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EVALUATING THE ACCESS, AWARENESS AND PUBLIC RESPONSE TO MASS MEDIA MESSAGES ON HEALTH COMMUNICATION DURING THE 2024 LASSA FEVER OUTBREAK IN NIGERIA

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Abstract

This study evaluates access, awareness, and public response to mass media messages on health communication during the outbreak. Grounded in the agenda-setting theory, the research aims to assess how mass media influenced public perception and health-seeking behaviour. A quantitative research methodology was adopted, with data collected through structured questionnaires administered to 300 respondents across the two states. The findings reveal that mass media platforms, including radio, television, and social media, were instrumental in disseminating critical health information and raising awareness about preventive measures. However, the study highlights significant disparities in access to accurate information, particularly in rural communities, which hindered effective public response. The study concludes that while mass media in Nigeria played a significant role in shaping public discourse on Lassa fever, there is a pressing need for more targeted and inclusive communication strategies to bridge information gaps in underserved areas. In addition, partnerships between media organisations and local health authorities should be strengthened to ensure accurate and timely information dissemination in future health emergencies.

Keywords: Lassa fever, Mass media, Health communication, Information, Public response

Introduction

The intersection of media, communication, and public health has increasingly drawn scholarly and policy attention, particularly in the context of recurring health emergencies in sub-Saharan Africa. In regions like Nigeria, where health systems often struggle under the weight of limited infrastructure and recurring disease outbreaks, the strategic use of mass media has emerged as a vital component of public health interventions. Beyond merely transmitting information, the press now serves a more dynamic role, shaping public understanding, encouraging preventive behaviours, and facilitating community engagement during health crises (Nkanunye & Obiechina, 2017; Beato & Jano, 2019).

During outbreaks such as Lassa fever, effective communication becomes a cornerstone of epidemic response. The media's responsibility extends beyond awareness creation to the active framing of health threats and mobilisation of communities toward risk-reducing behaviours. In light of this, health communication must not only be timely and factually accurate but also culturally relevant and tailored to the specific audience (Malikhao, 2020). By influencing how people perceive risk and what actions they take in response, the media function as both gatekeepers of information and agenda-setters

that shape societal discourse during emergencies (Bala, Strzeszynski, & Topor-Madry, 2017).

The 2024 resurgence of Lassa fever in Nigeria, especially in the highly susceptible states of Ondo and Edo, brought renewed attention to the role of communication strategies in public health management. Despite years of awareness campaigns and disease surveillance efforts, these states continue to record high case numbers, reflecting persistent challenges in controlling transmission. This situation not only highlights the endemic nature of Lassa fever in these areas but also exposes systemic weaknesses in public health communication and behavioural adaptation. Key questions arise regarding the reach, reception, and impact of media messages: Are they sufficiently penetrating vulnerable communities? Do they translate into informed decisions and sustained behavioural change? These are critical inquiries in understanding the gaps between message dissemination and effective public response (Nigeria Centre for Disease Control [NCDC], 2024; Adeyeye, 2022).

Lassa fever, a zoonotic viral haemorrhagic disease endemic to West Africa, was first identified in 1969 in Lassa town, Borno State, Nigeria (Frame et al., 1970). The primary route of infection involves indirect human contact with items contaminated by rodent excreta, particularly from *Mastomys natalensis*, a rodent species that serves as the natural host. Although inter-human transmission is less common, it remains a serious risk in healthcare settings lacking adequate infection control. Official estimates indicate an annual incidence ranging from 100,000 to 300,000 cases across West Africa, with approximately 5,000 deaths (Africa Centres for Disease Control and Prevention [Africa CDC], 2024). However, emerging studies suggest the actual burden may be significantly underestimated, potentially affecting up to 2.7 million individuals annually in the region (SciDev.Net, 2024).

The scale of the 2024 outbreak in Nigeria was deeply concerning. Between epidemiological weeks 1 and 24, the country recorded 162 confirmed deaths, translating to a case fatality rate (CFR) of 17.6%, a slight increase from the 17.1% recorded during the same period in 2023 (NCDC, 2024). The states of Ondo and Edo again emerged as the most impacted, maintaining their historical position as Lassa fever hotspots. This ongoing vulnerability is driven by a confluence of ecological, socio-cultural, and structural factors, including poor sanitation, inadequate rodent control, and limited access to accurate health information (Fatiregun et al., 2019).

Despite concerted efforts, questions remain about the actual effectiveness of mass media campaigns in reducing disease incidence and enhancing public health responses. While several studies have investigated the role of media in health communication, the focus has often been on general awareness or specific populations. For instance, Lucas, Ikani, and Ikegwuonu (2022) examined the use of broadcast media in controlling Lassa fever outbreaks in Nasarawa and Plateau States. Ijwo, Akurega, and Barnabas (2018) assessed communication strategies in the Federal Capital Territory, and Fatiregun et al. (2019) explored awareness levels in Ondo State. However, little empirical work has examined how residents of Ondo and Edo States responded to media messages during the 2024 outbreak, especially in terms of behavioural outcomes.

This study aims to bridge the gap by evaluating public access to, comprehension of, and responses to health messages disseminated through mass media during the 2024 Lassa fever outbreak in Ondo and Edo States. The research evaluates explicitly how mass media influenced community knowledge, individual preventive behaviours, and healthcare-seeking attitudes during the crisis. Grounded in the Communication for Development (C4D) paradigm, which promotes participatory, culturally sensitive, and inclusive health communication approaches (UNICEF, 2017), the study aims to offer practical insights into improving the effectiveness of media-driven public health campaigns in Nigeria's endemic zones.

Statement of the Problem

In regions where healthcare infrastructure remains fragile and public health literacy is unevenly distributed, particularly across sub-Saharan Africa, strategic communication plays a vital role in curbing the spread of infectious diseases. The use of mass media is often assumed to fill crucial informational voids, especially during disease outbreaks, by providing the public with timely, accurate, and actionable health information. This communicative function becomes even more imperative during crises, such as the 2024 resurgence of Lassa fever in Nigeria, where Ondo and Edo States, historically burdened by recurring outbreaks, were once again at the epicentre of national concern.

Despite the implementation of extensive public health communication campaigns through

radio, television, and social media platforms, which government agencies and health partners primarily coordinate, epidemiological reports indicate a continued rise in confirmed cases and fatalities in these two states. According to data from the Nigeria Centre for Disease Control and Prevention (NCDC, 2024), Ondo and Edo accounted for over 65% of all laboratory-confirmed Lassa fever cases in the first half of 2024. This troubling trend raises important questions about the efficacy and local relevance of these communication efforts. Specifically, it becomes necessary to interrogate whether the disseminated messages were comprehensible, culturally sensitive, and linguistically accessible to both urban and rural populations. Furthermore, the credibility of the messages, as perceived by the intended audiences, and their willingness to translate such information into preventive action remain largely unexplored.

Although scientific research has extensively covered the clinical and epidemiological aspects of Lassa fever (Sogoba, Feldmann, & Safronetz, 2016; Fatiregun et al., 2019), a discernible gap remains in the literature regarding how local communities engage with and respond to mass-mediated health communications during ongoing outbreaks. While studies such as Lucas, Ikani, and Ikegwuonu (2022) have provided insights into the general role of media in public health interventions, they do not sufficiently address the socio-cultural and behavioural dimensions of message reception, particularly in settings prone to endemic transmission.

This gap in understanding is both academic and practical in nature. Without robust, evidence-based insight into how communication strategies are received and acted upon at the grassroots level, there is a significant risk that public health messages will fail to achieve their intended impact. Misalignment between message design and community realities can undermine the effectiveness of even the most well-intentioned campaigns. Hence, this study seeks to investigate the levels of media access, public awareness, and behavioural responsiveness to health communication disseminated during the 2024 Lassa fever outbreak in Ondo and Edo States.

Objectives of the Study

The following specific objectives guided the study:

1. To determine how easily residents of Ondo and Edo States accessed health information about the 2024 Lassa fever outbreak via mass media.
2. To evaluate the level of public awareness and the depth of comprehension regarding Lassa fever information conveyed via broadcast, print, and digital media during the outbreak.
3. Assess the nature and effectiveness of public responses and behavioural adaptations resulting from exposure to mass-mediated health communication.
4. Identify the predominant media platforms and communication strategies used to disseminate Lassa fever messages and evaluate their perceived credibility and influence among residents.

Conceptual Clarification

Access to Mass-Mediated Health Messages

Effective communication in public health hinges on access to mass media. This concept extends beyond simply having the means to connect with digital or traditional platforms; it also involves social, cultural, and cognitive variables that affect how individuals perceive and engage with information (Livingstone & Helsper, 2007). In Nigeria, infrastructural imbalances and digital inequalities persist, shaping access to health-related content. While radio and television still dominate in rural and semi-urban communities, urban centres are increasingly shifting toward digital platforms for health updates (Omeje, Nwafor, & Alabi, 2020). For instance, during the 2024 Lassa fever outbreak, the extent to which the population accessed and engaged with public health information was primarily influenced by the availability of reliable media, the relevance of the content, and socio-cultural resonance (Wakefield, Loken, & Hornik, 2010). Media messages that are linguistically relatable and culturally sensitive tend to achieve better understanding and compliance among audiences. Buckingham (2003) emphasises that access should not be considered complete unless accompanied by media literacy; individuals must possess the interpretive skills necessary to decode and critically evaluate content. Thus, bridging both technological and cognitive gaps is essential to ensuring equitable health outcomes during emergencies.

Awareness Through Mass-Mediated Health Communication

Health communication aims not only to inform but also to foster awareness, where individuals become

conscious of health threats and the actions required to mitigate them. McQuail (2010) highlights the media's vital role in spreading health-related knowledge, which empowers communities during crises. Tailoring messages to reflect local values and realities increases their impact, especially in combating diseases like Lassa fever, where myths and misinformation are prevalent. Waisbord (2001) emphasises that culturally adapted campaigns tend to resonate more deeply with their target audiences. Accurate messaging should address false beliefs while promoting sustainable behaviour change. Repeated exposure to such content has been proven to enhance knowledge and preparedness (Noar, 2006). Experiences from Nigeria's past outbreaks, such as Ebola and COVID-19, show that health communication is most effective when it is consistent, credible, and rooted in the lived experiences of local populations (Olapegba et al., 2020). During the Lassa fever outbreak, deploying messages through familiar channels in indigenous languages could significantly boost public awareness and cooperation.

Public Responses to Health Messages in the Media

The success of health communication is ultimately reflected in the behavioural shifts it inspires. Rimal and Lapinski (2009) argue that actual effectiveness lies in influencing practical actions, such as adopting better hygiene practices, seeking medical consultations, and participating in public health initiatives. For a campaign to achieve this, the messaging must not only be clear but also emotionally compelling. Wakefield, Loken, and Hornik (2010) found that health messages that evoke emotions like fear, empathy, or urgency often prompt more significant behavioural responses. However, persistent issues such as misinformation, scepticism toward media, and inconsistent messaging can obstruct these efforts (Schiavo, 2014). In regions like Ondo and Edo States, examining how residents reacted through the adoption of preventive behaviours or by amplifying the message within their social networks can offer practical insights into the real-world effectiveness of health media interventions.

Mass-Mediated Messages

Mass-mediated messages are crafted and transmitted through established media channels, including radio, television, newspapers, and digital platforms, to reach broad and diverse audiences (Dominick, 2013). These messages are central to mass communication because of their potential for rapid dissemination, uniformity of content, and broad societal reach.

In public health emergencies, the framing, clarity, frequency, and perceived credibility of mass-mediated messages significantly affect their efficacy (Noar, 2006). This study critically assesses the structure and delivery of such messages relating to Lassa fever, examining traditional and new media for their roles in informing the public and encouraging preventive behaviours.

Health Communication

Health communication occupies a strategic intersection in mass communication, focusing on how the dissemination of information can influence individuals and communities to make informed choices about their well-being. It draws upon interdisciplinary insights from public health, media and communication studies, and behavioural sciences to promote preventive health behaviours, encourage early detection, and support health literacy (Thomas, Fine, & Ibrahim, 2005). Schiavo (2014) argues that for health communication to be truly effective, it must transcend mere transmission of information. Instead, it should be context-sensitive, delivered in a manner that aligns with the linguistic, cultural, and socio-economic realities of the intended audience. This becomes even more critical during public health emergencies, when swift, credible, and targeted messaging can significantly influence how the population perceives and responds to health threats. In outbreak-prone regions, such as those affected by Lassa fever in Nigeria, the role of the media shifts from being a source of information to becoming a central instrument for crisis communication. They foster accurate risk perception, countering myths, and promoting protective behaviours. Mass-mediated health communication serves as an essential pillar in epidemic preparedness and response.

Opinion of Literature

The Influence of Mass Media on Public Health Education

Mass media play a strategic role in shaping public health outcomes by facilitating behavioural change and fostering awareness of disease prevention and health promotion strategies. As Guttman (2000)

notes, the media act as agents of social intervention by framing health-related messages in ways that can shift public attitudes and influence decision-making processes regarding personal and community health practices.

Expanding on this, Marinescu and Fox (2016) underscore the persuasive power of mass communication in establishing health norms and showcasing behavioural role models, particularly through repeated and relatable portrayals of health topics in news, advertisements, and entertainment content. These portrayals often carry substantial social weight, which enables the public to reassess health beliefs, modify risky behaviours, and adopt preventive strategies. This is relevant in societies where health literacy is low and access to trusted information sources is limited.

Health communication via mass media serves not only the general populace but also aids institutional communication between health authorities and healthcare professionals. According to Tulane University's School of Public Health and Tropical Medicine (2020), such communication frameworks empower individuals to make informed choices while simultaneously guiding healthcare workers in understanding their operational responsibilities, ethical duties, and procedural rights within the healthcare system.

From a theoretical standpoint, the mass media's agenda-setting function, as introduced by McCombs and Shaw (1972), explains how the prominence given to specific health issues in media coverage can significantly shape public perception. Weiss (2009) observes that through agenda-setting, the media do not tell people what to think, but rather what to think about—thus elevating the visibility of specific health topics in the public sphere and prompting discourse and policy attention.

This function is particularly relevant in areas such as maternal health, where consistent media exposure has been linked to increased public knowledge and awareness. Khan and Ali (2017), as cited in Ozohu-Suleiman (2021), affirm that journalism plays a substantial role in promoting maternal health literacy, particularly when messages are tailored to resonate with diverse audiences. Similarly, Okorie, Oyesomi, and Kayode-Adedeji (2014) maintain that the mass media serve as educational tools that enhance reproductive health knowledge and inform individuals on how and where to access relevant services.

Empirical findings by Zamawe, Banda, and Dube (2016) further validate the transformative potential of mass communication, particularly in enhancing health-seeking behaviours and empowering communities with life-saving information. Nevertheless, Dare (2000) and De Jesus (2013) caution that for such communication to translate into measurable behavioural change, it often needs to be supplemented with community-based or interpersonal communication strategies, especially in rural or low-literacy environments.

Rimal and Lapinski (2009) assert that one of the primary aims of health-related mass communication is to inform and educate, laying the groundwork for public health intervention and advocacy. The pervasiveness of mass media in contemporary society reinforces this function. As Rendon (2002) highlights, media platforms, ranging from traditional outlets such as television and newspapers to digital media like social networks and online news, are integral to everyday life, cutting across socio-economic and cultural boundaries.

Kenix (2011) encapsulates this influence by arguing that the media not only mirror societal values but also actively shape identity and aspirations. Media messages, by constructing realities around health and well-being, can spark multi-sectoral collaboration and collective action, potentially directing political will, institutional focus, and community participation towards achieving public health goals.

Review of Empirical Studies

In their work titled *Evaluation of the Inputs of Broadcast Media to Lassa Fever Scourge Prevention in Select Communities of Nasarawa and Plateau States, Nigeria*, Lucas, Ikani, and Ikegwuonu (2022) explored the role of traditional broadcast media in public health communication regarding Lassa fever. The study adopted a quantitative research design, guided by the Health Belief Model, to investigate how communities in Nasarawa and Plateau States received and responded to media messages. Employing a multistage sampling procedure and survey methodology, their findings revealed that several structural and contextual limitations significantly hampered the effectiveness of the media in sensitising the public. These included insufficient broadcast content, weak signal reception in hard-to-reach rural areas, minimal use of indigenous languages, and inadequate airtime devoted to health messages. The

researchers recommended a more robust and inclusive approach by media houses, calling for the use of local dialects, enhanced transmission technologies, and increased programming time dedicated to public health issues.

While this study offered valuable insights into the media's technical and logistical challenges, it did not sufficiently examine how individuals accessed and processed information during an actual Lassa fever outbreak. It primarily focused on systemic barriers rather than the behavioural and cognitive responses of the target population. The current study aims to address this shortcoming by investigating a more recent outbreak (2024), specifically examining how media access, public awareness, and communication strategies impact individual and collective health behaviours. Furthermore, unlike the earlier study's emphasis on conventional media, this research incorporates a broader spectrum of mass communication channels, including social media platforms, mobile technologies, and grassroots outreach mechanisms, thus enriching the discourse on public health communication in the digital age.

In a related study, Wogu (2018) evaluated the effectiveness of mass media campaigns in raising awareness about Lassa fever among residents of rural Ebonyi State. His study, *Mass Media Awareness Campaign and the Prevention of the Spread of Lassa Fever in the Rural Communities of Ebonyi State, Nigeria: Impact Evaluation*, employed a survey research design involving 354 respondents from six rural communities. Using SPSS for quantitative analysis, Wogu concluded that although mass media campaigns did succeed in reaching rural audiences, they fell short in triggering significant behavioural changes. In particular, media messages often lacked practical, culturally tailored content that could influence preventive health behaviours. Based on these findings, Wogu advocated for the inclusion of actionable health messages and the incorporation of culturally resonant content, such as jingles during news broadcasts, to enhance engagement and retention.

While Wogu's research highlighted the general effectiveness of mass media in message dissemination, it did not probe deeper into the socio-psychological factors that mediate public responses, such as message clarity, perceived credibility, and access to communication channels. In addition, it did not account for geographic variability in media reach or audience diversity. The current study, therefore, expands the analytical lens by focusing on communities in Ondo and Edo States that have recurrently experienced Lassa fever outbreaks. It investigates not only the extent of media coverage but also the accessibility of these messages, public comprehension, and the subsequent health-related behaviours that emerge during real-time public health emergencies.

Further advancing the scholarly understanding of health risk communication, Ben-Enukora, Oyero, Okorie, Ejem, and Omowale (2023) investigated the relationship between public anxiety and message comprehension in their study titled *Perceived Public Alarm and Comprehension of Risk Communication Messages about Lassa Fever in Nigeria: A Gauge of the Risk Communication Model*. Using the mental noise hypothesis as part of the Risk Communication Model, the study examined how heightened emotional states affected the public's ability to process health information regarding Lassa fever. The researchers surveyed 653 respondents from highly endemic states using multistage sampling and structured questionnaires. Their findings indicated a nuanced relationship: while general anxiety levels were high, respondents still demonstrated notable comprehension of the health messages disseminated. In Ebonyi and Ondo States, for instance, increased public alarm positively correlated with higher comprehension scores, suggesting that fear, when appropriately managed, may prompt more attentive engagement with health communication. However, in Edo State, this pattern was not statistically significant.

Despite offering critical insights into how emotional states shape cognitive processing, the study fell short in analysing broader access-related variables such as media platform availability, trust in message sources, and real-time behavioural adjustments during outbreaks. These aspects are crucial for holistic public health communication. The current study addresses these gaps by exploring how media accessibility, content relevance, and audience interpretation jointly influence both understanding and behavioural outcomes. It shifts the focus from psychological responses alone to a more integrated analysis of how individuals process and respond to health messages under varying social and infrastructural conditions.

Complementing this body of work, Erubami (2022) examined the correlation between media exposure and knowledge, attitudes, and practices regarding Lassa fever in rural South-South Nigeria. His study, *"Mass Media Exposure and Lassa Fever Knowledge, Attitudes, and Practices in Rural*

Nigeria," drew responses from 384 individuals across eight communities using a multistage sampling technique. Findings revealed a strong positive relationship between increased exposure to media and heightened awareness and attitudes ($\beta = .609$ and $\beta = .600$, respectively). The study also uncovered a disconnection between awareness and practical health behaviours, indicating that improved knowledge does not automatically lead to action. Cultural barriers, linguistic mismatches, and generic content were identified as contributing factors to the issue. Consequently, Erubami proposed localising health messages to reflect the cultural realities and language preferences of target audiences.

While Erubami's findings are significant in illuminating the knowledge-behaviour gap, his study did not thoroughly examine how real-time health crises, such as active outbreaks, might alter or intensify this dynamic, particularly in mixed urban-rural environments like Ondo and Edo States. The current research builds on this by not only assessing exposure levels but also by critically examining how communication access, content comprehension, and public trust converge to shape behavioural responses during health emergencies. This study, therefore, adds contextual depth to the discourse, offering evidence-based insights for designing more inclusive, culturally responsive, and action-oriented media campaigns aimed at controlling the spread of infectious diseases in Nigeria.

Theoretical Framework

Audience Reception Theory

Initially conceptualised by Stuart Hall in the early 1980s, Audience Reception Theory represents a significant shift in media and communication studies by reframing how scholars understand the relationship between media texts and their audiences. In his seminal work*, Encoding and Decoding in the Television Discourse*, Hall (1980) argued that communication is not a linear process of message transmission, but rather a complex interaction between media producers and receivers. He posited that audiences do not simply absorb messages as they are presented but actively interpret them through the filter of their own cultural, social, and experiential backgrounds. The core premise of the theory lies in the idea that while media producers encode specific meanings into their content, audiences decode these messages in diverse ways resulting in different readings: dominant (where the audience agrees with the intended message), negotiated (a partial agreement or reinterpretation), or oppositional (a complete rejection of the message) (Hall, 1980; Morley, 1992). This theoretical model challenged the traditional 'hypodermic needle' or 'magic bullet' models, which viewed audiences as passive recipients of information, and instead emphasised the co-creation of meaning by audiences.

This research, which investigates public engagement with mass media health communication during the 2024 Lassa fever outbreak in Ondo and Edo States, employs Audience Reception Theory as a nuanced analytical lens. It helps to uncover not just whether messages reached the target population but how those messages were internalised, negotiated, or rejected. This distinction is crucial, particularly in public health communication, where behavioural change is often the ultimate goal. Applying this theory to health communication enables the recognition of multiple influencing variables, including levels of education, language preferences, cultural norms, media trustworthiness, and lived experiences with healthcare systems, all of which shape how health messages are interpreted and acted upon. In many rural or semi-urban settings, factors such as mistrust in government messages, reliance on traditional beliefs, or the use of local dialects can significantly affect how health advice is received and whether it translates into action.

This theoretical application also enriches the study by allowing for a deeper investigation into decoding patterns observed among different segments of the population. For example, communities that fully adopted recommended preventive practices likely exhibited dominant readings, whereas those who selectively applied advice may have reflected negotiated readings. Conversely, communities that ignore or dispute media messages entirely often demonstrate oppositional readings, often due to underlying socio-cultural or historical reasons. Through this framework, the study avoids oversimplifying audience engagement and instead explores how meaning is constructed in real-life contexts. It highlights the importance of tailoring communication strategies to accommodate varied interpretative frameworks within communities. Moreover, it supports the formulation of more effective, context-sensitive public health interventions by stressing that effective messaging is not only about what is communicated but also how it is interpreted and integrated into everyday behaviours.

Methodology

This study employed a quantitative research design, with a descriptive survey approach chosen as the most appropriate method for systematically gathering numerical data to explore levels of media exposure, public awareness, and behavioural responses during the 2024 Lassa fever outbreak in Edo and Ondo States, Nigeria. The descriptive survey strategy was selected because it allows researchers to capture and analyse naturally occurring phenomena without manipulation, offering insights into population characteristics as they exist (Creswell, 2014). This approach proved helpful in evaluating how health-related messages disseminated via mass media influenced the public during a critical health emergency.

Population and Sampling

The research focused on adult residents drawn from four Local Government Areas (LGAs): Akure North and Owo in Ondo State, as well as Esan West and Etsako West in Edo State. These locations were deliberately selected based on epidemiological reports from the Nigeria Centre for Disease Control (NCDC, 2024), which highlighted their vulnerability to recurrent Lassa fever outbreaks. According to the National Population Commission (NPC, 2023), the estimated combined population across these four Local Government Areas (LGAs) is approximately 1.02 million.

To determine a statistically appropriate sample, the study consulted Krejcie and Morgan's (1970) framework for determining sample size. For populations exceeding one million, a sample size of 384 is typically sufficient at a 95% confidence level and 5% margin of error. The study ultimately adopted a working sample of 300 respondents. This reduction was necessitated by field-based limitations, including financial constraints, logistical challenges, and rugged terrain, especially in rural areas that were still recovering from the outbreak. Despite the adjustment, sample integrity was maintained by evenly distributing 75 respondents per Local Government Area (LGA), ensuring regional balance and demographic inclusiveness. Wimmer and Dominick (2014) affirm that such pragmatic adjustments are acceptable in real-world research, provided proportional representation and methodological rigour are upheld.

Sampling Technique

The study adopted a multi-stage sampling technique. Initially, the LGAs were purposively chosen based on their Lassa fever incidence rate and relevance to the research problem. Within each selected Local Government Area (LGA), convenience sampling was employed to recruit adult participants who had demonstrable exposure to mass media during the outbreak. This strategy aimed to include only respondents who were likely to have encountered and engaged with relevant public health communication, thereby enhancing the internal validity and focus of the study.

Data Collection Instrument

The principal instrument for data collection was a structured self-administered questionnaire, designed to elicit quantitative responses on key variables such as media access, message recall, perceived credibility of health information sources, and self-reported behavioural responses. The questionnaire combined closed-ended items and Likert-scale statements, calibrated on a five-point continuum ranging from "Strongly Agree" to "Strongly Disagree".

To ensure content validity, the instrument underwent expert review by two academic specialists in health communication and one public health practitioner. These reviewers provided feedback on the relevance, clarity, and alignment of the questions with the study objectives. Modifications were made accordingly. A pilot study was then conducted using a sample of 20 individuals from a neighbouring Local Government Area (LGA) that was not included in the final sample. The test-retest reliability method was applied, yielding a reliability coefficient of 0.82, which indicates a high level of consistency in the measurement tool.

Data Collection Procedure

Fieldwork lasted four weeks. Eight trained research assistants were deployed to administer the questionnaires, using both English and local languages to accommodate participants with limited literacy. Face-to-face administration was prioritised to enhance response accuracy and reduce risks of

misinterpretation. Field assistants operated under close supervision to ensure compliance with ethical standards and data quality protocols.

Data Analysis

Quantitative data were analysed using IBM SPSS Statistics (Version 25)**.** Descriptive statistical techniques, namely, frequencies, percentages, and mean scores, were employed to summarise findings. Given the study's descriptive focus, inferential statistics were not applied. Responses to Likert-scale items were processed to reveal trends in public awareness and behavioural engagement with media-driven health messages. The use of SPSS was guided by its proven reliability in processing structured survey data and generating results suitable for both academic and policy-based utilisation.

Ethical Considerations

The study adhered strictly to the principles of ethical research practices. Prospective participants were thoroughly briefed on the purpose and scope of the study, and only those who gave informed consent were included. Confidentiality was guaranteed, and no identifying information was collected or disclosed. The research received full approval from the Research Ethics Committee of the Faculty of Social Sciences**,** in line with Nigeria's national ethical guidelines and international benchmarks such as the Declaration of Helsinki (World Medical Association, 2013).

Data Presentation and Analysis

The study administered a total of 300 structured questionnaires to residents across four purposively selected Local Government Areas (LGAs) in Edo and Ondo States. Of this total, 291 questionnaires were accurately completed and returned, resulting in a response rate of 97%. This high level of participation not only reflects the relevance of the research topic to the target population but also strengthens the reliability and representativeness of the data. Such a response rate is considered exceptional in social research. It implies a strong engagement from the community members, likely due to their direct or indirect experiences with the Lassa fever outbreak and associated media messaging.

Figure 1: Questionnaire Response Rate

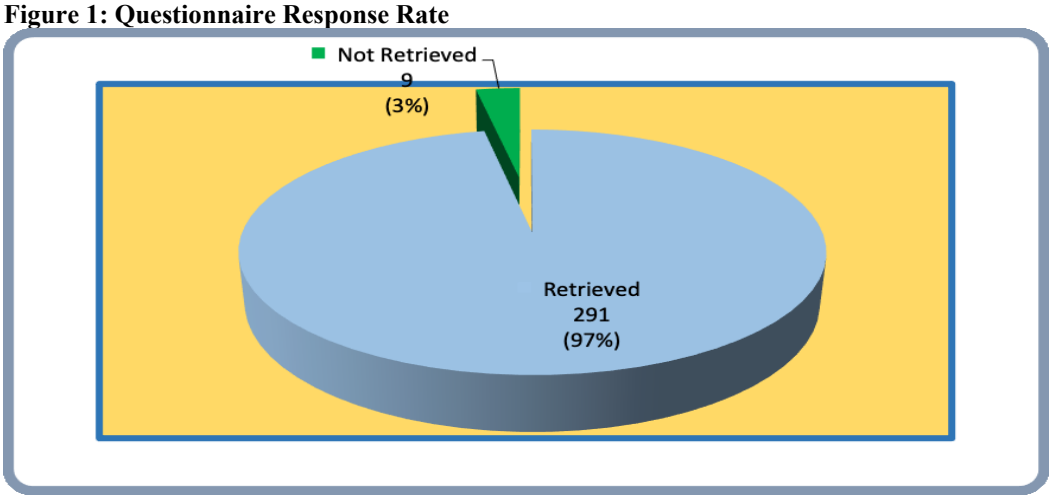
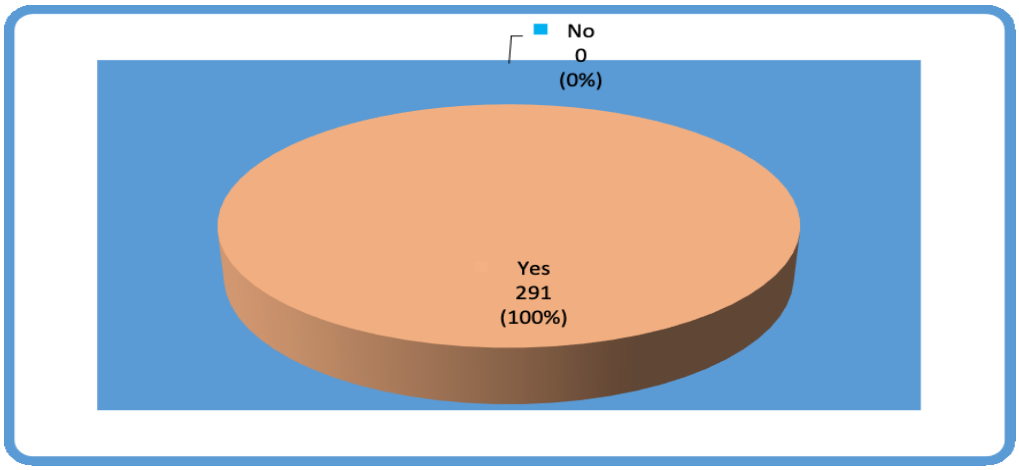


Figure 2: Public Awareness of Lassa Fever via Mass Media Channels

An examination of the data illustrated in Figure 2 indicates that all respondents acknowledged receiving information related to Lassa fever through at least one mass media platform. This outcome highlights the effectiveness and penetration of mass media campaigns during the 2024 outbreak in the affected regions of Ondo and Edo States. It reflects a comprehensive level of media exposure, suggesting that communication strategies employed by health authorities were successful in reaching a broad audience. This widespread awareness implies that the public was not only informed about the outbreak's existence but also had some understanding of its health implications and associated risks.



Public Awareness, Comprehension, and Reactions to Mass Media Communication on Lassa Fever
This segment of the study examines the central research objectives, focusing on how the public in Ondo and Edo States engaged with health messages disseminated through mass media during the 2024 Lassa fever outbreak. It specifically evaluates the extent of public awareness, the level of understanding regarding the nature and transmission of the disease, and the degree to which individuals have adapted their behaviours in response to the information received.

Table 1: Respondents' Level of Awareness and Behavioural Response to Mass Media Health Messages on Lassa Fever in Ondo and Edo States (N = 291)

Health Message Themes	SA	A	U	SD	D	Total	Mean Rating	Interpretation
Risk from contaminated food or items (e.g., rat urine/faeces)	110	91	20	43	27	291	3.7	High awareness and behavioural compliance
Transmission through infected bodily fluids (e.g., urine, blood)	107	111	26	31	16	291	3.9	High risk perception and comprehension
Disease impacts internal organs (liver, spleen, kidneys)	128	83	18	29	33	291	3.8	Strong understanding of disease severity
Avoiding affected individuals or locations	98	97	36	19	41	291	3.6	Conscious effort to reduce exposure
Hygiene practices (rodent control, storage, clean environment)	95	119	10	30	37	291	3.7	Significant engagement in preventive behaviour
Infection control (avoiding contact with patients/materials)	93	91	42	39	26	291	3.6	Moderate awareness with partial behavioural change
Seeking medical help upon symptoms (e.g., fever, vomiting)	101	95	32	29	34	291	3.6	Encouragement of early medical consultation

Fieldwork, 2025.

The data presented in Table 1 suggest that the majority of respondents demonstrated substantial awareness and understanding of key Lassa fever transmission pathways and preventive practices. Notably, the high mean scores across most indicators reflect a significant level of information uptake, indicating that media campaigns were effective in influencing public attitudes and behaviours during the outbreak.

Public Access to and Confidence in Mass Media Platforms for Health Messaging During the 2024 Lassa Fever Outbreak

Gaining insights into how individuals received and responded to health information during the 2024 Lassa fever outbreak is vital for evaluating the efficiency of risk communication strategies. Specifically, this section focuses on the dual dimensions of accessibility and trustworthiness of various mass media channels, which together influence the overall success of public health messaging in crises.

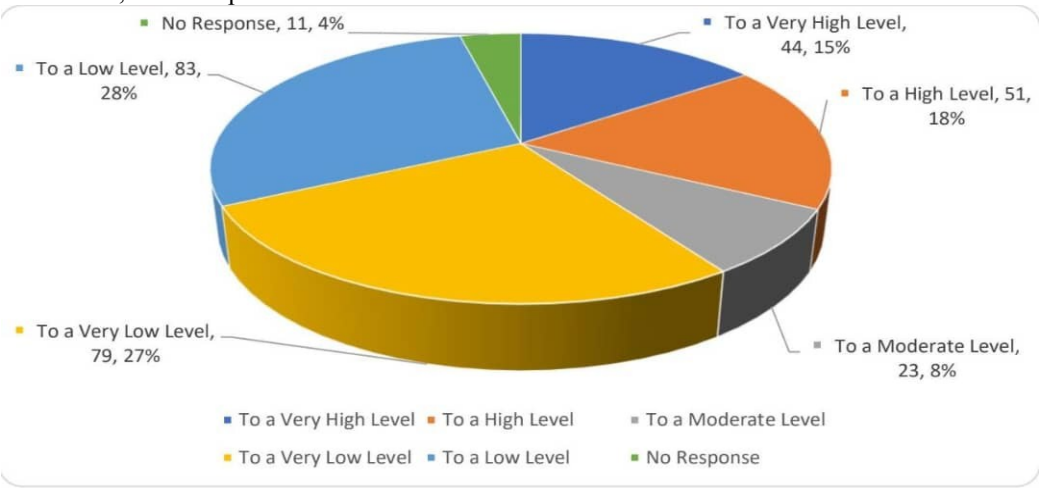
Table 2: Participants' Access to and Trust in Mass Media Channels During the 2024 Lassa Fever Outbreak (N = 291)

Media Channels	**Access Frequency**	**Easily Accessible**	**Viewed as Credible**	**Behaviour Influence**	**Mean Score**	**Decision**
Radio	203	188	212	199	3.9	Accepted
Television	180	172	201	190	3.8	Accepted
Social Media (e.g., WhatsApp, Facebook)	174	181	163	157	3.6	Accepted
Newspapers	105	89	101	85	3.2	Accepted
Health Workers/ Community Announcements	222	210	218	211	4.0	Highly Accepted
Mobile Phone Text Alerts	127	121	120	118	3.4	Accepted

Fieldwork, 2025.

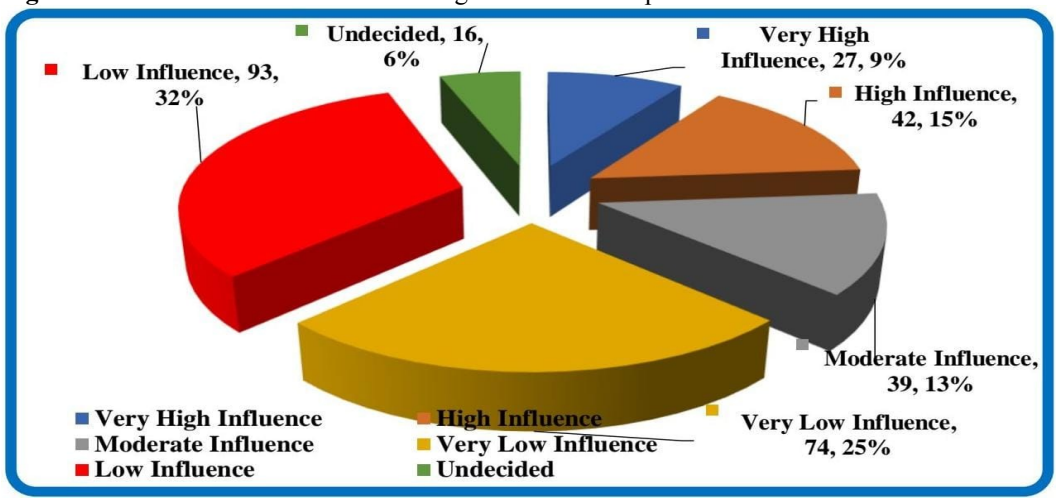
The results in Table 2 show that health workers and community-based communication channels were not only the most accessible but also the most trusted and behaviourally influential.

Figure 3: Scope of Public Engagement with Mass Media Messages on Lassa Fever – Access, Awareness, and Comprehension



Although mass media channels have disseminated information regarding Lassa fever, the limited depth and specificity of these messages may hinder public understanding, allowing the disease to persist and potentially spread further within vulnerable communities.

Figure 4: Influence of Mass Media Messages on Public Response to Lassa Fever



The analysis of responses in Figure 4 indicates that participants generally perceived the impact of mass media messages on Lassa fever awareness and behaviour as only moderately effective. This relatively modest influence may be attributed to either the infrequent broadcasting of relevant health messages or a prevailing public apathy towards personal hygiene and preventive health behaviours.

Discussion of Findings

This study provides compelling insights into the dynamics of public engagement with health communication during the 2024 Lassa fever outbreak in Edo and Ondo States. While a significant proportion of respondents acknowledged exposure to health messages through mass media, particularly via radio, television, and social networking platforms, apparent disparities were observed in the actual accessibility of these messages, especially in rural and underserved regions. Infrastructural limitations, such as erratic broadcast signals and language barriers, hindered timely access to accurate information.

These challenges mirror the findings of Lucas, Ikani, and Ikegwuonu (2022), who observed similar issues in less connected areas of Nasarawa and Plateau States. Although digital platforms have expanded the reach of public health communication, this expansion has not necessarily guaranteed equitable access. The variation in how media messages are received and understood underscores the explanatory strength of Hall's (1980) Audience Reception Theory. According to this framework, audience interpretation of media messages is not uniform; instead, it is shaped by multiple factors, including socio-economic status, language proficiency, and cultural context. In remote communities, where health messages may not align with local dialects or everyday experiences, people are more likely to misinterpret or ignore them altogether (Morley, 1992). Thus, media availability alone is insufficient; it must be coupled with content that resonates with the audience's lived realities.

A further dimension of the findings reveals that awareness of Lassa fever, its symptoms, modes of transmission, and prevention strategies was generally high. However, the depth of understanding varied considerably across demographics. Respondents in Ondo State, for example, exhibited a more accurate grasp of the disease compared to their counterparts in Edo State, despite similar levels of exposure. This discrepancy can be partially explained by differences in education and prior exposure to health education programmes. Ben-Enukora et al. (2023) observed that regions with visible and active public health campaigns often report higher levels of message comprehension, especially when the audience perceives a direct threat to their well-being. This study demonstrates that mere exposure does not ensure comprehension. Drawing again on Hall's (1980) theory, it becomes clear that individuals decode messages through the lens of their social and educational positioning, resulting in diverse interpretations ranging from complete acceptance to outright rejection.

While many participants could recall preventive measures such as maintaining environmental hygiene, using rodent-proof containers, and seeking prompt medical care, actual behavioural adoption lagged. Many admitted to making few or no changes in lifestyle, a pattern especially pronounced in economically disadvantaged areas. This behavioural inertia corroborates the findings of Erubami (2022), who argued that knowledge alone is insufficient to effect behavioural change. Structural issues, such as poverty, entrenched cultural beliefs, and scepticism towards government health initiatives, often hinder the adoption of protective behaviours. Audience Reception Theory helps explain this by recognising that audiences are not passive consumers but active agents who interpret media messages in the context of their realities. When health advice seems detached from their lived experiences or too challenging to implement, individuals are likely to reinterpret or dismiss it. For health communication to be effective, it must not only inform but also adapt to the socio-economic contexts of its intended audience, offering practical solutions that are feasible within their environments.

Finally, the study examined the perceived trustworthiness and influence of various media platforms. While traditional outlets like radio and television still hold sway in terms of credibility, platforms such as WhatsApp, X (formerly Twitter), and Facebook have grown in popularity for disseminating health information. Respondents voiced strong concerns about the reliability of social media, citing frequent encounters with misinformation and disinformation that undermined trust and compliance. This aligns with Wogu's (2018) assertion that health communication must be embedded in culturally relevant and credible content to counteract the spread of misleading narratives. From a theoretical lens, the degree to which a message is trusted fundamentally affects how it is decoded. As Hall (1980) posited, messages from sources perceived as trustworthy are more likely to result in dominant or preferred readings, while those from distrusted sources often evoke oppositional interpretations. This underscores the necessity for health communicators to build credibility through transparency, consistency, and alignment with the cultural and social norms of the communities they serve.

Conclusion

While the study affirms that mass-mediated communication played a crucial role in informing the public during the Lassa fever outbreak, it also reveals critical gaps in accessibility, comprehension, behavioural response, and media trust. These findings underscore the need for inclusive, audience-sensitive communication strategies that consider structural inequalities and local realities. By anchoring communication efforts in the principles of Audience Reception Theory, stakeholders can better understand the complexities of message interpretation and enhance the effectiveness of public health

campaigns across diverse populations.

Recommendations:

1. The Federal Ministry of Health and the Nigeria Centre for Disease Control (NCDC) should intensify health campaigns using culturally relevant and locally understood languages, particularly targeting rural communities through community radio and face-to-face engagement.
2. The National Orientation Agency (NOA) and state health ministries should collaborate closely with traditional and religious leaders to disseminate health information in a manner that resonates with local values and beliefs.
3. The National Broadcasting Commission (NBC) should mandate regular and accurate public health programming across all licensed broadcast platforms, ensuring wider and consistent reach.
4. Mass media organisations should train health reporters and broadcasters on audience-tailored messaging techniques, prioritising simplicity, accuracy, and cultural context.
5. Educational institutions and civil society groups should integrate public health literacy into school curricula and community outreach initiatives.
6. Social media companies, in collaboration with the NCDC, should establish verified platforms for disseminating urgent and credible health updates to counter misinformation.

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