



HEALTH COMMUNICATION AS A VIABLE TOOL IN THE CONTROL AND PREVENTION OF MENINGITIS IN NIGERIA: AN ANALYTICAL AUDIENCE PERSPECTIVE

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ABSTRACT: *Meningitis continues to be a significant public health challenge in Nigeria, leading to substantial morbidity and mortality rates. Effective control and prevention strategies are crucial in mitigating the impact of this infectious disease. It is in the light of this that this study therefore, from an analytical audience perspective, examines health communication as a viable tool in the control and prevention of meningitis in Nigeria. The objective of this study is basically to examine the impact of health communication interventions on the knowledge and preventive behavior related to meningitis among the target audience in Nigeria. This study is anchored on the attitude change theory; and data were collected through the use of questionnaires. Findings from this study show that health communication interventions have been impactful because it has influenced the knowledge and preventive behavior of the respondents as regards to the control and prevention of meningitis. The study also revealed that health communication strategies have been highly effective in the control and prevention of meningitis in Nigeria. This study recommends that in order to enhance the effectiveness of health communication as a viable tool in the control and prevention of meningitis in Nigeria, the multi-channel communication approaches should be strengthened.*

KEYWORDS: Audience, Control, Communication, Health, Health communication, Meningitis, Prevention.



INTRODUCTION

Meningitis is a severe inflammation of the meninges, the membranes surrounding the brain and spinal cord, caused by bacterial or viral infections. Meningitis is a significant public health problem in Nigeria, with outbreaks occurring annually, particularly during the dry season. The disease is highly contagious and can spread quickly among people who have close contact with each other. Meningitis has been a public health concern in Nigeria for several decades. The country is located in the meningitis belt, a region in sub-Saharan Africa characterized by frequent outbreaks of meningitis. According to the World Health Organization (WHO), Nigeria had the largest outbreak of meningitis in the world in 2017, with over 14,000 cases and 1,166 deaths reported. The disease is prevalent in the northern part of Nigeria, where the climate is arid and hot. The dry and dusty conditions during the harmattan season, which usually occurs between November and March, create a suitable environment for the spread of the disease.

Therefore, in line with the responsibility of the media, various health communication campaigns have been embarked on to educate, inform, enlighten, warn, persuade and even dissuade the heterogeneous, critical and sophisticated audience. In this light, health communication campaigns have been visible in recent times, as in time past in the campaign on the control and prevention of diseases such as meningitis.

According to Nnamdi (2019), health communication is a powerful tool that can influence health behaviors linked to viral transmission and infection. Health communication at various times has been used to convey health information messages about the health risks and raise health awareness. Health communication messages provide information about factors such as disease outbreaks, symptoms, modes of transmission, fatality rates, treatment centers, drugs and prevention methods. These messages can be transmitted for either short or long durations, can be attached to other organized programmes, such as institutional outreach, and may complement policy changes. The primary purpose of health communication campaigns during disease outbreaks is to elicit population behavior change, which leads to disease prevention and control. However, the effectiveness of such campaigns in achieving this goal depends on message precision and clarity, the degree of funding, the media environment, use of appropriate language and the audience's ability to implement behavior change (Farquhar, 2008).

Meningitis, an inflammation of the meninges affecting the pia, arachnoid, and subarachnoid space in response to bacteria and bacterial products, continues to be an important cause of mortality and morbidity worldwide. However, mortality and morbidity vary by age and geographic location of the patient and the causative organism. Patients at risk for high mortality and morbidity include infants and young children, those living in low-income countries [or in low socioeconomic strata], HIV-infected patients in developing countries, those infected with *Neisseria meningitidis* (the meningococcus, Mc) or *Streptococcus pneumoniae* (the pneumococcus Pc), and infants living in resource-poor countries infected with *Salmonella* species (Chang, 2004). In the pre-vaccine era, haemophilus influenza was the most common bacterial pathogen causing meningitis in young children, and H. influenza type B caused approximately 70% of bacterial meningitis in children younger than five years of age (Dery & Hasbun, 2007). However, in the early 1990s, a conjugated vaccine against H. influenza type B was developed, and after a program to vaccinate against H. influenza type b was implemented, the global incidence of H. influenzae-induced meningitis decreased dramatically (55% reduction in the annual number of cases in the United States alone). Subsequently, S.



pneumoniae and *N. meningitidis* have emerged as the pathogens responsible for most cases of bacterial meningitis (Dery & Hasbun 2007).

Almost all microbes that are pathogenic to human beings have the potential to cause meningitis, but a relatively small number of pathogens (primarily *N. meningitidis*, *S. pneumoniae*, *H. influenzae* type B, group B streptococcal disease, *Escherichia coli*, *Salmonella* species, and *Listeria monocytogenes*) account for most cases of acute bacterial meningitis in children and neonates, although the reasons for this remain incompletely understood.

In order to tackle the spread of this disease, health communication becomes imperative. Health communication campaigns are intensively employed in public health awareness and campaigns by governmental and non-governmental organizations. Huge amount of money is spent annually for materials and salaries that have gone into the production and distribution of booklets, pamphlets, exhibits, newspaper articles, and radio and television programmes in order to create awareness.

According to Haruna (2017), one of the primary goals of health communication in controlling and preventing meningitis in Nigeria is to increase awareness of the disease. Many people in Nigeria are unaware of the signs and symptoms of meningitis, which can delay diagnosis and treatment. Health communication campaigns can use various channels to increase awareness of meningitis, including mass media, social media, and community outreach programs. These campaigns can provide information on the causes, symptoms, and treatment of meningitis, as well as preventive measures such as vaccination and hygiene practices.

Also, Mudashiru (2020) opined that health communication can also promote preventive measures that can help reduce the spread of meningitis. These measures include vaccination, good hygiene practices, and avoiding close contact with infected persons. Health communication campaigns can provide information on the importance of vaccination, the types of vaccines available, and where to get vaccinated. They can also promote good hygiene practices, such as washing hands regularly, covering the mouth and nose when coughing or sneezing, and avoiding crowded places. By promoting these preventive measures, health communication can help reduce the incidence of meningitis in Nigeria.

Early detection and treatment are essential in controlling and preventing meningitis in Nigeria. Health communication can play a crucial role in promoting early detection and treatment by providing information on the signs and symptoms of meningitis and the importance of seeking medical attention promptly. Health communication campaigns can also provide information on the appropriate treatment for meningitis, which usually involves antibiotics and supportive care. By promoting early detection and treatment, health communication can help reduce the morbidity and mortality associated with meningitis in Nigeria.

To ensure the effectiveness of health communication in the control and prevention of meningitis, it is essential to conduct a thorough audience analysis. Different target audiences such as healthcare professionals, community leaders, caregivers, and the general public, require tailored messages and communication channels. Understanding their knowledge, attitudes, beliefs and practices surrounding meningitis helps in designing relevant and impactful interventions.



Statement of the Problem

Despite increased health communication campaigns in the control and prevention of meningitis in Nigeria, a lot of persons are not fully aware of the disease. Despite the widespread information about the disease, there is a strong lack of awareness in some parts of the country. The role of health communication for public health development cannot be overemphasized as it remains a very important instrument for health campaigns geared toward behavior change. Various health communication campaigns have been effectively used in Nigeria to promote sexual and reproductive health, population control and HIV/AIDS causes, symptoms, dangers and effects. The campaign for immunization enabled the reduction of infant and child mortality while people have also benefited from malaria and other kinds of public health campaigns. Health communication emphasizes societal responsibility for improved health conditions; educating the population about risky behaviors, vulnerability, prevention and treatment of some diseases.

Communication thus creates awareness, increases knowledge, builds approval, and encourages healthy attitudes and behaviors. Behaviour Change Communication (BCC) motivates the adoption and sustenance of healthy behaviors and lifestyle. An intervention campaigner must therefore be clear about whose behavior is intended to be influenced, which aspects of behavior are targeted for change and the best communication strategies for achieving these goals.

Objectives of the Study

The objectives of this study are as follows;

- i. To examine the impact of health communication interventions on the knowledge and preventive behavior related to meningitis among the target audience in Nigeria.
- ii. To evaluate the effectiveness of health communication strategies in the control and prevention of meningitis in Nigeria.

Research Questions

Based on the objectives of this study, the following research questions were formulated to serve as a guide for this study;

- i. What is the impact of health communication interventions on the knowledge and preventive behavior related to meningitis among the target audience in Nigeria?
- ii. How effective are health communication strategies in the control and prevention of meningitis in Nigeria?



LITERATURE REVIEW

Meningitis: An Overview

Meningitis is a medical condition characterized by inflammation of the meninges, the protective membranes that envelop the brain and spinal cord. According to Ajibola (2018), meningitis is defined as the inflammation of the meninges, which are three protective layers that cover the brain and spinal cord. The meninges consist of the dura mater (outermost layer), the arachnoid mater (middle layer), and the pia mater (innermost layer). When these membranes become inflamed, it can lead to a range of symptoms and potentially life-threatening complications.

According to the Center for Disease Control and Prevention (2022), meningitis can be classified into several types based on the causative agent. The most common types are bacterial meningitis, viral meningitis, and fungal meningitis. Bacterial meningitis is often caused by pathogens such as *Neisseria meningitidis*, *Streptococcus pneumoniae*, and *Haemophilus influenzae*. Viral meningitis, on the other hand, is usually caused by enteroviruses, herpesviruses, or the mumps virus. Fungal meningitis is relatively rare and is typically associated with fungal infections such as *Cryptococcus neoformans* or *Histoplasma capsulatum*.

The symptoms of meningitis can vary depending on the age of the individual and the causative agent. Common symptoms include high fever, severe headache, stiff neck, sensitivity to light (photophobia), nausea, vomiting, confusion, and in some cases, a rash (Gotschlich, 2006). In infants, symptoms may also include irritability, poor feeding, excessive sleepiness, and a bulging fontanelle (soft spot on the head).

Diagnosing meningitis requires a combination of medical history assessment, physical examination, and laboratory tests. The healthcare provider will perform a thorough physical examination, paying particular attention to the neck stiffness and neurological signs. Diagnostic tests may include a lumbar puncture (spinal tap) to analyze the cerebrospinal fluid (CSF) for signs of infection, blood tests, imaging studies (such as CT scan or MRI), and sometimes viral or bacterial cultures of body fluids (Mado et al., 2013).

Immediate treatment is essential for meningitis, as it is a medical emergency. Bacterial meningitis is typically treated with antibiotics, while viral meningitis usually resolves on its own with supportive care, such as rest, fluids, and over-the-counter pain relievers to manage symptoms. Fungal meningitis may require long-term antifungal therapy. Additionally, individuals with severe meningitis may need hospitalization to receive intravenous fluids, medications to reduce brain swelling, and other supportive measures.

Prevention plays a crucial role in reducing the incidence of meningitis. Vaccination is one of the most effective preventive strategies, and several vaccines are available to protect against certain types of bacterial and viral meningitis. Vaccines such as the meningococcal conjugate vaccine, pneumococcal conjugate vaccine, and *Haemophilus influenzae* type b (Hib) vaccine have significantly reduced the incidence of bacterial meningitis. It is also important to practice good hygiene, such as regular hand washing, covering the mouth and nose when coughing or sneezing, and avoiding close contact with individuals who are ill.



Concept of Health Communication

Health communication refers to the adoption of various communication strategies to enlighten members of the public on health-related matters and influence individual, government, or community decisions that positively impact on health. According to Batta (2013), health communication is the art and technique of informing, influencing, and motivating individuals, institutions, and the public about important health issues.

Health communication is the study and practice of communicating information about health, disease, and healthcare to individuals, groups, and communities. Effective health communication is essential for promoting healthy behaviors, preventing diseases, and improving healthcare outcomes. It involves a wide range of communication strategies, including mass media campaigns, interpersonal communication, and digital technologies. The goal of health communication is to provide accurate, reliable, and accessible information to individuals, families, and communities to enable them to make informed decisions about their health. Health communication can also help to raise awareness about health issues, reduce stigma surrounding certain health conditions, and increase engagement in healthcare services.

According to Nutbeam (1998) cited in Ojo (2019), health communication refers to the use of mass media and other technological innovations to disseminate useful health information to the public. It increases awareness of specific aspects of individual and collective health as well as importance of health in development. It should be noted here that health communication encompasses the study and use of communication strategies to inform and influence individual and community decisions to enhance health. It links the domains of communication and health.

Health communication is integral to the effective public health response to the continuing threat posed by communicable diseases in Nigeria. Infectious disease has been a significant component in the history of Nigeria and continues to have a major impact in the country. While it is generally acknowledged that the majority of diseases are either treatable or preventable, countries like Nigeria lacks the advanced medical training and technologies prevalent in developed countries. However, it is possible for the level of awareness of preventable diseases to be increased with the health communication models and systems that have been created for developing countries.

One of the key challenges in health communication is ensuring that the information is culturally appropriate and relevant to the target audience. Communication strategies must take into account the cultural beliefs, values, and practices of the audience, as well as their literacy levels, language proficiency, and access to health services.

Effective health communication can have a significant impact on health outcomes. For example, mass media campaigns have been shown to increase awareness and uptake of preventive health behaviors, such as vaccination, smoking cessation, and cancer screening. Interpersonal communication, such as counseling and patient-provider communication, can improve patient satisfaction, adherence to treatment, and health outcomes. Digital technologies, such as health apps and telemedicine, can improve access to healthcare services and support self-management of chronic conditions.



However, health communication can also be ineffective or even harmful if the information provided is inaccurate, incomplete, or misleading. It is therefore essential that health communication is based on the best available evidence and is delivered by qualified and trained professionals.

In conclusion, health communication is a vital component of public health and healthcare. It plays a crucial role in promoting healthy behaviors, preventing diseases, and improving health outcomes. Effective health communication requires an understanding of the target audience and their cultural context, as well as the use of evidence-based communication strategies. By providing accurate and accessible health information, health communication can empower individuals, families, and communities to make informed decisions about their health.

Health Communication and Public Health Campaign on the Control and Prevention of Meningitis

The prevention of meningitis is one of the greatest health challenges threatening the developing countries today. It leaves indelible marks that are avoidable with proper knowledge and compliant behavior. Although it is a popular health topic in global media discourse, context-specific and culture-oriented campaigns would impact both urban and rural publics for positive health orientation and behavior change. This type of communication would be less discriminatory but rather affect receivers' knowledge, attitude and practice irrespective of their socio-demographic, economic and cultural backgrounds.

Some modern communication technologies may limit information availability to specific media consumers, making developing countries and the grassroots estranged from current trends associated with the epidemic. Little is thus known or documented about context and culture-specific media strategies utilized for easy availability, affordability, accessibility and comprehension of meningitis messages in a pluralistic country like Nigeria.

Kelechi (2021) noted that health campaigns are aimed at promoting defined objectives like the fight on meningitis prevention. Different health communication techniques including participatory, media advocacy, multi-pronged approaches and creative media formats are used to influence the behavior of target audiences. In other words, the role of health communication for public health development cannot be overemphasized as it remains key instruments for health campaigns geared toward behavior change.

According to Abdi (2019), effective communication is essential for the control and prevention of meningitis. Health communication campaigns can raise awareness about the disease, promote preventive measures, and encourage early detection and treatment. Public health campaigns on meningitis can also address the social and cultural factors that affect the incidence and impact of the disease, such as vaccination hesitancy and stigma. It should be noted that effective health communication plays a crucial role in raising awareness about meningitis among the population. PBy disseminating accurate and timely information through various channels, such as mass media, community engagement, and educational campaigns, health communication helps to ensure that individuals are aware of the causes, symptoms, and preventive measures related to meningitis. This empowers the public to recognize early signs, seek prompt medical attention, and take preventive measures.

One of the most effective ways to prevent meningitis is through vaccination. Vaccination programmes can significantly reduce the incidence and impact of meningitis. However, vaccine



hesitancy and misinformation can undermine the effectiveness of vaccination campaigns. Health communication campaigns can counter vaccine hesitancy by providing accurate and accessible information about the safety and efficacy of vaccines (O'Connor, 2021). In fact, vaccination is one of the most effective strategies for preventing meningitis outbreaks. Health communication plays a pivotal role in promoting vaccination campaigns. By disseminating accurate information about the benefits, safety, and availability of meningitis vaccines, health communicators can encourage individuals to get vaccinated. This involves targeting specific populations, such as children, adolescents, and high-risk groups, and addressing vaccine hesitancy through evidence-based communication strategies.

Another important aspect of health communication campaigns on meningitis is early detection and treatment. Early detection and treatment can improve health outcomes and reduce the spread of the disease. Health communication campaigns can raise awareness about the symptoms of meningitis and encourage individuals to seek medical attention if they experience any of the symptoms.

Health communication campaigns on meningitis can also address the social and cultural factors that affect the incidence and impact of the disease. For example, stigma and discrimination can discourage individuals from seeking medical attention and can exacerbate the impact of the disease. Health communication campaigns can challenge stigma and discrimination by promoting a positive and inclusive message about meningitis. Health communication also plays a critical role in dispelling myths and misconceptions surrounding meningitis. In many communities, cultural beliefs and misinformation can hinder prevention efforts. Through targeted messaging and community engagement, health communicators can address misconceptions about vaccination, transmission routes, and treatment options. This helps to build trust, increase acceptance of preventive measures, and overcome resistance to interventions.

Health communication also emphasizes the importance of hygiene practices and preventive measures to control meningitis transmission. This includes promoting regular handwashing, avoiding crowded places during outbreaks, and maintaining respiratory hygiene. Health communicators utilize various channels, such as radio, television, and social media, to educate the public on these preventive measures and motivate behavioral change.

Health communication contributes to strengthening surveillance and early warning systems for meningitis outbreaks. By enhancing communication between healthcare providers, public health authorities, and communities, health communicators facilitate the timely reporting and response to suspected cases. This allows for swift outbreak detection, rapid deployment of medical resources, and implementation of preventive measures to contain the spread of the disease.



Theoretical Framework

This paper is anchored on the Attitude Change Theory. The theory according to Baran and Davis (2012) was developed in the 1940s during World War II. This theory emphasizes that there are some pre-existing attitudes, which have to be changed for a selective message to be able to have effect on an audience. It further explains that these pre-existing attitudes can be an obstacle to effective dissemination of a desired message. The theory also states that for a change to occur there must be emotional and intellectual communication strategies designed to influence the target audience and it must be properly channeled to this audience. However, change in an individual's perception will be effective if only the message meets the individual's expectation(s), if it is tied to someone he admires, or if it is bound to be beneficial to him (Wood, 2000).

Three bases for attitude change were also explained in this theory; they include compliance, identification, and internalization. These three processes demonstrate the different levels of attitude change (Wood, 2000). In a nutshell, this theory shows that existing attitudes of an individual or an individual's mental predispositions need to be changed or channeled to a particular cause through an intellectually and emotionally binding strategy (Baran & Davis, 2012).

Relating the theory to this study, it clearly shows that for a positive attitude and effective health communication campaign on the control and prevention of meningitis to take place, there must be emotional, physical and psychological appeal in the campaign messages. Since the attitude change theory is a psychological framework that explains how people's attitudes towards a particular issue or behavior can be influenced and changed overtime, the theory can be applied to understand the factors that influence people's attitudes towards vaccination, which is one of the most effective ways of preventing meningitis. Research has shown that vaccine hesitancy is a common phenomenon in Nigeria, with many people expressing doubts and concerns about the safety and efficacy of vaccines. Attitude change theory suggests that these attitudes can be modified through persuasive communication that addresses people's beliefs, values and emotions.

METHODOLOGY

For the purpose of this study, the survey design was employed. According to Obaze and Onosu (2009), a method of collecting and analyzing social data via highly structured and frequently very detailed interviews or questionnaires in order to obtain information on large numbers of respondents presumed to be representative of a specific population.

The survey approach carefully chooses samples (subsets) from a population that will accurately reflect the total parent population. In order to provide the researcher with a representative sample of the population, the survey approach is appropriate for this study. Also, conducting research projects like this is thought to be an easy and inexpensive process.



Population of the Study

Population is described by Obaze and Onosu (2009) as a theoretically determined aggregation of survey elements. The population of this study are residents of Benin City which is 1,905,000 (NBS, 2023).

Sample Size and Sampling Procedure

In order to ensure manageability of the study, the sample size of this study was determined using Taro Yamane's formula. Based on the formula, the sample size is 400.

Also, the random sampling was used in this study. Random sampling is a scientific technique whereby every element within a population has an equal chance of being selected.

Data Presentation and Analysis

During this research, 400 copies of questionnaires were printed and distributed to the respondents. Out of the above figure, 380 copies were returned and 20 copies were wrongly filled. This reduced the total number of questionnaires collected to 380 copies. The data collected is shown in the tables below;

Research Question 1: What is the impact of health communication interventions on the knowledge and preventive behavior related to meningitis among the target audience in Nigeria? Items 1, 2, 3, 4 and 5 were used to answer this research question.

Table 1: How familiar are you with meningitis and its symptoms?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|-------------------|------------|----------------|----------------------|---------------------------|
| Very familiar | 254 | 66.8 | 67 | 67 |
| Somewhat familiar | 109 | 28.6 | 29 | 96 |
| Unfamiliar | 17 | 4.4 | 4 | 100 |
| Total | 380 | 99.8 | 100 | |

(Source: *Field Survey, 2023*)

The data in Table 1 shows that 254 respondents (67%) which constitute the majority of the respondents are very familiar with meningitis and its symptoms. The reason for this could be because these respondents regularly expose themselves to various health communication messages about communicable diseases and infections.

Table 2: Have you ever received any health communication intervention related to meningitis?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|--------------|------------|----------------|----------------------|---------------------------|
| Yes | 297 | 78.1 | 78 | 78 |
| No | 71 | 18.6 | 19 | 97 |
| Undecided | 12 | 3.1 | 3 | 100 |
| Total | 380 | 99.8 | 100 | |

(Source: *Field Survey, 2023*)



The data in Table 2 shows that the majority of the respondents (78%) have received health communication intervention related to meningitis in the past. This could possibly be one of the reasons the majority of the respondents are very familiar with meningitis and its symptoms.

Table 3: How effective are health communication interventions in enhancing your knowledge about meningitis?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|--------------------|------------|----------------|----------------------|---------------------------|
| Very effective | 209 | 55.0 | 55 | 55 |
| Somewhat effective | 147 | 38.6 | 39 | 94 |
| Ineffective | 24 | 6.3 | 6 | 100 |
| Total | 380 | 99.9 | 100 | |

(Source: *Field Survey, 2023*)

The data in Table 3 shows that the majority of the respondents (55%) noted that health communication interventions are very effective in enhancing their knowledge about meningitis. This could possibly be due to the fact that health communication interventions provide valuable and accessible information about meningitis, its symptoms, prevention methods, and available treatments. This information empowers the respondents to understand the disease better, recognize its symptoms, and take appropriate actions.

Table 4: Have health communication interventions influenced your preventive behavior towards meningitis?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|--------------|------------|----------------|----------------------|---------------------------|
| Yes | 278 | 73.1 | 73 | 73 |
| No | 58 | 15.2 | 15 | 88 |
| Undecided | 44 | 11.5 | 12 | 100 |
| Total | 380 | 99.8 | 100 | |

(Source: *Field Survey, 2023*)

The data in Table 4 shows that the majority of the respondents (73%) answered in the affirmative that health communication interventions have influenced their preventive behavior towards meningitis. This could be because these health communication interventions use clear, concise and easy-to-understand language to convey important messages. When information about meningitis prevention is communicated in a straightforward manner, individuals are more likely to grasp the key points and comprehend the actions they need to protect themselves and others.



Table 5: How likely are you to engage in preventive measures such as vaccination after receiving health communication interventions on meningitis?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|-----------------|------------|----------------|----------------------|---------------------------|
| Very likely | 217 | 57.1 | 57 | 57 |
| Somewhat likely | 108 | 28.4 | 28 | 85 |
| Unlikely | 55 | 14.5 | 15 | 100 |
| Total | 380 | 100 | 100 | |

(Source: *Field Survey, 2023*)

The data in Table 5 shows that the majority of the respondents (57%) noted that they are very likely to engage in preventive measures such as vaccination after receiving health communication interventions on meningitis. This can be because health communication interventions effectively inform individuals about the risks and consequences of meningitis. By raising awareness about the disease and its prevention, people become more knowledgeable about the importance of taking preventive measures.

Research Question 2: How effective are health communication strategies in the control and prevention of meningitis in Nigeria? Items 6, 7 and 8 were used to answer this research question.

Table 6: Which of the following health communication strategies geared towards the control and prevention of meningitis have you come across?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|----------------------------|------------|----------------|----------------------|---------------------------|
| Mass media campaigns | 169 | 44.4 | 44 | 44 |
| Community outreach | 85 | 22.4 | 22 | 66 |
| Social media campaigns | 78 | 20.5 | 21 | 87 |
| Mobile health intervention | 48 | 12.6 | 13 | 100 |
| Total | 380 | 99.9 | 100 | |

(Source: *Field Survey, 2023*)

The data in Table 6 shows that the majority of the respondents (44%) noted that mass media campaigns are one of the health communication strategies geared towards the control and prevention of meningitis. This could be because mass media campaigns have the ability to reach a large and diverse audience, and they can target various demographics and socio-economic groups, ensuring that the message about meningitis reaches a wide range of individuals.



Table 7: How will you rate the accessibility and reach of health communication strategies on the control and prevention of meningitis especially in rural areas?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|--------------|------------|----------------|----------------------|---------------------------|
| Excellent | 104 | 27.3 | 27 | 27 |
| Very good | 76 | 20.0 | 20 | 47 |
| Good | 93 | 24.4 | 24 | 71 |
| Moderate | 71 | 18.6 | 19 | 90 |
| Poor | 26 | 6.9 | 7 | 97 |
| Very poor | 10 | 2.6 | 3 | 100 |
| Total | 380 | 99.8 | 100 | |

(Source: Field Survey, 2023)

The data in Table 7 shows that the majority of the respondents (27%) rated the accessibility and reach of health communication strategies on the control and prevention of meningitis especially in rural areas as excellent. This could be because the various health communication messages are being disseminated using multiple channels.

Table 8: How effective are health communication strategies in promoting the adoption of meningitis vaccination programmes among Nigerians?

| Responses | Frequency | Percentage (%) | Valid Percentage (%) | Cumulative Percentage (%) |
|--------------------|------------|----------------|----------------------|---------------------------|
| Very effective | 228 | 60.0 | 60 | 60 |
| Somewhat effective | 119 | 31.3 | 31 | 91 |
| Ineffective | 33 | 8.6 | 9 | 100 |
| Total | 380 | 99.9 | 100 | |

(Source: Field Survey, 2023)

The data in Table 8 shows that the majority of the respondents (60%) noted that health communication strategies are very effective in promoting the adoption of meningitis vaccination programmes among Nigerians.

DISCUSSION OF FINDINGS

All the data collated for this study will be discussed here;

Research Question 1: What is the impact of health communication interventions on the knowledge and preventive behavior related to meningitis among the target audience in Nigeria? The data in Table 1, 2, 3, 4 and 5 were used to answer this research question. Based on the available data, health communication interventions have been impactful because it has influenced the knowledge and preventive behavior of the respondents as regards to the control and prevention of meningitis.

The above finding is in line with the view of Obadare (2021) who noted that health communication interventions play a crucial role in promoting knowledge and preventive



behavior related to meningitis in Nigeria. He opined that health communication interventions contribute to enhancing knowledge about meningitis among the population. By disseminating accurate and up-to-date information through various channels, such as mass media, community engagement, and digital platforms, people can learn about the causes, symptoms, risk factors, and available preventive measures for meningitis. This knowledge empowers individuals to recognize the signs of meningitis and seek timely medical assistance. In agreement with this, Ganiyu (2022) noted that health communication interventions are designed to influence behavior change. They provide information on recommended behaviors and emphasize their benefits in preventing meningitis. For example, campaigns promoting the use of vaccines and educating individuals about the importance of completing the full vaccination schedule can lead to increased immunization rates. Likewise, communication efforts promoting hand hygiene, respiratory etiquette, and avoiding overcrowded spaces can encourage the adoption of preventive practices

Research Question 2: How effective are health communication strategies in the control and prevention of meningitis in Nigeria? The data in Table 6, 7 and 8 were used to answer this research question. Based on the data analyzed, it is evident that health communication strategies have been highly effective in the control and prevention of meningitis in Nigeria. These strategies play a vital role in disseminating information, raising awareness, promoting preventive measures, and encouraging behavior change among the population. Health communication strategies ensure that accurate and up-to-date information about meningitis is widely disseminated to the public. This includes information about the causes, symptoms, risk factors, and available preventive measures. By providing this information through various channels, such as mass media, community outreach programs, healthcare facilities, and digital platforms, individuals can access reliable information and make informed decisions regarding their health.

CONCLUSION

Health communication has emerged as a vital and viable tool in the control and prevention of meningitis in Nigeria. The country faces significant challenges related to meningitis, including its high incidence, severity, and impact on public health. However, through effective communication strategies, Nigeria has the opportunity to address these challenges and make significant progress in mitigating the burden of meningitis.

Health communication serves as a catalyst for change by disseminating accurate and up-to-date information about meningitis. It plays a crucial role in improving knowledge and awareness among the population, enabling individuals to recognize the signs and symptoms of meningitis and seek appropriate medical care promptly. By providing comprehensive information on the causes, risk factors, and available preventive measures, health communication empowers individuals to make informed decisions about their health and take necessary precautions.

Moreover, health communication strategies foster behavior change by promoting preventive practices. These strategies highlight the importance and benefits of vaccination, good hygiene practices, and early detection. By utilizing various channels and engaging communities, health communication strategies encourage individuals to adopt these behaviors, leading to a significant reduction in the transmission and impact of meningitis.



Trust and credibility are integral components of effective health communication. By employing reliable sources, experts, and healthcare professionals, communication efforts can counter misinformation and build trust among the population. Trustworthy communication channels and messages are more likely to be received, understood, and acted upon, facilitating behavior change and adherence to preventive measures.

Community engagement is another crucial aspect of health communication in meningitis control and prevention. By involving community leaders, local organizations, and healthcare providers, communication strategies can ensure that messages are culturally appropriate, resonate with the target audience, and address specific community needs. This participatory approach fosters ownership, collaboration, and sustained behavior change, leading to more effective prevention and control efforts.

Monitoring and evaluation are essential components of health communication strategies. By systematically assessing the impact of communication interventions, Nigeria can refine and improve its approaches over time. This iterative process enables the identification of strengths, weaknesses, and areas for improvement, ensuring that communication efforts remain effective in the face of evolving challenges.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made;

- i. To enhance the effectiveness of health communication as a viable tool in the control and prevention of meningitis in Nigeria, the multi-channel communication approaches should be strengthened. This will involve utilizing a combination of traditional and digital communication channels to reach a broader audience and ensure the dissemination of accurate and timely information.
- ii. In Nigeria, with its diverse cultures, languages, and regional variations, it is essential to tailor health communication messages to specific regional and cultural contexts. This will ensure that the messages that resonate with the target audience, are easily understood, and are more likely to drive behavior change.

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