

## PSYCHO SOCIAL IMPLICATION OF INFILTRATION OF EBOLA VIRUS DISEASE INTO NIGERIA: RELIGIOUS AND COUNSELLING PERSPECTIVES

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### ABSTRACT

This study examined psycho social implication of infiltration of ebola virus disease into Nigeria system from religious and counselling perspectives. A sample of the study comprised of 275 randomly selected males and females from different working class and educational attainment in Ogun state. The mean age and standard deviation was  $46.5 \pm 6.3$  years. The ex-post-facto research design was employed. A 21 item; Ebola Infiltrations Implication questioner design by the Researchers was used to generate data for the study. All the hypotheses data were tested at 0.05 level of significance Data was analysis with the use of Multiple Regression and Analysis of Variance. The results indicated that there is a combined contribution(65.4%) of infiltration of Ebola fear to health, emotion and social consciousness of people Also, it revealed that Ebola virus infiltration contributed most to health consciousness ( $\beta = .391$ ;  $t = 38.62$ ;) follows by social consciousness ( $\beta = .437$   $t = 25.876$ ) and emotional consciousness( $\beta = .419$ ,  $t = 17.654$ )  $p > .05$ , Lastly, Results indicated that, significant differences existed between health, social and emotion ( $F_{3, 246} = 81.277$ ;  $p < .05$ ) and infiltration of Ebola virus. On the basis of finding, it was recommend that Counsellors, Social workers and all who are interested in health should continue to promote health consciousness irrespective of disease or not. Preaching or teaching should be directed towards reducing the emotional influence as to reduce developing other human psychological diseases.

**Keywords:** Health, emotion, social and Ebola.

### INTRODUCTION

The past decade has been one of the most eventful in the long history of infectious diseases. There are multiple indexes of these events and of the rate at which our knowledge base has grown(Paul,1996). The sheer number of relevant publications indicates explosive growth; moreover, new means of monitoring antimicrobial resistance patterns are being used along with the rapid sharing of information (as well as speculation and misinformation) through means that did not exist even 10 years ago. Then there are the microbes themselves. One of the explosions in question—perhaps the most remarked upon—is that of "emerging infectious diseases." (Paykel,2001).

An outbreak of Ebola virus disease (EVD) in West Africa, with onset in early February 2014, is evolving in Guinea and Liberia. This is the first such outbreak in the area. The first cases were reported from the forested region of south-eastern (Guinea Baize, Pannetier&Oestereich 2014). Since the first case of Ebola Virus Disease (EVD) was recorded in Nigeria and it's subsequent spread across the country. A sense of fear and panic has enveloped the entire country over the disease. People now get jittery and abscond from anyone who complain sign of fever or similar symptoms associated with Ebola.(Guardian ,2014).The onset of EVD is sudden and early symptoms include flu-like illness, fever, muscle pain (myalgia), fatigue

(weakness), headache and sore throat. The next stage of the disease is characterised by symptoms and clinical manifestations from several organ systems. Symptoms can be gastrointestinal (vomiting, diarrhoea, anorexia and abdominal pain), neurological (headaches, confusion), vascular (conjunctival/pharyngeal injections), cutaneous (maculopapular rash), and respiratory (cough, chest pain, shortness of breath), and can include complete exhaustion (prostration). During the first week, patients often deteriorate suddenly, while diarrhoea and vomiting are getting worse. All of these symptoms correspond to the prodromal phase of EVD. After one week, haemorrhagic manifestations can appear in more than half of the patients (bloody diarrhoea, nosebleeds, haematemeses, petechiae, ecchymosis and puncture bleedings). Some patients develop profuse internal and external haemorrhages and disseminated intravascular coagulation (Wong, Qiu, Olinger, Kobinger, 2014).

Ebola viruses are highly transmissible by direct contact with infected blood, secretions, tissues, organs or other bodily fluids of dead or living infected persons. Airborne transmission has not been documented and person-to-person transmission is considered the principal mode of transmission for human outbreaks regardless of how the index case was infected. Burial ceremonies are known to play a role in transmission (McElroy, Erickson & Flietstra, 2014). Transmission through sexual contact may occur up to seven weeks after clinical recovery, as observed for Marburg filovirus, and it is supposed to be possible for Ebola viruses. (Ecdc 2014). Transmission to humans can also occur by contact with dead or living infected animals, e.g. primates (such as monkeys and chimpanzees), forest antelopes, duikers, porcupines and bats. Hunting and butchering of wildlife (great apes and fruit bats) has been identified in previous outbreaks as a potential source of infection (Undas, Brummel-Ziedins & Mann, 2014).

There is strong epidemiological evidence that psychological variables such as depression are associated with disease outcomes for CHD, cancer, and HIV-AIDS. One pathway to poor CHD outcome in depressed individuals, for example, involves poor lifestyle habits, such as smoking and excessive use of alcohol (Neil, 2005). An alternative pathway may involve physiological changes associated with depression, such as increased cortisol production, or an increased tendency for blood to clot. (Williams & Schneiderman, 2002). Another point of view, expressed by Appels, Bar, Bar, ruggeman & de Bates (2000), is that exhaustion or fatigue, masking as depression, may be a symptom of subclinical heart disease involving inflammation of the coronary arteries that supply blood to heart muscle. Sickness behaviour refers to subjective feelings of fatigue, weakness, malaise, and listlessness, which can be accompanied by changes in appetite and weight, altered sleep patterns, diminished interest in one's surroundings, and difficulties in concentration. It was once thought that these symptoms were caused by infection, but it now seems that they can be caused in the absence of infection by the body's own inflammatory response to damaged coronary arteries or to heart attack. It thus appears that psychosocial and behavioural factors not only contribute to chronic diseases, but also can themselves be influenced by disease processes. (Fenton & Lowndes, 2004).

The most widely studied stressors in children and adolescents are exposure to diseases (sexual, physical, emotional, or neglect) (Cicchetti 2005). McMahon et al. (2003) also provide an excellent review of the psychological consequences of such stressors. Studies have also addressed the psychological consequences of exposure to diseases during childhood (Shaw 2003). A majority of children exposed to war experience significant psychological morbidity, including both post-traumatic stress disorder (PTSD) and depressive symptoms. For example, Nader et al. (1993) found that 70% of Kuwaiti children reported mild to severe

PTSD symptoms after the Gulf War. Some effects are long lasting: Macksound & Aber (1996) found that 43% of Lebanese children continued to manifest post-traumatic stress symptoms 10 years after exposure to war-related trauma.

It is well known that first depressive episodes often develop following the occurrence of a major negative life event (Paykel 2001). Stressful life events often precede anxiety disorders as well (Faravelli & Pallanti 1989, Finlay-Jones & Brown 1981). Interestingly, long-term follow-up studies have shown that anxiety occurs more commonly before depression (Angst & Vollrath 1991, Breslau et al. 1995). In fact, in prospective studies, patients with anxiety are most likely to develop major depression after stressful life events occur (Brown et al. 1986).

## Religion and Ebola

Throughout history religion and one's spirituality and beliefs has had an impact on infectious disease and the understanding of infectious diseases. Many older societies believed that disease was caused by an evil spirit or by the stinging of an evil spirit. There was also the belief that disease was caused by various Gods such as the God of disease or the God of pestilence or by one God as punishment for sins. Specific examples of this have been seen throughout history with the 14th Century Black Death, Lassa fever and most recently AIDS (Brandy, 2012). Religion and spiritual beliefs have also impacted the way in which infectious diseases have been studied. The most notable example of this is the Taoist theology and their goal of reaching immortality which encourages them to pursue research on disease. Other examples are also seen in the African culture.

Religion has also impacted the way in which societies prevent disease and treat people with certain diseases. Examples of society using religious beliefs to prevent disease are seen in African culture. The AIDS epidemic, leprosy, and the persecution of Jews during the Black Death are all examples in which religious beliefs have allowed society to negatively treat groups of people associated or not associated with certain. (Powell, Shahabi, & Thoresen, 2003).

At followed a recent recommendation by the Liberian Council of Churches, which said in a statement last week the outbreak has Biblical implications. "God is angry with Liberia," the religious leaders said, according to the Daily Observer. "Ebola is a plague. Liberians have to pray and seek God's forgiveness over the corruption and immoral acts (such as homosexuality, etc.) that continue to penetrate our society. As Christians, we must repent and seek God's forgiveness." Although there is no confirmed case of the disease in Ghana, many have begun wondering how a mysterious disease could plague the sub-region so fast and so defiant of medical solutions. But the Christian Council has moved to dismiss spiritual connotations. The Christian leaders say they are adopting a practical approach by waging a sensitization campaign to address West Africa's feared killer. Religion was for many people an important source of support, explanation and, they hoped, protection. On Day 29, over 300 Christian churches from throughout the country converged on a stadium in Kampala to pray for the end of the Ebola outbreak. Several priests took the opportunity to emphasise the need for people to follow the scriptures. As one of them said, "whenever there is famine, an epidemic or endless wars, the Bible says it is coming from God on a particular people or nation for sins committed". This theme of divine retribution was echoed by the leader of the Muslim Tabliq sect on Day 61, who stated that "whenever man sins, such punishments like the deadly Ebola and AIDS attack mankind". (Hewlett & Amola, 2003)

The problem of this study therefore, is to investigate the psycho-social implication of the infiltrations of Ebola virus disease into Nigeria system. For this reason the following hypotheses are raised:

1. There is no significant single and combined contribution between emotion, social and health and fear of Ebola disease.
2. There is no significant relative contribution between emotion, social and health and fear of Ebola disease.
3. There is no significant difference between emotion, social and health and fear of Ebola disease

## **METHODOLOGY**

### **Design**

The research adapted the ex-post-facto research survey for this study because the researcher is interested in finding the relationship between the independent variable and the dependent variable without necessarily manipulating the independent variables.

### **Sample**

The population of the study consisted of men and women in the Ikenne Local Government, Ogun state, Nigeria. The sample of the study comprised of 300 randomly selected males and females from of different working class and educational attainment. The age of the respondent was between 18 to 60years. The mean age was 36.5years while the standard deviation was 3.41.

### **Instrumentation:**

The instrument consists of structured questions developed by the Researcher. Section A consists of demographic data like sex, Age, Educational attainment and occupation. While section B consists of fifteen structure questions which are made of 3 subs scale with 5 questions each. Such like A total number of 15 questions were taken in which six questions were in each section. Participant responded to the questions statement in a 5 – point likert scale ranging from Strongly Agreed = 1, Agree – 2, Undecided -3, Disagree-4 and Strongly Disagree- 5

### **Validity and Reliability**

The questionnaire was subjected to face validity and content validity by the assistance of experts in research method. Some questions were reconstructed, while some were deleted. A reliability coefficient of 0.76 was obtained via a test-retest method after on interval of 2 weeks.

### **Procedure**

The researcher personally administered the questionnaire with an instruction to the respondent that the exercise is purely for research.

### **Data Analysis**

Data were analyzed using Multiple Regression Analysis for hypothesis 1 and hypothesis 2 and One way Analysis of variance statistics for hypothesis 3.

**RESULTS**

H<sub>1</sub>: There is no significant single and combined contribution between emotion, social and health and fear of Ebola disease.

**Table 1:- Multiple Regressions showing single and combine contribution of the independent variables (Model Summary)**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668 <sup>a</sup>	.446	.443	5.32465
2	.723 <sup>b</sup>	.523	.519	3.14384
3	.812 <sup>c</sup>	.659	.654	2.46789

a. Predictors: (Constant), health

b. Predictors: (Constant), health, social

c. Predictors: (Constant), health, social, emotion

The result above indicated that health, social, emotion taken together and singly contributes to fear of Ebola. In the Model summary above, Model 1 shows that  $R = .668$ ;  $R^2 = .446$  and adjusted  $R^2$  of .443, which implies absence of health consciousness contributed 44.3% to the fear of Ebola. Model 2 shows that a combination of health, social contributed,  $R = .723$ ;  $R^2 = .523$  and  $R^2$  adjusted = .519, that is 51.9% is responsible to Ebola fear. Model 3 shows that  $R = .812$ ;  $R^2 = .659$  and  $R^2$  adjusted = .654, hence, health, social and emotion contributed 65.4% to Ebola fear.

H<sub>2</sub>: There is no significant relative contribution between emotion, social and health and fear of Ebola disease

**Table 2:- Multiple Regression showing relative contribution of the Independent Variables and Dependent Variable**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.450	1.145		10.877	.000
health	2.217	.078	.866	28.606	.000
2 (Constant)	4.368	.765		5.713	.000
Health	1.756	.050	.686	35.035	.000
Social	1.013	.045	.442	22.608	.000
3 (Constant)	3.456	0.641		.	.000
Health	1.246	.042	.391	38.662.	.000
Social	.976	.310	.437	25.876.	.000
Emotion	.865	.021	.419	17.654.	.

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	Social	1.013	.045	.442	22.608	.000
3	(Constant)	3.456	0.641		.	.000
	Health	1.246	.042	.391	38.662.	.000
	Social	.976	.310	.437	25.876.	.000
	Emotion	.865	.021	.419	17.654.	.

a. Variable Dependent: ebola

The result in the table shows the relative contribution singly and combined. In model 1 health contributed =10.877;  $p > .05$ ). In model 2, with a combination of health and social consciousness. health ( $\beta = .686$ ,  $t = 10.877$ ) social consciousness, ( $\beta = .442$   $t = 22.608$  ; $P > .05$ ). In Model 3, with a combination of health, social an consciousness health ( $\beta = .391$ ;  $t = 38.62$ ;) social consciousness ( $\beta = .437$   $t = 25.876$ ) and emotional consc: .419,  $t = 17.654$ )  $p > .05$ ..

**H<sub>3</sub>:**There is no significant relative contribution between emotion, social and health and fear of Ebola disease

**Table 3:- ANALYSIS OF VARIANCE (ONE-WAY)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1000.117	1	1000.117	35.275	.000 <sup>a</sup>
	Residual	7740.072	273	28.352		
	Total	8740.189	274			
2	Regression	823.357	2	411.678	41.651	.000 <sup>b</sup>
	Residual	2688.378	272	9.884		
	Total	3511.735	274			
3	Regression	1788.256	3	596.086	81.277	.000 <sup>c</sup>
	Residual	1987.632.	271	7.334		
	Total	3775.888	274			

a. Predictors: (Constant), health

b. Predictors: (Constant), health, social

c. Predictors: (Constant), health, social, emotion



d. Dependent Variable: ebola fear

Result above show the ANOVA (one-way) of health, social, emotion and ebola fear. It is seen that in Model 1, health alone contributed ( $F_{1, 273} = 35.275$ ;  $p < 0.5$ ; Model 2, a combination of health and social ( $F_{2, 247} = 41.65135$ ;  $p < 0.5$ ). While Model 3, health, social, emotion ( $F_{3, 246} = 81.277$ ;  $p < .05$ ). Hence hypothesis of no significant difference is hereby discarded and the alternate is accepted.

## DISCUSSION

Consequently upon the analysis of data, the following findings were aimed at:

Hypothesis one of no significant single and combined contribution between infiltration of Ebola virus disease and emotion, social and health consciousness of people is hereby discarded. The result revealed in model 1,  $R = .668$ ;  $R^2 = .446$  and adjusted  $R^2$  of .443, which implies absence of health consciousness contributed 44.3% to the fear of Ebola. Model 2 shows that a combination of health, social contributed,  $R = .723$ ;  $R^2 = .523$  and  $R^2$  adjusted = .519, that is 51.9% is responsible to ebola fear. Model 3 shows that  $R = .812$ ;  $R^2 = .659$  and  $R^2$  adjusted = .654, hence, health, social and emotion contributed 65.4% to ebola fear. All these could not have happened by chance although the three independent variables contributed 65.4%. Which implies that 34.6% could not be accounted for. Hence, it is concluded that other factors that are not taken care of by this research are responsible for this ebola fear infiltration. The result of the finding is in line with Neil(2012) and Farmer (1996). who revealed that outbreak of diseases might heighten emotion and paralyzed social activities.

Hypothesis 2 of no significant relative contribution between emotion, social and health and fear of Ebola disease was discarded the finding revealed that the infiltration of Ebola virus contributed more to health consciousness of people follows by reduction in social activities and lastly by emotional problem. Health consciousness contribution most can be substantiated, in view of the fact that ebola virus is spread by mostly by contact This make people to be more conscious in the practice of hygiene like, washing of hands, using sanitizers etc. The social outing and shaking of hands also reduced so that contact of people might be curtail. As it is shown that each and combined shows a significant relative contribution.

Hypothesis three of the Analysis of Variance (one way) in Table 3 show Model 1, health alone contributed ( $F_{1, 273} = 35.275$ ;  $p < 0.5$ ; Model 2, a combination of health and social ( $F_{2, 247} = 41.651$ ;  $p < 0.5$ ). While Model 3, health, social, emotion ( $F_{3, 246} = 81.277$ ;  $p < .05$ ). Hence hypothesis of no significant difference is hereby discarded and the alternate is accepted.. This laid credence to the first two hypotheses that infiltration of Ebola virus to Nigeria system heightens health consciousness, emotional imbalance and reduced social contact.

## CONCLUSION AND RECOMMENDATIONS

It is concluded that infiltration of Ebola virus to Nigeria system heightens health consciousness, emotional imbalance and reduced social contact. In view of these, the following are recommended:

Since Ebola virus infiltration has brought good hygiene consciousness to Nigeria, which is a good thing, the health crusaders, Counselors, Social workers and all who are interested in health should continue to promote health consciousness irrespective of disease or not. Since Religious view this as the end of the world event, preaching or teaching should be directed towards reducing the emotional influence as to reduce developing other human psychological diseases of human beings.

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