

## **Influence Of Media Campaigns on The Level of Awareness and Knowledge of Lassa Fever Risk Factors, Prevention and Treatment Behaviour of Enugu State Residents**

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**Abstract:** During health emergencies like Lassa fever outbreak, there is general hunger for information, as a way of staying healthy. This no doubt, account for the sharp increase of audiences' (listeners and viewers) quest for information during such periods. This study has as specific objective of finding out the level of awareness of Lassa fever risk factors, prevention, treatment, and practice among residents of Enugu State. The explanatory mixed method design was adopted for this study. From a projected population estimate of 4,411,100, a sample size of 384 was drawn using the automated online sample size calculator with confidence level of 95% and confidence interval of 5.0%. Instruments for data collection were questionnaire and in-depth interview while statistical package for social science (SPSS) was used in analyzing the generated data. The qualitative data generated through interview were used to complement the quantitative data generated using the questionnaire. The qualitative data from interview were discursively presented. It was discovered that the broadcast media influenced the health behaviour of people positively as it concerns Lassa fever risks factor, testing, prevention and practice. Also, evidence from research data suggests that there is significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice. Premised on data evidence, the researcher drew a reasoned conclusion that health campaigns from the mass media are capable of influencing the behaviour of the audience, and by giving health emergencies like the Lassa fever outbreak the needed attention, the researcher concludes, media can help reduce or totally eliminate mortality ratios in times of diseases and virus outbreaks through their various awareness and sensitization campaigns. The need for health advocacy was suggested. That is, the use of opinion leaders, particularly religious and traditional leaders to spread the gospel of healthy living be adopted. The need for future studies in this same area was suggested. But such studies should take broader scope, using the same research design and methodology. This is to refute or replicate the outcome of the research, thereby making the findings of this research to stand the test of time.

**Keywords:** Lassa fever, Awareness and knowledge, Media campaigns, Health behavior

Public health

## 1.0 Background of the Study

In recent decades, the role of media campaigns in shaping public awareness and knowledge on various health issues has gained substantial recognition. The utilization of media platforms, such as television, radio, newspapers, and digital platforms, has proven effective in disseminating information to diverse populations, influencing their behaviors and decisions regarding health-related matters. The power of media campaigns lies in their ability to reach a wide audience, transcending geographical boundaries and socioeconomic differences (Smith, 2017).

The primary functions of the communication media are to inform, educate, and entertain the society. The various mass media channels (magazines, television, internet, newspapers, etc.) have the power to direct our attention towards certain issues and this is evident in the Agenda-Setting function of the mass media. To be in good health, people need adequate information and knowledge on health matters. They need information on healthy lifestyle practices, preventive health measures, health conditions and diseases, and government healthcare programmes

No doubt, communication is extremely important in the fight against health problems, not only because it offers considerable instrumental value, but also because it facilitates access to interventions that aid the prevention, treatment and care for the ailment. More importantly, health communication strategies reduce vulnerability to the disease, improve advocacy, and subsequently enhance mobilization and networking

As the world continues to face emerging infectious diseases, understanding the impact of media campaigns on public awareness and behavior becomes paramount. One such emerging infectious disease is Lassa fever, caused by the Lassa virus. Lassa fever is a zoonotic disease endemic to West Africa, with Nigeria being one of the most affected countries (Olayemi et al., 2020). Lassa fever (LF) or Lassa haemorrhagic fever (LHF) is an acute viral illness caused by the Lassa virus which was first discovered and isolated in 1969 in the town of Lassa in Borno state of Nigeria (Frame, Baldwin, Gocke, & Troup 1970). Lassa virus is a member of the Arenaviridae virus. The primary host of the virus is the Natal multimammate mouse (*Mastomys natalensis*), found commonly in most of Sub-Saharan Africa (McCormick, 1987).

The occurrence of viral haemorrhagic fever, (VHF) is mainly found in certain geographies of Asia, the Middle East, Africa, and South America with differing complicated biological systems and seasonal patterns. Transmission of infection occurs from person to person in close contact, airborne transmission, and sexual transmission from convalescent patients. Given its high rate of incidence, Lassa fever is a major problem in affected countries (Centre for Disease Control, 2014a and 2014b). Lassa fever commonly occurs in West Africa resulting in 300,000 to 500,000 cases annually with 5,000 deaths per year (Richmond & Baglole, 2003).

Lassa fever, according to (McCormick, 1987) cited in Smith, and Adedeji (2017, p.76) “has been reported to be primarily spread by contact with the faeces or urine of rodents”. It is endemic among the rodent population in countries such as Nigeria, Sierra Leone, Guinea, and Liberia, where it is known to cause outbreaks on an almost annual basis (World Health Organization, 2016).

Enugu State, located in southeastern Nigeria, has also experienced cases of Lassa fever, necessitating the need for effective awareness campaigns to inform and educate its residents about the risk factors, prevention strategies, and treatment options associated with the disease. While Lassa fever can lead to severe health consequences,

including organ failure and death, a well-informed population can take preventive measures to reduce its spread (WHO, 2020).

However, the success of media campaigns in disseminating accurate and comprehensive information hinges on various factors. The design, content, frequency, and reach of the campaigns play crucial roles in determining their effectiveness. Theoretical models, such as the Health Belief Model and the Social Cognitive Theory, provide insights into how individuals perceive health threats and subsequently engage in preventive behaviors (Rosenstock, 1974; Bandura, 1986). These models underscore the significance of media campaigns in not only conveying information but also in fostering self-efficacy and perceived susceptibility among the audience.

Enugu State, like many other regions, is characterized by a diverse demographic composition and varying levels of media exposure. Factors such as education, income, and access to media platforms can influence individuals' reception and interpretation of health messages. Moreover, cultural beliefs, social norms, and personal experiences can shape how individuals respond to health campaigns (Airhihenbuwa, 1995). Therefore, a comprehensive understanding of the local context is crucial in tailoring media campaigns to effectively reach and resonate with the target audience.

Media campaigns are most impactful when they are evidence-based and informed by a deep understanding of the local context and the target audience's needs (Wakefield et al., 2010). Assessing the effectiveness of these campaigns requires robust methodologies, including surveys, interviews, and observational studies. By measuring changes in awareness levels, knowledge retention, and behavior modification, researchers can gauge the impact of media campaigns on public health outcomes (Noar et al., 2009).

The digital age has ushered in new avenues for health communication, including social media and online platforms. These platforms enable real-time interactions and information sharing, potentially enhancing the reach and engagement of health campaigns (Moorhead et al., 2013). However, challenges such as the spread of misinformation and the digital divide must also be considered in the design and implementation of these campaigns.

Despite the potential of media campaigns to impact public health outcomes, gaps in knowledge persist regarding their effectiveness in promoting awareness and behavior change related to Lassa fever in Enugu State. While numerous media campaigns have been conducted to address various health issues, limited research has specifically focused on assessing the impact of these campaigns on Lassa fever awareness, and knowledge. Given the complex interplay of factors influencing media campaign effectiveness, this study seeks to delve into the influence of media campaigns on the level of awareness and knowledge of Lassa fever risk factors, prevention, and treatment behavior among Enugu State residents. By examining the existing media landscape, content of campaigns, and its impact on public knowledge and behavior, this study aims to provide insights that can guide the development of future health campaigns in the region.

## **1.2 Main Research Problem**

The main research problem of this study is to investigate the influence of media campaigns on the level of awareness and knowledge of Lassa fever risk factors, prevention, and treatment behavior among Enugu State residents.

## Objectives of the study

- Find out the level of awareness of Lassa fever risk factors, prevention, treatment, and practice among residents of Enugu State.
- Ascertain if the knowledge level and health behaviour of Enugu State residents towards Lassa fever risk factors, prevention, treatment and practice has increased as a result of their awareness to the media campaigns.

## Research Questions

Research questions, drawn from the specific objectives, were raised to give the study desired focus. They are:

1. What is the level of awareness of Enugu State residents on Lassa fever risk factors, prevention, treatment and practice?
2. To what extent has the knowledge level and health behaviour of Enugu State residents towards Lassa fever risk factors, prevention, treatment and practice increased as a result of their awareness to the campaigns?

## Hypotheses

To speculate on the outcome of this research and to test for statistical significance of the data collected, the following hypothetical statements were formulated.

### *Hypotheses One*

**H<sub>0</sub>:** There is no significant relationship between the exposure to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

**H<sub>1</sub>:** There is significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

## 2.0 Literatures Review

### Health Communication

Health communication, as defined by the World Health Organization (WHO), is the comprehensive process of conveying health-related information using communication media. The concept revolves around the idea that health is not just the absence of disease but a state of complete physical, mental, and social well-being. Therefore, health communication encompasses the role played by various communication platforms in disseminating information to enhance overall health and well-being.

The New South Wales Department of Health in Australia (2006) considers health communication a pivotal strategy for informing the public about health concerns and ensuring that important health issues remain at the forefront of public awareness. Akinfeleye (1987) describes health communication as the type of communication disseminated by mass media to facilitate effective healthcare delivery. In the context of influencing behaviors and

attitudes for healthy choices, Smith and Hornik (1999) emphasize that health communication involves the development and dissemination of messages tailored to specific audiences.

Freimuth, Linnan, and Potter (2000) view health communication as a means to prevent diseases through modifying behaviors. The U.S. Department of Health and Human Services' Office of Disease Prevention and Health Promotion defines health communication as the study and practice of conveying promotional health information. It encompasses public health campaigns, health education efforts, and communication between healthcare professionals and patients.

In media health communication, the media serves as a powerful tool for disseminating health information to influence people's health choices and enhance their health literacy for sustainable development. This concept aims to achieve various goals, including increasing awareness and knowledge about health issues, influencing attitudes and behaviors, promoting healthy practices, demonstrating the benefits of behavior changes, advocating for health issues or policies, boosting support for health services, addressing misconceptions, and more (Akpobo, 2015).

Over the past few decades, the importance of health in society has led to the emergence of health communication as a distinct field of study and practice. Various studies (Agbonifo, 1983; Ruger et al., 2001; Sen, 1999) have underscored the significance of health in society, prompting both national governments and global health agencies to focus on improving health systems. Health communication has emerged as a crucial step in complementing these efforts, contributing to improving individuals' and communities' health and well-being (Nutbeam, 1998; Rimal & Lapinski, 2009).

Health communication involves utilizing communication techniques and technologies to positively influence individuals, populations, and organizations, with the goal of promoting both human and environmental health (Miabach & Parrot, 1995). This implies that mass media platforms such as radio, television, films, and print media play pivotal roles in disseminating health-related information that can lead to positive behavior change and improved health outcomes.

### **Broadcast Media and Health Communication**

Broadcasting, a significant scientific development of the 19th century, revolutionized communication by using airwaves to establish a global communication network. Broadcasting encompasses conventional mediums like television and radio, providing a means to convey messages simultaneously to a vast audience. The fundamental role of broadcasting in development lies in providing pertinent information to the public (Akpan, 2006). This information dissemination occurs through various formats, including news broadcasts, discussions, interviews, magazines, entertainment-based information, spot announcements, and radio drama serials.

The attributes of broadcasting—ubiquity, immediacy, voracity, flexibility, voluntariness, potential for social control, and interference (Heads, 1985)—make it an effective channel for campaigns and communication strategies. Health communication leverages these attributes to achieve its objectives. For instance, broadcasting effectively delivers health news, raises awareness about diseases such as HIV/AIDS and Diabetes, and encourages early detection and prevention efforts. The broadcast media also play a critical role in promoting health-conscious attitudes and behaviors, contributing to the overall well-being of society.

In a study of the role of broadcast media in breast cancer awareness, Nnanna (2008) highlights the significance of the media's mission to raise awareness about early detection and prevention of breast cancer. Broadcast platforms enable campaigns that engage diverse audiences across local, national, and international stations. This approach encourages women across the country to adopt early detection plans, potentially saving lives through timely intervention.

The prominence of diseases and mortality rates in contemporary society makes health-related topics particularly compelling for news media. HIV/AIDS and Diabetes, for instance, receive substantial media coverage due to their impact on public health. This elevated media attention to health issues serves as a catalyst for public awareness, education, and engagement. Kitzinger (2000) underscores the fact that media coverage of HIV/AIDS has surpassed that of other major diseases, making it a high-profile news topic.

Studies have demonstrated that the mass media serve as a primary source of health information for the general public (Martinson & Hindman, 2005; Reagan & Collins, 1987). Media messages significantly contribute to health knowledge and awareness (Salmon & Akin, 2003). Notably, different channels are utilized based on individuals' backgrounds, characteristics, and health needs (Maibach & Parrot, 1995; Mashall & Smith, 1995). Dutta's study (2004) reveals that active retrieval channels such as newspapers, magazines, and the internet are primary sources for health-conscious individuals. On the other hand, passive consumption channels like television and radio are preferred by those who are less health-conscious.

In conclusion, broadcast media, with its unique attributes, holds substantial potential for health communication and public health promotion. Its widespread reach, immediate impact, and capacity for disseminating information make it an invaluable tool for raising awareness, changing attitudes, and encouraging positive health behaviors. The evolving role of broadcast media in healthcare campaigns, alongside the development of health communication as a field, underscores the significance of effective communication in achieving sustainable health development goals.

### **Empirical Studies**

**Ezugwu (2014):** This study investigated the "Influence of Breast Cancer Broadcast Media Campaigns on the Health Behavior of Women in South East Nigeria." The study employed a mixed-method approach, involving a questionnaire and in-depth interviews to assess the impact of broadcast media on health behavior. Results: The study found that broadcast media campaigns positively influenced women's health behavior related to breast cancer. The media's role in disseminating information about risks, testing, prevention, and practices contributed to improved awareness and behavior.

**Keating et al. (2006).** This study assessed the effects of media campaigns on HIV/AIDS awareness and prevention in Nigeria. Data from Family Planning and Reproductive Health Surveys were analyzed to investigate program exposure, knowledge, and prevention of HIV/AIDS. Results: The study revealed that program exposure varied between genders and locations. Radio and television programs contributed to knowledge and awareness about HIV/AIDS. The study suggested that media campaigns could play a role in influencing discussions about HIV/AIDS.

**Mamudu (2014).** This explored perception, attitude, and practices related to HIV/AIDS prevention. They highlighted electronic media as a major source of information. Results: The studies emphasized the role of media campaigns in disseminating health information to a wide audience. The electronic media, particularly radio and TV, were identified as effective channels for reaching individuals with important health messages.

**Obono (2011).** This study examined "Media Strategies of HIV/AIDS Communication for Behavior Change in South West Nigeria." The study utilized unobtrusive observation and in-depth interviews to analyze the content of selected media. Results: The study revealed that media strategies using social marketing techniques enhanced the acceptance and recall of HIV/AIDS messages. The integration of different media forms, including advertisement, drama, news, and public service announcements, contributed to increased information availability and comprehension.

### **3.1 Research Method:**

The survey method was chosen as the most suitable approach, involving the use of a questionnaire to collect data from Enugu state residents. In-depth interviews were also conducted to gather qualitative data.

### **3.2 Population of the Study:**

The entire population of Enugu State residents is considered the population of the study. Enugu State is located in Nigeria and consists of 17 Local Government Areas. The study focused on the residents of Enugu State due to its relevance to the research objectives.

### **3.3 Determination of Sample Size:**

Given the large population, a manageable and representative sample size of 384 was determined using an online sample size calculator. This sample size was chosen to ensure reliable results.

### **3.4 Sampling Technique:**

A multi-stage sampling technique was used, involving cluster sampling, random selection of local government areas, and purposive selection of principal cities and layouts. This approach was chosen to ensure representation in the sample due to the complexity of the population.

### **3.5 Instruments for Data Collection:**

Both quantitative and qualitative data were collected using a questionnaire and interview guide, respectively. The questionnaire contained open and closed-ended questions, while the interview guide aimed to gather more in-depth information from program directors of broadcast stations.

### **3.6 Validity of the Measuring Instrument:**

The measuring instruments were validated through content and face validity. Corrections and suggestions from independent researchers were incorporated to ensure that the instruments effectively addressed the research objectives.

### **3.7 Reliability of the Measuring Instrument:**

The test-retest method was used to establish the reliability of the questionnaire. The Pearson's correlation coefficient was calculated, resulting in a high reliability coefficient of 0.97.

### **3.8 Method of Data Collection:**

The researcher and research assistants administered the questionnaire and interview guide simultaneously. Quantitative data were collected through interpersonal administration of the questionnaire, while qualitative data were gathered through interviews with program directors of selected broadcast stations.

### **3.9 Method of Data Analysis:**

Both descriptive and inferential statistics were employed for data analysis. Quantitative data were presented using tables, percentages, and charts. Hypotheses were tested using the chi-square statistic. Qualitative data from interviews were presented in a narrative manner in tables.

## **4.1 Data Presentation**

**Table 1: Questionnaire Distribution and Return Rate**

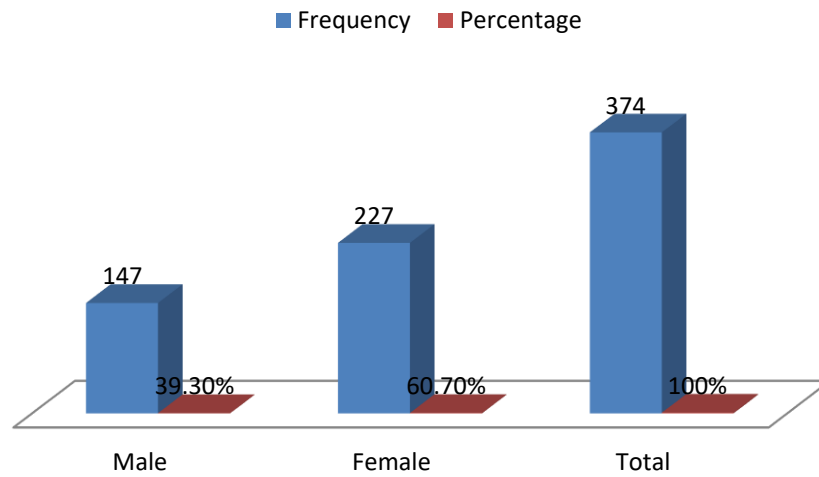
Item	Frequency	Item	Frequency	Percentage
No. Returned	378	Analysable	374	97.4%
No. not returned	6	Mortality Rate	10	2.6%
Poorly filled	4	<b>Total</b>	<b>384</b>	<b>100%</b>
<b>Total</b>	<b>384</b>			

The researcher divided this section into two distinct data parts (demographic and psychographic). The demographic data contained the sex, age, marital status, occupation, and educational level of respondents. While the psychographic elicited respondents' attitude of respondents towards Lassa fever media campaigns in relation to the risk factors, prevention, treatment and practice.



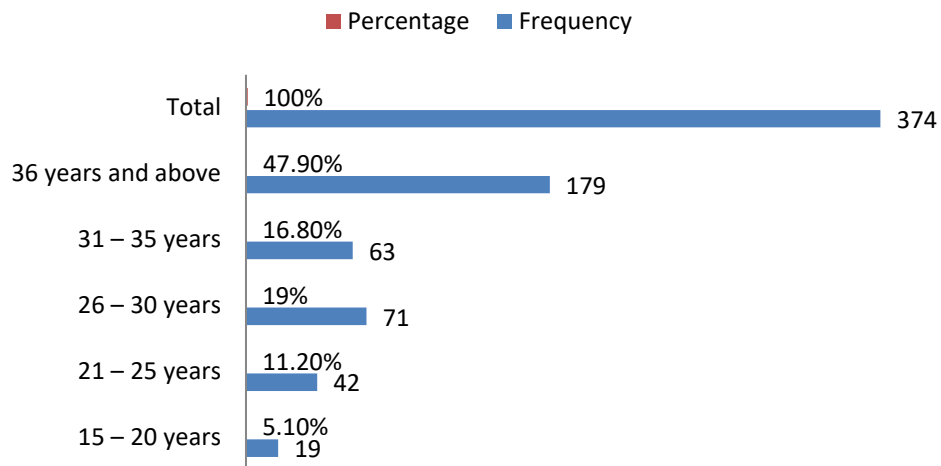
## SECTION A: Biographic Data

Chart 1: Gender Distribution of Respondents

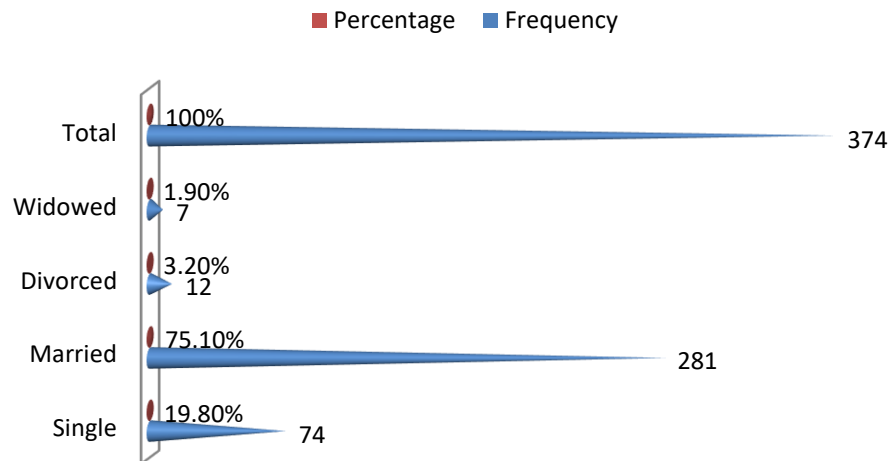


Source: *Field Data, 2019*

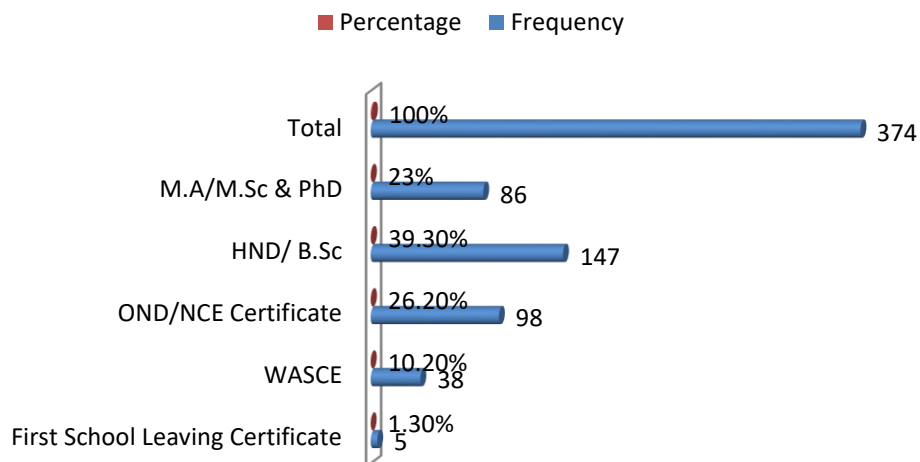
Chart 2: Age Distribution of Respondents



Source: *Field Data, 2019*

**Chart 3: Marital Status of Respondents (Que.3)**

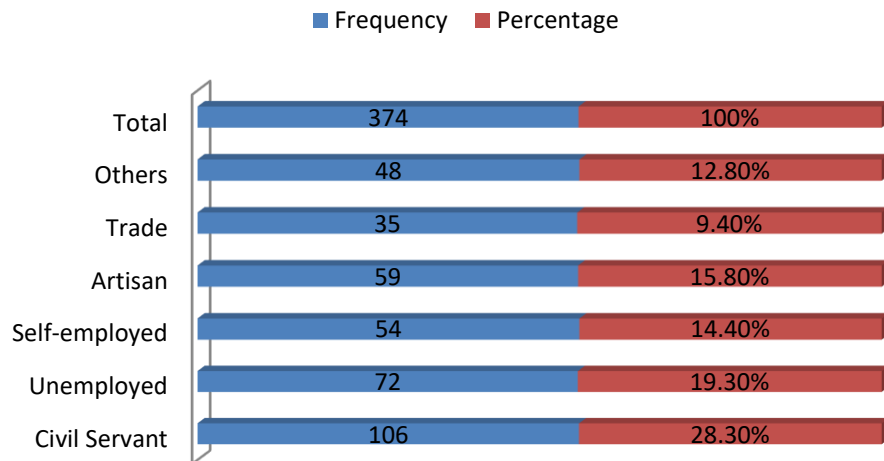
**Source:** *Field Data, 2019*

**Chart 4: Educational Background of Respondents**

**Source:** *Field Data, 2019*

Presentation of research data on *Chart 4* indicate that 5 representing 1.3% of the respondents had First School Leaving Certificate; 38 or 10.2% had O/Level (WAEC/GCE or NECO); 98 representing 26.2% had either OND or NCE; 147 or 39.3% had Higher National Diploma (HND) or Bachelor's Degree (BSC or BA). However, 86 or 23% had either Masters or Doctorate degrees.

Chart 5: Occupation of Respondents)



Source: Field Data, 2019

## SECTION B: Psychographic Data

Table 2: Respondents' place of residence or work in Enugu State

Response	Frequency	Percentage
Enugu	122	32.6%
Oji – River	127	34%
Nsukka	125	33.4%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: Field Data, 2019

Data presentation on *Table 2* show that out of the 374 respondents, 122 representing 32.6% of them reside or work in Enugu; 127 representing 34% them are in Oji-River, while Nsukka respondents are 125 representing 33.4%.

Table 3: Respondents' exposure to watch or listen to TV and/or Radio programmes

Response	Frequency	Percentage
Yes	374	15.7%
No	0	15%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: Field Data, 2019

Data collected as presented on *Table 3* show that all the 374 respondents claimed to watch or listen to TV and/or Radio programmes. The import of these data generated is that the respondents are adequately fit to provide the necessary data for this research.

**Table 4: Respondents Most Favourite Station (Que. 8)**

Response	Frequency	Percentage
Nigerian Television Authority (NTA), Enugu	92	24.6%
Coal City FM (Radio Nigeria), Enugu	201	53.7%
Enugu State Broadcasting Service Radio (Sunrise FM)	53	14.2%
Enugu State Broadcasting Service TV (Star TV)	28	7.5%
None of the above listed	0	0%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: *Field Data, 2019*

**Table 5: Frequency with Which Watch or Listen to Programmes in their Favourite Station**

Response	Frequency	Percentage
Always-Daily	186	49.7%
Occasionally-Weekly	120	32.1%
Rarely-Monthly	53	14.2%
Never	0	0%
Don't know	15	4%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: *Field Data, 2019*

**Table 6: Respondents' exposure to Programmes That Focused On Lassa fever Disease**

Response	Frequency	Percentage
Yes	374	100%
No	0	0%
Can't Say	0	0%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: *Field Data, 2019*

Data collected as presented on *Table 6* show that all the 374 respondents claimed to have watched or listened to TV and/or Radio programmes that focused on Lassa fever disease. The imports of these data generated are that the respondents are adequately fit to provide the necessary data for this research.

**Table 7: Programme Format Stations Mostly Use in Focusing on Lassa fever Disease**

Response	Frequency	Percentage
Radio Jingles	41	11%
Television Commercials	4	1.1%
Main News Bulletin	25	6.7%
Public Service Announcement	11	2.9%
Discussion/Phone-In Programme	247	66%
Health Programme	46	12.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

Source: *Field Data, 2019*

**Table 8: Extent to Which Respondents Received Information on Lassa fever Disease from Preferred Medium.**

Response	Frequency	Percentage
To a large extent	315	84.2%
Moderately	36	9.6%
To some extent	14	3.7%
Don't know	9	2.4%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

Data presented on *Table 8* indicate that out of the 374 respondents, 315 or 84.2% of them agree that *to a large extent*, received information on Lassa fever disease from preferred medium; 36 or 9.6% of the respondents claimed that they have *moderately* received information on Lassa fever disease from preferred medium. While 14 representing 3.7% of them claimed that they *to some extent* received information on Lassa fever disease from preferred medium, the other 9 or 2.4% of the respondents were *indifferent*.

**Table 9: Respondents' Knowledge on Lassa fever Disease**

Response	Frequency	Percentage
Risk factors/Transmission mode	257	68.7%
Prevention	104	27.8%
Cure	8	2.1%
Can't Say	5	1.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

**Table 10: Respondents Knowledge on the risk factors for contracting Lassa fever disease**

Response	Frequency	Percentage
Having rodents in the house	204	54.5%
Dirty environment	121	32.4%
Eating rodents	32	8.6%
Eating leftover food	12	3.2%
Can't Say	5	1.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

**Table 11: Respondents' Opinions That Living in a Cleaner Environment Can Help Prevent Rodents Coming Around the House**

Response	Frequency	Percentage
Strongly agreed	222	59.4%
Agreed	111	29.7%
Disagreed	27	7.2%
Strongly Disagreed	9	2.4%
Can't Say	5	1.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

Data collected as presented on *Table 13* indicate that out of the 374 respondents, 222 representing 59.4% of them agreed strongly that living in a cleaner environment can help prevent rodents coming around the house; 111 or

29.7% of them agreed that living in a cleaner environment can help prevent rodents coming around the house; 27 or 7.2% of them disagreed that living in a cleaner environment can help prevent rodents coming around the house. While 9 representing 2.4% of them disagreed strongly, 5 or 1.3% of the respondents were indifferent.

**Table 12: Respondents' Opinion on Whether Lassa fever has little or No Cure**

Response	Frequency	Percentage
Strongly agreed	222	59.4%
Agreed	111	29.7%
Disagreed	27	7.2%
Strongly Disagreed	9	2.4%
Can't Say	5	1.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

Data collected as presented on *Table 12* indicate that out of the 374 respondents, 222 representing 59.4% of them agreed strongly that Lassa fever has little or no cure; 111 or 29.7% of them agreed that Lassa fever has little or no cure; 27 or 7.2% of them disagreed that Lassa fever has little or no cure. While 9 representing 2.4% of them disagreed strongly, 5 or 1.3% of the respondents were *indifferent*.

**Table 13: Respondents views on how Lassa fever disease broadcast media campaign are important on the risk factors, prevention, treatment and practice**

Response	Frequency	Percentage
To a large extent	315	84.2%
Moderately	36	9.6%
To some extent	14	3.7%
Don't know	9	2.4%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

Data presented on *Table 13* indicate that out of the 374 respondents, 315 or 84.2% of them agree that *to a large extent*, Lassa fever disease broadcast media campaign are important on the risk factors, prevention, treatment and practice; 36 or 9.6% of the respondents claimed that Lassa fever disease broadcast media campaign are *moderately* important on the risk factors, prevention, treatment and practice. While 14 representing 3.7% of them claimed that Lassa fever disease broadcast media campaign are, *to some extent* important on the risk factors, prevention, treatment and practice, the other 9 or 2.4% of the respondents were *indifferent*.

**Table 14: Respondents' attribution on their knowledge level on the risk factors, prevention, treatment of Lassa fever disease and their current health behavior on broadcast media campaigns**

Response	Frequency	Percentage
Yes	360	96.3%
No	9	2.4%
Can't Say	5	1.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** Field Data, 2019

**Table 15: Respondents' Alertness of Being Infected by the Lassa Fever Disease**

Response	Frequency	Percentage
Yes	358	95.7%
Not at All	3	0.8%
Don't know	13	3.5%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** *Field Data, 2019*

Data collected as presented on *Table 15* indicate that out of the 374 respondents, 358 representing 95.7% of them claimed they are cautious of being infected by the Lassa fever disease. While 3 or 0.8% of them differed, 13 or 3.5% of the respondents were indifferent.

**Table 16: Respondents' attributions on their behavior on the risk factors, prevention and treatment due to their knowledge of media campaigns on Lassa fever**

Response	Frequency	Percentage
Of course	293	78.3%
Somehow	58	15.5%
Not at All	7	1.9%
Not Applicable	16	4.3%
<b>Total</b>	<b>374</b>	<b>100%</b>

**Source:** *Field Data, 2019*

#### **4.2 Presentation of Qualitative Data**

The interview sessions were organized a day after the collection of the quantitative data. One interviewee (Programme Director) in each of the purposively selected broadcast media station as was engaged in an interview session for this study. The stations were purposively selected because they have been known to have weekly or daily programmes on health communication, unlike other private radio stations in Enugu that have no regular health campaign programmes in their schedules. The interviewees were selected based on the fact that they are knowledgeable about healthcare campaigns as Programme Directors, who actually supervise the production and broadcast of such programmes.

#### **Sampling Technique for Qualitative Analysis**

Qualitative data were generated from 4 programme Directors in the following purposively selected broadcast stations in Enugu State:

- |                                |                    |               |
|--------------------------------|--------------------|---------------|
| 1) Sunrise FM, Enugu           | Programme Director | Interviewee 1 |
| 2) Star TV (ESBS), Enugu       | Programme Director | Interviewee 2 |
| 3) NTA, Enugu                  | Programme Director | Interviewee 3 |
| 4) Radio Nigeria (FRCN), Enugu | Programme Director | Interviewee 4 |

**Table 17: Opinions on Their Station' Participation in Lassa fever Campaign**

INTERVIEW QUESTION 1
<b>Does your station participate in Lassa fever Campaign?</b>
Here, the researcher tried to check the extent to which individual stations have keyed in into the Lassa fever campaigns. Responses from the four interviewees revealed that there is substantial involvement of the media in awareness creation about Lassa fever outbreak in Nigeria. For instance, interviewee 2 stated thus <i>“health programme abound in our station (Star TV (ESBS), Enugu and it is expected that we should raise the issue to the front burner through such programme”</i> . Supporting the above viewpoint, Interviewee 4 believes that <i>“....I doubt if there is any station that is worth its onion that will not be involved in the Lassa fever outbreak. ....we have been involved in similar outbreaks like Bird Flu, HIV/AIDS, Ebola and host of others”</i> . However, Interview 3 contends that <i>“not all stations see this as important, but we at the NTA, it is a sacred duty to be involved in the campaigns”</i> .

**Source:** *Qualitative Interview Field Data, 2019*

**Table 18: Interviewees' Opinions on Programme Format, Time and Frequency of Broadcast**

INTERVIEW QUESTION 2
<b>Please, kindly give a clear picture of the programme format, time and frequency of broadcast</b>
Here, the researcher attempted to find out programme format, time and frequency of broadcast of health programmes that feature Lassa fever issues. Findings showed that majority, if not all the interviewees use discussion/phone in programme mostly, followed by dedicated health programmes and jingles. Interviewee 3 stated that: <i>“...at NTA, AM Express morning show for example is aired every day between the hours of 7-9am except Saturdays and Sunday</i> . Corroborating the viewpoint above, interviewee 4 stated that <i>“...at Radio Nigeria, Ka Oha Malu for example is aired every week between the hours of 1-2pm except Saturdays”</i> It is believed that there are other programmes available used in the Lassa fever campaigns.  Interview 1 also agreed that <i>“Yes, we have dedicated health programmes every Wednesdays and Saturdays where health issues like Lassa fever is talked about for awareness creation and other purposes.”</i>

**Source:** *Qualitative Interview Field Data, 2019*



**Table 19: Interviewees’ Opinions on how their media organ have promoted healthcare awareness campaign to the people of Enugu State on Lassa fever**

INTERVIEW QUESTION 3
<b>To what extent do you think your media organ has promoted healthcare awareness campaign to the people of Enugu State on Lassa fever?</b>
<p>Here, the researcher attempted to find out the extent to which their media organ have promoted healthcare awareness campaign to the people of Enugu State on Lassa fever. Findings showed that they have at one point or the other promoted healthcare awareness campaign to the people of Enugu State on Lassa fever. For example, interviewee 2 of Star TV (ESBS), Enugu stated that: “...through news bulletins, sponsored programmes, commentaries and discussion programmes, ESBS has effectively been involved in the promotion of Lassa fever and other diseases or virus’ outbreaks in Nigeria. Corroborating the viewpoint above, interviewee 4 of Radio Nigeria (FRCN), Enugu stated that “.....even the listeners know that our station is ahead of others in health campaigns through our various programmes”.</p> <p>Interviewee 1 agreed that “Yes, we have actively promoted healthcare awareness campaign to the people of Enugu State, particularly Ebola virus, Zika Virus, Lassa fever and other health emergencies. Evidently, the various individual stations have used their various programmes to promote healthcare awareness campaign to the people of Enugu State on Lassa fever</p>

**Source:** *Qualitative Interview Field Data, 2019*

**Table 20: Interviewees’ Opinions on their audience are exposed to their station’s broadcast on healthcare like Lassa fever**

INTERVIEW QUESTION 4
<b>To what extent do you think the audience have been exposed to your station’s broadcast on healthcare like Lassa fever?</b>
<p>Here, the researcher attempted to find out the extent programme managers believe the audience have been exposed to their station’s broadcast on healthcare like Lassa fever. Interviewee 1 stated that: “...there is no doubt that they do. Corroborating the viewpoint above, interviewee 3 stated that “...from the various interactive health programmes of our station, the traffic in the phone-in segment is a testament to the fact that the audience are exposed to our programmes on health emergencies like the Lassa fever”.</p> <p>Interviewee 2 also contend that “Yes, they are regularly exposed to our health programmes as long as we are on air” The responses further revealed that though there is no dependable measurement scale for audiences’ exposure to the programmes of the individual stations, their phone-in programme segment can be used to estimate exposure level to the Lassa fever media campaigns.</p>

**Source:** *Qualitative Interview Field Data, 2019*

**Table 21: Interviewees' Opinions on how their Lassa fever health awareness campaign have positively affected the health behaviour of the audience**

INTERVIEW QUESTION 5
<b>Do you think the Lassa fever health awareness campaign have positively affected the health behaviour of the audience?</b>
<p>Here, the researcher attempted to find out the thinking of programme managers on whether their Lassa fever health awareness campaign have positively affected the health behaviour of their audience. All the interviewees believe that media programmes would surely affect the audience who have exposure positively. For example, interviewee 2 from Star TV (ESBS), Enugu stated that: <i>"...those who actually watched our programmes have been affected positively, hence you see people taking precautionary measures against being infected by the Lassa fever. Corroborating the viewpoint above, interviewee 1 stated that "...although one cannot actually judge the level of influence, one can confidently say our programmes have made the viewers to be more careful about the risks factors and preventive measures of Lassa fever".</i></p> <p>Interviewee 4 agreed that <i>"Yes, the effects are manifest here and there. Go to the people and you will be amazed at the high level of positive impact."</i> The responses further revealed that Lassa fever health awareness campaign have positively affected the health behaviour of the people, particularly in their behaviors towards the risk factors, preventive measures and treatment.</p>

**Source:** *Qualitative Interview Field Data, 2019*

**Table 22: Interviewees' Opinions on Station's Voluntarily Involvement in Healthcare Awareness Campaigns as a Service to the Society**

INTERVIEW QUESTION 6
<b>Does your station voluntarily engage in healthcare awareness campaigns as a service to the society?</b>
<p>Here, the researcher attempted to find out the extent to which individual stations voluntarily engage in healthcare awareness campaigns as a service to the society. Findings showed that majority, if not all the agreed as such. Interviewee 1 of Sunrise FM, Enugu stated that: <i>"...it is the core social responsibility of the media and we are committed to doing that. Corroborating the viewpoint above, interviewee 3 of NTA, Enugu stated that "...although with the increasing need to generate revenue with available airtime, NTA is still in the business of performing the core media social responsibility function to her audience in general and society as a whole".</i></p> <p>Interviewee 2 agreed that <i>"Yes, we have no option than to always perform such role for our society."</i> Obviously, the responses further revealed that station are Involved in Lassa fever Healthcare Awareness Campaigns as a Service to the Society voluntarily.</p>

**Source:** *Qualitative Interview Field Data, 2019*

### 4.3 Testing of Hypothesis

All these linear and relationship-based hypotheses formulated for this study were tested with quantitative data collected through questionnaire as presented on relevant chart were analyzed using the *Statistical Package for the Social Sciences* (SPSS)

#### *Hypotheses One*

**H<sub>0</sub>:** There is no significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

**H<sub>1</sub>:** There is significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

**TESTED DATA:** Quantitative data collected from questions 14 and 15 in the questionnaire as presented on *Tables 12 and 13* were used in testing Hypothesis one.

In trying to check the correlation between attitude towards Lassa fever media campaigns on the risk factors, prevention, treatment and practice and the practice on the risk factors, prevention and treatment due to their attitude towards Lassa fever and their awareness of its campaigns, the spearman's rank order correlation coefficient® was used in measuring the degree of linear relationship between data presented on questions 14 and 15 of the questionnaire.

**Table 23: Spearman's Rank Order Correlation Coefficient between attitude towards Lassa fever media campaigns and the practice**

Scale	Que.14 (X)	Que.15 (Y)	Rank for X	Rank for Y	Diff. for XY	D <sup>2</sup>
1	204	222	1	1	0	0
2	121	111	2	2	0	0
3	32	27	3	3	0	0
4	12	9	4	4	0	0
5	5	5	5	5	0	0
N = 5						$\sum D^2 = 0$

Substituting the values into the formula

$$r = 1 - \frac{\sum D^2}{N(N^2 - 1)}$$

$$e = 1 - \frac{0^2}{5(25-1)}$$

$$e = 1 - \frac{0}{5 \times 24}$$

$$e = 1 - \frac{0}{120}$$

$$e = 1 - 0 = 1$$

Based on the table of interpretation, the correlation coefficient varies between **+1** to **-1**. Between 0.6 to 0.80 falls the correlation coefficient, which invariably means that the correlation coefficient between attitude towards Lassa fever media campaigns and the practice is *HIGH*.

It means, therefore, that there is significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

#### 4.4 Discussion of Results

The research data presented indicates that out of the 374 respondents, 315 or 84.2% of them agree that *to a large extent*, Lassa fever disease broadcast media campaign are important on the risk factors, prevention, treatment and practice; 36 or 9.6% of the respondents claimed that Lassa fever disease broadcast media campaign are *moderately* important on the risk factors, prevention, treatment and practice. While 14 representing 3.7% of them claimed that Lassa fever disease broadcast media campaign are, *to some extent* important on the risk factors, prevention, treatment and practice, the other 9 or 2.4% of the respondents were *indifferent*.

Based on the table of interpretation, the correlation coefficient varies between **+1** to **-1**. Between 0.6 to 0.80 falls the correlation coefficient, which invariably means that the correlation coefficient between attitude towards Lassa fever media campaigns and the practice is *HIGH*. It means, therefore, that there is significant relationship between the level of awareness to Lassa fever media campaigns and the level of knowledge of Lassa fever risk factors, prevention, treatment and practice.

To weigh this finding within the framework of the qualitative research data collected, interview data shows media programmes would surely affect the audience who have exposure positively. For example, interviewee 2 from Star TV (ESBS), Enugu stated that: “...those who actually watched our programmes have been affected positively, hence you see people taking precautionary measures against being infected by the Lassa fever. Corroborating the viewpoint above, interviewee 1 stated that “...although one cannot actually judge the level of influence, one can confidently say our programmes have made the viewers to be more careful about the risks factors and preventive measures of Lassa fever”.

The study carried out by Bowen (2013) on “Impact of a mass media campaign on bed net use in Cameroon”, gives this research the needed empirical support in the results of Bowen study revealed that, approximately 298,000 adults and over 221,000 of their children under five slept under a bed net because of the knowledge, motivation, and or timely reminder provided by K O Palu Night Watch activities. The results suggest a strong role for mass media communication interventions in support of investments in malaria control commodities such as Long Lasting Insecticide Nets (LLINs). This, the media replicated in the awareness creation campaign against Lassa fever.

## **5.2 Conclusion**

The premise of this research is that the health campaign from the mass media is capable of influencing the behaviour of the audience. By giving health emergencies like the Lassa fever outbreak the needed attention, the researcher concludes, will help in shaping the health behavior of the people in the areas of risk factors, prevention, treatment and practice.

Based on evidence from empirical literature and research data as analyzed, the researcher draws a reasoned conclusion that the media can help reduce or totally eliminate mortality ratios in times of diseases and viruses outbreaks through their various awareness and sensitization campaigns.

## **5.3 Recommendations**

Consequent upon the findings of this research, the following recommendations are made:

1. Media houses should not relent in the successes recorded so far, but should continue to raise issues that concern the health of the people to the front burner. By projecting the risk factors, testing, preventive and treatment methods, the people will surely live healthy lifestyles by adopting healthy practices.
2. There is need for massive awareness creation among the people about other minor but killer diseases like breast cancer, ulcer, tumor, cough and cold. This can be done using various programme formats like discussion/Phone-In program, dedicated Health Programmes, Radio Jingles and Main News Bulletins.

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