Assessment of Radio Messages on Women's Knowledge of Breast Cancer in Jos City

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Abstract

This study investigates the effectiveness of radio messages on knowledge of breast cancer among women in Jos. The research is anchored on Attitude Change Theory while a descriptive survey research design was employed with structured questionnaire as instrument of data collection to from 400 sampled respondents randomly selected from the population of women in Jos metropolis. Findings revealed that the level of Breast Cancer awareness among women in Jos was significantly high, with majority (100%) of women being familiar with the disease and 96% (regular and occasional listeners) attributed the knowledge of the disease to regular exposure to radio messages. Radio was also affirmed as an effective medium for breast cancer information dissemination as 91% asserted that radio messages increase sensitisation and awareness. It further showed that significant proportion (93%) of respondents reported understanding of the messages and educational level was identified as a factor influencing radio messages comprehension. However, despite high level of exposure and positive impact, the study found that 54% of respondents believed that radio stations in Jos have not created sufficient sensitization and awareness campaigns due to inconsistent messages and lack of dedicated programme on breast cancer. Nevertheless, radio messages were generally considered effective; contributing significantly to women's knowledge, including awareness of symptoms, preventive measures like practices of Breast Self-examination and health seeking behaviour. The study concludes that radio remains an effective and indispensable tool for

improving breast cancer awareness and knowledge among women and general health communication in Jos metropolis. It recommends among others increased frequency and dedicated knowledge-driven programme on breast cancer.

Keywords: Assessment, Breast Cancer, Radio Message, Women's Knowledge

Introduction

Global research statistics on the prevalence of breast cancer indicate that breast cancer is the leading and most common deadliest cancer disease found in women around the world, (Ogunniyi et al, 2025; Okuoko et al, 2022). According to the available data from World Health Organisation (WHO, 2024) and Breast Cancer Research Foundation (2025), not less than 2.3 million women were diagnosed with breast cancer globally in 2022 with an alarming mortality rate of approximately 670,000 women world-wide.

In Africa, cancer is no longer a silent crisis; it is a growing public health emergency that demands urgent, equitable and sustained action (WHO, 2024). The continent has the highest breast cancer mortality rate globally with 60 - 70% of women in Africa are diagnosed at advanced stage, and only one in two women diagnosed with breast cancer will survive in 5 years (WHO, 2024). This significant increase is projected to double by 2040 due to demographic shift (WHO, 2024). The global health body also reported that 198,300 new cases were reported in 2022 in Africa alone with a record-high death rate of 91,300. This buttresses the report that black women have the highest death rate from breast cancer, (American Cancer Society, 2024). Even though breast cancer exists in all races and countries of the world, the disparity in mortality rates and survival indices indicate that black women have the highest mortality index of about 42% compare to the white women despite advanced effort in managing the disease, (BCRF, 2025).This is in tandem with the report of International Agency for Research on Cancer (IARC) that, the standardized net survival ranges from 35-42% in countries like Zambia and Nigeria to 52-58% in black women in Uganda, South Africa and Namibia, while more than 83% net survival was found in non-black women in Namibia (IARC, 2025).

This report further exposes the vulnerability of African women to the disease. And in a speech delivered by Janabi Mohamed (WHO regional Director for Africa) recently on world cancer day (4th February, 2026), cancer was tagged as the leading cause of premature death in sub-Saharan Africa, each year over one million new cases are diagnosed in Africa with nearly one million losing their lives, with several families battling the cost of life-threatening treatment, and breast cancer accounting for the highest percentage.

In Nigeria, Breast Cancer account for 45.7% of all cancer found in women (Obateru et al, 2024), and the country is reported to have a record-high mortality rate - the second highest in Africa after Algeria with 51.5 per 100,000 women, which indicates a significant increase that also affects even young women between 15 to 39 years in recent time (WHO, 2024). This corroborates the position of International Agency for Research on cancer (IARC) and partner institutions who found that African women who are diagnosed with breast cancer before the age of 40 years have low survival rate than those diagnosed above 40 years.

The survival rate of this disease is not unconnected with early detection, diagnosis and treatment, however, it is difficult to achieve this feat especially in medium and low income countries because of lack of awareness among women and limited access to proper health facilities, making Africa stands at the threshold of contributing highest mortality rate of breast cancer globally, and in most cases, between 60-70% of women are diagnosed at later stages with only one in two survive in five years, (WHO, 2024). This corroborates the position of Okeke (2018), who posited that many women in developing and underdeveloped countries hardly survive breast cancer because of late detection, un-affordable cost of treatment, low literacy level and poor facility.

However, to prevent or manage this global health challenge through early detection, diagnosis and treatment, effective health communication remains a pivotal strategy. Any deliberate health awareness campaign and knowledge-based information on breast cancer must be supported by the media. The media remains one of the most viable and critical stakeholders in health education, with radio as the most accessible medium that has the comparative advantage of penetrating the inaccessible rural areas and hinterlands, where modern communication avenues are limited.

Over the years, radio as a powerful medium has continued to play this vital role of educating and creating awareness campaigns on breast cancer to equip women and the society with requisite knowledge and accurate information about the disease to enable them seek medical attention on time and at the right medical facility in order to reduce mortality rate and better survival chances. However, the impact of radio messages on breast cancer prevention and management among women in Jos, Plateau State, Nigeria, remains unclear. Therefore, the focus of this study is to assess the effectiveness of radio information on cancer-related issues on women in Jos metropolis.

Objectives of the Study

The objective of this study is to assess the effectiveness of radio messages on women's knowledge of breast cancer in Jos city, while the specific objectives:

1. To ascertain the level of exposure to radio messages on breast cancer among women.
2. To find out the level of women understanding of radio messages on breast cancer
3. To assess the effectiveness of radio messages on women's knowledge of breast cancer

Review of Literature

Impact of Radio Information on Breast Cancer

Women need to be informed and educated about the disease to encourage early detection, diagnosis and treatment, as keys to mitigating the increased mortality of breast cancer which radio is undoubtedly, the viable channel of such communication and campaigns. The enduring relevance of radio broadcasting cannot be overemphasized as the medium remains one of the most effective and flexible tools of any kind of public awareness campaign, and health communication is not an exception because of its affordability and ability to reach a wide coverage of heterogeneous audience without hindrance (Nwofor et al, 2022). Due to its portability, radio has become a companion that people carry to farms, offices, market as they go about their daily activities, and sometimes use their handset's headphones to listen to radio programmes and messages everywhere they go. This agreed with the position of Dagaci (2020) that radio is powerful that it brings information to rural communities or groups faster than any medium, which makes it a stakeholder in grassroots development and mobilization. This makes radio broadcasting a viable tool for transmission of breast cancer information and awareness campaigns if truly intended to reach the nooks and crannies of the hinterlands.

In health communication, radio plays vital role due to its accessibility, wide reach and cheap characteristics. Studies have shown that most women who engaged with radio messages or information on breast cancer campaigns are quite conversant with the symptoms of the disease as well as ability to perform breast self-examination and screening among others (Jimam et al, 2017; Nwafor et al, 2022). Similarly, Wongnaah et al, (2025) point that radio messages and programmes on breast cancer awareness have helped many women to know the risk factors and symptoms of the disease, which has led to attitude change towards the disease

among women and their health behaviour and practice. This impact has demonstrated the important role radio played as a medium in disseminating health information. Nwafor et al (2022) also agrees that frequent exposure to breast cancer radio campaigns has resulted in high level of awareness among women in a study conducted in Benue State, which showed the impact of radio in health information dissemination.

Likewise, a study by Nwokedi and Amushie (2024) underscore the impact of broadcast media (including radio) in improving knowledge and correcting or combating health misconception and misinformation, especially about breast cancer in Enugu Metropolis, where most women often mistaken breast cancer for spiritual attack or poison; a misconception deeply rooted in their belief system which make them take cancer for something diabolic or superstitious instead of seeking medical attention. However, broadcast media especially radio played a major role in correcting this false belief; which is an improvement on their understanding of breast cancer.

Challenges Associated with Radio Medium and Breast Cancer Enlightenment

In as much as radio remains the most accessible and affordable tool of communication and public enlightenment that can navigate a wide coverage of every segment of the society: both rural and urban areas without hindrance, there are varieties of mitigating limitations that always mar the influential and impactful success of breast cancer enlightenment campaigns of radio broadcasting. Motsamai and Mokgotha (2025) contend that belief systems (cultural and religion) stand a strong barrier to radio campaigns on breast cancer, even though transmitting health programmes and campaigns with cultural mix lends acceptance, trust and relevance to the campaign. However, many cultures and religions frown at open discussion of women's reproductive health including breast let alone touching it. This prevents many women from accepting or cultivating any healthy habits propagated through radio campaigns on breast cancer, or even reject performing health instructions like breast examination. This assertion of belief system, is in tandem with the position of Nwokedi and Amushie (2024), which revealed that some women take breast cancer for spiritual attack, superstition or poison based on their beliefs.

Okeke (2018) further affirms that low literacy level is one of the reasons for late detection, presentation and diagnosis that lead to high mortality rate of breast cancer in developing countries. Motsamai and Mokgotha (2025) lend credence that in as much as radio is flexible, diversity in languages remains a barrier to effective radio health communication and education. However, McQuail (2010) contends that inconsistent or irregular listening pattern due to work or programme schedules,

poor electricity supply and radio signals coverage can limit message understanding of radio broadcasting. This inconsistency can also be caused by sponsorship. According to WHO (2022), the funding of breast cancer radio programmes is substantially inconsistent as such campaigns largely dependent on government or donor agencies, thereby resulting in inconsistent breast cancer enlightenment campaigns because some of the donor agencies or government stop funding such programmes forcing it to go off-air and ceased to exist, which consequently denied the audience that consistent listening pattern.

Review of Empirical Studies

Dagaci (2020) investigated the influence of radio health campaign in eradicating breast cancer among women in Minna, Niger State. The researcher was guided by Health Belief Model and adopted survey method to draw a sample of 160 women used for the study. Data from the study indicated that majority (over 50%) of women have access to health information on radio Niger, particularly breast cancer programmes. The research concluded that health programmes and campaigns have impacted positively on women and recommended that radio health programmes should be restructured to incorporate feedback mechanism to encourage audience participation.

The nexus between the study under review and the current investigation is that, both studies measure the level of women exposure to radio campaigns on breast cancer, though the former focused on radio health campaigns in eradicating breast cancer among women in the city of Minna, Niger state - The later focused on evaluating the effectiveness or impact of radio messages on the knowledge of women about breast cancer in Jos city.

Akinboye et al (2023) conducted an experimental survey on the effect of health education to the knowledge of breast cancer screening among nursing students in Plateau State, using Jos South and North LGAs as the study areas. A quasi-experimental study was used with a systematic random sampling of 50 female health apprentices (nursing students). The study revealed that there was significant difference in knowledge scored (0.07) and effect of 0.56 baseline. Therefore, the research concluded that health education intervention was effective in improving knowledge of breast cancer screening among nursing students in plateau state.

The study under review relates to the present in the area improving knowledge of breast cancer which can be anchored through with health communication strategy to educate women on the Plateau. However , the underlying lacuna in the forgoing review indicated that the reviewed study focused on the effect of health education

on knowledge of breast cancer screening among nursing students, though the revelation in this study may not translate to the general populace's knowledge on breast cancer in Plateau State as the focus was on nursing students, who are health professional on study, and highly knowledgeable about the disease and the screening, while the current study sought to evaluate or assess the effectiveness of radio messages on women's knowledge of breast cancer in Jos city.

In a similar study, Obateru et al (2024) undertook a survey of communication strategies in tackling breast and prostate cancers in Plateau State. The study collected data from 2652 respondents from six LGAs, two in each senatorial districts with a study guide of Health Belief Model. The study revealed that both genders claimed to be aware of the two diseases and admitted that radio, television and traditional avenues like worship centers serve as their major communication channels.

The study however, concluded that respondents have permissible knowledge on critical health challenge like cancer due to limited sources of information, which the researcher acknowledged was affected by settlement patterns and recommended partnership of health institutions and communicators for a renewed communication strategies on health issues.

The study under review and the present both relate in the ultimate objective of the knowledge of breast cancer among women. The contrast remains that the current study sought to assess the effectiveness of radio messages on women's knowledge of breast cancer in Jos city, where as the study under review focused on communication strategies in tackling Breast and Prostate Cancers.

In another study, Mbiere and Etumnu (2020) examined the influence of breast cancer campaigns on the practice of breast self-examination among women in Owerri, Delta State. Health Belief Model guided the study. Survey method was adopted. Data from the study revealed that 46% have moderate level of awareness on the practice of breast self-examination and 45% indicated that the influence of awareness campaigns is low on breast self-examination. The study thus, concluded that these communication campaigns on level of awareness and practice of breast self-examination were largely ineffective, hence the low influence. The study recommended that effort should be intensified in creating awareness and exposure to media information on breast cancer to encourage women practice breast self-examination.

The correlation between the study under review and the present is that both studies sought to examine the influence of media campaigns on breast cancer among

women but largely differ as the reviewed study focused on the influence of breast cancer awareness campaigns on practice of breast self-examination among women in Owerri Delta State, whereas the present study focuses on assessing the impact or effectiveness of radio messages on women's knowledge of breast cancer in the city of Jos, Plateau State.

Ezugwu and Nzekwe (2019) examined the influence of broadcast media campaigns on breast cancer health behaviour among women in the South East Nigeria. The research was anchored on Health Belief Model and cognitive dissonance theory. Survey and in-depth interview were used to collect data. Findings revealed that a significant relationship between breast cancer awareness and risk factors, prevention, treatment and screening. Data further indicated that the knowledge of the cancer through media campaigns was considerably related to the attitude toward the disease and breast self-examination. The study concluded that average women in the south east are knowledgeable about the disease but moderately lacked the know-how to dictate abnormalities on the breast and suggested the need to intensify media campaigns to encourage women perform breast self-examination and breast clinical examination regularly for early detection of the disease, this again underscored the importance of health communication on public knowledge of breast cancer, if the trend of late detection must be averted for better survival index and prevention.

Nwofor et al (2022) carried out another investigation on how radio campaigns influence women of vulnerable age to utilise screening service in Tarka LGA. The researcher adopted survey method. Findings showed high level of exposure and awareness of breast cancer among vulnerable women in the locality but majority of them do not go for breast cancer screening service. The study recommended more creative radio contents that appeal and engaged the rural women. Which further underscored the relevance and need of media intervention in such community especially radio that can penetrate the hinterland.

The relationship between the study under review and the present is that both studies measure the influence radio campaigns and level of exposure to breast cancer among women but the weak point and gap lie in the fact that Nwofor et al couldn't adopt and theoretical guide for the study and focused on vulnerable women in a particular local government (Tarka) in a different state (Benue). While the current study focuses on women in Jos city and the effectiveness of radio messages on their knowledge of breast cancer.

Theoretical Framework

This study is anchored on attitude change theory. The theory was rooted in Aristotle's rhetoric before 19th century and was formally developed in 20th century by notable social psychologists like Carl Hovland, who developed Yale attitude approach that focuses on communication, credible source and persuasion; Leon Festinger with cognitive dissonance and Fritz Heider's consistency among others. The main proposition emphasizes the power of the media to influence beliefs and attitudes that eventually become behaviour. The theory examines how media messages persuade and influence the audience to modify or alter their beliefs, feelings and behaviour. This explains how attitudes are formed and changed through consistent exposure to media information and persuasion, as Olufemi (2012) posits that the more one is exposed to an attitude, the more the person will tend to like it. However, the effectiveness of the influence is largely dependent on three keys factors of, the credibility of the source, logical appeal of the message content and the perceptive character of the audience.

Based on this, our behaviour, feelings and cognitive are attitudinal components that can change due to influences which impact our psychology to trigger decision, shape opinions and modify feeling and perception towards specific issues or events, which makes it a relevant model for this research work, which investigated the effectiveness of radio messages on the knowledge of women about a particular health challenge (breast cancer) in the city of Jos.

Methodology

The study employed the survey research design. The population of the study were women living in Jos metropolis, Plateau State, Nigeria. The city of Jos (study area) cut across two local government areas of Jos North and Jos South, and the study population is taken from the two local government areas that make up the city population of women; where Jos North has 216,361 women while Jos South has 154,325, totaling 370,686 women in the city of Jos. This population data taken 20 years ago since 2006 census does not reflect the current reality of the city population of women in Jos in 2026 due to demographic shift over the years. However, for want of true reflection of demographic trends, the researchers therefore, applied Owuamalam's (2012) population projection rate of 2.3% as recommended by UNDP to determine the estimated number of women in 2026. The projection formula; $Pp = Gp \times Pi \times T$ was used. Where;

Pp = (Projected population), based on current year.

Gp = (Given population): the initial population available from the last census.

Pi = (Population increase index): annual growth rate recommended by UNDP (2.3%).

T = (Time): the period between the last census and the year of study.

So, Pp = 370,686 × 0.023×20, and Pp = 170,516.

Therefore, the current estimated population of women in Jos is 170,516 + 370,686 =541,202.

Using Taro Yamane formula; $n = \frac{N}{1+N(e)^2}$, a sample of 400 women was derived for this study.

Where:
n = sample size.
N = population size (541,202).
e = level of precision (error margin).
1 = constant

$$n = \frac{541{,}202}{1 + 541{,}202(0.05)^2}$$

$$n = \frac{541{,}202}{1 + 541{,}202(0.0025)}$$

$$n = \frac{541{,}202}{1 + 1{,}353.005}$$

$$n = \frac{541{,}202}{1{,}354.005} = 399.7$$

$$n \approx 400$$

Also, the study adopted the questionnaire instrument. A questionnaire is a tool which can be used in different types of research and it is one of the main means of collecting quantitative primary data. It contains a series of questions asked to individuals to obtain statistically useful information about a given topic (Roopa & Ran, 2012) and it is designed to gather information that will be subjected to further analysis (Babbie, 2010). With the use of a questionnaire, standardised data can be collected and analysed to yield consistency of result (Roopa & Ran, 2012).

Furthermore, random sampling technique was used. This sampling method was essential because it eliminated selection bias and ensured that every respondent in

the target had equal chance of taking part in the study. Simple percentages and frequency tables were used to present and analyse data.

Data Presentation

The researchers distributed 400 copies of questionnaire and all were retrieved and found valid.

Section	Item	Variable	Frequency	Percent
A	**Respondents' level of Exposure to Radio Messages on Breast Cancer**			
	Do you know about Breast Cancer	Yes No	400 0	100 0
	Do you listen to radio messages or programmes on Breast Cancer	Yes No	352 48	88 12
	How often do you listen to radio messages and campaigns on Breast Cancer	Regular Once a while Not at all	271 66 15	77 19 4
	Radio is the best channel to engage women on breast cancer	Agreed Disagreed Not sure	307 37 11	86 11 3
	Radio messages increase awareness and sensitization on breast cancer among women in Jos	Agreed Disagreed Not sure	323 16 13	91 5 4
B	**Measuring the Understanding of Radio Messages and sensitisation on Breast Cancer**			
	Do you really understand radio messages on breast cancer	Yes No	340 12	97 3
	Level of education contribute to understanding radio messages on breast cancer	Agreed Disagreed Not sure	325 15 12	93 4 3
	Respondents' opinions on better ways radio can create and transmit people-oriented breast cancer messages for effective understanding and sensitization of women in Jos	-incorporate native languages in breast cancer campaigns and programmes. -Initiate feedback mechanism to enable women participate on breast cancer programmes. -increase frequency and consistency of radio programmes. -improve on radio contents that are obsolete.		

		-featuring medical experts on radio breast cancer programmes for professional input to educate women.		
	Radio stations in Jos should create regular weekly programmes on breast cancer, featuring medical experts to educate women for effective knowledge and understanding	Agreed Disagreed Not sure	328 1 23	93 0.28 7
C	**Effectiveness of radio messages on women's knowledge of breast cancer**			
	Have radio stations in Jos created enough sensitisation and public awareness campaigns on breast cancer	Yes No	163 189	46 54
	Effectiveness of radio messages to respondents' knowledge of breast cancer	Very effective Effective Not effective Not sure	115 210 17 10	33 59 5 3
	Can you say radio messages have added to your knowledge of breast cancer	Yes No	348 4	99 1
	Knowledge acquired through your engagement with radio messages and programmes on breast cancer	-detecting symptoms. -how to conduct breast self-examination. -preventive measures. -encourage regular visit to the hospital for screening. Correcting misinformation associated with Breast Cancer. -seeking treatment at the right facility.		
	Have radio messages encouraged women to cultivate attitude and practice preventive measures and early detection	Agreed Disagreed Not sure	341 4 7	97 1 2

Discussion of Findings

One of the cardinal objectives aimed at demystifying the topic of this study is ascertaining the level of women's exposure to radio messages and awareness of breast cancer. As shown in the table above, there's high level of breast cancer

awareness among women in Jos (100%) - indicating they know about breast cancer and just 10% did not know of the disease. This implies that most of women in Jos city are aware of breast cancer and a substantial number of these women attributed their awareness to frequent exposure to radio messages and programmes, as 88% of respondents indicated listening to radio messages and programmes on breast cancer, while 12% do not. This finding again, amplifies the high potentials and relevance of radio as the most accessible and effective medium for health communication and information dissemination with community-wide reach.

Measuring the frequency of listenership, the study found that 77% of respondents are ardent listeners who listen to radio messages on breast cancer regularly, while 19% listen occasionally and only 10% do not. This result revealed that majority of women in Jos city access information on breast cancer through the radio and this is not unconnected with their consistent exposure and repeated contact with health messages on radio, which many studies shown to have influenced attitude and behaviour towards any health problem (Nwafor et al, 2022; Wongnaah et al 2025).

The study further revealed that radio remains the best channel to engage women on breast cancer as 86% of respondents agreed that radio is the most effective medium to reach a broad audience with breast cancer messages and most intriguing is that majority of women (91%) affirmed that radio messages increase sensitisation and awareness of breast cancer among women in Jos - which is an indication that radio programmes and campaigns in combating breast cancer have been successful in creating awareness and sensitisation on breast cancer - reinforcing the essential role of radio as a powerful communication tool in public health campaigns.

Investigating women understanding of radio messages on breast cancer (one of the specific objectives of this study), the finding revealed that verse majority of respondents (97%) understand radio messages on breast cancer and 3% do not; implying that programme contents are generally simple and clear for easy understanding of the target audience. Similarly, a substantial number of respondents (93%) affirmed that level of education also contributes to understanding of radio messages - an indication that message comprehension varies across different educational background which underscores the importance of tailoring messages to different literacy levels that aligns with audience segmentation for effective message delivery. This finding corroborates the position of Okeke (2018), which asserts that level of education determines the understanding of radio messages and can therefore be concluded as one of the reasons why 4% of respondents said they don't understand radio messages.

Respondents also suggest better ways to create and/or improve radio contents on breast cancer for effective understanding and comprehension. These include, incorporating native languages into breast cancer campaigns and programmes, initiating feedback mechanism for participatory communication (like audience phone calls during programmes), updating obsolete contents with captivating ones like radio drama, increase frequency of programmes and featuring medical experts for professional input to educate women on breast cancer during radio health programmes. With these suggestions, majority of women (93%) supported the idea of dedicating a regular weekly radio programmes on breast cancer that will feature medical professionals. This emphasised the desire for credible, consistent and expert-driven health information dissemination that are culturally relevant to resonate with the audience.

Contrary to high level of exposure leading to high level of awareness and understanding of radio messages on breast cancer, the findings further revealed a gap in the perceived adequacy and consistency of radio campaigns and programmes on breast cancer in Jos, as majority of respondents (54%) affirmed that radio stations in Jos city have not created enough sensitisation and awareness campaigns on breast cancer, while only 46% believed the radio broadcast campaigns on breast cancer were enough. This suggests a vacuum between radio potential and actual utilisation of the medium – an indication that even though radio is effective but the radio health campaigns on breast cancer are inconsistent or dedicated programme on breast cancer is lacking, which corroborated the early suggestion of WHO (2022) that funding of breast cancer radio programmes is substantially inconsistent because such campaigns heavily depend on government and donor agencies who sometimes stop funding such programmes, forcing it to go off-air or ceased to exist, thereby denying the audience regular listening pattern.

In terms of effectiveness of radio messages on respondents' knowledge of breast cancer, 59% stated that radio messages are effective, while 33% considered them very effective. Though 3% of respondents were not sure and only 5% claimed it is not effective, an overwhelming 99% of respondents acknowledged that radio messages and programmes help them understand breast cancer and have contributed to their knowledge of the disease. Moreover, women's engagement in breast self-examination, breast medical examination and other preventive measures were largely attributed to radio campaigns and messages on breast cancer. Beyond awareness and sensitization campaigns, respondents reported acquiring specific knowledge through radio messages and programmes such as identifying symptoms, performing breast self-examination, adopting preventive measures, correcting

misinformation and seeking proper medical treatment at the right facility. This indicates that radio messages go beyond awareness to actual knowledge acquisition - a demonstration that radio is not only informative but practically influence public knowledge and health behaviour, which is in tandem with the position of Dagaci (2020) who posited that radio can influence attitude, change health behaviour and even instill knowledge about a particular disease.

Additionally, findings also revealed that 97% of respondents agreed that radio messages have encouraged them to adopt preventive practices and behaviour. This aligns with health communication theories that emphasise the role of media in influencing both awareness and action.

Conclusion

From the discussion of findings, public knowledge of breast cancer through radio sensitization and awareness campaigns to encourage preventive practices among women is a key strategy in reducing the mortality of the disease to better survival. Therefore, it is safe to conclude that women in Jos city are aware of breast cancer due to consistent exposure to radio messages on breast cancer. Those women in Jos also understand radio messages on breast cancer clearly and the level of education plays significant role in determining the comprehension of health messages across different educational backgrounds. This factor was identified to be responsible for the small fraction of respondents (4%) who don't understand such messages.

That radio is not only impactful in educating the general public but an effective medium for conveying and disseminating breast cancer information, as radio messages and programmes do not only create sensitisation and awareness campaigns about breast cancer but contributed to imparting knowledge of the disease among women in Jos city, thereby influencing their attitude and behaviour for better health practices. Though there's a gap of inadequate or inconsistent radio messages, the study concludes that dedicated breast cancer related programmes and consistent campaigns are relatively lacking, thereby denying women regular listening pattern.

Recommendations

The study suggests the following recommendations:

1. Radio stations in the city of Jos should dedicate specific health programme on breast cancer sensitisations, awareness campaigns and health information disseminations as almost 60% of women said, dedicated knowledge-driven health programmes on breast cancer are lacking.

2. There is need to increase the frequency and consistency of radio behaviour change-related messages and campaigns in combating the prevalence of the disease because in most cases the messages and campaigns are inadequate and inconsistent as shown in the research findings.
3. Radio channels should adopt audience-centered strategies, such as incorporating native languages that resonate with the cultural values to foster better understanding and design radio health programme contents based on audience segmentation to align with different literacy levels, since the findings revealed that educational background plays significant role in message comprehension.

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