

Attitude of Senior Secondary School Students towards Ebola Preventive Measures in Calabar, Nigeria

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Abstract

Peoples' attitudes toward Ebola Virus Disease (EVD) have, over the years been observed to tremendously impact its control and prevention especially during outbreaks but hardly had research significant efforts focused on one of the most vulnerable groups (the in-school-adolescents). This article sought to fill this literature gap by focusing on the attitudes of senior secondary school students toward EVD preventive measures. A survey research design was adopted with two null hypotheses formulated to guide the study. A questionnaire with a reliability coefficient range of 0.79 to 0.86 was used to collect data from 200 respondents while data was analyzed with t-test statistics. The findings revealed that the attitude of students towards EVD preventive measures was significantly positive. The result also indicates that significant family differences exist in attitude in favour of monogamy. It was concluded that the level of awareness of the disease was high with some myths, misconceptions and misinformation about EVD diffused. It was recommended that attitude of similar and other age cohorts be recognized and targeted for more routine mobilization, activities, messages and other preventive interventions and campaigns in order to reduce false beliefs and improve help seeking behaviour while educational public health messages should focus on limiting or halting EVD spread occasioned by unsafe health attitudes.

Keywords: Family type, Attitudes, Ebola Preventive measures

Introduction

The first case of Ebola Virus Disease (EVD) outbreak in Nigeria as an important public health problem was in 2014. In the year, this deadly and severely fatal illness with a case fatality rate of up to 50%, was declared a 'Public Health Emergency of International Concern' by the World Health Organization (WHO). Given that even a single case of EVD could have serious consequences, its occurrence in the country provoked a great deal of anxiety, tension and concern among the populace. Potentially, it therefore meant that, the spread of EVD threatened to negate years of development efforts by isolating the nation from international trade and denying it foreign direct investment (Spengler, .Ervin, Turner, Rollin & Nichol, 2016). Already, as Osang (2016) had pointed out lack of proper information about the EVD and the resultant disease had a devastating effect on many families in the regions that experience it as an epidemic and even in areas that did not experience it in an epidemic proportion. The lack of information led to the maltreatment and stigmatization of EVD survivors and their families especially in their places of work. Nyakarahuka, Skjerve, Nabadda, Sitali, Mumba, and Mwiin (2017) observed that survivors of EVD, their families and the broader community suffered discrimination and stigmatization. This awareness created in the people an attitude of shying away from normal social gatherings as the freedom of movement was reduced.

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Securing visas to travel to other countries from Nigeria then was also difficult and many people lost their sponsorship to study outside the country. Osang (2016) cited the case of a Nigerian football team that was barred from participating in China at the time of EVD breakout in Nigeria.

The fact that EVD was viewed as an immigration risk, and the lack of adequate health care services which agitated many Nigerians further provoked some attitudinal problems in them, making them conscious of their vulnerability to the EVD. Owing to the awareness of the potential danger to life and the nation, the immediate reaction to its sudden emergence was a resort by many people to panic measures like the eating of bitter kola, bathing with and drinking strong salt solutions. The Government of Nigeria, development partners and the public health sector along with the relevant health educators were unanimous in placing a major focus on educating the public to prevent EVD from taking root, spreading and becoming epidemic as the most appropriate and definitive response to the potential scourge and ravaging impact of the disease. However, of the numerous challenges emanating from the fight to prevent the spread of the virus, attitudinal orientation seemed to be among the topmost (Osang, 2016). The apparent worrisome attitude exhibited by people towards its prevention was indicative that the highly contagious Ebola Virus was going to spread like wild fire across the country and become endemic (WHO,2014). As pointed out by Shuaib (2014), the Federal Government of Nigeria was very concerned and responsive to the outbreak of EVD as there were collaborative efforts by the Federal Ministry of Health (FMOH) and Nigeria Centre for Disease Control (NCDC), the Lagos State Ministry of Health and partner agencies which established an Ebola Emergency Operations Centre (EEOC) to coordinate all the outbreak response activities. Social and mass media were also used to provide information about EVD and other forms of prevention and control measures to limit the spread as well as promote preventive measures such as personal hygiene and good public health practices. Toll-free Ebola help numbers were established and made available to the general public to seek medical advice and care when the need arose. Since weak security network failed to ensure that people were not properly screened and those suspected did not leave their quarantined bases, the only option available to them was a resort to EVD prevention measures: strict use of sanitizers, judicious washing of hands, and the avoidance of hand shake and so on.

In-school-adolescents and Ebola prevention

Undoubtedly, the group most prone to the risk of contacting the killer virus was in-school adolescents in view of their unique biological, developmental and environmental characteristics. Generally, they are very mobile, experimental, risk taking and vulnerable (Sanders, 2013). Their disposition, character traits coupled with the awareness of the potential danger of the virus with the resultant potential stigmatization and discrimination against survivors and their families reinforce the fear and uncertainty thereby making parents, teachers and school administrators to be jittery, panicky and deeply confused (Gatherer,2014). This was reinforced by myths and believed that witchcraft or some ill luck brought about the disease. More so the arrival of the first acutely-infected EVD patient to Nigeria in 2014 and whose primary destination was Calabar, Nigeria sparked off an intense tension for its outbreak and possibility of spreading fast while the news of its arrival made people respond with fear. Many people were agitated about how to curtail its spread, especially in Calabar Municipality with its teeming number of students. Nwozichi (2015) observed an overwhelming concern about the quick spread of the virus and the consequent health challenges and burden it posed to the areas that were to be affected. Part of their worry and fear stemmed from the fact that they were not well-informed about the EVD and this explained the type of attitude they exhibited towards it and the preventive strategies. Although Fowler, Fletcher, Fischer, Lamongtane, Jacob, and Bret-Major (2014) noted that factors such as lack of knowledge, limited infection, prevention and control resources, poor public health infrastructure and highly transmissible nature of the virus contributed to the increase in the outbreak in the affected regions, the attitude of people towards the preventive measures was also a major contributory factor to the outbreak and spread Osang, 2016).

From the foregoing, it is obvious that the attitude of young people to EVD prevention has a lot of consequences with regards to its containment or otherwise. Attitude towards EVD could impact the control and preventive measures, especially when there is an outbreak. Attitude refers to a set of emotions, beliefs and behaviours towards a particular object, a person, thing or event. Attitudes are often the result of experiences or upbringing and they can have a powerful influence over behaviour (Cherry, 2017). Collins Dictionary online (2018) defines attitude as the way you think and feel about something, especially when this shows in the way you behave.

According to the APA College Dictionary of Psychology (2009) attitude is a relatively enduring and general evaluation of an object, person, group, issue, or concept on a scale ranging from negative to positive; attitudes provide summary evaluations of target objects and are often assumed to be derived from specific beliefs, emotions and past behaviours associated with those objects. Attitude has cognitive, affective and behavioural dimensions which underlie behaviour in very a significant way. Accordingly, it is unlikely for one to understand behavior without first appreciating attitude.

Allport (1974) in Asuquo (1997) conceptualized attitude in terms of mental and neural state of readiness, organized through experience exerting a direct or dynamic influence response to all objects and situations with which it is related. In the same way, Penner (1989) perceives attitude as a consistent disposition to respond to an object in some way (favourable or unfavourable). He asserts that it is unobservable but precedes a person's action and a major factor in determining human reactions and behavior. Glen (1989) as cited by Asuquo (1997) had also described it as a response pattern or a tendency to act or think in a particular way. Taken together, attitude provides a frame of reference that conditions behaviour in that a favourable attitude elicits positive behavior while an unfavourable attitude would cause a reaction either of avoidance or aggression. A neutral attitude, however, leads to indifference. It is logical to assume that a positive attitude toward EVD preventive measures could produce tangible desirable behaviour change since attitude play a vital role in shaping behaviour and social interaction (Asuquo, Ekuri, Asuquo & Basse, 2005). Similarly, as was indicated earlier, a person's attitude has a lot to do with the person's family of orientation in the sense that the family can affect his attitude. Anagbogu (2010) observed that children from monogamous family develop better attitude towards issues because they have parents who are closer to them and who are committed to their responsibilities than those from polygamous family. It is, therefore, reasonable to assume that children from monogamous homes could develop better psychological attitude, while those reared from polygamous homes have more negative attitude towards issues. Also, a family type where parents are not educated and do not understand the implication of EVD prevention would make it difficult for the children to know the kind of preventive measures to take in order to prevent the spread of EVD or to avoid being infected. Most often parents who are not educated do not provide quality care and attention for their children and this can result in poor development and negative attitude to life.

The purpose of this study was to investigate secondary school students' attitude to EVD preventive programme. The influence of family type on their attitude to its preventive programme was also investigated. Given that a change of attitude and quality family type would be very necessary for the prevention and control of EVD, it was expected that the outcome of these investigations would provide data that would help in the design of educational intervention for EVD prevention and other related infectious diseases among in-school adolescents and similar age cohorts in Nigeria Subjects 6498 senior secondary two students in the 20 government approved secondary schools in Calabar Municipality of Cross River State constituted the study population. Of this number, 3266 were males and 3232 were females with age range of 12-15. Using the stratified random sampling technique, a total of 200 students (100 males and 100 females) was selected from five out of the 20 schools. This was to give an equal representation of both sexes.

Instrumentation

The research design adopted for this study was the survey. The instrument for data collection was a questionnaire (Attitude to Ebola Prevention Questionnaire (ATEPQ) specifically developed by the researchers to collect data for this study. Section A of the instrument focused on family type while section B with 15 items on the 4-point Likert-type options of strongly agree, Agree, Strongly disagree and Disagree focused on the attitude to Ebola preventive measures. The instrument was validated with the assistance of experts in measurement, evaluation, Guidance and Counselling who made useful recommendations, modifications and corrections. A pre-test (using the test-retest reliability technique) was done on a group of respondents with similar characteristics but who were not part of the study to establish internal consistency. A reliability coefficient range of 0.79 to 0.86 was obtained. The dependent and independent t-test served as the statistical instrument for data analysis. This range of coefficient correlation is high enough to measure the same psychological construct.

Data collection and analysis

The questionnaire was administered directly with the help of five research assistants and the respondents were guided by the researchers to complete the questionnaire. The scoring was done manually.

All positive statements were assigned 4 points (strongly agree) responses; 3 point to agree while 2 and 1 were assigned to disagree and strongly disagree responses respectively. The order of scoring was reversed for all negatively worded items and based on this the sum of score for each subject for the individual scales was determined and utilized for further analysis with the help of t-test statistics.

Results and Discussion of research findings

The results of data analysis which was based on the purpose of study are presented in tables 1 and 2

H01: The attitude of senior secondary school students towards Ebola Virus Disease preventive measures is not significantly positive.

Table 1: Dependent t-test Analysis of the Senior Secondary 2 Students' Attitude towards EVD Preventive Measures (N=200).

Variables	X	SD	t-value	Sig Level
Sample mean	16.42	4.54	7.47	0.00
Reference mean	15.00	0.00		

* Significant at .05 level, critical t =1.96, df=199

Table 1 presents the summary of dependent t-test analysis. The result in the table indicated that the calculated t-value of 7.47 was greater than the critical t-value of 1.96 at 0.05 level of significance with 199 degree of freedom. With this result, the null hypothesis 1 which states that the attitude of Senior Secondary School Students towards EVD Preventive Measures is not significantly positive was rejected. This implies that the attitude towards EVD preventive measures is significantly positive. H02: Family type does not significantly influence attitude towards Ebola Virus Disease Prevention.

Table1: Independent t-test Analysis of the Influence of Family Type on Attitude to EVD Preventive Measures (N=200).

Family type	N	X	SD	T-value
Monogamous	120	17.66	1.89	8.83
Polygamous	80	15.12	2.23	

* Significant at .05 level, Critical t=1.96, df=198

The result in table 2 indicated that the calculated t-value of 8.83 was greater than the critical t-value of 1.96 at 0.05 level of significance with 198 degree of freedom. With this result, the null hypothesis 2 which states that family type does not significantly influence attitude towards EVD preventive measures was rejected. The result implies that significant family type differences exist in terms of attitude to EVD preventive measures. However, respondents from monogamous family show superiority over those from polygamous family in terms of their attitude to EVD preventive programme. The result from the data analysis on hypothesis one revealed that the attitude towards EVD preventive measures is significantly positive. The finding of this hypothesis is in line with the view of Ogado (2002) as cited by Osang (2016) that people with adequate knowledge usually have positive attitude towards EVD prevention measures. This result also agrees with the work of Nyakarahuka, Skjerve, Nabadda, Sitali, Mumba, and Mwiin (2017) who worked on the knowledge and attitude of 740 respondents towards Ebola and Marburg virus disease prevention in two affected communities in Uganda and discovered a positive attitude. It is also in line with the finding by Illesanmi and Alele (2014) who worked on knowledge, attitude and perception of Ebola virus disease among secondary school students in Ondo state Nigeria and discovered a good knowledge and a positive attitude towards its prevention.

The result from the data analysis on hypothesis two revealed that family type significantly influences attitude to EVD preventive measures. Similar findings in were reported Anagbogu (2010) who discovered that children from monogamous homes develop better attitude towards issues than their counterparts from polygamous families because they have parents who are closer to them and are committed to their responsibilities. In other words children from monogamous homes develop better psychological attitude towards EVD prevention, while those reared from polygamous homes have more negative attitude towards EVD prevention.

Conclusion and recommendations

This study has shown that in-school adolescents tend to have a favourable attitude towards EVD preventive programmes. They are positively disposed to EVD prevention. The study also indicates that significant family influence exist on the attitude of young people in favour of those from monogamous families. From the results, it was concluded that the attitude of Students towards EVD preventive measures in Calabar Municipality of Cross River State, Nigeria is positive and also that the family type of students tends to affect their attitude towards EVD preventive measures. Further studies should be focused on correlates of students' attitude to EVD prevention and indeed, other deadly diseases like Lassa fever.

Based on these results, efforts should be made by Government to ensure promotion and sustainability of health education, focusing on the mode of transmission and preventive measures such as demonstration of hand washing techniques, addressing the myths and misconceptions and promoting safe burial practices. In addition, medical personnel, health educators and counselors in public and private schools should intensify efforts to increase their health education service delivery to shape right attitudes of young people and prepare them for response to emerging and re-emerging infectious diseases in view of the poor attitudes that may be emanating from families. Furthermore, parents should endeavour to expose their children to health education programmes in their exemplary behavior, public enlightenment campaigns and the mass and social media so as to increase and develop their learning experiences.

References

- Anagbogu, M.A. (2010). Counselling of antisocial behaviour for better adjustment of Nigerian adolescents. A Publication of Nigerian Society for Educational Psychologists.
- Asuquo, P.N. (1997). Students' perception of school counseling and their attitudes towards its programmes. *Nigeria Journal of Educational Foundations* 1(1) 67-77.
- Asuquo, P.N.; Ekuri, E.E.; Asuquo, A.E. & Bassey, D.A. (2004). Adolescent perception of HIV/AIDS and their attitude to its prevention in Calabar, Nigeria. *International Quarterly of Community Health Education* 23(1), 63-72
- Cherry, K. (2017). Attitudes and Behaviours in Psychology. Retrieved from <https://www.verywell.com> on 27th January, 2018.
- Centre for Disease Control Facts Sheet. Retrieved from <http://www.cdc.gov/vht/ebola/pdf/ebolafactsheet.pdf> on 25th Jan 2018.
- Collins Dictionary (2018). Meaning of Attitude. Retrieved from www.collinsdictionary.com on the 27th of January, 2018.
- Fowler, R. A., Fletcher, T., Fischer, W.A., Lamongtane, F., Jacob, S., Bret-Major, D. et al. (2014). Caring for Critically ill patients with Ebola virus disease. Perspectives from West. *American Journal of Respiratory Critical care Medicine*, (190), 733-737.
- Gatherer, D. (2014). The 2014 Ebola Virus disease outbreak in West Africa. *Journal of general virology* 95(8)1619-1624.
- Illesanmi, O.S & Alele, F.O. (2014). Knowledge, Perception and Perception of Ebola Virus Disease among Secondary School Students in Ondo State, Nigeria. Retrieved from www.researchgate.net publication on 19th February, 2018.
- Medicines Sans Frontiers (2008). Complete Filo Virus Haemorrhagic fever guideline. Retrieved from <https://www.redddit.com> on 20th February, 2018.
- Nwozichi, C. U. (2015). Knowledge of Ebola virus disease and attitude towards ebola survivors among residents of Lagos state, Nigeria. *Community Acquired Infection*, 2, 63-64.
- Nyakarahuka, L., Skjerve, E., Nabadda, D., Sitali, D.C., Mumba, C., & Mwiin, F.N. (2017) Knowledge and attitude towards Ebola and Marburg Virus Diseases in Uganda using quantitative and participatory epidemiology techniques. *PLoS Negl Trop Dis* 11(9):e0005907. doi:10.1371/journal.pntd.005907.
- Ogodo, F.A. (2002). Home background and disciplined behaviour among secondary school students. Unpublished M.Ed Thesis, University of Calabar.
- Osang, M. A. (2016). Family Background and attitude of senior secondary school students towards ebola preventive measures in Calabar Municipality of Cross River State. *An unpublished B.Sc.Ed Project of the University of Calabar*.
- Penner, L.A.(1986)*Social psychology concepts and applications*. New York:West Publishing company.
- Sanders, R.A.*Adolescent psychosocial, social and cognitive development*. *Pediatrics in Review* 34(8)
- Shuaib, F. et al (2014). Ebola virus disease outbreak- Nigeria. *Morb Mortal Weekly Report* 63 (39), 867-872.
- J.R.Spengler, E.Ervin, J.S.Towner, P.E.Rollin & S.T.Nichol, (2016) Perspective on West Africa Ebola Virus Disease Outbreak, 2013-2016). *Emerging Infectious Disease Journal* 22(6)
- Umeora, O. et al (2014). Ebola viral disease in Nigeria: the panic and cultural threat. *African Journal of Medical Health Science*, 13, 1-5.
- World Health Organization (2014). Nigeria is now free of Ebola virus transmission. Retrieved from <http://www.who.int/mediacentre/news/ebola/20october2014-2014/en/>.