate the impact the outbreak of Ebola Virus Disease had on school attendance and school hygiene.

Purpose of the Study

The purpose of the study was to find out the perceptions of parents and teachers of the impact that the outbreak of Ebola Virus Disease had on school attendance and hygiene in Yenagoa Local Government Area of Bayelsa State. The study specifically sought to find out:

1. Parents' and teachers' perceptions of the impact of Ebola Virus outbreak on school attendance.
2. Parents' and teachers' perceptions of the impact of Ebola virus outbreak on school hygiene.
3. Lessons that have implications for sustainable school service delivery from the result.

Research Questions

The research questions drawn from the purpose of the study are:

1. What are parents' and teachers' perceptions of the impact of the outbreak of Ebola Virus Disease on school attendance?
2. What are parents' and teachers' perceptions of the impact of the outbreak of Ebola Virus Disease on school hygiene?
3. What lessons can be drawn from the result?

Methodology

The descriptive survey design was adopted for the study. The sample for the study (selected through simple random sampling technique) consisted of two hundred and forty respondents (240) comprising one hundred and twenty (120) parents and one hundred and twenty (120) teachers. Parents and teachers from both urban and rural areas were equally represented. A questionnaire titled "Teachers and Parents Perceptions of the Outbreak of Ebola Virus Disease (TAPPIOEVD)" was used to elicit responses from the respondents. Section "A" of the questionnaire dealt with the respondents' demographic data while section B contained (10) questions which elicited responses on parents' and teachers' perceptions on the impact of EVD on school hygiene and school attendance. The response type was a four-point likert type scale scored as Strongly agree- SA (4 points), Agree- A (3 points) Disagree- D (2 points) and Strongly disagree -SD (1 point). The questionnaire had a reliability coefficient of 0.86 and the method of analysis was the criterion mean. Scores below the criterion mean (2.50) were rejected while those that are equal to and above the criterion mean were accepted.

Results

The results of the study are presented in the tables that follow.

Research question 1:

What are parents' and teachers' perceptions of the impact of Ebola Virus outbreak on school attendance?

The result of the analysis of data is presented in table 1.

Table 1 : Parents’ and Teachers’ Responses on the Impact of EVD on School Attendance

The result presented in table 1 showed that School attendance was negatively affected as most parents withdrew their children from school for fear of contacting the EVD.

S/N	ITEM	N TEACHERS	SD	X	N PARENTS	SD	X	CRITERION	DEACON TEACHER	DEACON PARENT
1.	Most parents withdrew their children from school.	1	0.82	3.38	1	0.68	3.69	2	Accepted	Accepted
2.	Most parents refused to release their children even after the control of EVD		2	0.91		3.22	2		1.71	3.63
3.	Most schools resumed during the out break	0		0.17	2.53	0		1.89	2.50	5
4	School attendance was mostly affected in the rural areas		0	0.89	3.28		0	1.74	3.58	
5	The outbreak affected school attendance during and after the outbreak			0.82	3.41			0.73	3.64	

Both parents and teachers agreed to this (-x=3.60 and 3.38 respectively). Result also showed that this occurred both during the outbreak and immediately after the declaration of an Ebola free society. The decline in school attendance was also more evident in the rural areas than in the urban areas, as perceived by teachers and parents (-x=3.28 and 3.58 respectively). However, it was discovered that two months after the declaration of Ebola free society, school attendance had returned to normalcy (above 90%).

Research Question 2:

What are parents’ and teachers’ perceptions of the impact of the EVD outbreak on school hygiene?

The result from the analysis of data is presented in table 2.

Table 2: Parents' and Teachers' Perceptions on the Impact of EVD on School Hygiene.

S/N	ITEM	N TEACHERS	SD	X	N PARENTS	SD	X	CRITERION	DEACON TEACHER	DEACON PARENT
1.	Washing of hands was introduced to schools.		0.08	2.57		0.78	3.59		Accepted	Accepted
2.	Thermometers were provided to check students' temperature		0.85	3.55		0.49	3.05		Accepted	Accepted
3.	The practice of hand washing with soap stopped immediately after the control of EVD. outbreak		0.73	3.61		0.89	2.58		Accepted	Accepted
4	Hygiene was mostly emphasized only in urban schools		0.13	3.02		1.05	2.90		Accepted	Accepted
5	School environment has remained very clean since the outbreak of EVD		0.62	3.65		1.03	3.40		Accepted	Accepted

The results of the data analysis presented in table 2 show the impact of EVD outbreak on school hygiene. It brought about the use of thermometers for checking pupils and students temperature. This is shown in parents' and teachers' responses (-x=3.05 and 3.55 respectively). Washing of hands was also introduced to schools; however it stopped immediately after the control of EVD outbreak, because the Ministries of Health and Education stopped visiting schools to monitor their compliance to the directive of the Government. This was in line with parents' and teachers' responses (-x=3.59 and 2.57, and 2.58 and 3.61 respectively).

Discussion:

The findings of this study have shown that though parents and teachers may have reacted differently to the news of the Ebola Virus Disease outbreak, they seem to quite understand the implications of the outbreak. This may have resulted to both parties resolving to abide by the directive given by the Government to schools.

Parents and teachers also agreed that the outbreak of Ebola virus disease had significant impact on school attendance as most parents withdrew their children from school. This finding agrees with Haninan (2014) who noted that because of the fear of Ebola, parents on their own locked up their children from attending school.

Result of the study also showed that both parents and teachers agreed that hand washing and the use of thermometers to check pupils' temperature were introduced as measures for improving the health condition of members of the school community. It was also in consonance with government directive for checking the spread of Ebola Virus through body contact. However, as noted by Ayomide,(2014) the practice of hand

washing stopped immediately Nigeria was declared Ebola Virus free. The result of this study also agreed to this (Mean- 3.61 and 2.58). Furthermore, though hand washing was discontinued in schools, the awareness created on the importance of good health and the need for a clean environment continued as the environment of most schools have remained clean since after the outbreak. The result of the study in table 3 confirmed this as parents and teachers responses had means of 2.90 and 3.02 respectively.

Lessons from the Ebola Disease outbreak

From the results of this study, these lessons can be drawn.

Health is a significant predictor of sustainable school service delivery. A school owner or manager should therefore understand that holistic education entails the “wellness” of the spirit, soul and body. Negligence of the health situation of children may lead to depopulation of the school through sickness and death, contagious diseases and deficit while proper attention to children health needs endear parents to the school, lead to increase in population of the school and also attract other benefits to the school.

The outbreak of EVD Virus evoked health consciousness in most Nigerians, especially teachers and parents. Washing of hands which is one of the important aspects of school hygiene, which has been neglected over the years was re-introduced. Onosedo(2014) lamented that the Nigerian teachers at the primary school level sparsely remembered that it is their responsibility to oversee the health situation of the children under their care. School owners and teachers should not wait until there is an outbreak before giving the health of the children the priority it deserves.

The school is one of the most significant institutions in the society. As a result of the nature of its composition, a health issue that is not tackled promptly can spread easily and become devastating on the society. This is because the nature of children is such that they must interact (play) with their friends and peer groups in the school. Some of them at the nursery level may not be able to explain their health condition if a regular check is not carried out on them. Hence the need for a daily temperature checks on them.

It was also discovered that most schools lacked health facilities such as sick bay, visiting doctors/nurses and / or first aid boxes. The government through the Ministry of Education became more serious about these areas at the advent of Ebola Virus Disease.

Recommendations

The results of this study and the lessons from the EVD outbreak have led to the following recommendations.

-The Government through the Ministry of Education should establish a Health monitoring team to supervise the health facilities in schools on at least a termly basis.

- School owners should continue the practice of hand washing and checking of the temperature of children as this will help to forestall the transfer of disease from one pupil/ student to another.
- First aid boxes should be provided in all schools, where there is no sick bay, which is very necessary.
- Schools should engage the services of at least either a parttime doctor or qualified nurse who can attend to pupils/students when the need arises.
- School environment should always be kept clean to enhance the well being of the pupils/ students.

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