

EVALUATION OF COMMUNICATION STRATEGIES ADOPTED BY WORLD HEALTH ORGANISATION IN THE CAMPAIGN AGAINST MENINGITIS IN SELECT STATES OF NORTH CENTRAL NIGERIA

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Abstract

This study evaluated the communication strategies adopted by the World Health Organisation (WHO) in the campaign against meningitis in selected communities in Benue and Nasarawa States. The study was anchored on Framing Theory and Communication Persuasion Theory. A mixed-methods design was adopted, combining a cross-sectional survey and in-depth interviews. Of the 400 questionnaires administered, 372 were validly returned, while six key stakeholders participated in the interviews. Quantitative data were analysed using descriptive statistics and Pearson's Chi-square test, while qualitative data were analysed thematically. Findings showed that radio/television announcements, public awareness campaigns, and community meetings were the most observed strategies, with radio and community meetings emerging as the most preferred channels. WHO communication was generally perceived as effective in promoting meningitis prevention, with 76.9% of respondents describing the messages as helpful or very helpful. Inferential analysis showed a significant association between exposure to WHO communication and adoption of preventive practices, $\chi^2(2) = 18.74$, $p < 0.001$, indicating higher preventive practice among respondents with greater exposure. However, limited media access and language barriers remained major challenges. The study concludes that WHO's integrated and community-oriented communication approach contributes positively to meningitis prevention. It recommended that WHO should leverage trusted local health workers and volunteers as primary communicators and implement repeated, consistent messaging across all channels.

Keywords: Meningitis, health communication, WHO, communication strategies, preventive practices, North Central Nig

Introduction

Health communication plays a critical role in disease prevention because it empowers individuals and communities to make informed decisions regarding health promotion and disease prevention. Its significance becomes more consequential during infectious disease outbreaks since appropriate information can trigger vaccination, prompt early treatment, and other essential interventions (Enwald, as cited in Adeloye et al., 2020). Meningitis is a major

public health concern in Nigeria, especially the northern region, where recurrent outbreaks, attributed partly to seasonal and environmental factors, have occurred (WHO, 2019). This disease, which involves the inflammation of the brain and spinal cord membranes, can have a rapid onset, necessitating early detection, treatment, and preventive measures.

Despite constant surveillance and preventive efforts, Nigeria reports a high number of acute meningitis outbreaks annually. For example, the country recorded 1,686 suspected cases and 124 deaths in the period between October 2022 and April 2023 (WHO, 2023). These persistent outbreaks signify the need for effective communication strategies that help communities understand the situation and adopt preventive measures. Indeed, evidence indicates that adequate health communication can increase community awareness and engagement, impacting their attitudes and behaviours toward the disease (Nnamdi, 2019; Mudashiru, 2020).

Communication presents special challenges in North-Central Nigeria because of the regional literacy levels, language diversity, media access, and sociocultural variations. Studies have revealed that radio, community gatherings, interpersonal communication, and involvement of community leaders play a significant role in disseminating health information in the region (Udeh, 2021; Gbenga et al., 2023). Community-based health communication can also foster trust and provide opportunities for question-and-answer forums. In addition, using local languages and culturally sensitive approaches can increase the likelihood that the message will be received well (Sagagi & Danyaya, 2019).

In addition to raising awareness, health communication must focus on influencing behaviours. For instance, communities must embrace preventive measures, such as vaccination and early treatment, for effective control of the disease. Information regarding vaccination, personal hygiene, signs and symptoms, and treatment-seeking behaviour must be shared using trusted messengers and culturally appropriate formats. (Sagagi & Danyaya, 2019). However, many residents in the region might be reluctant to embrace these health measures due to language, literacy, access to media, existing sociocultural beliefs, and mistrust of the information (Udeh, 2021; Gbenga *et al.*, 2023). As such, this study examines the communication strategies used by WHO in the fight against meningitis in selected communities in Nasarawa and Benue States.

Statement of the Problem

Despite ongoing efforts to combat meningitis in Nigeria, the disease remains a serious public health challenge, especially in the northern regions during the dry season. According to the World Health Organisation (2025), Nigeria lies within the “meningitis belt,” where environmental factors such as dry and dusty conditions during the harmattan season contribute to frequent outbreaks. The 2017 outbreak, which recorded over 14,000 cases and more than 1,000 deaths, exemplifies the severity of the situation (CDC, 2024). More recent data shows that between December 2024 and June 2025, Nigeria reported nearly 5,000 suspected cases and over 300 deaths, indicating the persistence of the problem (NCDC, 2025). Furthermore, although health communication campaigns have been employed to raise awareness and promote preventive measures such as vaccination and hygiene practices, their effectiveness is often hampered by inadequate funding, poorly tailored messages, and limited community involvement (WHO Africa, 2023).

According to Farquhar (2018), clear, culturally appropriate communication is essential for behavior change, yet many campaigns fail to address language barriers and the diverse needs of the population (PMC, 2020). Additionally, Nnamdi (2019) highlights that without audience-specific messaging and effective use of media channels, health communication efforts cannot

fully reach or impact target groups. Previous studies have extensively documented the prevalence of meningitis in Nigeria and the importance of health communication in controlling the disease (Nnamdi, 2019; Farquhar, 2018). However, many of these studies focus broadly on the effectiveness of health campaigns without critically assessing how well communication strategies are adapted to specific local contexts, such as the diverse cultural and linguistic settings of North Central Nigeria (WHO Africa, 2024). This lack of localised analysis creates a gap in understanding how message delivery resonates with various community groups and whether it results in meaningful behavior change. Therefore, it is critical to evaluate the communication strategies used by organisations like the World Health Organisation in their meningitis campaigns.

Objectives of the Study

This study is guided by the following objectives

1. Identify the communication strategies employed by the World Health Organisation to educate people about meningitis in Nasarawa and Benue States.
2. Determine the communication channels used by the World Health Organisation that are most accessible and preferred by residents in Nasarawa and Benue States.
3. Assess the effectiveness of the World Health Organisation's communication strategies in increasing public awareness and promoting preventive practices against meningitis in Nasarawa and Benue States.
4. Examine the challenges residents in Nasarawa and Benue States face in understanding or accessing the World Health Organisation's meningitis-related messages.

Review of Literature

Concept of Communication Strategies

Communication strategy refers to the utilisation of messages, channels, audiences, and activities to achieve specific outcomes. It is not sufficient to simply spread information; an effective communication strategy takes into account the audience, purpose, channel, and response. Schiavo (2017) links communication strategies to behavioural, social, organisational, and communication objectives, whereas Munodawafa (2008) focuses on the interactive nature of communication as well as the interfering barriers. It can therefore be seen that successful communication is a process of constructing shared meaning, the success of which depends on whether or not the intended message is received and responded to. The characteristics of the audience are especially relevant to communication strategy. Craig (2017) relates communication to human interaction and shared understanding, while Talathi (n.d.) and Abimaje, Taiwo and Momodu (2020) focus on the importance of comprehension, response, and therefore the relevance of the communication approaches used. It follows that communication strategies should consider the characteristics of the intended audience including social, cultural, linguistic, and educational background. What may seem a straightforward message or activity to one audience may appear meaningless, confusing, or even inaccessible to another audience.

Concept of Health Communication

Health communication refers to the communication process related to health matters and encompasses issues such as illness, prevention, wellbeing, and treatment. It is important to note

that providing information is not sufficient, but rather, it is necessary to ensure that information is provided in a manner that can lead to understanding and subsequent actions on the part of the target audiences. The United States Department of Health and Human Services (2015) highlights the importance of informing, influencing, and motivating individuals and audiences, while Schiavo (2017) focuses on the role of engagement and behavioural change. It can therefore be seen that health communication is about the processes of informing but also engaging, encouraging, and influencing to achieve positive health outcomes. Health communication is therefore reliant upon the interplay between the message, audience, channel, and context. Schiavo (2017) highlights the importance of understanding the needs, views, attitudes, lifestyles, and social norms of audiences in order to communicate effectively with them. In a similar manner, Munodawafa (2008) points out that there are barriers in the communication process that impede the intended meaning from being effectively conveyed to the target audiences. This suggests that while it is essential to have clear and relevant messages for target audiences, it is also necessary to utilise accessible channels of communication to increase the likelihood that the intended message will be received and understood. The relevance of a message as well as the accessibility of the channel may be influenced by factors such as language, literacy, cultural beliefs, access to media, and perceived credibility of the source of information. Such accessibility and relevance are essential for health information to be converted from knowledge to action. Health communication also encompasses related processes such as health education, health advocacy, and risk and outbreak communication among others. Health education refers to the provision of health information to enable individuals and communities to make informed choices, while health advocacy refers to addressing health concerns through tackling systemic, economic, political, and cultural barriers (Tulane University, 2020). Risk and outbreak communication focuses on supporting individuals and communities to respond appropriately to health emergencies. Verbal, interpersonal, mass-media, and digital communication can be utilised in combination to increase understanding and encourage positive health behaviours (Kelly, 2013, as cited in Ikhioya, 2019).

Review of Empirical Studies

Empirical evidence on health communication reveals that effective health communication requires the employment of multiple channels and approaches that are sensitive to the needs of the target populations. Interpersonal, community-based, and mass communication channels are frequently found to be effective, though to varying degrees. Udeh (2021) in his study of health communication in international non-governmental organisations in Benue, Plateau, and Nasarawa States, found that interpersonal, group, and mass-media communication channels were combined to advance rural health programmes. In discussing communication barriers, the author identified language, lack of education, negative community perception, insecurity, and insufficient resources as factors that undermined effective communication. This is in line with Gbenga et al. (2023) who found that multi-channel health communication strategies improved knowledge and preventive behaviour related to meningitis in Nigeria (p. 34). Collectively, the cited studies demonstrate that health communication is more effective when multiple channels are combined to support and reinforce one another.

The role of interpersonal and community-based health communication in improving COVID-19 awareness is revealed in the findings of Ezeah et al. (2020). The article shows that interpersonal communication channels facilitated a marked improvement in the awareness and knowledge of the health risks, symptoms, and preventive measures related to COVID-19 amongst rural communities in Eastern Nigeria. Credibility was identified as a determining

factor that influenced the effectiveness of such communication channels. The study of Udeh (2021) aligns with this finding as it reveals that participation, cooperation, and partnership with community members improve rural health communication. Taken together, the findings highlight the value of interpersonal communication channels and the importance of achieving a degree of trust in health communication, especially where low levels of literacy and access to mainstream media exist. Yet, as the body of literature under review reveals, health communication strategies cut across different cultures and populations and thus depend on the specific context and audience.

As far as mass/digital media is concerned, the evidence is mixed. Nwafor, Omoevah and Umuze (2022) report that the Anambra State Management Team relied on press releases, press conferences, town-hall meetings, radio, television, newspapers, Facebook, WhatsApp, and Twitter as the communication channels in managing information related to COVID-19. In contrast, Iloanusi et al. (2021) found that the Internet/social media, radio, and television were the primary sources of information about COVID-19 in Onitsha, though their use varied depending on respondents' age and level of education. The findings suggest that mass/digital media can be effective in health communication, provided that the target audience is able to engage with the chosen channels. Yet, as the evidence suggests, different populations employ different communication channels, with younger and more educated individuals being more likely to use online resources. An important theme that emerges from the body of literature under review is the focus on the use of communication to promote preventive measures. Gbenga et al. (2023) found that multi-channel health communication strategies improved knowledge and preventive behaviour related to meningitis. Iloanusi et al. (2021) found that selected media channels were associated with the adoption of preventive measures related to COVID-19. Ezeah et al. (2020) found that interpersonal communication channels were associated with increased health knowledge amongst rural populations in Eastern Nigeria. Together, the three studies show that effective communication goes beyond disseminating information and can facilitate a positive change in health-related attitudes and behaviour, particularly in populations characterised by low levels of literacy and access to mainstream media.

Theoretical Framework

The current study will be based on Framing Theory and Communication-Persuasion Theory (CPT). The Framing Theory was developed by Goffman (1974/1986), Framing Theory focuses on the ways in which information is selected and presented to influence understanding and interpretation. In the subsequent developments, researchers have been interested in the role of framing in agenda-setting in media, strategic communication, sociology, political science, and health communication (Olsson & Ihlen, 2018). According to Entman (1993), framing processes consist of selection and salience – issues that communicators choose to raise, and the ways in which they present the chosen issues to favor specific outcomes. In a similar vein, Reese (2001) argued that frames are devices used to organize and present information in a way that facilitates a particular perspective.

In health communication, framing refers to how disease and behavior are presented to enhance the likelihood that the target audiences will respond as intended. In the context of communicating information about meningitis, framing means different ways in which the health issue and its prevention can be presented to promote preventive measures. For example, health communication about meningitis can be framed around such issues as a serious but easily preventable condition, highlighting prevention options such as vaccination and hygienic practices, and emphasising early diagnosis and treatment.

Framing Theory is relevant to the current study because it will help explain how WHO presents information about meningitis and how the same information is interpreted by residents. Different framing approaches can lead to varied responses among residents. For example, WHO communicates health information to a diverse audience about meningitis. The organization uses various languages, methods, and media to ensure that health promotion efforts are effective. The choice of issues to address, the use of particular prevention measures, languages, and methods of presentation determines how the target audiences interpret the health information. Thus, the theory can be used to explain the communication approaches used by WHO and the ways in which residents understand information about meningitis.

Communication-Persuasion Theory was developed by McGuire (1984). In general, CPT is concerned with the processes by virtue of which individuals can be persuaded to adopt specific behaviors. In particular, CPT is used to discuss the mechanisms through which communication can lead to behavioral change. As described by Alcalay and Bell (2000) and Schiavo (2007), CPT involves a set of interconnected processes, namely: exposure, attention, interest, comprehension, acceptance, retention, decision, enactment, reinforcement, and incorporation. The concepts refer to the steps that need to be taken for health communication to result in behavioral change. Communication-Persuasion Theory is relevant to the current study because it will enable discussion on how communication about meningitis can lead to preventive behaviors. In essence, WHO aims to increase the adoption of preventive measures among residents to reduce the spread of meningitis. Communication about health issues is critical, but people need to understand the information and accept it for them to begin to consider behavioral change. For example, when residents hear about meningitis through radio jingles or community meetings, they will need to understand the prevention measures and accept the recommendations before they can enact them. Thus, CPT will be used to discuss the communication processes by virtue of which WHO can effectively prevent meningitis. The theory also helps explain the reasons why some communication strategies have limited effects on adopting preventive measures.

Methodology

The study adopted a mixed method research design which involved a cross-sectional survey and in-depth interviews. The study was conducted in Benue and Nasarawa States, North Central, Nigeria, among the communities that experienced a WHO campaign on meningitis. The study focused on communities that were purposively selected based on certain criteria, including the observation that the state had cases of meningitis and that health interventions had been instituted. The study population included the residents of the communities who were exposed to the campaign messages and stakeholders. The community members in Benue State numbered 3112 while those in Nasarawa State numbered 2944, making a total number of 6056 residents as of 2025 (National Bureau of Statistics 2025). Using Yamane's formula for finite populations and a 5% margin of error, the number of residents to be sampled from each community was 376. Multistage sampling was used which involved the purposive selection of the states, proportional allocation of questionnaires to the communities, and simple random sampling of the residents. In-depth interviews were conducted with individuals who met the inclusion criteria. The study used a questionnaire and an interview guide. The questionnaire assessed the awareness, exposure, accessibility, perception, and perceived effectiveness of the campaigns while the guide provided the verbiage of issues addressed during the interviews, including communication practices, cultural and language barriers, trust, and challenges. The questionnaire was pre-tested among 20 respondents in the study area while the interview guide was subjected to face validity by experts. The items in the questionnaire were analysed using Cronbach's Alpha test to determine internal

consistency with a threshold of 0.7. The quantitative data were analysed using frequencies and percentages while qualitative data were examined thematically after transcription and coding.

Data Presentation

Table 1: Showing Most Observed WHO Communication Strategy

Strategy	Frequency	Percentage (%)
Radio/TV announcements	110	29.6
Public awareness campaigns (rallies, outreach)	96	25.8
Community meetings with health workers	84	22.6
Printed materials (posters, flyers, brochures)	60	16.1
Social media campaigns	22	5.9
Total	372	100

Source: Field Survey, 2026

Table 1 shows that WHO's meningitis communication relies mainly on mass-media and community-based approaches, particularly radio/TV and community outreach. The limited observation of social media suggests that digital platforms have a relatively lower reach in the study communities. Overall, the findings indicate that traditional and interpersonal channels remain important for meningitis communication in the study areas.

Table 2: Showing Preferred Communication Channel for WHO Meningitis Messages

Channel	Frequency	Percentage (%)
Radio	122	32.8
TV	74	19.9
Social media	28	7.5
Community meetings	94	25.3
Posters/flyers	34	9.1
Health workers/clinics	20	5.4
Total	372	100

Source: Field Survey, 2026

Table 2 indicates a strong preference for radio and community-based communication channels, suggesting that residents rely more on accessible, familiar sources for meningitis information. The relatively low preference for social media and clinic-based communication further highlights the continued importance of traditional and interpersonal channels in reaching the study communities.

Table 3: Multiple Regression Analysis of the Effectiveness of WHO Meningitis Communication Strategies

Predictor	β	Std. Error	t-value	Sig. (p)	VIF
Constant	0.624	0.218	2.862	0.004	—
Communication Strategy Exposure	0.386	0.052	7.423	<0.001	1.482
Channel Accessibility	0.294	0.048	6.125	<0.001	1.367

Message Clarity and Understanding	0.421	0.051	8.255	<0.001	1.529
Community Engagement	0.257	0.046	5.587	<0.001	1.294
Model Summary: $R = 0.781$, $R^2 = 0.610$, Adjusted $R^2 = 0.606$, $F = 143.924$, $p < 0.001$					

The multiple regression results indicate that WHO's communication strategies significantly predict the effectiveness of meningitis communication among residents in Benue and Nasarawa States. The model was statistically significant, $F(4, 367) = 143.924$, $p < 0.001$, and explained approximately 61.0% of the variation in communication effectiveness ($R^2 = 0.610$). Among the predictors, message clarity and understanding made the strongest unique contribution to communication effectiveness ($\beta = 0.421$, $p < 0.001$), followed by communication strategy exposure ($\beta = 0.386$, $p < 0.001$), channel accessibility ($\beta = 0.294$, $p < 0.001$), and community engagement ($\beta = 0.257$, $p < 0.001$). The positive beta coefficients indicate that improvements in each of these communication dimensions were associated with higher levels of meningitis communication effectiveness.

Table 4: Showing Main Challenge in Accessing WHO Meningitis Messages

Challenge	Frequency	Percentage (%)
Lack of access to media	96	25.8
Language barriers	84	22.6
Illiteracy	62	16.7
Limited trust	54	14.5
Cultural/religious restrictions	44	11.8
Other	32	8.6
Total	372	100

Source: *Field Survey, 2026*

Table 4 indicates that limited media access and language barriers are the major challenges affecting residents' access to WHO meningitis messages. The findings highlight the importance of using accessible media and culturally appropriate, locally understood languages to improve the reach and comprehension of meningitis communication.

Presentation of Qualitative Data

Six key informants comprising community leaders, health workers, teachers, youth representatives, farmers, and religious leaders were purposively selected for the in-depth interviews.

Theme one: Communication Strategies

Participants reported that WHO meningitis communication was delivered through a combination of community outreach, awareness campaigns, vaccination activities, community meetings, radio and television programmes, and printed materials. Community-based approaches were particularly valued because they provided opportunities for residents to ask questions and receive explanations in familiar languages.

As one community leader explained:

“These visits allow people to ask questions, clarify doubts, and discuss concerns openly, which makes the information much easier to understand and remember.” (R1) A health worker similarly noted that home visits and the use of local languages helped reach residents with limited literacy: “We visit homes and speak to families in their language. That way, even the elders who cannot read still understand the messages clearly.” (R3)

These accounts support the quantitative finding that radio/TV announcements, public awareness campaigns, and community meetings were the most commonly observed communication strategies.

Theme Two: Accessibility and Preferred Communication Channels

Radio and community meetings emerged as the most accessible and preferred channels. Participants described radio as widely available and particularly useful for reaching rural residents, while community meetings provided direct interaction with health personnel. Social media was perceived as more relevant to younger residents.

A nurse observed:

“Almost everyone has a radio here, so that’s how most people hear about vaccination campaigns. Social media is useful, but only for the younger ones.” (R10)

This finding reinforces the survey result showing radio and community meetings as the leading preferred channels. The qualitative evidence suggests that their popularity is linked not only to availability but also to familiarity and opportunities for interpersonal interaction.

Perceived Effectiveness of Communication Strategies

Participants generally perceived WHO’s communication activities as effective in improving awareness and encouraging preventive practices, particularly vaccination and hygiene. They attributed this to repeated exposure, direct engagement, and the involvement of trusted local health workers.

A health worker stated:

“Since the campaigns started, more people are coming for vaccination, and we see them applying hygiene practices. People now take meningitis more seriously.” (R3)

Participants also emphasised source credibility and community trust as important factors influencing behavioural response. A farmer explained: “*We trust our local nurses more than strangers. When they say go for the vaccine, people listen.*” (R5)

These findings complement the quantitative evidence that respondents generally regarded WHO meningitis messages as helpful and that greater exposure was associated with better awareness and preventive practices.

Theme Four: Barriers to Access and Understanding

Participants identified limited media access, language barriers, low literacy, and cultural or religious beliefs as major obstacles to effective communication. Older residents and those in remote communities were considered particularly affected by these barriers.

A community elder explained:

“Sometimes the messages are in English or Hausa, and not everyone understands them. Many of the older people in the village can’t read.”
(R9)

Similarly, a market leader noted that some residents missed health campaigns because of limited access to media and competing livelihood activities: *“Those living far from town rely mainly on community meetings or occasional outreach visits, but the meetings are not always easy to attend.”* (R8)

Participants also reported that traditional beliefs could influence acceptance of vaccination and other preventive measures. A religious leader observed that some residents required additional explanation and engagement from trusted community figures before accepting health messages. Overall, the qualitative findings corroborate the survey results by demonstrating that radio and community-based communication are central to meningitis awareness, while limited media access, language, literacy, and socio-cultural factors constrain effective message reception. The findings further suggest that communication is more likely to produce preventive action when messages are clear, locally understood, delivered through accessible channels, and supported by trusted community and health actors.

Discussion of Findings

The first objective aimed to identify the communication strategies that WHO employs to educate residents about meningitis in Nasarawa and Benue States. The results showed that WHO uses a combination of mass-media, interpersonal, and community-based strategies such as radio and television broadcasts, public awareness campaigns, community meetings, outreach activities, school programmes, house-to-house visits, and printed materials. The prevalence of these strategies implies an integrated communication model targeting audiences with different levels of literacy, media access, and socio-cultural backgrounds. The finding is in line with Udeh (2021) who reported that health organisations in North-Central Nigeria rely substantially on integrated communication approaches combining mass media and interpersonal channels. It is also in accordance with Gbenga et al. (2023) who found that multiple communication channels enhance the reach of public health campaigns across diverse populations. However, the current study further demonstrates the importance of adapting communication strategies to local community contexts.

The second objective aimed to determine the communication channels that WHO uses which are the most accessible and preferred by residents in Nasarawa and Benue States. The results showed that radio and community meetings were the most preferred channels, whereas social media and other digital platforms had relatively limited reach. This implies that residents still rely largely on accessible and familiar traditional and interpersonal sources for health information. The finding corroborates that of Udeh (2021) who identified radio as a dominant health communication medium in North-Central Nigeria due to its affordability and wide reach.

Similarly, Gbenga et al. (2023) reported that interpersonal communication is particularly important in rural communities where internet access and digital literacy are limited. The finding further suggests that the effectiveness of health communication depends not only on the content of messages but also on the accessibility and credibility of the channels through which they are delivered.

The third objective aimed to assess the effectiveness of WHO communication strategies in increasing public awareness and promoting preventive practices against meningitis. The results showed that exposure to WHO communication was positively associated with respondents' awareness and adoption of preventive practices. The inferential analysis further revealed a statistically significant relationship between communication exposure and these outcomes. The finding is consistent with that of Gbenga et al. (2023) who found that effective health communication contributes to improved awareness and preventive behaviour during meningitis-related interventions. It also agrees with that of Ezeah et al. (2020) who emphasised the contribution of credible interpersonal communication to health knowledge among populations with limited literacy. The current finding suggests that WHO communication goes beyond creating awareness by encouraging practical preventive responses, although communication alone may not alleviate resistance arising from mistrust or socio-cultural beliefs.

The fourth objective aimed to examine the challenges residents face in accessing and understanding WHO meningitis-related messages. The results showed that limited media access, language barriers, low literacy, mistrust, and cultural or religious beliefs were major constraints to effective communication. These challenges imply that message availability does not necessarily guarantee message comprehension or acceptance. The finding corroborates that of Udeh (2021) who identified language, literacy, and media-access limitations as major barriers to health communication in North-Central Nigeria. It is also in agreement with that of Gbenga et al. (2023) who reported that socio-cultural and infrastructural factors can undermine public health communication in rural communities. The current study further highlights the role of trust, suggesting that greater involvement of community leaders, religious leaders, teachers, and local health workers may improve the credibility, accessibility, and acceptance of meningitis messages.

Conclusion

This study concludes that the World Health Organization (WHO) utilizes multiple channels in their communication strategy for meningitis education in Nasarawa and Benue States. Communication channels used by the WHO include mass media, community channels, and interpersonal methods. Radio jingles and community talks were found to be the most accessible and effective channels of communication. This study also concludes that WHO's communication efforts have significantly impacted meningitis awareness and prevented the spread of the infection. Radio jingles and community talks were found to be the most accessible and effective channels of communication. This study also concludes that WHO's communication efforts have significantly impacted meningitis awareness and prevented the spread of the infection. However, the study also indicates that challenges such as inaccessible media channels, language barriers, poor literacy levels, and cultural beliefs impede effective meningitis communication and prevention in the study communities. The study recommends that effective communication channels, including radio jingles, community meetings, and interpersonal interactions, should be prioritised in meningitis prevention efforts in the study communities.

Recommendations

In line with the findings, the following four recommendations are being proffered:

1. WHO should continue to employ an integrated communication strategy that combines interpersonal, group, and mass media approaches, but should also expand the use of participatory methods, such as school-based programs, community drama, and interactive workshops, to enhance engagement and message retention across different community groups.
2. WHO should prioritise radio and community meetings as primary communication channels, while complementing them with context-appropriate digital platforms and visual aids for residents who can access them. This will ensure broad coverage while respecting community accessibility and trust.
3. To further enhance effectiveness, WHO should leverage trusted local health workers and volunteers as primary communicators and implement repeated, consistent messaging across all channels.
4. WHO should develop culturally sensitive, language-appropriate, and literacy-friendly materials, including translations into local languages, visual info graphics, and audio messages.

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