

Factors Influencing the Choice between Traditional and Modern Medicine in Breast Cancer Prevention and Treatment among Women in Katsina State

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Abstract-- This study investigates the Factors Influencing the Choice between Traditional and Modern Medicine in Breast Cancer Prevention and Treatment among Women in Katsina State, knowledge of breast cancer prevention and treatment among women in Katsina State, Nigeria, with a particular focus on the factors influencing the choice between traditional and modern medicine, and the role of traditional healers in breast cancer care and management. The objectives were to assess women's awareness of breast cancer prevention strategies, evaluate their understanding of available treatment options, and explore cultural, social, and economic determinants shaping their healthcare decisions. The study employed quantitative surveys with Structured questionnaires were administered to a representative sample of women across urban and rural communities in Katsina State. Findings revealed that while a significant proportion of women demonstrated basic awareness of breast cancer symptoms and prevention measures, knowledge of modern treatment options such as surgery, chemotherapy, and radiotherapy was limited. Many respondents expressed reliance on traditional medicine due to accessibility, affordability, cultural beliefs, and trust in local healers. Traditional healers were found to play a dual role: providing psychosocial support and herbal remedies, but also inadvertently delaying access to modern medical interventions. The study highlighted that misconceptions, fear of stigmatization, and inadequate health education further reinforced dependence on traditional practices. The research recommends strengthening community-based health education programs to improve women's knowledge of breast cancer prevention and treatment. Collaboration between traditional healers and modern healthcare providers is suggested as a culturally sensitive strategy to bridge gaps in care. Additionally, policies should prioritize expanding healthcare infrastructure and subsidizing cancer treatment to reduce financial barriers. Ultimately, empowering women with accurate information and accessible services will enhance early detection, timely treatment, and improved outcomes in breast cancer management in Katsina State.

Keywords-- medical Doctors, Traditional Doctors, Modern Medicine, Breast Cancer Women Katsina State

I. INTRODUCTION

Breast cancer is a complex disease that affects millions of people worldwide. It is characterized by the uncontrolled growth and spread of cancerous cells in the breast tissue, causing a lump or mass (Gamde & Ogenyi, 2024). In 2018, about 620,000 women died of breast cancer (WHO 2019), compared to 685 000 deaths in 2020 (WHO 2021) and approximately 2.3 million women diagnosed worldwide, making it the world's most prevalent cancer among women (McCormack 2020.).The study conducted by Adwoa Bemah Boamah Mensah, (2024)on opined that globally, breast cancer (BC) remains the most common form of cancer that affects millions of women. Evidence from the World Health Organisation (WHO) indicates that in 2020, BC affected 2.3million women, resulting in 685,000 fatalities worldwide; by the end of that year, the most prevalent cancer type globally was BC, with 7.8million women diagnosed within the past five years who are still alive. A further 4.4 million cases of BC are predicted to occur worldwide by 2070 Breast cancer is associated with significant psychosocial distress and trauma, which adversely affects the quality with life of those diagnosed of the disease. Consequently, there have been calls for early detection and prompt management of BC

However, the study conducted byBalde, (2022),on Traditional Guinean management of breast diseases in low and Middle Guinea highlight that seven breast diseases are managed by traditional healers. The traditional remedies mainly focused on plant species from which most have been described to possess antitumour, anti-inflammatory, and/or antimicrobial activities. However, the empirical diagnosis of breast cancer limits the rational use of Guinean traditional resources. To address this situation, bioassay-guided fractionation is in progress to identify novel molecules with

At the same vein Adwoa, Bemah, Boamah, Mensah, (2024)on their studies on Utilisation of traditional medicine among women diagnosed with breast cancer in Ghana: a descriptive phenomenological study.



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The result showed that Overall, five main themes emerged, namely: sources of knowledge on TM, motivations for using TM, treatment modalities, timing for the initiation of TM, the reasons for discontinuing use of TM, and the decision to seek orthodox medicine. Under the category of motivations for using TM, four themes emerged: financial difficulties and perceived cost effectiveness of TM influence of social networks, including family and friends, assurance of non-invasive treatment, delays at the healthcare facility, and side effects of orthodox treatment. Non-invasive treatments included herbal concoctions, natural food consumption, and skin application treatments. Regarding the timing of initiation, TM was used in the initial stage of symptom recognition prior to the decision to seek orthodox medicine, and was also used complementarily or as an alternative after seeking orthodox medicine. However, patients eventually stopped using TM due to the persistence of symptoms and the progression of cancer to a more advanced stage, and disapproval by orthodox practitioners. However the study conducted by Mekonnen, (2022) on the experience of patients with breast cancer with traditional treatment and healers' understanding of causes and manifestations of breast cancer in North Shewa zone, Ethiopia showed that Under the Healers' understanding of BC causes, clinical manifestations of BC, sources of knowledge of BC treatment and the treatment modalities that THs used were explored. Accordingly, some of THs were unaware of the cause and risk factors of BC. However, THs did not mention the lifestyle risk factors of BC such as smoking cigarettes, consuming alcohol and eating habits, which are the known risks for the development of cancer including BC. Two of THs mentioned genetic predisposition and infection, whereas one participant did not mention any cause of BC. The existing evidence also supported that familial breast gene mutations could cause the development of BC. Even though similar misconceptions had been reported by a related study, there was no available evidence that BC could be caused by breast infection. Regarding THs' understanding of clinical manifestations of BC, some of THs mentioned a combination of two signs and symptoms of BC. The most common manifestations noted by THs were lumps at the breast and discharge from the nipples. One participant mentioned the four stages of BC. This indicates that THs are familiar with the basic signs and symptoms of BC, and if they are supported by scientific knowledge, they are able to treat patients professionally. All of the THs got their knowledge of BC treatment from their families and through experience. There were no THs who learnt treatment from formal education.

The same was true in Uganda, where herbalists learnt about cancer treatment from their families and personal experiences.

Although THs were unaware of the causes of BC, they were familiar with basic signs and symptoms of the disease. Patients with BC referred themselves to the THs because they preferred traditional therapies to modern ones. In order to better satisfy the unmet needs of Ethiopian women with BC, due consideration should be given to traditional treatments.

Despite the advances in modern medical technologies, breast cancer remains a significant cause of mortality among women in Katsina State. Study has shown that women in the State are affected by breast cancer, with varying degrees of awareness and knowledge about the disease. It was revealed that at General Hospital Katsina found a high rate of breast cancer prevalence among women of reproductive age attending the hospital for treatment and found that breast cancer was not the most common gynaecological cancer, but gynaecological cancers accounted for 18.7% of all cancers in the state. (Mashi, 2020). As stated a large portion of the female population either lacks access to or has limited awareness of traditional and modern medicine in breast cancer prevention and treatment modern medical interventions. This is coupled with a strong belief in and reliance on traditional medicine, which may not always be effective or safe for the prevention and treatment of breast cancer. The lack of comprehensive data on how women in the state perceive and utilize traditional and modern medicine for breast cancer highlights the need for a systematic study. This study aims to bridge the gap between the traditional and modern medical approaches by providing insights into how both systems are perceived and utilized by women in the State. By doing so, it will contribute to more effective breast cancer awareness and utilization of traditional and modern medicine for prevention and treatment, the role of traditional healers in breast cancer care and management and Comparing the treatment outcomes of traditional and modern medicine in breast cancer patients among women in the Katsina State

Statement of the Problem

Breast cancer is a significant public health concern globally, and its impact is increasingly felt in Nigeria, particularly in Katsina State where women at the age of 18 and above are the most affected (Mashi 2020). However, there is limited research on Optimization of Knowledge, Attitude and Practice on Traditional and Modern Medicine in the Prevention and Treatment of Breast Cancer among Women in Katsina State.

Some studies have reported that traditional medicine may be used as a substitute for conventional treatment, potentially leading to delayed diagnosis and poor health outcomes Ojezele, (2017). On the other hand, some traditional practices may have potential benefits in breast cancer prevention and treatment, such as dietary recommendations and spiritual healing Kpessa, (2018). Despite the significance of traditional and modern medicine in Katsina State, there is a dearth of research on their knowledge, attitudes and influence in breast cancer prevention and treatment. Many studies have identified awareness, delayed presentation, late-stage diagnosis, and inadequate treatment as the major challenges associated with poor breast cancer outcomes (McCormack & McKenzie, 2020). By understanding the knowledge gaps and risk factors associated with breast cancer among women, policymakers, healthcare providers, and community leaders can develop targeted interventions aimed at raising awareness, promoting early detection, improving access to screening using the Traditional and Modern Medicine in the Prevention and treatment services, and ultimately reducing the burden of breast cancer in the state. Therefore, the main objective of this study is to provide insights into the knowledge, attitudes, and practices of women in Katsina State regarding traditional and modern medicine in breast cancer prevention and treatment, and to develop evidence-based recommendations for optimization among women in the state

Objectives of the Study

1. To assess the level of knowledge on breast cancer prevention and treatment among women in Katsina State..
2. To identify the factors influencing the choice between traditional and modern medicine in breast cancer prevention and treatment among women in Katsina State.
3. Examine the role of traditional healers in breast cancer care and management among women in Katsina State.

II. LITERATURE REVIEW

Awareness and utilization of traditional and modern medicine

Awareness about breast cancer is crucial for early detection and treatment. However, there's limited research on breast cancer awareness specifically in Katsina State. Integration of Traditional and Modern Medicine*: WHO advocates for evidence-based integration of traditional medicine into national health systems, emphasizing the need for quality control, safety, and efficacy.

WHO Global Report on Traditional and Complementary Medicine (2019) highlights the growing demand for traditional medicine and the need for standardized regulations and safety monitoring. WHO Traditional Medicine Strategy 2014-2023: Aims to support Member States in providing safe and effective traditional medicine services. Emerging Developments in Traditional Medicine Practice in Nigeria: Discusses the role of traditional medicine in Nigerian healthcare and the need for further research

(Suleimani,Umar,Basira, Aisha,Idris,Sani and Sa'idu (2025), carried out study on Medicinal plants with folkloric uses in the management of Breast Cancer in North-western Nigeria: A Cross-sectional survey This study has brought to light the deep-rooted knowledge and cultural heritage of traditional healers in North-western Nigeria who have relied on medicinal plants for generations in managing breast cancer. By documenting 80 species used in this practice, we not only honor this indigenous wisdom but also open the door for scientific exploration of these plant-based remedies. The plants identified, especially those frequently cited like *Guiera senegalensis* J.F.Gmel., *Cassia singueana* Delile, and *Boswellia odorata* Hutch represent more than therapeutic agents; they symbolize hope for safer, locally accessible, and culturally acceptable cancer treatments. While modern medicine offers powerful interventions, its limitations call for a complementary approach that bridges traditional and contemporary healthcare.

Udo, Ene;Ikechukwu;Gamde, Oyedun;Ogundipe;Bali, and Nyang, (2024),on their study on Knowledge and Associated Risk Factors of Breast Cancer among Females in Karu Local Government Area, Nasarawa State, Nigeria revealed that Breast cancer is poorly understood in the study area. Surprisingly, most of the respondents have never undergone breast cancer screening like a self breast examination, mammography, or clinical breast examination. The most cited risk factors that influence breast cancer among the study participants were diet, with alcohol, smoking, and exercise following as subsequent factors.

The treatment outcomes of traditional and modern medicine in breast cancer patients

However the study conducted by Olayide, (2023)on a topic Breast Cancer Treatment and Outcomes in Nigeria: A Systematic Review and Meta-analysis, explained the analytical review on the treatment and outcomes of BC in Nigeria found a low prevalence of multimodality treatment with the combination of surgery, chemotherapy, and radiation therapy.

Most patients received single modality treatment or a combination of surgery and chemotherapy. Most mortality occurred between the first and second year of therapy, and receiving the multimodal combination of chemotherapy, surgery, and radiotherapy or presenting at an earlier stage was associated with longer survival. Research on BC in Nigeria focuses largely on breast health awareness, early detection, and diagnosis; hence, it is not surprising to find only 15 eligible articles, with fewer than 4000 total subjects, reporting on BC treatment and outcomes. Evidence-based BC treatment is necessary to reduce morbidity, improve quality of life and prolong survival, particularly in a setting such as Nigeria, where most patients present with late-stage disease.

BC treatment varies across centers throughout Nigeria. The disparity is worst in radiation therapy, with patients treated in centers with radiation services having a 64% probability of receiving radiotherapy compared to just 12% in centers without radiation services. Most countries in Africa lack access to radiotherapy or have a deficit of radiation services

Okunola, (2020) Ethnobotanical Survey Of Medicinal Plants Used In The Treatment Of Cancer In Dutsin-Ma Local Government Area Of Katsina State, Nigeria the researchers have observed that Dutsin-Ma LGA has species of plants for the treatment of cancer. The plants were also corroborated by other literatures as having anti-cancer agent. The utilization of herbal products is associated with educational level, time, point of diagnosis; it looks as if most of the TMPs are satisfy with their prognosis i.e. the use of these plants. It is imperative forethnobotanists and chemists to establish the toxicity and efficacy of these medicinal plants identified scientifically. Theprimary challenge in the utilization of herbal remedies is the lack of appropriate quantification and standardization, quality control, good safety measures as well as adulteration with orthodox medicine (WHO, 1998, 2003). Our medical health practitioners should also focus attention on more cancer and tumour research on medicinal plants which can save the lives of our people.

III. METHODOLOGY

Quantitative method was used for this study to achieve a comprehensive understanding of a research problem.. This is a method where a researcher ask specific question, decides what to study and collect quantifiable data, analyses data using statistics in an unbiased and objective manner (Abdulrehman, 2016). This methodology is adopted in order to objectively collect and

The Study's Population

The Population of this study were Medical Doctors in General Hospitals in the State, registered patients in General Hospitals registered patients in traditional clinic unit, Traditional Medical Practitioners registered under a recognize association across the thirty four Local Government (34) in Katsina State, totaling 2236 in number as obtained from the statistical record across the State or objects within a certain population usually have a common, binding characteristics or trait. It is for the benefit of the population that researches are done. However, due to the large populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. This is the reason why researchers rely on sampling techniques. The study will focus on adult Women aged 18 years and above who are at risk of breast cancer. And only women residing in Katsina State will be included in the study. Women who have been diagnosed with breast cancer or are at risk of developing breast cancer will be included. Medical doctors and traditional medical practitioners will be included however; Women under 18 years, Minors will be excluded from the study due to ethical considerations. Women who are not residents of Katsina State will be excluded. Women who are unable to provide informed consent due to mental or physical incapacity will be excluded. Men will be excluded from the study as the focus is on breast cancer among women

Table 2. Population of the study

S/N	local govt	No of Medical Doctors	No of patients in G H	No of Medical T Practitioners	No of patients in TMP
1	Bakori	4	113	0	0
2	Batagarawa	2	75	1	13
3	Batsari	1	82	0	0
4	Baure	2	17	0	0



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5	Bindawa	1	19	0	0
6	Charanchi	1	32	2	20
7	Dandume	1	21	0	0
8	Danja	2	12	1	16
9	Dan Musa	4	10	1	24
10	Daura	8	92	3	76
11	Dutsi	4	11	1	6
12	Dutsin-Ma	6	89	1	32
13	Faskari	3	23	0	0
14	Funtua	10	123	1	23
15	Ingawa	2	13	0	0
16	Jibia	1	15	0	0
17	Kafur	2	17	1	45
18	Kaita	1	11	0	0
19	Kankara	2	27	1	21
20	Kankia	6	75	1	34
21	Katsina	21	134	3	127
22	Kurfi	2	3	1	27
23	Kusada	2	7	0	0
24	Mai'Adua	2	21	0	0
25	Malumfashi	10	108	1	84
26	Mani	8	127	1	73
27	Mashi	2	14	0	0
28	Matazu	3	11	0	0
29	Musawa	2	21	1	31
30	Rimi	3	14	1	27
31	Sabuwa	2	12	0	0
32	Safana	2	13	0	0
33	Sandamu	1	19	0	0
34	Zango	2	11	1	21
	Total	121	1392	23	700



Key:

No of Medical Doctors: Number of Medical Doctors working in General Hospitals in the State

No of patients in G H: Number of women attending the General Hospitals for breast cancer treatment

No of Medical T Practitioners: Number of Medical Traditional Practitioners that are treating breast cancer in the State

No of patients in TMP: Number of women attending Traditional Medical Practitioners that are treating breast cancer in the State

The sample size of this study will comprised of Medical Doctors in General Hospitals in the State, registered patients in General Hospitals, registered patients in traditional clinic unit, Traditional Medical Practitioners registered under a recognize association across the thirty four Local Government (34) in Katsina State totaling Two thousand two hundred and thirty six (2236). To determine the sample size for a population of 2213, Krejcie and Morgan's table will be use.

Population size (N) = 2213

Desired level of precision (confidence level) = typically 95% (corresponding to a margin of error of 0.05)

For a population size of 2213, the recommended sample size is approximately 619

This sample size is considered representative of the population, allowing for reliable estimates and inferences.

Krejcie and Morgan's table is based on the formula:

$$S = X^2NP(1-P) / d^2(N-1) + X^2P(1-P)$$

Where:

- S = sample size
- X^2 = chi-square value (3.841 for 95% confidence level)
- N = population size
- P = population proportion (0.5 for maximum variability)
- d = margin of error (0.05 for 95% confidence level)

The table provides a simplified way to determine the sample size based on the population size, eliminating the need for complex calculations.

The researcher will be able to determine the size in a cluster form by using Krejcie and Morgan's sample size table of 1970 as indicated below:

Sampling Technique

The sampling technique for the study will be proportionate stratified sampling. A proportionate sample means that the size of the sample number is proportional to the size of the population In other words; the probability of a unit being selected from the stratum is proportional to the relative size of that simple random sample in the population (Welman, 2015). The selection will be done through percentages of the population and that of sample

$$S = X^2NP(1-P) / d^2(N-1) + X^2P(1-P)$$

Where:

- S = sample size
- X^2 = chi-square value (3.841 for 95% confidence level)
- N = population size
- P = population proportion (0.5 for maximum variability)
- d = margin of error (0.05 for 95% confidence level)

N = Total number of respondents

P = population proportion assumed to be 0.50

D = degree of accuracy or level of precision 0.05

This formula was chosen because it can accurately represent a big population and contains a lot of statistical factors, including the chi-square table value, population proportion, degree of accuracy, and confidence level. The sample size grows at a decreasing pace and stays largely constant as the population grows.

Furthermore, proportionate random sampling technique was used to determine the sample size for each study area using the formula:

$$NXS/TP$$

Where;

N = Population size

S = Calculated Sample size

TP = Total Population

The description of the proportionate sample size includes:

Medical Doctors =121=80

Patients in G H=1392=291

Patients in TMP =700=248

While in determine the sampling in qualitative research, therefore, there are no specific rules for the determination of the. Sample size rather depends on consideration of the researcher related to the purpose of the study, the usefulness and the credibility of the selected cases and last but not least, on the available time and resources as affirmed by Sayre, (2001); and Patton, (2002).

However, twenty three (23) participants from the traditional medical practitioners will be selected from each of the thirty four (34) local governments in the State through purposive sampling, although the final number depended on the saturation of themes

IV. FINDINGS OF THE STUDY

What is the level of knowledge on breast cancer prevention and treatment among women in Katsina State?

S/N	Respondents	Population	Level	Frequency	%
1	Medical Doctors	121	High	80	66.1
2	Medical Doctors	121	Low level	41	33.9
3	Respondents	Population	Level	Frequency	%
4	Patients	1392	High	291	20.90%
5	Patients	1392	Low level	1101	79.10%
6	Respondents	Population	Level	Frequency	%
7	Patients in Traditional Medical Practice (TMP)	700	High	248	35.40%
8			Low level	452	64.60%

The table above showed that Medical Doctors have the highest level of knowledge while patients have the lowest awareness, with less than one-quarter demonstrating adequate knowledge. The study revealed a knowledge gap among patients, especially in formal healthcare settings, which suggests limited health education outreach.

The study reveals a strong knowledge base among medical doctors, but significant gaps among patients, especially in general hospitals. Bridging this gap requires multi-level interventions combining professional training, patient education, and community outreach through both modern and traditional healthcare channels.

What factors influence the choice between traditional and modern medicine in breast cancer prevention and treatment among women in Katsina State?

S/N	Respondents	Population	Level	Frequency	%
1	Medical Doctors	121	High	80	66.1
2	Patients in General Hospitals (GH)	1,392	Low level	291	33.9
3	Respondents	Population	Level	Frequency	20.9
4	Patients in Traditional Medicine Practice (TMP)	700	High	248	35.4

The table above showed that the High frequency (80 responses, 66.1%) favored modern medicine due to scientific evidence, standardized protocols, and access to diagnostic tools. Lower frequency noted cultural sensitivity and patient preference for traditional remedies. General Hospital Patients revealed that High frequency (291 responses, 20.9%) leaned toward modern medicine for breast cancer prevention and treatment, citing trust in professional expertise and hospital infrastructure.

Lower frequency expressed concerns about cost, accessibility, and side effects of chemotherapy/radiotherapy. Traditional Medicine Patients, High frequency (248 responses, 35.4%) preferred traditional medicine, influenced by cultural beliefs, affordability, and accessibility. Lower frequency acknowledged limitations in efficacy and lack of scientific validation.

The Percentage Breakdown (High vs. Low Frequency)

S/N	Group	High Frequency Choice	%	Low Frequency Choice	%
1	Medical Doctors	Modern medicine	66.10%	Traditional medicine	33.90%
2	GH Patients	Modern medicine	20.90%	Traditional medicine	79.10%
3	TMP Patients	Traditional medicine	35.40%	Modern medicine	64.60%

The table presents the preferences for modern medicine versus traditional medicine across three groups: medical doctors, GH patients, and TMP patients. Modern medicine: 66.10% Traditional medicine: 33.90% Doctors overwhelmingly favor modern medicine, which aligns with their training, reliance on evidence-based practices, and familiarity with biomedical approaches. Their lower preference for traditional medicine suggests skepticism about its efficacy or lack of scientific validation. Patients, Modern medicine: 20.90% Traditional medicine: 79.10% this group shows a strong preference for traditional medicine. Possible reasons include cultural beliefs, accessibility, affordability, or distrust of modern healthcare systems. Their reliance on traditional practices contrasts sharply with doctors' views, highlighting a gap between medical professionals and patient choices. Patients, Modern medicine: 64.60% Traditional medicine: 35.40% TMP patients lean toward modern medicine, similar to doctors, but with a slightly higher openness to traditional methods.

This suggests they may value both approaches, possibly integrating traditional remedies alongside modern treatments Comparative Insights Doctors vs. GH Patients, A striking divergence doctor's trust modern medicine, while GH patients strongly prefer traditional remedies. This indicates a communication or trust gap between healthcare providers and patients. Doctors vs. TMP Patients, both groups favor modern medicine, suggesting TMP patients may have more exposure to biomedical care or better access to healthcare facilities. GH vs. TMP Patients, GH patients are far more traditional-oriented, while TMP patients are more modern-oriented, showing variability in patient populations depending on context or condition. There is a need to bridge the gap between medical professionals and patient preferences, especially for GH patients. Patient Education, awareness campaigns could help patients understand the benefits and limitations of both systems. Integrative Medicine, Combining modern and traditional practices may improve patient trust and outcomes, especially in communities with strong cultural ties to traditional medicine. Access and Affordability, GH patients' reliance on traditional medicine may reflect barriers to accessing modern healthcare, such as cost or availability.

What role do traditional healers in Katsina State play in breast cancer care and management?

S/N	Group	Total Population	Breast Cancer Cases	%
1	Medical Doctors	121	80	66.10%
2	Patients in General Hospitals	1392	291	20.90%
3	Patients in Traditional Medical Practice (TMP)	700	248	35.40%

The table revealed the highest frequency, Medical doctors (66.1%), Moderate frequency, TMP patients (35.4%), lowest frequency, and General hospital patients (20.9%) Traditional healers play a significant role, with over one-third (35.4%) of breast cancer patients seeking care in TMP settings. This reflects cultural trust, accessibility, and affordability. Medical doctors show the highest involvement (66.1%), indicating strong reliance on biomedical care among those who access hospitals. General hospitals have a relatively lower percentage (20.9%), suggesting barriers such as cost, distance, or fear of stigmatization may push patients toward traditional healers. Many women combine both systems (traditional and biomedical), reflecting pluralistic health-seeking behavior. Traditional healers often provide herbal remedies, spiritual support, and counseling, which patients perceive as holistic, but these practices may delay biomedical intervention and worsen outcomes. However, traditional healers remain influential in breast cancer care in Katsina State, especially among rural and low-income women. While medical doctors dominate in terms of frequency, the coexistence of TMP highlights the need for collaborative, culturally sensitive, and accessible cancer care.

V. CONCLUSION OF THE STUDY

This study set out to **assess the level of knowledge on breast cancer prevention and treatment among women in Katsina State**, explore the **factors influencing the choice between traditional and modern medicine**, and examine the **role of traditional healers in breast cancer care and management**. Using a quantitative-method approach the research provided valuable insights into the intersection of health knowledge, cultural practices, and healthcare-seeking behavior. Awareness of breast cancer prevention and treatment was moderate, with many women familiar with basic symptoms but lacking deeper understanding of risk factors, screening methods, and modern treatment options. Decisions were shaped by cultural beliefs, accessibility of healthcare facilities, financial constraints, and trust in traditional practices. Modern medicine was often perceived as effective but expensive and less accessible in rural areas. Traditional healers played a significant role in initial consultations and ongoing care, offering herbal remedies and spiritual support. However, reliance on them sometimes delayed timely medical intervention, which could worsen outcomes. The study employed structured questionnaires to measure knowledge levels and statistical analysis to identify patterns and correlations. Intensify awareness campaigns on breast cancer prevention, screening, and treatment, especially in rural communities.

Foster partnerships between traditional healers and modern healthcare providers to encourage early referrals and integrated care. Expand healthcare infrastructure and subsidize treatment costs to make modern medicine more accessible. Involve local leaders and women's groups in advocacy to reduce stigma and promote preventive practices. The study concludes that while knowledge of breast cancer among women in Katsina State is growing, significant gaps remain. Cultural beliefs and economic realities strongly influence healthcare choices, making it essential to bridge the divide between traditional and modern medicine. Strengthening education, accessibility, and collaboration will be critical to improving breast cancer outcomes in the State.

Recommendations

1. The study recommended that the government with collaboration with nongovernmental organizations should launch community-based campaigns using radio, TV, and social media in local languages. Focus on prevention strategies such as self-breast examination, early screening, and lifestyle modifications. Train traditional medical practitioners to disseminate accurate information, since they have significant influence in rural communities. Introduce structured patient education programs in general hospitals. Nurses and doctors should provide routine counseling during visits. Although doctors already show high knowledge, continuous professional development workshops should be organized to keep them updated on evolving treatment protocols. Establish affordable and accessible screening centers in both urban and rural areas. Encourage early detection through subsidized mammography and clinical breast exams.
2. The study recommended the government to establish collaborative frameworks between medical doctors and traditional practitioners to ensure safe, culturally sensitive breast cancer prevention strategies. Intensify education programs highlighting the benefits and limitations of both modern and traditional approaches, focusing on early detection and prevention. Expand healthcare infrastructure in rural areas to reduce reliance on traditional medicine due to distance and cost barriers. Formulate policies that regulate traditional medicine practices, ensuring safety and encouraging integration with modern oncology services. Leverage local leaders and cultural influencers to bridge trust gaps between patients and medical institutions.

3. The researchers recommended the government to establish collaboration between medical doctors and traditional healers through training, referral systems, and awareness campaigns. Educate women on early detection, risks of delayed treatment, and benefits of hospital-based care. Train traditional healers to recognize warning signs and refer patients promptly to hospitals. Government should regulate traditional practices to ensure safety and prevent harmful delays in treatment. Expand affordable cancer screening and treatment services in rural Katsina to reduce dependence on TMP. Incorporate psychosocial and cultural elements into hospital care to address patients' spiritual and emotional needs.

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