

VISUAL COMMUNICATION DESIGN AND PUBLIC HEALTH: TOWARDS CONTAINING THE OUTBREAK OF EBOLA VIRUS DISEASE IN NIGERIA

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Abstract

Sometime in 2014, the menace of Ebola Virus Disease (EVD) surfaced in Nigeria, following the death of Patrick Sawyer, a Liberian-American, an Ebola patient in Lagos, and a nurse who treated him. The entire citizenry were bewildered at the development. With this, the Nigerian Government at all levels made conscious effort to contain EVD, to avoid an epidemic. Consequently, people were compelled to resort to desperate, delusional measures which included bathing and drinking of salted hot water, excessive consumption of bitter kola, among others. These revealed the level ignorance of the populace on the facts of Ebola Virus Disease. In order to bridge the gap, this study presented visual communication as an avenue for mass education of the Nigerian populace through outdoor poster medium. Model A2 sized posters with digital illustrations and detailed information concerning EVD were designed and visualized using Adobe Photoshop and CorelDraw applications. Each poster had English titles. The visual messages would no doubt educate the literates and illiterates in the streets of Nigeria, on the facts of Ebola Virus Disease. The information will undoubtedly help to inform the populace on how to prepare themselves in case of future outbreak of EVD hence it could reoccur.

Keywords: Ebola Virus Disease, Visual communication, Public awareness, Poster, Inform

Introduction

According to World Health Organisation report on Ebola virus disease (2014), "it formerly appeared in 1976 in two simultaneous outbreaks, one in a village near the Ebola river in the Democratic Republic of Congo, and the other in a remote area of Sudan... Formerly known as Ebola Hemorrhagic fever, it is a severe, often fatal illness, with a death rate of up to 90%. It affects humans and non-human

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primates.” The menace of Ebola Virus has raised concern in West African countries such as Liberia, Guinea and Sierra Leone. Since the entry of Ebola Virus to Nigeria via Late Patrick Sawyer on July 20, 2014, the Ebola affair has become one nightmare from which many Nigerians wish they could awake and discover that it was all just a dream (Sokunbi, 2014; 21). Out of desperation, people resorted to various un-called for actions such as drinking of warm salted water, bathing of warm salted water, restraining from regular handshakes, avoiding hugs, all in the name of quelling Ebola emergency. All these reveal lack in adequate, basic information on Ebola Virus and its proper management.

However, since the entry of Ebola in Nigeria, the Government at all levels including the health sector had swung into action to take the rampaging challenge by all possible means to avoid its transference to pandemic. The mass media in Nigeria, both prints and electronics contributed immensely towards updating the general populace on issues, cases and management of Ebola Virus disease.

The question that arose in this frenzy situation is thus: what is the contribution of the field of visual arts towards the management, control and prevention of the scourge of Ebola Virus Disease in Nigeria? Thus mass sensitization and publicity remains the greatest paradigm which visual communication should employ through visual metaphors, to contribute in quelling Ebola emergency in Nigeria as a whole.

This paper attempts to review historical overview of ebola, symptoms and effects through information sourced via World Health Organization (WHO) documentation, North Dakota Department of Health and European Centre for Disease Prevention and Control (ECDC) and also, to develop digital illustrations made with Adobe Photoshop Cs6 for outdoor posters, designed on CorelDraw X5 application, which carry basic information on origins, causes, symptoms, prevention, and control of Ebola Virus Disease. This to a large extent should provide campaign aid to government agencies such as National Orientation Agency, Ministry of Information or Ministry of Health of state or federal level for the purpose of mass sensitization on EVD.

Outbreak of Ebola Disease and the Nigerian Experience

The first human case of Ebola Virus disease, leading to the 2014 outbreak was a 2-year old boy who died 6 December, 2013 in the village of Meliandou,

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Gueckedon Prefecture, Guinea. His mother, sister, grandmother then became ill with symptoms consistent with Ebola infection and died. People infected by those victims spread the disease to other villagers. "The disease Hemorrhagic viral fever spread to other countries subsequently. In Liberia, the disease was reported in Lofa and Nimba counties in late March" (Liberian Ministry of Health and Social Welfare Report, 13 April, 2014). Sierra Leone had the worst blow of the outbreak which was twice the number of cases in Guinea and Liberia.

"The first reported case in Nigeria was an imported case of a Liberian-American Patrick Sawyer, who travelled by air from Liberia and became violently ill upon arriving in the city of Lagos. He died five days later, on July 25, 2014" (Ynaija.com, 2014). The government quickly mobilized health and security personnel to locate the entire late Sawyer's contact, quarantined some of them and placed the others under surveillance, including the doctors and nurses who treated him.

Subsequently, two doctors and a nurse who treated Late Patrick Sawyer got infected and died of Ebola. On this, Mark (2014) reported that Dr. Ameyo Adedovoh who treated late Patrick Sawyer gave up to Ebola Virus Infection. Similarly, a report was made that a nurse who treated Patrick Sawyer died. Confirming this report, a documentation on vanguardngr.com (2014) articulates that "On August 6, 2014, The Federal government confirmed five new cases of Ebola in Lagos and a second death from the virus, bringing the total number of infections in sub-Saharan Africa's largest city to seven...Those who have died include the "index patient", a Liberian who brought the virus to Lagos and a nurse who treated him."

Containment efforts of Nigerian Government

Since the outbreak of Ebola virus on 20th July, 2014, the federal government has been making tireless efforts through the Ministry of Health and law enforcement agencies towards containing Ebola virus disease. Many international organizations including ECOWAS, US centre for Disease Control and Prevention (CDC) and European community donated funds and summoned personnel to help stop the outbreak in the affected areas of West Africa. "The Ebola Disease that has caused so much panic in Nigeria in the last one month did not evolve from among Nigerians. It was imported from Liberia thereby sentencing Nigeria once again to the burden of carrying Liberia's cross" (Iredia, 2014: 11).

“President Goodluck Jonathan declared the control and containment of the Ebola Virus in Nigeria a National emergency. Accordingly, he has directed the federal ministry of health to work in collaboration with the state ministries of health, the National Centre for Disease Control (NCDC), the National Emergency Management (NEMA) and other relevant agencies to ensure that all possible steps are taken to effectively contain the threat of the Ebola virus in line with International Protocols and Best Practices” Mohammed (2014:1). The Nigerian Government knew full well the consequences of treating Ebola outbreak with kid-glove. That was why they increased surveillance at the country’s borders and attempted to control the disease through tracking and provision of mass education through the print and electronic media. By 27th of August 2014 the Minister of Health, Professor Onyebuchi Chukwu made an announcement. Aborishade (2014:13-14) reported thus: “Nigeria has only one confirmed case of EVD, a secondary contact of Patrick Sawyer, and she is the spouse of one of the physicians who participated in the management of the “index case”.

On September 11, Nigeria announced that it no longer has even a single case of Ebola, but will indeed wait for about a week before declaring itself completely Ebola-free (thecable.ng, 2014).

Who are most at risk?

The people who are most at risk of contracting Ebola Virus are health workers, because they are the ones who treat Ebola Patients of Ebola in isolation. Some Nigerian health workers in the frontline of quelling Ebola outbreak fell. On this, Chikwe and Yusufu (2014;6) report that “Dr. Stella Ameyo Adedovoh was said to be the most senior and first doctor to attend to the Liberian Patrick Sawyer, who died in her hospital in Lagos. The four previous deaths in Nigeria were the index case, Sawyer, two workers, and ECOWAS protocol officer. The spouses of health workers are the next people at risk. Dennis Akagha, the spouse of Late Justina Ejelonu, the nurse who treated late Patrick Sawyer narrated his experiences and on how he survived Ebola to Amagiya (2014: 12), a reporter on Saturday Edition of Vanguard, 30th August 2014. According to him, stigmatization and fear of being infected made health workers refrain from treating late Justina in the ward she was. Helpless, she gradually ebbed away in her ward. He also hinted that she could have survived with adequate care. For now, there is no cure for Ebola Virus Disease, “there is also no standard treatment for Ebola Virus Disease; patients receive supportive therapy. This

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consists of balancing patient's fluids and electrolytes maintaining their Oxygen status and blood pressure, and treating them of any complicating infections (USCDC, 2010: 2).

However, there are some experimental drugs that vary from patients to other. Some of the drugs are ZMapp, TKM-Ebola, RNA interference and other vaccines. "Subsequently, the WHO assistant Director-general for health system and innovation said on 5th September that transfusion of whole blood or purified serum from Ebola survivors is the therapy with the greatest potential to be implemented immediately on a large scale in West Africa, although there is little information on the efficacy of such treatment" Briggs (2014).

Posters as medium of mass sensitization on Ebola outbreak

Posters and billboards remain indispensable tools for outdoor communication because they reach a vast audience. They are "mass-produced advertisements or announcements, usually printed on large sheets of paper, for public display, (Microsoft Encarta, 2009). Modern posters are made up of colourful images or illustration, accompanied by texts and are for commercial purposes, entertainment and some occasions for education.

In a poster, word and images are indispensable An illustration in posters is an image created separately to accompany words (Getlein, 2008, 259). Similarly, Okonkwo (2011:9) describes posters and its functions. He avers that "posters include both textual and graphic elements, although a poster may be either wholly graphical or wholly text---they are designed to be both eye-catching and informative." He goes further to state that posters can be employed to create notification on new products, events, films, propaganda, political campaign and educational purposes, etc.

Presentation of Informative Poster on Ebola Virus Disease

During the research, eight sample posters were designed and their titles were as follows: *Origin of Ebola Virus Disease, People Most at Risk, Symptoms, Acute Symptoms, Prevention and Control, Control Measures for Medical Workers and Does Ebola have Treatment?*

The researcher used Adobe Photoshop software application in making the illustrations digitally and CorelDraw for the layout design of the posters. “Digital illustration is the use of tools from computer software to create illustrations (Onwuekwe, 2011: 220). A simple draw and paint digital technique was employed. It involved making sketches on paper, tracing with ink and scanning onto Photoshop which was the application employed for painting. After rendering the illustrations, considering chiaroscuro effects and other principles of composition, the illustrations were exported to *CorelDraw* application for final composition into posters, considering the themes earlier mentioned.



Plate 1: “Facts on Ebola”

Medium: Digital Layout Design Dimension: 23X17inches

Artist: Chidiebere Onwuekwe; Date: 2014

Yellow colour was used on the background of the caption “Facts on Ebola virus disease”. Yellow predominantly calls attention to the theme. Johnson (2010) believes that cheerful sunny yellow is an attention getter. In this poster, the female doctor introduces Ebola disease and its origin to the viewers.

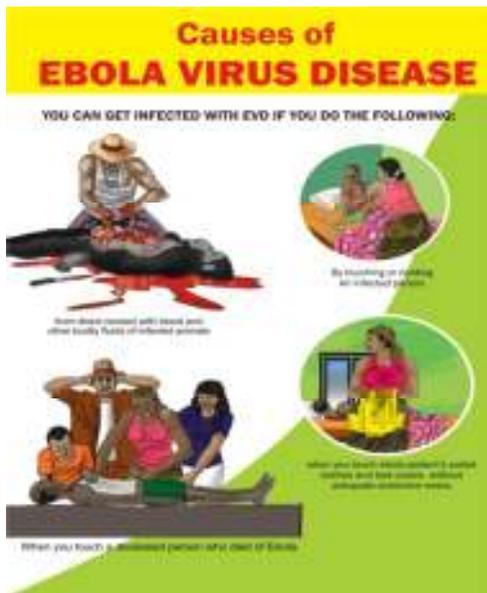


Plate 2: “Causes of Ebola Disease”

Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe

Date: 2014

Plate 2 highlights how one could be infected with Ebola virus. Like the other poster the caption is highlighted in yellow background and red text in order to draw attention to it. The same effect has been applied in other posters for the purpose of unifying them as one project.



Plate 3: "Who is most at risk...?"

Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe; Date: 2014

The third poster "who most is at risk?" portrays the people who are easily and mostly exposed to contracting Ebola virus disease as health workers because they deal directly with patients. Workers such as doctors, nurses and lab scientists are illustrated here against a white background which projects them vividly. The layout arrangement is formal when an imaginary line of symmetry is drawn along the centre of the poster.



Plate 4: "Primary Symptoms..."

Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe; Date: 2014

Plate four is titled "primary symptoms of Ebola virus disease". Here all the primary signs of the deadly disease such as high fever, headache, muscle pains, diarrhea, acute fatigue, vomiting and red eyes, are portrayed herein. A visual flow of "C" or "G" shape is formed here from "muscle pain" to "acute fatigue".

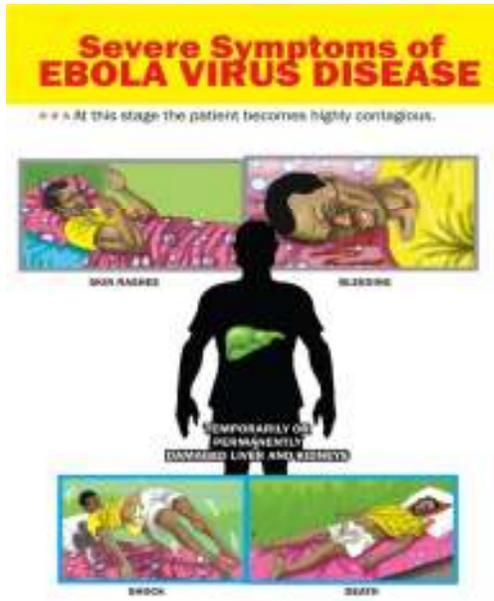


Plate 5: "Severe Symptoms..."

Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe; Date: 2014

Illustrated in pictures are the severe symptoms of Ebola Virus disease such as skin rashes, bleeding, impaired kidney and livers, shock and death. The figure in the center of the image was done in silhouette with the intention of projecting how badly damaged the liver inside his body is. His liver is painted in green to picture the negative psychological effect of green as sickness. The entire layout is symmetrically arranged.

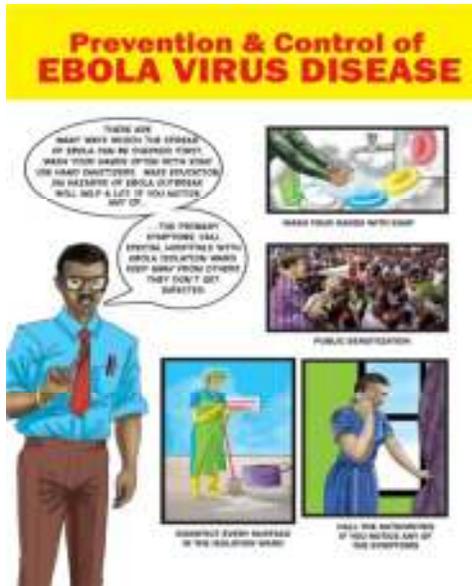


Plate 6: "Prevention..."

Medium: Digital Layout Design

Dimension: 23X17inches

Artist: Chidiebere Onwuekwe

Date: 2014

Here a medical doctor briefs the viewers on how the spread of Ebola can be controlled. Most facts on his speech balloon were pictured inset on the poster. The entire arrangement is formal.



Plate 7: "Preventive measures for health workers..."

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Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe; Date: 2014

This poster is designed specifically for health workers. It addresses them on how they should protect themselves adequately while treating Ebola patients in isolation wards. Here, lists of items that make up the protective gear are pictured and written down on this poster. Inset are pictures on how they should take precautions in the wards. Red was used specifically on the background to throw more attention on the caption.



Plate 8: "Any treatments...?"

Medium: Digital Layout Design; Dimension: 23X17inches; Artist: Chidiebere Onwuekwe; Date: 2014

The caption section is highlighted in red. The doctor clarifies that Ebola has no cure except for supportive care and experimental drugs. Inset is pictures of experimental drugs such as Z-mapp, which are used in isolation wards for test treatments on the patients. The balance of the entire layout design is asymmetrical

Conclusion

The contribution of visual artist towards containing the outbreak of future occurrence of Ebola Virus Disease (EVD) in Nigeria using outdoor posters design Models were researched in this paper. It is simply sensitizing and educating the

general populace on origins, causes, symptoms, prevention and control of Ebola virus through the use of outdoor posters as a medium. Visual metaphor is the language to which the visual artist employed visualizing model posters which can be employed by organizations as a medium of sending message to the general public on Ebola virus disease. The research presented eight posters illustrated with Photoshop application and designed in CorelDraw. Themes in the posters include: Origin of Ebola, causes of Ebola Virus, prevention and control of Ebola Virus. If the government agencies and some NGOs contacted by the researcher respond to partnership towards mass production and distribution of the posters to various zones of the country, it will undoubtedly contribute in educating people on Ebola virus disease outbreak and how they should protect themselves in future from the scourge of the 21st Century viral outbreak in Sub-Saharan West Africa.

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