



BREAST CANCER AND HEALTH SEEKING BEHAVIOUR AMONG WOMEN IN KEFFI LOCAL GOVERNMENT AREA IN NASARAWA STATE, NIGERIA

Faridah Ladi Apake Department of Sociology, Faculty of Social Sciences, Nasarawa State University, Keffi

Abstract

The study examines breast cancer and health seeking behavior among women in Keffi local government area in Nasarawa State, Nigeria. Survey design research was adopted in the study while the sample size for the study was drawn from Keffi local government area of Nasarawa State. The study used primary source of data collection via questionnaire. The study used multi-stage sampling technique in drawing the study sample size of 400 respondents using Yamane formula from the target population. The findings revealed that larger percentages are aware of breast cancer, with health workers and mass media serving as the major sources of information. Despite the reported awareness, the study revealed low consistency in the practice of breast self-examination and clinical breast examination. This limited knowledge has implications for early detection, as it contributes to delayed recognition of symptoms and poor adoption of preventive practices such as breast self-examination (BSE) and clinical breast examination (CBE). The study recommends that Nasarawa State Ministry of Health and local health authorities should conduct regular community-based awareness campaigns on breast cancer and provide financial support schemes or subsidies to make diagnosis and treatment more affordable for low-income women. Also, affordable and accessible breast cancer screening facilities should be established in primary healthcare centres across Keffi Local Government Area of Nasarawa State. Periodic free screening exercises should be organized to encourage participation.

Keywords: Cancer, Breast Cancer, Health, Awareness, Health Behavior

1. Introduction

Breast cancer is the commonest form of cancer and one of the major leading causes of cancer related deaths among women in the world. It is indeed, becoming an emerging epidemic in many countries of the world. The Surveillance Epidemiology and End Results (SEER) of the National Cancer Institute (2013) estimated that 232,340 women were diagnosed and that 39,620 women died of cancer of the breast in the year, 2013. As the name implies, breast cancer is an abnormal growth or a malignant tumor, arising from the cells of the breast which predominantly occur in women and also, rarely in men (Balentin, 2021). National Cancer Institute (2020) has indicated that the cancerous tumors in the breast usually grow very slowly so that by the time one is large enough to be felt as a lump, it may have been growing for as long as ten years and if not detected early enough or if left untreated, these malignant tumors can invade the fatty tissue of the breast and then spread to other parts of the body. It further indicated that the first noticeable

symptom of the disease is typically a lump that feels different from the rest of the breast tissue and usually painless. Lumps found in the lymph nodes located in the armpit can also indicate breast cancer. Apart from lump, changes in the breast size or shape, skin dimpling, nipple inversion or spontaneous single-nipple discharge and sometimes, pains can also indicate breast cancer. More than one million new cases of female breast cancer are diagnosed each year and it is the most commonly occurring disease in women, accounting for over 1/3 of the estimated annual 4.7 million cancer diagnosis in females and the second most common tumor after lung cancer in both sexes (Cancer Statistics World-Wide, 2005).

Breast cancer is seen as a major public health problem, claiming over one million lives annually especially in industrialized nations (Cancer Statistics World-Wide, 2005) According to statistics released by the World Health Organization (2006), countries like the United States of America, Italy, Australia, Germany, the Netherlands, Canada and France have the highest overall breast cancer rates while developing countries

with lower breast cancer rates are Northern Africa and Eastern Asia. Breast cancer is undoubtedly the most dreaded cancer with lots of psychological impacts and one of the most popular malignancies that affects about one in every nine women (Alkassin & Abubakar, 2016). It is also the type of cancer having the highest prevalence (45.7%) among the females in Nigeria and border Countries (Isa & Evren, 2016). Common signs and symptoms of breast cancer include change in a way the breast or nipple feels, change in how the breast or nipple seems and discharge of the nipple (Etikan et al., 2016).

Health-seeking behaviors are often influenced by factors such as socioeconomic status, gender, age; type of illness, the influence of significant others and other social networks, and the quality of healthcare services (MacKian, 2003). Delays in obtaining proper diagnosis and care could result in the worsening of symptoms, potentially leading to adverse effects or outcomes (Afolabi, & Adegoke, 2013). For healthcare providers, understanding the health-seeking behaviors and factors that influence health-seeking behavior is, therefore, critical, and crucial in providing patient-oriented services (Olenja, 2003). However, it is interesting to know that as debilitating as breast cancer disease is, majority of women have little or no knowledge of the disease and even in situations where they are aware of the disease, their attitudes towards seeking health is negative causing their untimely or preventable death. It has been observed that certain socio cultural, religious, genetic and economic factors are responsible for this negative attitude. It is against this backdrop that this study seeks to ascertain the breast cancer and health seeking behavior among women in Keffi LGA Nasarawa state, Nigeria.

According to the World Health Organization (WHO, 2018), breast cancer is the most common cancer diagnosed among women in 154 out of 185 countries of the world and it is the leading cause of cancer-related mortality in over 100 countries (Globocan, 2018). Breast cancer is the fifth most common cause of cancer-related death globally (Ferlay et al., 2015). It was also reported that, breast cancer cases were increasing in Nigeria due to factors such as poor knowledge about breast cancer and lack of early detection measures, insufficient health personnel and infrastructure. This therefore, calls for an urgent action

to adopt a holistic approach to tackle the menace of breast cancer and indeed all other cancers afflicting the Nigerian citizens, just in the same way the menace of HIV/AIDs, small pox, Guinea worm, tuberculosis were tackled by governments, Non-Governmental Organizations etc. Therefore, women in Keffi Local government area do not possess the required information that could guide them in early detection of cancer as Nasarawa Mirror (2013) revealed that a good number of women out of ignorance are still dying of the disease. However, women seem not to be sufficiently aware of the disease, and this seems to have further inhibited positive perception of the conditions and the various intervention techniques thereby culminating possibly, in high prevalence in Keffi LGA Nasarawa state, Nigeria. In view of these that the researchers were motivated to investigate breast cancer and health seeking behavior among women in Keffi LGA Nasarawa state, Nigeria.

The paper has the following research questions

- i. What is the level of awareness of breast cancer among women in Keffi LGA Nasarawa state, Nigeria?
- ii. What are the breast self-examination practices among women in Keffi LGA Nasarawa state, Nigeria?

2. Literature Review

2.1 Conceptual Review

Cancer

Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body, which if not controlled can lead to death (The American Society, 2018). Breast cancer is a malignancy of the breast common in women (Onajole 2006). It occurs when cells in the breast begin to grow out of control and can invade other tissues such as duct glands or spread through the body. These changes of the genes are responsible for cell growth and repairs and are the result of the interaction between genetic factors and external agents (WHO, 2004). Breast cancer on the other hand, is a cancerous tumor or malignant which occurs when the abnormal cells invade other parts of the breast, through the blood stream. It usually starts to develop from the milk-

producing glands of the breast called “lobules” (Jassal, & Sunil 2009). Therefore in this paper, cancer is an abnormal growth or a malignant tumor, arising from the cells of the breast which predominantly occur in women and men

Health Seeking Behaviour

Health seeking behavior is a state of being, which is an integral part of daily life, and connected with the identity both of individuals and communities. It involves a person's social, personal, cultural circumstances, and lived experiences (Poortaghi et al., 2015). Moreover, health-seeking behavior varies according to the type of disease (MacKian, 2003). Health-seeking is one of the factors that determines the uptake and outcomes of health care. Health-seeking concerns factors that can either encourage or hinder people from making healthy choices in their lifestyle and their search for medical assistance and treatment (Facione, 1993). Health-seeking and its related activities and behaviors are influenced by culturally recognized signs and symptoms of illnesses and their associated interpretations. Health seeking behavior could also be regarded as a conditioned behavior. When people perceive that they are ill, the actions they take in dealing with the illness have implications for the progression of the disease. Therefore, there is a need to understand the motivation behind engagement in such behavior (Bentur, et al 2014). Adverse outcomes can result from delays in obtaining proper diagnosis and care. Prompt attention can reduce the complications that can arise from not engaging in timely and optimal health-seeking behavior (Afolabi, 2013). In this study, health seeking behavior is the state of being, which is an integral part of daily life, and connected with the identity both of individuals and communities.

Health Behavior

Health behaviors (health-related behaviors) according to the World Health Organization (WHO) refer to any actions that pertain to a person's health and can impact their overall well-being, both in their day-to-day activities and in their utilization of health services. Those intentional or unintentional behaviors involve, for instance, participating in preventive interventions such as vaccination and cancer screening, following

medical treatment plans, attending medical appointments, having good nutrition habits and getting enough physical activity and sleep. Risky behaviors such as consumption of alcohol and tobacco products are also identified as health-related behaviors. Health behaviors are often seen as actions taken by individuals, but they can be studied in and generalized to groups or entire populations. The behaviors, which largely contribute to people's lifestyles, can change over time, in different stages of life, among different groups and in various environments (Short et al, 2015). Hence, in the paper health behavior is actions that pertain to a person's health and can impact their overall well-being, both in their day-to-day activities and in their utilization of health services

2.2 Theoretical Framework

The study is positioned within the Health Belief Model. The Health Belief Model (HBM) was first developed by social psychologists Hochbaum, Rosenstock and Kegels (1950) in response to the failure of a free tuberculosis (TB) health screening program. The HBM is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals (Quist, 2015). The Health Belief Model (HBM) is a psychological framework used to understand health behaviours. It suggests that individuals are more likely to engage in health-promoting behaviours if they believe they are susceptible to a health issue (perceived susceptibility), that the issue can have serious consequences (perceived severity), and that taking a specific action would reduce their risk or improve their situation (perceived benefits). Additionally, the model incorporates perceived barriers to taking action, cues to action (triggers to engage in health behaviour), and self-efficacy confidence in one's ability to take action). Overall, the HBM emphasizes the importance of personal beliefs in shaping health-related decisions and behaviors.

According to Akpenpuun (2014), the theory centers on individual's health behavior and seeks to explain factors that affect or influence reaching a decision to utilize health care facilities. That, is non-utilization of health care services is related to personal attitudes and beliefs regarding health and health care system. This model identifies individual predisposition towards a

given preventive health behavior which is governed by beliefs and attitudes. The model is built on some core assumptions:

- i. Individual's perception of his own vulnerability to illness;
- ii. His beliefs about the severity of the illness, which may be defined in terms of physical harm or interference with social functioning.
- iii. The person's perception of the benefits associated with actions to reduce the level of severity or vulnerability; and
- iv. A person's evaluation of potential obstacles associated with the proposed actions. These actions may be physical, psychological or financial.

In essence, there must be a belief of interference of disease before the benefits of preventing the disease will be considered. They also have to consider the benefits, cost and inconveniences involved in seeking a particular health care service (Akpenpuun, 2014).

The HBM is used in this study based on the fact that woman can access healthcare services on the basis of perceived benefits if that woman has the following conditions:

- i. Feels that a negative health condition
- ii. Has a positive expectation that by taking a recommended action, in health care services.
- iii. Believes that she can successfully take a recommended health action (i.e., she can use any health facility services comfortably and with confidence or ease).

2.3 Empirical Review

Level of Awareness Regarding Breast Cancer among Women

Adebamowo and Ajayi (2022) in a study conducted in Ibadan, Nigeria, found that women with secondary education and above demonstrated significantly higher levels of awareness regarding breast cancer symptoms and screening practices such as breast self-examination (BSE) and mammography. The study concluded that increased educational attainment

equips women with better access to health information, thereby improving their ability to identify early warning signs and seek timely medical assistance. Okobia et al. (2006) among women in Benin City revealed a strong positive relationship between formal education and awareness of breast cancer. The authors reported that women with tertiary education were more likely to correctly identify risk factors and screening methods. In contrast, those with limited or no formal education often held misconceptions about the disease and relied heavily on traditional beliefs and informal sources of information.

Oluwatosin and Oladepo (2006) in rural Southwestern Nigeria, it was discovered that women with no formal education exhibited significantly lower awareness of breast cancer and were less likely to engage in preventive behaviours. The authors emphasized the need for targeted health education campaigns in rural and underserved communities where educational attainment is generally low. Yip et al. (2006) in Malaysia and Ginsburg et al. (2008) in Peru similarly revealed that education level was one of the strongest predictors of breast cancer awareness and screening uptake. These studies affirmed that women with higher education are more likely to receive, comprehend, and act on breast cancer information, often due to better health literacy and greater access to formal health services.

Aniebue and Aniebue (2008) emphasized that although awareness campaigns have improved general knowledge of breast cancer; disparities still persist based on educational status. Their study in Enugu State showed that literate women not only had more accurate information but also exhibited more proactive attitudes toward screening and treatment options. Illiterate and semi-literate women, on the other hand, showed a tendency to delay seeking care until symptoms became severe. Ntekim et al. (2009) in Ibadan underlined that while mass media contributes to general awareness, education significantly influences comprehension and application of the information disseminated. The research indicated that women with primary or no formal education often misunderstood critical aspects of breast cancer symptoms and screening guidelines.

Breast Self-Examination Practices among Women

Agboola et al. (2015) conducted a community-based survey in Ogun State, Nigeria, and found that although 78% of respondents were aware of breast cancer and 62% had heard about BSE, only 18% reported conducting it regularly. The study emphasized the gap between cognitive awareness and actual behavioral compliance, pointing to low health literacy, lack of confidence, and fatalistic beliefs as major hindrances to regular practice. Similarly, Bello et al. (2017) examined the impact of health education workshops in rural Kano communities and found that although post-intervention knowledge scores improved significantly, follow-up assessments revealed a drop in BSE practice rates after three months. This underscores the need for reinforcement strategies, such as peer education and community role modeling, to maintain long-term behavior change.

Ezechi et al. (2014) studied urban and semi-urban women in Lagos and identified education level as a significant predictor of CBE utilization. Women with secondary or tertiary education were more likely to visit health facilities for periodic breast checks. However, those with less education—even after exposure to awareness campaigns—remained less proactive. This gap was attributed to socio-cultural norms, low risk perception, and distrust of the health system, especially where male physicians were involved in the examination process. Aliyu and Amadu (2019) reported that stigma and religious conservatism played strong roles in discouraging CBE, even where public health messages were frequent. The study revealed that many women still relied on spiritual healing or local remedies unless symptoms became severe. The authors recommended that health education be delivered through trusted religious and community leaders to improve legitimacy and acceptance.

Oladimeji et al. (2015), working with rural women in South-West Nigeria, found that integrating breast cancer education into routine maternal and child health services increased both BSE and CBE uptake over a 6-month period. This suggests that embedding breast

cancer messages within existing healthcare delivery platforms can increase exposure and normalize preventive behavior. Nwachukwu and Okafor (2020) studied women in Enugu and found that while most respondents had been exposed to breast cancer awareness through radio and market outreach programmes, only a minority could accurately demonstrate the steps of BSE. They concluded that repeated, practical-based adult education methods—especially in native languages—are more effective than one-off sensitizations.

3. Methodology

The study adopted the survey research design, specifically a descriptive survey approach. The descriptive survey method was considered most suitable because it enables the researcher to systematically collect, organize, and analyze data from a representative sample of the population in order to describe existing conditions, practices, attitudes, and behaviours as they occur naturally in the study area. The population of this study comprises women aged 18 years and above residing in Keffi Local Government Area of Nasarawa State, Nigeria. According to the National Bureau of Statistics (NBS, 2025), the estimated total population of Keffi Local Government Area is 299,000, out of which approximately 142,900 are women aged 18 and above. This group forms the study's target population, as they fall within the reproductive and post-reproductive age range and are more likely to face breast cancer-related health concerns or have awareness of them. Yamane (1967) formula was used to determine the sample size of 400 for the study. A multi-stage sampling technique was adopted to ensure adequate representation of different segments of the population within Keffi Local Government Area of Nasarawa State, Nigeria. To obtain relevant and reliable information for the study primary data collection method was employed. The primary data were collected via the questionnaire. Data generated were analyzed using descriptive statistics.

4. Results and Discussion

Table 1: Socio-Demographic Characteristics of Respondents

Variables	Variable options	Frequency	Percentage (%)
Age	18-27years	120	25.5
	28-37years	138	34.5
	38-47years	96	24.0
	48 and above	65	16.0
	Total	400	100.0
Marital Status	Single	128	32.0
	Married	220	55.0
	Widowed	32	8.0
	Divorced /Separated	20	5.0
	Total	400	100.0
Educational Attainment	No formal Education	52	13.0
	Primary	68	17.0
	Secondary	146	36.5
	Tertiary	134	33.5
	Total	400	100.0
Occupation	Unemployed	84	21.0
	Self-employed	152	38.0
	Farmer	106	26.5
	Others	58	14.5
	Total	400	100.0

Source: Field Survey, 2026

Table 1 is the presentation of the socio-demographic characteristics of the respondents. The age distribution reveals that the majority of respondents (34.5%) were within the 28–37 years age group, followed by those aged 18–27 years (25.5%) and 38–47 years (24.0%), while only 16.0% were 48 years and above. This indicates that the study sample was predominantly made up of women in their reproductive and economically active years, which may influence their health-seeking patterns due to family responsibilities and exposure to health information.

Regarding marital status, more than half of the respondents (55.0%) were married, 32.0% were single, 8.0% were widowed, and 5.0% were divorced or separated. The dominance of married women could imply greater household responsibilities, which might affect their access to healthcare and prioritization of preventive health behaviours such as breast cancer screening.

Educational attainment of the respondents indicates that the largest proportion (36.5%) had secondary education, followed closely by those with tertiary

education (33.5%). Seventeen percent (17.0%) attained primary education, while 13.0% had no formal education. This relatively high level of formal education among respondents could positively influence their awareness and understanding of breast cancer, as education often plays a critical role in shaping health-seeking attitudes and practices.

In terms of occupation, 38.0% were self-employed, 26.5% were civil servants, 21.0% were unemployed, and 14.5% were engaged in other forms of work. This suggests that a substantial proportion of respondents are engaged in income-generating activities, which could affect their ability to afford healthcare services. Conversely, the notable percentage of unemployed women may face economic barriers to accessing timely breast cancer screening and treatment. Overall, the socio-demographic profile of respondents indicates a relatively young, economically active, and moderately educated population, with implications for designing targeted breast cancer awareness programmes in Keffi Local Government Area.

Table 2: Level of Awareness of Breast Cancer among Women in Keffi Local Government Area of Nasarawa State, Nigeria

Response	Frequency	Percentage (%)
Yes	302	75.5
No	98	24.5
Total	400	100.0

Source: Field Survey, 2026

Table 2 display the level of awareness of breast cancer among women in Keffi Local Government Area of Nasarawa State, Nigeria. The data provide that majority of respondents (75.5%) reported being aware of breast cancer, while 24.5% indicated no prior

knowledge. This denotes that the larger percentages of the study population are aware of breast cancer and its impact on the wellbeing and health of the resident of the Local Government Area.

Table 3: Sources of Information on Breast Cancer in Keffi Local Government Area of Nasarawa State, Nigeria

Response	Frequency	Percentage (%)
Health workers	146	36.5
Mass media	124	31.0
Friends/Relatives	88	22.0
Social media	42	10.5
Total	400	100.0

Source: Field Survey, 2026

Table 3 shows the various sources through which respondents obtained information on breast cancer. The findings reveal that health workers were the most common source of information, cited by 36.5% of respondents. This highlights the crucial role healthcare professionals play in disseminating accurate and reliable information on breast cancer prevention, detection, and treatment. The trustworthiness and direct interaction with health workers may explain why they are the leading source. Mass media was the second most common source, accounting for 31.0% of responses. This suggests that television, radio, and newspapers remain influential channels for creating breast cancer awareness in Keffi Local Government Area. These platforms can reach a wide audience, including those with limited access to health facilities.

More so, friends and relatives were mentioned by 22.0% of respondents, indicating the significance of interpersonal communication in sharing health-related information. While such informal networks can be effective in raising awareness, they may also carry the risk of spreading misinformation if not backed by credible sources. Also, social media accounted for only 10.5% of responses, showing that although digital platforms are emerging as health communication tools, their penetration and usage for breast cancer information remain relatively low in the study area. The data suggest that while health workers remain the most trusted and utilized source of breast cancer information, combining their efforts with mass media and expanding the use of social media could create a more comprehensive and far-reaching awareness strategy

Table 4: Breast self-examination Practices on Breast Cancer in Keffi Local Government Area of Nasarawa State, Nigeria

Response	Frequency	Percentage (%)
Visit a hospital/clinic	188	47.0
Use traditional medicine	88	22.0
Self-medication	76	19.0
Do nothing/wait and see	48	12.0
Total	400	100.0

Source: Field Survey, 2026

Table 4 presents the respondents' initial actions when they notice changes in their breasts, which is a direct measure of health-seeking behaviour. The findings indicate that nearly half of the respondents (47.0%) reported visiting a hospital or clinic as their first response. This is encouraging, as it shows that a

significant proportion of women in Keffi Local Government Area recognize the importance of seeking professional medical evaluation for breast-related symptoms. However, 22.0% of respondents preferred using traditional medicine as their first line of action. This reflects the continuing influence of cultural

beliefs, traditional healing practices, and possibly limited trust or accessibility to formal healthcare services. Self-medication was chosen by 19.0% of respondents, suggesting a tendency among some women to rely on over-the-counter drugs or home remedies rather than professional consultation. Such practices can delay early diagnosis and treatment, potentially worsening health outcomes. Alarming, 12.0% reported doing nothing or adopting a “wait and see” approach. This indicates a worrying level of health neglect or lack of awareness about the dangers of delayed intervention in breast cancer cases. While the fact that almost half of the women seek professional care is promising, the substantial proportion relying on traditional medicine, self-medication, or inaction highlights the need for intensified public health education campaigns. These should aim to promote timely hospital visits and dispel myths surrounding breast cancer, thereby improving early detection and survival rates

4.1 Discussion of Findings

The findings of this study revealed important insights into the breast cancer and health seeking behavior among women in Keffi Local Government Area of Nasarawa State, Nigeria. These findings are discussed in relation to the study objectives.

The results indicate that most women in Keffi Local Government Area of Nasarawa State, Nigeria are aware of breast cancer, with health workers and mass media serving as the major sources of information. However, the depth of knowledge varies significantly, and education emerged as a key determinant of awareness. Women with higher educational attainment were more likely to have accurate information on symptoms, risk factors, and preventive practices, whereas those with little or no formal education often held misconceptions or incomplete knowledge. This finding is consistent with existing literature, which emphasizes education as a critical factor in shaping health literacy and influencing early detection practices. Thus, while awareness is present, its quality and accuracy are disproportionately shaped by women’s educational levels.

Despite the reported awareness, the study revealed low consistency in the practice of breast self-examination

and clinical breast examination. Many women acknowledged hearing about these practices but did not carry them out regularly. The inconsistency was linked to a combination of poor health education follow-up, cultural taboos surrounding the breast, and reliance on self-medication or traditional medicine. Even though adult health educators and health workers engage in sensitization campaigns, the findings suggest that these efforts may not be sufficiently sustained or contextualized to bring about behavioural change. This reflects a gap between knowledge and practice, indicating that awareness campaigns alone are insufficient unless coupled with culturally sensitive and accessible interventions that encourage regular screening behaviour.

5. Conclusion and Recommendations

This study set out to investigate the breast cancer and the health-seeking behaviour of women in Keffi Local Government Area, Nasarawa State, Nigeria. The findings clearly demonstrate that although a significant proportion of women in the study area have heard about breast cancer, their knowledge remains superficial and fragmented, often confined to general awareness without in-depth understanding of risk factors, symptoms, preventive strategies, and treatment options. This limited knowledge has implications for early detection, as it contributes to delayed recognition of symptoms and poor adoption of preventive practices such as breast self-examination (BSE), clinical breast examination (CBE), and mammography. The study also revealed that health-seeking behaviour is not solely determined by awareness, but is instead shaped by a complex interplay of socio-cultural, economic, and institutional factors. Cultural and religious interpretations of breast cancer, including beliefs that it is a spiritual illness or a curse, often discourage women from seeking medical treatment early. Traditional health practices and reliance on herbal remedies continue to compete with formal healthcare systems, leading many women to exhaust non-medical alternatives before presenting to hospitals. Such delays often result in late-stage diagnosis, which reduces treatment efficacy and increases the likelihood of mortality. Ultimately, the conclusion of this study is that unless structural, cultural, and economic barriers are systematically addressed, awareness alone will not translate into

positive health-seeking behaviour. A holistic approach that integrates health education, economic empowerment, cultural reorientation, and institutional strengthening is essential to foster early detection, timely treatment, and a reduction in breast cancer-related morbidity and mortality among women in Keffi Local Government Area of Nasarawa State, Nigeria. Based on the findings, the following recommendations are made:

- i. Nasarawa State Ministry of Health and local health authorities should conduct regular community-based awareness campaigns on breast cancer, focusing on early detection, self-examination techniques, and the importance of prompt medical consultation.
- ii. Affordable and accessible breast cancer screening facilities should be established in primary healthcare centres across Keffi Local

Government Area of Nasarawa State. Periodic free screening exercises should be organized to encourage participation.

- iii. Collaboration with community leaders, religious institutions, and women's associations should be encouraged to address cultural misconceptions and stigma surrounding breast cancer.
- iv. Government and non-governmental organizations should provide financial support schemes or subsidies to make diagnosis and treatment more affordable for low-income women.
- v. Continuous training should be provided to healthcare professionals to improve their capacity for early detection, counselling, and culturally sensitive communication.

References

- Adebamowo, C.A & Ajayi, D (2022). "Hip-ratio and Breast Cancer risk in urbanized Nigeria women Ibadan": Retrieved 20th Sept. 2007 from *Breast-cancer-research.com/content/5/2/R18*
- Brain, C.M. & Iteno, J.K (2021). "Cancer care in Nepal. Variables that affect diagnosis treatment and prognosis" A case study of *Journal of Cancer Nursing* 24 (2), pp. 137 – 142
- Breast Health South Africa (2006). Breast Cancer. Retrieved from <http://www.cansa.org.org.za/cgi/bia/giga.cgi?cmd>
- Global Cancer Statistics (2002). Cancer Report. Retrieved from www.tripdatabase.com/spider.htm?Itemid=374138
- Kash, K.M., Holland, J.C., Halper, M.S & Miller, D.C. (1999). "Psychological distress and surveillance behavior behavior of women with a family history of breast cancer". *Psycho-oncology*. Vol. 14 Issue 6
- Kinney, A.Y., Emery G., Dudley W. & Croyle, R.T. (2002). "Screening behaviours among African American Women at high risks of breast cancer. Do beliefs about od matter.? *Oncology Nursing Ofrum* 29 (5): 835 – 843 {context link
- McElmurry, B.J. (1999). Health Education programmes to control asthma in multi-ethnic low income urban communities. Retrieved from Online education <http://www.chestjournal.chestpubs.org/content/116/suppl-2/1985-2.full>
- Oluwatosin, O.A. & Oladebo, O. (2006). *The level of the knowledge of breast cancer and its early detection measures among rural women in Akinyele local area*. Ibadan. Nigeria. Retrieved from <http://creativecommons.org/licenses/by/2.0>
- Onajole, A.T., Ajekigbe, A.T., Dawotola, D.A., Odeyemi, K.A. & Abdulaheem, I.S., (2006). Awareness of self examination of the breast among non-medical female undergraduates in two universities in Lagos, Nigeria" *Journal of Medical Women Association*
- Orija, O. (2007). Cancer control in an economically disadvantage setting – Nigeria. Retrieved online from <http://209.85.229.132/search?Q=cache>
- Rager, K.B. (2003). "The self-directed learning of women with breast cancer". *Adult Education Quarterly*. Vol. 53, No. 4, 277 – 293. University of Oklahoma
- Rosenberg, P. (2007). "A perspective study of body size and breast cancer in black women" *American Association for Cancer Research*. [Htt://cabp.accrjournal.org/cgi/content/full/1619/1795](http://cabp.accrjournal.org/cgi/content/full/1619/1795)
- W.H.O/UN (2008). World Glbal Cancer Rates. Cancer Report. Retrieved from [ww.cancer.org/downloads/STT/BCFF.final.pdf](http://www.cancer.org/downloads/STT/BCFF.final.pdf)
- World Global Cancer Rates (2006). Cancer Report. Retrieved from www.who.int/mediacentre/news/release/2006/pro6/en/W.H.O (2006). Facts Sheets No 297.