

## **Ebola in West Africa: Implications on “Community Interaction” in Urban Nigeria**

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### **Abstract**

*Following the outbreak of the Ebola virus disease in some West African Countries, Nigeria became an affected country. In a country where planning for disease outbreaks are woefully inadequate, the country showed determination in adopting approaches that ensured that the scenario did not escalate to an epidemic level. This article argues that there were more to it than mere medical controls. Focusing on the city of Lagos and using data from the Nigerian media, it shows that the fear of Ebola had active community effects. The study shows how the fear of Ebola disease in Nigeria served as a foundation for an urban community change based on some transformations in community interactions in the city. The article presents a foundational literature on community interaction in Ebola scenario. It also offers experiences that may be of importance to other developing country cities that are struggling to respond to Ebola emergencies.*

**Keywords:** Ebola, Lagos, Naija, Nigeria, Planning, Urban management, Virus, West Africa

## 1. Introduction

In Nigeria, there has been an unprecedented fear of Ebola virus disease (EVD or Ebola) since July 20, 2014. On that day, a man who was to become the country's index patient flew on commercial planes from Liberia, through Ghana, to Nigeria's largest city – Lagos. "In a matter of weeks some 19 people across two states were diagnosed with the disease (with one additional person presumed to have contracted it before dying)" (Courage, 2014). As Courage (2014) further notes:

"In a matter of weeks some 19 people across two states were diagnosed with the disease (with one additional person presumed to have contracted it before dying). But rather than descending into epidemic, there has not been a new case of the virus since September 5. And since September 24 the country's Ebola isolation and treatment wards have sat empty. If by Monday, October 20 there are still no new cases, Nigeria, unlike the U.S., will be declared Ebola free by the World Health Organisation (WHO)".

World Health Organisation (WHO, 2014a) declared Nigeria Ebola free on 20 October 2014. Lagos, with a more than 13 million residents (UN-Habitat, 2014), is more populated than Liberia and Sierra Leon combined (World Bank, 2013a and 2013b). How did Nigeria respond to an emergency effectively? Was it all due to medical controls? These are question worth answering. However, there are little or no researches available that has tackled these questions. Particularly on the case of Nigeria, the only research available is from Fasina et al. (2014). There is a paucity of Ebola related research on Nigeria is because the country has never had the Ebola experience until recently. Fasina et al. (2014: 1) attributed Nigeria's successful handling of its cases to "quick and forceful implementation of control interventions" -noting that it "was determinant in controlling the outbreak rapidly and avoiding a far worse scenario in this country".

In this study, we argue that it was not entirely due to medical controls, but also in addition to a combination of social and behavioural factors, such as community within the Lagos city. Ebola is much more than a medical issue. It has sociological, anthropological, regional aspects to it. A social science outlook on the issue is important for broader understanding of the pandemic and its effects on societies and human settlements. We begin by discussing the concept of community, and then explain the Ebola from West African and sub-Saharan African (SSA) perspectives respectively. We then present a methodology for our study, leading to our findings on issues relating to Ebola in Nigeria, with a focus on Lagos. Finally, we conclude by discussing its implications for community in Nigeria.

## 2. Idea of community as "interaction"

The concept of community is fluid. It can vary from one academic discipline to another, from place to place, culture to culture, and from time to time. Of the several definitions that exist on the subject, some are of importance to our study. Roberts (1979) views community from the perspective group objectives. Lee (1992) defines community, rightly and very simply, as a group of people who have something in common. Although a highly generalised definition, the phrase "something in common" implies that the definition is usable in multi-case scenarios. For instance (based on our concern), the "something in common" could be Ebola fear. Boothroyd and Davis (1993: 230) view community as "a group of people who know each other personally and who plan together over time for their long-term common betterment". The problem with this definition is with the phrase "know each other personally". We do not strictly agree that people within a community should know each other personally. This is not very possible in large group communities that exist

in urban areas around the world. Having mentioned that, the phrase, their long-term common betterment, is an important aspect of community. Knowles (2001: 11), by stating that “Clusters of individual lives make-up communities,” identifies it to comprise of individuals and their way of living. While the concept of community has several faces to it, these three opinions (Roberts, 1979; Lee, 1992; Boothroyd and Davis, 1993 and Knowles, 2001) together, capture our perspective of community in the context of on-going Ebola epidemic in some West African (WA) countries. Meaning: we view community from its interactional perspective. The reason being that “The interactional perspective emphasises the central roles that local interaction and capacity play in the emergence of community among people who share a common territory” (McGrath and Brennan, 2011: 341). Within this common territory are shared experiences of people. By viewing community from this lens, “both place and sense are major elements” of community because they form part of the people’s interaction with others (Chigbu, 2013a: 266). That is why McGrath and Brennan, (2011: 343) argued that:

“As a field of social interactions, community emerges from the collective actions of its diverse members. This collective capacity allows citizens to participate purposively in the creation, articulation, and maintenance of efforts designed to support and/or change social structures.”

Interactions, of course, do not occur in space. They occur within a defined territory or place – hence the importance of the geographical perspective of community. So for us, community is mnemonic for interaction of people within a geography. It is a scenario that exists, can emerge and can be lost. These all makes geographical or locational factors a core aspect of community – leading to the emergencies at different social and geographical levels. For instance, local communities exclusively addressing issues such as Ebola epidemic can exist in cities and villages. A national community (e.g. as in Nigeria, Liberia, Sierra Leon, The United States, Spain, among others) can work together in addressing Ebola. Continental regional bodies like the Economic Community for West African States (ECOWAS) or continental bodies like the African Union (AU) or global communities (e.g. United Nations) emerge as communities at their respective levels to address the Ebola concerns. However, for these communities to emerge – specifically to address Ebola – there must be a common interest or strand connecting its many members. In this case, the nature of interaction between these community members, therefore, will determine their success in the fight against Ebola. Based on the notion of community as interaction, we consider the many millions of residents in Lagos and Nigeria to represent a community of people with the Ebola interest. Interaction has been at the centre of addressing community-based concerns, mainly due to the local collective action it breeds. Flint and Lulo (2007) applied to natural resource management. McGrath et al. (2009) applied it in youth development, while Bridger et al. (2009) employed it in community development evaluations. We consider it necessary in analysing the fight against Ebola in Nigeria.

## 2.1 Community as an interaction can be lost

Since most theories of community revolve around structure, “the interactional approach, on the other band, is tied to process. It focuses on local citizen interaction, mobilisation, and residents working together as they address place-relevant matters” (Bridger et al. 2011: 85). However, these citizen interactions can vary from place to place, from time to time; and within a specific timeframe or place, it can rise or fall in its intensity. Over the years, much has been written about the loss of community and the implications for civil society (Putnam, 2000; Chigbu, 2012). Robinson and Green (2011) and McGrath and Brennan (2011) have noted the importance of maintaining and

sustaining community in order to keep the political, economic and social relationships at the local level intact. Issues like globalisation, conflicts and poor governance have been identified as some of the factors that can lead to loss of culture (McGrath and Brennan, 2011). Within the context of sub-Saharan Africa, Chigbu (2013b) provides extensive ideas to understanding the loss of culture in the region. We consider Ebola outbreak to have a propensity to lead to a loss of culture – for two main reasons. First, it is body-contact contagious in transmission. Secondly, it breeds fear into communities. And as some very important sub-Saharan cultures involve contact interaction (e.g. burial rites, family and community care work, etc.), the Ebola outbreak potentially means a radical change in these cultures. For instance, family and community members in Guinea, Liberia and Sierra Leon are currently instructed and impeded with the use of police and the army from giving traditional burial rites to their family members who died as a result of the Ebola disease (WHO, 2014). Community is therefore important to development. However, community development is often confused with economic development. In this regard, (Robinson and Green, 2011: 3) correctly clarified the relationship between community and economic development as follows:

“Communities need to provide a good social and physical infrastructure, including housing and schools, in order to generate jobs and income. Many community development activities, however, are more directly related to economic development, such as job training and business management. The concept of community development, then, is broader than economic development and may include many activities that are economic in nature”.

Considering the above statement. Community development, as applied to our study does not necessarily mean concrete improvement of a sector of an economy. Rather, it implies the useful interaction that people engage, which leads to improved social values, and possibly economic values (though may not be direct). What is central to the whole idea of community is people working together towards a collective. This can lead to improvements in their quality of life (whether social or economic, but not necessarily economic). Building community or avoiding a loss of community can, in itself, be a community development objective.

### **3. Ebola within the SSA and ECOWAS communities**

The Ebola was discovered after its first outbreak in Zaire (now named, the Democratic Republic of Congo or DRC) in 1976. That pioneer outbreak occurred in the village of *Yambuku*, within a tropical rain, about 170 kilometres south of the Ebola River (Zimmerman and Zimmerman, 2003). The Ebola River is a river from where the disease gained its name. Ebola virus causes a haemorrhagic that leads to somewhat malarial (yet nonspecific symptoms) at the early stage of infection. It then leads external and internal haemorrhage as the disease progresses, and can lead to death if not managed. Available data shows that Ebola has high mortality rate during outbreaks (Davis, 2014), but this depends on the strain. Currently, there are five strains of Ebola found in Zaire, Sudan, Tai Forest, and Bundibugyo (all in Africa). The fifth strain named Reston was been found in the Philippines. While the Zaire remains the most lethal of all the four strains, the Reston strain is the least lethal. Ever since its discovery in SSA, the most outbreaks of the more lethal strains have occurred within the SSA region. From Willett (2003), we know that there have been outbreaks since its discovery, with some of them occurring undetected. Table 1 shows a list and timeline for the detected Ebola outbreaks in SSA.

Table 1: Timeline of Ebola cases in SSA (1976-2014)

Country	Town	Cases	Deaths	Ebola Species	Year
Multiple countries	Multiple	9216	4555	Zaire	2014
Uganda	Luwero District	6	3	Sudan	2012
DRC	Isiro Health Zone	36	13	Bundibugyo	2012
Uganda	Kibaale District	11	4	Sudan	2012
Uganda	Luwero District	1	1	Sudan	2011
DRC	Luebo	32	15	Zaire	2008
Uganda	Bundibugyo	149	37	Bundibugyo	2007
DRC	Luebo	264	187	Zaire	2007
South Sudan	Yambio	17	7	Zaire	2004
Republic of Congo	Mbomo	35	29	Zaire	2003
Republic of Congo	Mbomo	143	128	Zaire	2002
Republic of Congo	Not specified	57	43	Zaire	2001
Gabon	Libreville	65	53	Zaire	2001
Uganda	Gulu	425	224	Zaire	2000
South Africa	Johannesburg	2	1	Zaire	1996
Gabon	Booue	60	45	Zaire	1996
Gabon	Mayibout	37	21	Zaire	1996
DRC	Kikwit	315	250	Zaire	1995
Ivory Coast	Tai Forest	1	0	Tai Forest	1994
Gabon	Mekouka	52	31	Zaire	1994
South Sudan	Nzara	34	22	Sudan	1979
DRC (Zaire)	Tandala	1	1	Zaire	1977
South Sudan	Nzara	284	151	Sudan	1976
DRC (Zaire)	Yambuku	318	280	Zaire	1976

Source: Centers for Disease Control and Prevention (CDC) of the United States (2014). Updated by authors.

Table 1 is derived from the Centre for Disease Control and Prevention (CDC) of the United States (2014) and updated by author. The table was updated last on the 14 October 2014 for the 2014 data. We updated the table based on WHO's (2014b) most recent data. The data for 2014 is constantly evolving. "These numbers are subject to change due to on-going reclassification, retrospective investigation and availability of laboratory results" (WHO, 2014c: 1). In fact, WHO (2014b: 205) particularly warns that:

"The numbers of cases remain subject to change due to reclassification and consolidation of cases and laboratory data, enhanced surveillance and contact tracing activities. Introduction of Ebola virus serology to test PCR-negative clinical cases is also likely to change the final number of laboratory-confirmed cases".

Nigeria is one of the multiple countries affected in the 2014 outbreak. Data for 2012 are all based on laboratory-confirmed cases only. If there is anything the table conveys, it is that Ebola outbreak is nothing new to Africa. In addition, it is not new to the world outside Africa. The CDC's (2014) records show that Ebola outbreaks have occurred in some countries outside Africa. It occurred in

England (1976), USA (1989), USA (1990), The Philippines (1989-1990), Italy (1992), USA (1996), The Philippines (1996), Russia (1996), Russia (2004) and The Philippines (2008). All of these cases are acknowledged by WHO (1978; 1992; 1996; 2002; 2005; 2007; 2009 and 2014b). Wolfe (2011) noted that Ebola could not have posed a major threat in 2014, but due to the panic created by the International media at the onset of the outbreak, a panicky environment developed in the affected countries. Nigeria is one of the countries facing the Ebola threat as a new experience. The Ebola outbreak in the ECOWAS community started in Guinea, then quickly spread to Liberia and Sierra Leone with isolated. Senegal recorded isolated cases. The Ebola gained entry into Nigeria through a transported case from Liberia.

## 4. Methodology

### 4.1 Lagos as a case study

Lagos (Nigeria) is a coastal city of more than 13 million people, projected to become one of the World's largest 15 cities by 2025 (UN-Habitat, 2014). It has a land area of 3345 km<sup>2</sup> serves as a transportation hub for the West African region. The land area consists of the Lagos Mainland and a group of islands. It is a coastal city with two main vegetation types –they are the swamp forest and lowland tropical forest. With a network abundance of creeks, lagoons, and rivers; it has a tropical climate with temperatures ranging from 24<sup>o</sup>C to 32<sup>o</sup>C. Its relative humidity ranges from 80% to 88% and rains each month of the year, with the peak being between the months of July to September. Wind speeds range from 3 to 4 on the Beaufort scale while sunshine hours range from 3 hours in the rainy season to almost 7 hours in the dry season. With a contribution of 60% to total national economic activities, Lagos is the busiest and most economically important city in Nigeria.

Due to a high rate of urbanisation, the majority of Lagos residents live in densely congested settlements. As at 2007, the population density of Lagos already averaged 18,150 people per Km<sup>2</sup> – and with annual urbanisation rate of 3% the situation is even worse today ((UN-Habitat, 2014). Averagely, the city experiences a daily influx of over 6,000 migrants, mostly from the rural areas of Nigeria (Ogunsote et al., 2011). More so, it has a host of environmental and sanitation challenges. In addition, two-thirds of the population of Lagos living in slum neighbourhoods (UN-Habitat, 2014). Challenges of the city include “poor services delivery, lack of adequate and affordable housing, proliferation of slums, chaotic traffic conditions, poverty, social polarisation, crime, violence, unemployment and dwindling job opportunities” (Opoko and Oluwatayo, 2014: 19). Living conditions are poor in Lagos. The city has “an occupancy ratio of 8-10 persons per room and 72.5% of households living in one-room apartments” (Opoko and Oluwatayo, 2014: 21). It is a well-known medical fact that overcrowding has adverse effects on sanitation and health to individuals. Therefore, a protracted outbreak of Ebola in the city could have led to catastrophic health situations. This is why Lagos provides a relevant case study for the study of urban community in relation to Ebola.

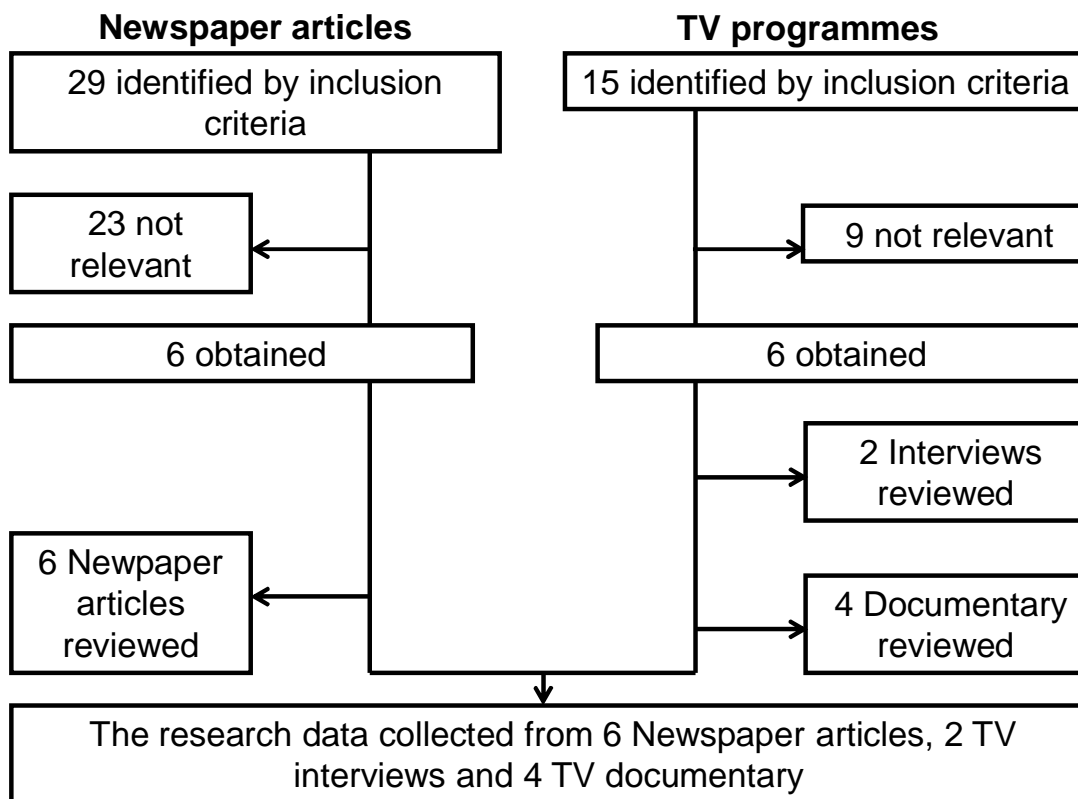
### 4.2 Data collection and analysis

An analysis of Ebola-related behaviour in Lagos is conducted based on data from the review of Nigerian news media, focusing on online newspapers, blogs and Television interviews and documentaries. Onyango and Gazzola (2011: 193) have used similar method in review of “sense of injustices” caused by “Kenya’s existing regional planning system”. Onyango and Gazzola (2011), in their case, focused on Kenya’s Press Media. In our case, we conducted an unsystematic review of for articles on the Ebola issue in Nigeria, using *Google* search. All media surveyed were online based. We conducted the unsystematic review of news items published between from July

20 to October 22 (in 2014). Our major question, how did the reaction to Ebola epidemic influence the lifestyle of people in Lagos or Nigeria? We identified some relevant works from Nigeria’s online media, assessing the quality of the works based on specified criteria, summarised evidences from the works and interpreted them as our findings.

Although this approach is typical with most systematic reviews, we consider our study to be unsystematic because we did not strictly follow a systematic review processes. “The original aim of a systematic review was to synthesise all the available, high quality evidence on the effects of an intervention to provide a robust evidence base to guide policy and practice” (Victor, 2008: 1). Although our study did use “evidence on the effects of an intervention to provide a robust evidence base to guide policy and practice,” it did not depend on a synthesis of “all available, high quality evidences”. Rather we used selected, but relevant local evidences that are accessible on the web concerning Ebola in Nigeria. More so, we conducted 5 confirmatory interviews with residents of Lagos to determine the reliability of our deductions from the review. This is why our approach is unsystematic, yet scientific in nature. Though non-systematic in approach, we followed a replicable pattern for data collection. The criteria for inclusion of reviewed items include: (1) focus on Ebola in Nigeria (2) TV programmes, interview and articles must be from a nationally recognised media house (3) they must have been conducted, released or published between the 20<sup>th</sup> of July and 22 of October 2014. (4) They are searchable and accessible online. However, we created an exception to accommodate a Public Broadcasting Service (PBS, of the United States) television documentary on Ebola in Nigeria – due to its relevance to the subject. Figure 1 is a description of the organisation of search process.

Figure 1: Classification and search process for review of works for the study



Source: Authors (based on the search and review processes adopted for the study)

The selected search results included 29 newspaper, and 15 TV programmes. 23 of the articles and 9 of the TV programmes were irrelevant to our study. As a result, we obtained 6 Newspaper articles, 2 TV interviews and 4 TV documentaries. In total, we reviewed 6 newspaper articles, 2 TV interviews and 4 TV documentaries for this study (see table 2). Considering the millions of articles and TV programmes available on Ebola in Nigeria, our study faced some limitation. In this regard, a critical question is why we reviewed only 12 works. We adopted a purposive review strategy (unsystematic) to enable us only adopt only necessary information that relate to Ebola issue in connection to the notion of community (and community development) in Nigeria. This meant that we had to adopt a manageable database for our analysis.

Table 2: List of reviewed works

Media sources	Caption	Newspaper/TV station
Newspaper articles	It's devastation continue, as Ebola virus fear grips Nigeria	Business Day
	Ebola: federal government says 198 Nigerians quarantined	Punch
	Ebola: Consumers Dump Bush Meat	The Independent
	In Nigeria, texting to prevent Ebola	Guardian
	Rivers Government Acknowledges FG's N200m to fight Ebola	Daily Times
	Nigeria shuts schools over Ebola	Vanguard
TV Interviews	TVC Interview with Dr Joseph Onigbinde	TVC News
	Ebola: interview with Nigeria's Health minister	TVC News
TV Documentary	How Nigeria succeeded in containing Ebola	PBS (USA)
	What do Nigerians really think of Ebola virus?	Battabox
	Members of the public react to rumour of salt and water solution as prevention for Ebola	Independent TV
	Lagos state confirms possible case of Ebola	Channels TV

Source: Authors (based on data classification of collection materials)

All sources of data in table 2 are from Nigeria, except for the PBS. These sources have, where necessary been cited directly and do not form part of the reference of our paper. The review aimed to discern the prevalent notions and behaviours of Lagos residents concerning the Ebola issue. We use extensive citations of the narratives curled from the reviewed works (articles, TV interviews and TV documentaries) to provide evidential analysis for our study. Our findings form the core of the following Ebola narratives.

## 5. The Ebola narratives

In the face of urbanisation, and a host of social economic challenges facing the Lagos community in Nigeria, the incursion of the Ebola virus into the Lagos airspace has become an ever increasing concern. This is specifically disturbing in areas characterised by slum settlements, poor sanitation and poor health facilities. Evidences from our reviews show that:

*“These concerns are genuine and were born on the July 2014 when according to a Liberian-American, named Patrick Sawyer, flew into Nigeria from Liberia already sick with the Ebola disease and infected 11 others before he died in the same month”.*



As reflected in the following narratives, the scenario has had community consequences in Lagos since then. We explain this scenario by adopting McGrath and Brennan's (2011: 346) approach to "model for culture, intergenerational development, and community building". This involves focusing on the personal and emotional expressions of people, their interaction and participation in community concerns and the role of the community as an agency.

### 5.1 Personal and emotional expression – when the fear of Ebola became the beginning of wisdom

The Ebola experience of Lagos, at its most basic level, provided an immediate source of individual and group expressions and creativity. Even before the index case arrived in Nigeria, *Business Day* reported that in "Acknowledging that Nigeria is in danger, the minister of health said that in addition to the leaflets produced for Lassa and other fevers that of Ebola fever is also emphasised". Leaflets were created in local languages, particularly in the Hausa, Igbo, Yoruba and *Pidgin English* languages to inform people of the need to stay tuned against Ebola. Music were created within the local streets of Lagos main streets and slums in connection to Ebola, in most cases, towards informing or educating people on the disease. Basically, there was already the fear of Ebola even before the index case occurred. In response to the fear of Nigerians contracting Ebola, efforts began in sensitising people to be hygiene conscious. In the *Business Day*, a man reported that:

*"These days the first thing I do after returning from work is to wash my hands before hugging my children or anybody. It is very important. The second thing is that before you eat, wash your hands again. The fruits must be washed; those things we eat from must be washed."*

From the above statement, the Ebola fear brought a change of behaviour to the respondent. Other Newspapers (e.g. the *Punch*, *Guardian* and *Daily Times*) and confirmatory interviews pointed to the fact that this was not usually the attitude of people prior to the Ebola experience. A change in behaviour was restricted to individuals in the country, Government agencies strategised towards a change in their usual approach. Evidences from the *Business Day* cited the Minister of Health of Nigeria to have said:

*"We will soon review our adverts for things like anti-malaria because they still say if you have fever, take this for three days. If you don't improve, go and see your doctor. But we are changing all that because now if you wait three days for Ebola, you are dead."*

Music were created within the local streets of Lagos main streets and slums in connection to Ebola, in most cases, towards informing or educating people on the disease. "Music is a powerful semiotic mediation through which memories are brought back to life, and which can help relive, albeit in altered ways, experiences of another time. The associational qualities can be profound" (McGrath and Brennan, 2011: 348). This appeared to have been effective. However there were some confusions created by fear. In a session conducted by the media (*Independent TV, Channels TV, TVC News, Vanguard, and Punch*), to ascertain the opinions of members of the public in Nigeria, there were revelations into the personal and emotional expressions on the Ebola issue. First and foremost, the Health Minister (during this period) employed emotional expressions as a strategy for calling on Nigerians and those in Lagos to follow health guidelines. One of such

emotional pleas made by the Minister of Health is presented below – an occasion where he noted that:

*“All those who had primary contacts have been quarantined. Secondary contacts have also been traced. So far, the number of people that have been traced is 198. Out of this number, 177 are in Lagos. Some are in quarantine, some are being monitored by health specialists. 21 persons in Enugu are also being watched. This is because one of the nurses that was involved with the treatment of the index case, unfortunately, disobeyed medical instructions and somehow travelled to Enugu. All those who she was in contact with including her husband are under quarantine. The medical team have been to traced all those who made contact with her. Health workers are now in all our border units. All the entry points into this country and exit points, we have port health workers that are working in our airports and seaports”.*

As reported by the *Punch*, the Minister went on to say,

*“We are calling on citizens specifically to cooperate. If health workers say you have had contact with A, B, C, don’t move to anywhere, respect that judgement. It is very important. In one or two cases where we have had disobedience, we lost one of them and this one now moved with it to another place (Enugu). So we are urging Nigerians, please to help us in making sure that all these messages and appeals we are making on you, we implement them.”*

These sort of emotional appeals contributed to motivating people towards being open about issues relating to Ebola. A look into these expressions shows that peoples’ (both government officials, politicians and local citizens) notion of the Ebola contributed to their development of personal visions towards avoiding any infection with the disease. In the context of the Ebola outbreak, “Such activities not only contribute to the development of the self but also of the individual’s roles, responsibility, and connection to the community itself (McGrath and Brennan, 2011: 348). This is (from our analysis of the scenario) is what set the stage for more focused purposive involvement in the community development process to take place in the city of Lagos.

## 5.2 Interaction and participation in the fight against Ebola – Some changes in “Lagosian” culture evolved

Being a megacity within a highly populated country, Lagos provides millions of people an opportunity for earn livelihood amidst the numerous challenges they face. This is one of the major function and importance of an urban area – to both the poor and the rich. Sheets (2013) while comparing Lagos to New York noted:

*“There's something more to Lagosians that I identify with. New York has always seemed like the one place in the world where a fast-talking, loud, aggravating person like me could fit into the social order, or lack thereof. What blew me away in my interactions with Lagosians is that they are all those things, only magnified”.*

Lagosians (as the residents of Lagos refer to themselves) as a community, have over a period of decades, developed their own ways of living – imbued with their own behaviours and characteristics that only unique to Lagos. As a consequence, prior to the outbreak of Ebola,

Lagosian held particular meaning in the everydayness of daily city and slum struggles. Roadside commerce is common and prices are based on haggling. Public transportation is hectic and buses usually carry twice their passenger-capacity. Both official police and local touts erect their roadblocks in the off-mainland areas of the city. Traffic can be slow and population congestion on the streets is common. The situation is worse in the several commercial districts where there open markets for goods and services. These are what one easily experiences in most parts of Lagos – slum life. Considering the nature of Lagos as described here, any epidemic would find a breeding ground here for an outbreak. However, efforts were made to deny Ebola a place in Lagos. How was this possible? In interviews carried out by the *TVC News* (and as confirmed by other reviewed works), a change of culture evolved during the period of the Ebola outbreak. The Lagos residents cooperated in all possible ways to prevent the spread of the virus because they simply did not wish to lose their city. Messages from WHO, the Nigerian government and local organisations were announced over the various media outlets and demonstrated on the streets of Lagos. The message concerning Ebola – what it is, where to report it and how to prevent it – were made to spread quick to the hearing of residents. On their part, citizens demonstrated participation. Documentary (but confirmed) evidences indicate that residents began to queue up to board public buses, a culture of use of disinfectant sanitisers became commonplace. From the roadside shops to the banks and public offices, sanitisers became handy to many – taxi and bus drivers, truck pushers and private homes (whether in slums or in rich neighbourhoods) began to follow anti-Ebola hygienic culture. Several of these elements led to development of capacities (in terms of expertise, knowledge and skill) of residents to work against the spread of Ebola. These activities became valued and the bond of community members developed towards a common goal – to avoid Ebola. Due to this process of interaction, “an awareness of common needs and interests emerges among local citizens, as do opportunities for involvement in activities for meeting common needs” (McGrath and Brennan, 2011: 355).

### 5.3 Lagos community as agency against Ebola – towards the development or building of a “new community”

Interaction, as noted by Bridger and Alter (2008) creates linkages across age, class, race, and ethnic lines, and different groups within a place and local population. This was the case in Lagos, the fear of Ebola spread created the emergence of a new community whereby, the urban rich and poor, men and women, girls and boys and people of different ethnicities viewed themselves in more equal terms before Ebola. This provided an interactional grounds for people to promote and support their general well-being. In the Banks, supermarkets and all public places where preferences were usually given to a certain class of urban citizens, a level of equality emerged, particularly, in relation to the use of hand-wash sanitisers in public places. The dividing walls of gender and social class became blurred within this context. This process, as identified by McGrath and Brennan (2011: 355), brought an “awareness of common needs and interests emerges among local citizens, as do opportunities for involvement in activities for meeting common needs” – that is, to be not to become infected by Ebola. Through our review of the general contents of works (shown in Table 2), and subsequent confirmations from key informants interviewed for this study, it emerged that a new common general focus of action was born in Lagos. This way, the Lagos people served as agents against Ebola spread.

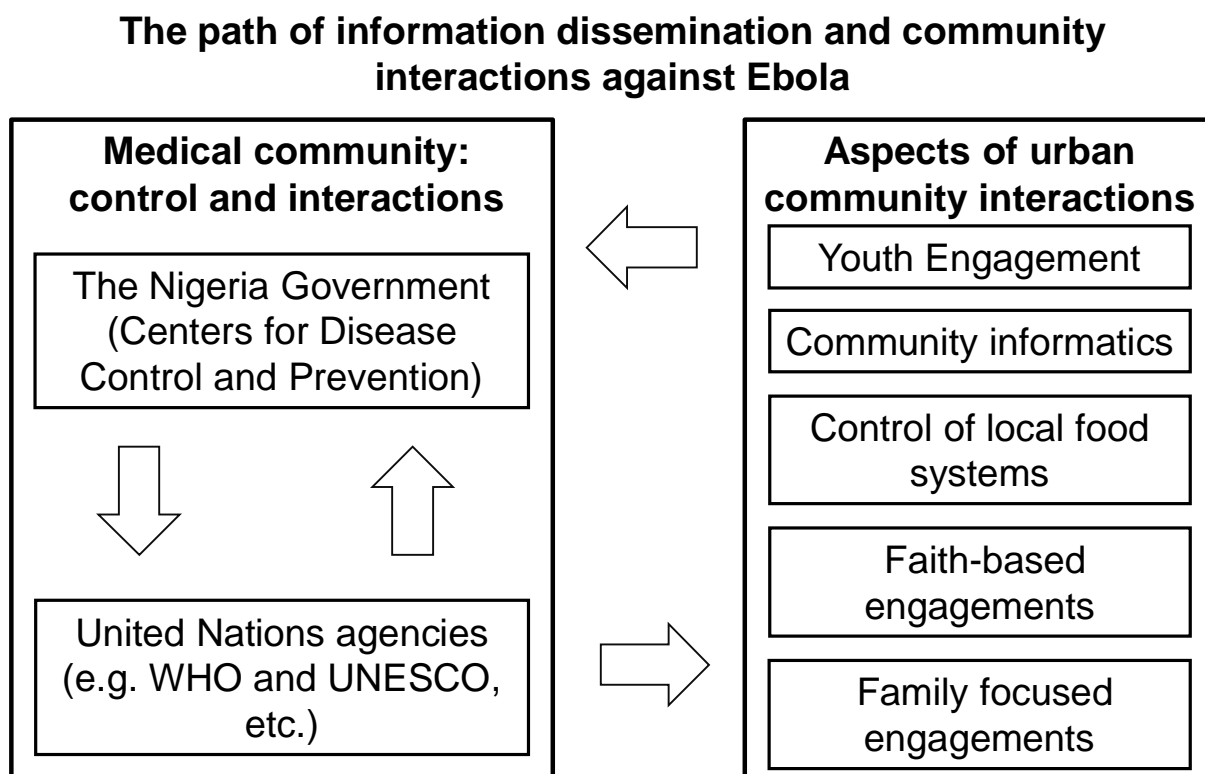
From the interactional lens, the Lagos community’s actions directed attention to their power to transform a situation. This is in line with notion that “the existence of community agency directs attention to the fact that local people, through interacting, often have the power to transform and

change society” (Bridger et al., 2011: 90). On the other hand, the presence of Ebola virus in Lagos necessitated the development of this agency which led to the building of relations among people, thereby, increasing the capacity of local people to come together and act in ways that did not support the spread of the virus. This supports the fact that “as long as people care about each other and the place in which they live, there is potential for agency and the development of community” (Bridger et al., 2011: 90).

#### 5.4 Understanding the most important community interactions that led to the elimination of Ebola

As have been witnessed in Ebola afflicted cities in SSA countries (Guinea, Liberia and Sierra Leon), the epidemic distorts social balance. This leads to chaos in existing community systems of interaction. Subsequently loosening the cultural fabrics that hold community. In our study on Nigeria, we found that rather than loosen that social fabric that held community; the fear of Ebola fortified the bond for community. The importance of medical control on this situation was very successful because the interactional aspect of the urban community evolved to a level of uniformity in the goal and actions against the outbreak. To make the nature of interactions that contributed to the eradication of Ebola, we have identified the core elements of interaction that made this possible (see Figure 2).

Figure 2: Identified elements of interaction that led to Ebola eradication in Lagos, Nigeria



Source: Authors (based on illustration of interactional elements)

Figure 2 shows the main actors and interactions that helped in averting the spread of Ebola. On one hand the medical community (comprising of Nigeria’s Centres for Disease Control and Prevention and UN organisations (e.g. WHO) cooperated in sharing information and determining what information should be shared with the public. At the citizens’ community level, interactions

were encouraged: youth engagement, community informatics, control of food system, faith-based engagements and family focused engagements. Each of these interactions as militated information from the medical community and provided feedback to them. We now explain how these interactions occurred.

#### 5.4.1 Youth Engagement

In the context of the Ebola outbreak in Lagos, youth engagement was used. It was “deployed as a strategy tailored to the needs and interests of young people; adapted to support the organisational and community context” of the eradication of Ebola” (Wheeler and Thomas, 2011: 213). Therefore, it contributed to influencing individuals, organisations, communities and society at large towards the understanding of personal hygiene issues. Youth leaders participated in information dissemination, Ebola seminars and Workshops on awareness creation.

#### 5.4.2 Community informatics

Community informatics involves the use of “information and communication technology within communities to promote interactions and collaboration” (Green and Robinson, 2011: 297). In Nigeria, community informatics was utilised mostly in the form of a text-messaging platform (called *U-Report*) provided an effective platform for communication on Ebola. UNICEF launched *U-Report* in Nigeria in April this year. It is based on a mobile system that uses Short Message Service (SMS) messages, to enable individual subscribers to freely ask questions about health issues, to get real time answers and to share information with other *U-reporters* across the country. This system strengthened community-led development, citizen engagement and behavioural change in Lagos. As a key community informatics tool against Ebola, the *Guardian* reports that:

*“When the recent outbreak of Ebola virus was first reported in Nigeria, Nne Orji was one of many Nigerians, who took baths in saltwater, believing that it would help keep her safe from the disease. She even drank from the salt solution – a mythical cure that has cost the lives of a number of people. She was especially concerned that her profession as an immigration officer put her at risk, because of contact with travellers from other countries. She was determined to do what it takes to protect herself, but she didn’t have good information about what to do. Along with the widespread fear of the disease, there were rampant rumours about how it could be caught – and magical ways to prevent it. Nne was just one of many who believed them. That all changed when her mobile phone beeped with a text message from her elder sister. Several beeps later, Nne had the information she needed to help protect herself against Ebola. And then she started sharing the messages with colleagues”.*

The sharing of messages through *U-Report* played a strong role in knowledge dissemination about Ebola. With more than 100 million Nigerians owning a mobile phone, this informatics service helped bring awareness and Ebola education to people. There is a great deal of potentials in the use of technology for boosting community interactions.

#### 5.4.3 Avoidance of some local food

Since Ebola virus is linked to animals like monkeys, this led to advises from the government concerning the consumption of *bush meat*. The term, *bush meat* is used to represent all meat from undomesticated animals. A story in article from the *Independent Newspaper* says that

*“Getting someone to give direction to the part of New Benin Market where Bush meat is sold is now a herculean task. A young girl hawking oranges within the vicinity of the market who was accosted by Saturday Independent for direction to where the sellers of bush meat in the market could be located did not answer. Rather, she gave the reporter a very cold, long stare and walked away so fast that she was almost knocked down by a car as she was crossing the road. The bowl of oranges she carried on her head fell on the road, with the oranges rolling in different directions. When she was asked by some onlookers why she was so absent minded while crossing such a busy road, the girl with tear her eyes glanced at their people on the opposite side of the road, pointed in the direction where she saw the reporter and said in a barely audible pidgin English: "Na one man there tell me say him want chop bush meat (meaning, there is man who wants to eat bush meat.)"*

Although the notion that Ebola can be contacted through infected bush meat is not yet medically confirmed, the consumption of *bush meat* became highly discouraged. Official warnings from the government encouraged people to avoid such food consumptions.

#### 5.4.4 Faith-based and family focused engagements

The Lagos community is a religious one. Faith-based organisations (e.g. churches, mosques and other religious associations), helped in speaking out on the Ebola issue to their various sub-communities. This intra-community interaction helped in people getting to know more about what was going on in the International community (current affairs on Ebola from WHO) as well as awareness on hygiene. At the basic level, families and extended family systems provided opportunity for more intimate expressions concerning the Ebola problem.

## 6. Conclusion: Implications on community and urban management

Many countries around the world have asked questions on how Nigeria became an Ebola affected country, and then worked their way out of it. It is not surprising that such questions have arisen – considering Nigeria’s supposed poor medical infrastructure. One of the aims of this study is to bring the interactional community aspect of Nigeria’s Ebola experience to the centre of community discourse. What we have done in this study is to highlight the role community can play in the eradication of Ebola virus within an urban area. We recognise that there are other factors that contribute to disease control through urban management. For instance, unlike in the other affected West African countries, Nigeria has an existing institutional structure for disease control and prevention. However, we have focused on the interactional aspect of community to emphasise the human activity and changes in the behavioural aspects necessary for managing such situations. Whether the identified interactions would continue or cease now that WHO has declared Nigeria to be Ebola free is a matter of time. If the country remains Ebola free for the next six months, then it would be worthwhile to conduct further research to ascertain the continuity of these community interactions.

The Ebola outbreak in West Africa, as we have seen from the case of Nigeria, has urban management implications. The situation has shown that disease control should be made a cardinal factor in urban planning and development priority. This means providing sanitation infrastructures that can cater for populations within the urban settlement, irrespective of whether they are squatter, formal or informal settlements. This is important because in order to avoid citywide spatial epidemic outbreaks that lead to high death rates. Unaffected countries (such as Ghana, Togo, Benin, The Gambia, etc.) have a lot of lessons to gain from the Nigerian experience. In addition, affected

countries like the USA, Spain and the UK have even more to learn from the case of Ebola in Nigeria.

In the present situation, we conclude by identifying major implications of the Ebola fight on community development. In this regard, we identified one major implication. The use of UNESCO's *U-Report* as a community informatics tool helped to provide health information that debunked the myths and misconceptions associated with Ebola and other diseases. Having become more enlightened on Ebola and other health issues, there is evidence that people are now posing critical questions to the Nigerian government concerning the quality of health services in the country. As a result, a comprehensive mapping and evaluation of existing health services will be essential for improving the overall health structures of the country in readiness for another Ebola outbreak or any other diseases. This has become a rallying point for a community effort in the country. If the public health system improves as a result of communities' demand for improved health services that can cater for another disease outbreak in the country, then it is worthwhile to identify the interactional aspect of community as being essential to health sector transformation in urban areas. This is particularly important to the developing countries of Africa, Asia and South America.

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