

EFFECTIVENESS OF BROADCAST MEDIA CAMPAIGNS ON MEASLES AWARENESS IN KEBBI STATE, NIGERIA

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Abstract

This study examined the effectiveness of broadcast media campaigns on measles awareness in Kebbi State, Nigeria, with focus on Kebbi Radio and Kebbi TV. The study investigated exposure levels, awareness creation, influence on attitudes toward immunization, and challenges affecting campaign effectiveness. The study was anchored on the Health Belief Model and Agenda Setting Theory. A descriptive survey research design was adopted. The population comprised residents of Kebbi State aged 18 years and above with access to radio and television, estimated at 2,498,490. A sample size of 385 respondents was selected using the Australian online calculator, and data were collected using a structured questionnaire. A total of 380 valid responses were analyzed using simple percentages. Findings revealed that residents are highly exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV. The study further showed that the campaigns create significant awareness and positively influence attitudes toward measles immunization. However, effectiveness is hindered by poor electricity supply, illiteracy, and limited media access. The study concludes that broadcast media campaigns play a vital role in improving measles awareness and promoting immunization behaviour in Kebbi State.

Keywords: Broadcast Media Campaigns, Measles Awareness, Kebbi Radio, Kebbi Tv, Health Communication

Introduction

Communication plays a fundamental role in shaping public understanding of health issues and influencing health related behaviour in modern societies. The mass media, especially radio and television, have become important channels for disseminating health information, educating citizen and mobilizing public participation in health campaigns (McQuail, 2010). Through news reports, documentaries, public service announcements, educational programmes and jingles,

broadcast media provide timely information capable of influencing public attitudes and behaviour concerning disease prevention and healthy living. Health communication has become increasingly important in developing countries where infectious diseases continue to pose serious threats to public health and socio-economic development. According to the World Health Organization (2023), effective communication strategies are essential for promoting preventive healthcare measures, improving public awareness, and encouraging participation in immunization programmes. In many African countries, radio and television campaigns have been used extensively to combat diseases such as HIV/AIDS, malaria, Ebola, COVID-19, polio and measles.

Measles is one of the most contagious viral diseases affecting children globally. The disease spreads rapidly through respiratory droplets from infected individuals and can result in severe complications including pneumonia, blindness, brain damage, and death (World Health Organization, 2023). Although measles is preventable through vaccination, it remains one of the major causes of child mortality in developing countries with weak healthcare systems and low vaccination coverage.

Nigeria remains among countries with persistent measles outbreaks despite several immunization campaigns organized by government and international health agencies. The World Health Organization (2023) reported that measles outbreaks continue to occur in many parts of sub-Saharan Africa because of inadequate vaccination coverage, poverty, misinformation, poor healthcare access and low public awareness. In Nigeria, northern states are particularly vulnerable because of socio-cultural barriers, illiteracy, weak healthcare infrastructure and poor access to health information. Masresha, Braka, Onwu, Nandy, Bawa, Goodson, Mihigo and Patel (2018) observed that Nigeria continues to record significant measles outbreaks despite progress in immunization activities between 2012 and 2016. The authors noted that northern Nigeria recorded higher incidence of measles because of low routine immunization coverage and poor public sensitization. The Nigeria Centre for Disease Control (2022) also emphasized that measles remains a major public health concern in several northern states, including Kebbi State. In response to these outbreaks, health organizations and government agencies frequently collaborate with broadcast media organizations to disseminate health messages concerning vaccination and disease prevention.

Broadcast media campaigns are particularly important in northern Nigeria where literacy levels are relatively lower and internet penetration remains limited. Radio remains one of the most accessible communication channels because it is affordable, portable and capable of reaching remote rural communities (Asemah, Nwammuo, & Nkwam-Uwaoma, 2017). Television also contributes significantly to public health education through visual demonstrations, documentaries, interviews and expert discussions. Kebbi Radio and Kebbi TV frequently broadcast health campaigns aimed at educating residents about measles symptoms, prevention methods and the importance of child immunization. These campaigns include public service announcements, health talks, jingles, interviews with healthcare professionals and educational programmes intended to improve public understanding of measles prevention. Despite these efforts, measles outbreaks continue to occur in several communities within northern Nigeria, suggesting that existing awareness campaigns may not be achieving the desired level of behavioural change. Jean Baptiste, Wagai, Luce, Fall, Masresha, Umeh and Gasasira (2021) argued that poor awareness, misinformation, insecurity and limited healthcare access continue to affect the effectiveness of immunization campaigns in Nigeria.

Scholars have further argued that the effectiveness of health communication campaigns depends on factors such as message clarity, language, consistency, audience trust and accessibility of communication channels (Wakefield, Loken, & Hornik, 2010). In rural communities, poor electricity supply, poverty, illiteracy and cultural beliefs may limit exposure to broadcast media campaigns and reduce public compliance with preventive healthcare measures. It is against this background that this study examines the effectiveness of broadcast media campaigns on measles awareness in Kebbi State, Nigeria, focusing specifically on Kebbi Radio and Kebbi TV.

Statement of the Problem

Measles remains a major public health challenge in Nigeria despite continuous immunization campaigns and public health sensitization programmes. Reports from the World Health Organization (2023) and the Nigeria Centre for Disease Control (2022) indicate that northern Nigeria records relatively high measles prevalence because of poor vaccination coverage and inadequate public awareness. Kebbi Radio and Kebbi TV regularly disseminate health campaigns concerning measles prevention and child immunization. These

campaigns are expected to educate residents about the dangers of measles and encourage positive health behaviour concerning vaccination. However, measles outbreaks continue to occur in several northern communities despite these media sensitization efforts. Studies have shown that misinformation, cultural beliefs, low literacy levels, poor healthcare access and distrust of government programmes contribute significantly to poor vaccination compliance in many parts of northern Nigeria (Yahya, Nuhu, and Murtala, 2021). In addition, poor electricity supply and limited media accessibility may prevent some rural residents from benefiting adequately from broadcast media campaigns.

Although previous studies have examined the role of mass media in health communication and immunization campaigns, limited scholarly attention has been given to the effectiveness of broadcast media campaigns on measles awareness in Kebbi State, particularly with focus on Kebbi Radio and Kebbi TV. This gap in knowledge necessitates this study.

Objectives of the Study

The broad objective of this study is to examine the effectiveness of broadcast media campaigns on measles awareness in Kebbi State, Nigeria. The specific objectives are to:

1. Determine the extent to which residents of Kebbi State are exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV.
2. Examine the level of awareness created by Kebbi Radio and Kebbi TV campaigns on measles prevention.
3. Assess the influence of Kebbi Radio and Kebbi TV campaigns on residents attitudes toward measles immunization.
4. Identify the challenges affecting the effectiveness of Kebbi Radio and Kebbi TV campaigns in Kebbi State.

Research Questions

1. To what extent are residents of Kebbi State exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV?
2. What level of awareness do Kebbi Radio and Kebbi TV campaigns create concerning measles prevention?

3. How do Kebbi Radio and Kebbi TV influence residents' attitudes toward measles immunization?

4. What challenges hinder the effectiveness of Kebbi Radio and Kebbi TV campaigns in Kebbi State?

Literature Review

Broadcast Media and Health Communication

The relationship between broadcast media and health communication has been extensively theorised and empirically investigated across several disciplines (Hornik, 2002; Noar, 2006). Broadcast media encompassing radio and television are uniquely positioned as health promotion vehicles owing to their wide reach, their capacity for audio-visual engagement and their accessibility to audiences with varying literacy levels (Wakefield, Loken, & Hornik, 2010). In sub-Saharan Africa specifically, broadcast media have been central to campaigns addressing HIV/AIDS, tuberculosis, malaria, polio and maternal and child health (Obregon & Waisbord, 2012; Banerjee & Duflo, 2019). The media is an indisputable purveyor of health information particularly in a period where health risks are high in any society. It has the primary responsibility of generating awareness and knowledge, in this instance, about viral hepatitis. It strives to generate specific outcomes or effects in a relatively large number of individuals usually within a specified period of time and through an organized set of communication activities. (Wogu, Chukwu, Orekyeh, Anorue, Nwokedi and Chukwu, 2019). The health communication campaigns rely on media outlets such as television and radio public service announcements, paid commercials with print materials such as posters, booklets, brochures, as well as social media adverts or announcements. (Freimuth & Quinn, 2004). Studies conducted across Nigeria consistently affirm the primacy of radio and television in rural health information consumption. Okafor and Uchenna (2018) found that radio was the most frequently accessed medium among rural communities in northern Nigeria for health information, reaching 78% of respondents in their study.

Concept of Measles

Measles is a highly contagious viral disease caused by the measles virus. The disease spreads through respiratory droplets from infected individuals and remains one of the leading causes of child

mortality globally despite the availability of effective vaccines (World Health Organization, 2023). Symptoms of measles include fever, cough, catarrh, conjunctivitis, and skin rash. Severe cases may result in complications such as pneumonia, diarrhoea, blindness, brain inflammation and death. According to UNICEF (2022), measles outbreaks continue to occur in many developing countries because of inadequate vaccination coverage, poverty, misinformation, weak healthcare systems and poor public awareness. Children under the age of five are particularly vulnerable to the disease. In Nigeria, measles outbreaks remain common in northern states because of low immunization coverage and poor healthcare access. Ibrahim, Usman, Mohammed, Abubakar, Nguku, Waziri and Gidado (2019) reported that Nigeria recorded significant measles burden between 2012 and 2016 despite ongoing vaccination campaigns. Shorunke, Adeola-Musa, Usman, Adewoye, and Stephen (2019) also observed increasing cases of measles in several Nigerian states between 2016 and 2018. The authors emphasized the importance of stronger surveillance systems and improved public awareness campaigns.

Measles Communication Campaigns in Nigeria

Measles communication campaigns in Nigeria are important public health strategies aimed at increasing awareness about measles prevention and promoting childhood immunization. Despite the availability of effective vaccines, measles remains a major health challenge in Nigeria, especially in northern regions where vaccination coverage is relatively low (World Health Organization [WHO], 2023). To address this problem, government agencies and international organizations frequently use radio, television, community outreach and other communication channels to educate citizens on the importance of immunization.

Broadcast media campaigns play significant roles in disseminating health information because radio and television can reach large audiences quickly and effectively. In Nigeria, radio is particularly effective in rural communities because it is affordable and accessible to people with limited literacy levels (National Primary Health Care Development Agency [NPHCDA], 2022). Health campaigns often include jingles, public service announcements, interviews and discussions in local languages to improve public understanding of measles symptoms, prevention, and vaccination benefits. According to UNICEF (2023), communication campaigns are essential for increasing

vaccine acceptance and correcting misinformation concerning immunization. Wogu et.al., (2019), also noted that media campaigns contribute significantly to public awareness and health education by communicating health risks and preventive measures effectively.

However, factors such as illiteracy, misinformation, poverty, poor electricity supply and cultural beliefs continue to limit the effectiveness of measles communication campaigns in some communities. Despite these challenges, media campaigns remain vital tools for promoting immunization and improving public health awareness in Nigeria.

Kebbi Radio and Television Campaigns on Measles

Kebbi Radio and Kebbi TV have played important roles in promoting measles awareness and immunization campaigns in Kebbi State through different health communication programmes organized in collaboration with the Kebbi State Ministry of Health, the World Health Organization (WHO), UNICEF, and the National Primary Health Care Development Agency (NPHCDA). These campaigns were aimed at educating residents on the dangers of measles and the importance of child vaccination. One of the major measles campaigns carried out in Kebbi State occurred in 2017 following the outbreak of measles across the state. The Kebbi State Government launched a statewide measles vaccination and sensitization campaign after recording over 656 suspected cases of measles. During the campaign, Kebbi Radio and Kebbi TV aired public service announcements, jingles and interviews to encourage parents to vaccinate their children against measles (Daily Post, 2017). The campaign involved the deployment of vaccination teams across the 21 local government areas of the state to improve immunization coverage among children aged nine months to five years.

In another campaign organized in 2017, the Kebbi State Government released about N22 million as counterpart funding for measles vaccination activities. The media campaigns disseminated through Kebbi Radio and Kebbi TV focused on educating rural and urban residents on the benefits of immunization and the dangers associated with measles outbreaks. Government officials emphasized the importance of media sensitization in increasing public participation in vaccination programmes (Vanguard, 2017). Furthermore, in 2023, the wife of the Kebbi State Governor, Hajiya Nafisa Nasir Idris, flagged off another measles sensitization and vaccination campaign in Birnin Kebbi. The campaign involved extensive radio and television sensitization programmes aimed at improving public awareness

concerning routine immunization and child healthcare. Kebbi Radio and Kebbi TV aired health talks, interviews with healthcare professionals, and community mobilization programmes in local languages to improve public understanding and acceptance of measles vaccination (Nanas Foundation, 2023).

Similarly, in 2026, Kebbi State intensified its media supported campaign against measles and rubella through radio and television awareness programmes. The campaign involved over 1,200 personnel across 225 wards and focused on encouraging parents and caregivers to present children for vaccination. Kebbi Radio and Kebbi TV consistently aired awareness jingles and interviews with health officials to mobilize residents for active participation in the immunization exercise (Leadership Newspaper, 2026).

Empirical Review

Masresha, Braka, Onwu, Nandy, Bawa, Goodson, Mihigo and Patel (2018) examined progress toward measles elimination in Nigeria between 2012 and 2016. The study found that northern Nigeria recorded higher measles incidence because of low routine immunization coverage and weak awareness campaigns. The researchers recommended stronger public sensitization and improved healthcare access.

Ibrahim, Usman, Mohammed, Abubakar, Nguku, Waziri and Gidado (2019) conducted a five-year review of measles surveillance data in Nigeria and concluded that measles remained a major public health concern despite ongoing immunization campaigns. The researchers emphasized the importance of strengthening communication strategies and community mobilization.

Jean Baptiste, Wagai, Luce, Fall, Masresha, Umeh and Gasasira (2021) investigated measles outbreak response campaigns in Borno State, Nigeria. Findings showed that media sensitization campaigns positively influenced public participation in vaccination exercises. However, insecurity, misinformation and poor healthcare access limited campaign effectiveness.

Shorunke, Adeola-Musa, Usman, Adewoye and Stephen (2019) examined measles surveillance data in Osun State, Nigeria and found that inadequate awareness and delayed healthcare seeking behaviour contributed significantly to measles transmission.

Theoretical Framework

This study is anchored on Health Belief model and Agenda Setting Theory

The Health Belief Model was developed by Rosenstock in 1974 as a psychological model that explains and predicts health behavior to be a consequence of individual belief. The primary principle of the model is that health behavior is determined by personal perceptions or understanding of any health crisis or an emergency such as an outbreak of disease. The theory states that people are more likely to adopt preventive healthcare measures when they perceive themselves as vulnerable to a disease and believe that preventive action will reduce the threat. Consequently, people's actions towards viral measles disease could largely depend on the information and opinion available to them. In relation to this study, Kebbi radio and Kebbi Tv campaigns help residents understand the dangers of measles and the benefits of immunization, thereby encouraging preventive health behaviour.

On the otherhand Agenda Setting Theory was propounded by Maxwell McCombs and Donald Shaw in 1972. The theory states that the media may not tell people what to think, but they significantly influence what people think about. Through repeated broadcasts concerning measles prevention and immunization, Kebbi Radio and Kebbi TV help place measles awareness on public agenda and increase public discussion concerning vaccination and disease prevention.

The theory is relevant to this study because it explains how consistent media attention on measles campaigns can influence public awareness and behavioural response.

Methodology

The study adopted the descriptive survey research design. The population comprised all residents of Kebbi State aged 18 years and above who have access to radio or television and are potential consumers of Kebbi Radio and Kebbi TV broadcasts. Based on the 2006 National Population Census projected to 2025 using the National Population Commission growth rate of 3.2%, the estimated adult population of Kebbi State is approximately 2,498,490. Online Australia Calculator as provided by the National Statistical Service (NSS) was used to draw the sample size of 385 from the total population. A multistage sampling technique was employed in selecting respondents for the

study. In the first stage, Kebbi State was stratified into its three senatorial zones: Kebbi North, Kebbi Central, and Kebbi South to ensure adequate geographical representation. In the second stage, two LGAs were randomly selected from each stratum. In the third stage, enumeration areas within selected LGAs were systematically sampled. In the fourth stage, households within selected enumeration areas were randomly selected using a random walk procedure. Structured questionnaire was used as the instrument for the data collection, while the data collected were analyzed using descriptive statistics, specifically frequency tables and simple percentages, for ease of interpretation and presentation.

Data presentation, Analysis and Result

Table 1: Questionnaire Distributed

Questionnaire	Frequency	Percentage
Number distributed	385	100%
Number returned	380	98.7%
Number not returned	5	1.3%
Total valid	385	100

Field survey, 2026

From table1 above, out of 385 questionnaire items administered, 380 (98.7%) were returned, 5 (1.3%) were not returned. Thus the data presentation and analysis were done based on the 380 copies recovered.

Table 2: Residents of Kebbi State are regularly exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV.

Response	Frequency	Percentage
Strongly Agree	200	52.6%
Agree	97	25.5%
Undecided	16	4.2%
Disagree	45	11.8%
Strongly disagree	22	5.8%
Total	380	100

Field survey, 2026

Table 2 above indicates that 200 (52.6%) of the respondents strongly agree that Residents of Kebbi State are regularly exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV, 97 (25.5%) agree, 16 (4.2%) are undecided, 45 (11.8%) disagreed while 22 (5.8%)

strongly disagree. Thus, the majority strongly agree that residents of Kebbi State are regularly exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV.

Table 3: Kebbi Radio and Kebbi TV campaigns create awareness concerning measles prevention among residents of Kebbi State.

Response	Frequency	Percentage
Strongly Agree	98	25.8%
Agree	170	44.7%
Undecided	26	6.8%
Disagree	50	13.2%
Strongly disagree	36	9.5%
Total	380	100

Field survey, 2026

Table 3 above indicates that 98 (25.8%) of the respondents strongly agree that Kebbi Radio and Kebbi TV campaigns create awareness concerning measles prevention among residents of Kebbi State., 170 (47.8%) agree, 26 (6.8%) are undecided, 50 (13.2%) disagreed while 36 (9.5 %) strongly disagree. Thus, the majority agree that Kebbi Radio and Kebbi TV campaigns create awareness concerning measles prevention among residents of Kebbi State.

Table 4: Kebbi Radio and Kebbi TV campaigns positively influence residents attitudes toward measles immunization.

Response	Frequency	Percentage
Strongly Agree	127	33.4%
Agree	105	27.6%
Undecided	69	18.2%
Disagree	25	6.6%
Strongly disagree	54	14.2%
Total	380	100

Field survey, 2026

Table 4 above indicates that 127 (33.4%) of the respondents strongly agree that Kebbi Radio and Kebbi TV campaigns positively influence residents attitudes toward measles immunization., 105 (327.6%) agree, 69 (18.2%) are undecided, 25 (6.6%) disagreed while 54 (14.2%) strongly disagree. Thus, the majority strongly agree that Kebbi Radio and Kebbi TV campaigns positively influence residents attitudes toward measles immunization.

Table 5: Poor electricity supply, poverty, illiteracy and limited media access hinder the effectiveness of measles campaigns in Kebbi State.

Response	Frequency	Percentage
Strongly Agree	115	30.3%
Agree	86	22.6%
Undecided	69	18.2%
Disagree	59	15.5%
Strongly disagree	51	13.4%
Total	380	100

Field survey, 2026

Table 5 above indicates that 216 (56.9%) of the respondents strongly agree that Poor electricity supply, poverty, illiteracy and limited media access hinder the effectiveness of measles campaigns in Kebbi State, 117 (30.8%) agree, 16 (4.2%) are undecided, 9 (2.3%) disagreed while 22 (5.8%) strongly disagree. Thus, the majority strongly agree that poor electricity supply, poverty, illiteracy and limited media access hinder the effectiveness of measles campaigns in Kebbi State.

Discussion of Findings

The study examined the effectiveness of broadcast media campaigns on measles awareness in Kebbi State, Nigeria. The findings of this study revealed that residents of Kebbi State are regularly exposed to measles awareness campaigns on Kebbi Radio and Kebbi TV. This finding suggests that broadcast media remain important channels for disseminating health information and reaching a large audience within the state. The high level of exposure recorded in the study indicates that radio and television campaigns have succeeded in creating visibility for measles-related information among residents. This finding aligns with the study of Wogu (2018), which revealed that mass media awareness campaigns significantly improve public exposure to health information and disease prevention campaigns in Nigeria.

Furthermore, the study revealed that Kebbi Radio and Kebbi TV campaigns create awareness concerning measles prevention among residents of Kebbi State. This finding implies that media campaigns are effective tools for educating the public on preventive health measures such as immunization, personal hygiene and early detection of measles symptoms. The finding supports the position of Wakefield, Loken and Hornik (2010), who found that mass media campaigns are effective in

creating public awareness and influencing health-related knowledge among audiences. In addition, the findings revealed that Kebbi Radio and Kebbi TV campaigns positively influence residents' attitudes toward measles immunization. This suggests that exposure to health campaigns through broadcast media encourages residents to develop favourable attitudes toward immunization programmes and public health interventions. The finding indicates that media campaigns do not only inform the public but also help in shaping positive health behaviours and perceptions. This finding is consistent with the study of Evans et al. (2024), whose study on vaccination campaigns found that media based health communication positively influences public acceptance of vaccination programmes and preventive health behaviour.

However, despite the effectiveness of the broadcast media campaigns, the study identified poor electricity supply, illiteracy and limited media access as major challenges hindering the effectiveness of measles awareness campaigns in Kebbi State. This finding implies that infrastructural and socio-economic factors continue to affect the reach and impact of health communication campaigns, especially in rural communities. The finding aligns with the study of Haenssger, Closser and Alonge (2021), who observed that inadequate infrastructure and limited communication access reduce the effectiveness of health campaigns in developing societies.

Conclusions

The study examined the effectiveness of broadcast media campaigns on measles awareness in Kebbi State focusing on Kebbi Radio and Kebbi TV. The findings revealed that residents are highly exposed to measles awareness campaigns through these broadcast channels. The study also established that the campaigns significantly enhance public awareness of measles prevention and positively influence residents attitudes toward immunization. However, the effectiveness of these campaigns is limited by challenges such as poor electricity supply, illiteracy and restricted access to media in some communities. Overall, the study concludes that broadcast media play a significant role in improving measles awareness and promoting immunization behaviour, despite existing structural and socio-economic challenges.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Kebbi Radio and Kebbi TV should intensify and sustain regular measles awareness campaigns to ensure continuous exposure and improved public understanding of immunization benefits.
2. Health messages should be simplified and translated into local languages to enhance comprehension among illiterate and rural populations.
3. Government and relevant stakeholders should improve electricity supply and media infrastructure to ensure consistent access to broadcast health information across Kebbi State.
4. Community-based sensitization programmes should be strengthened to complement radio and television campaigns, especially in areas with limited media access.

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