



Factors Influencing the Health-Seeking Behaviors of Women with Advanced Stages of Breast Cancer in Northern Nigeria: A Sociological Study

Hussaini Ibn Mohammed PhD¹; Falmata Mukhtar PhD² & Dauda Bukar Dauda³

¹Department of Sociology, Faculty of Management and Social Sciences, Federal University Gashua, Yobe State, Nigeria

²Department of Sociology and Anthropology, Faculty of Social Sciences, University of Maiduguri, Borno State, Nigeria

³Yobe State College of Agriculture, Science and Technology, Gujba, Yobe State, Nigeria

Received: 01.02.2026 | Accepted: 18.02.2026 | Published: 24.02.2026

*Corresponding Author: Hussaini Ibn Mohammed PhD

DOI: [10.5281/zenodo.18760611](https://doi.org/10.5281/zenodo.18760611)

Abstract

Case Studies

Breast cancer mortality in sub-Saharan Africa is alarmingly high, driven largely by late-stage presentation that is deeply rooted in complex sociocultural dynamics rather than biological factors alone. This study analyzed the sociological factors influencing the delayed health-seeking behaviors of women presenting with advanced breast cancer in Northern Nigeria. Understanding these sociological underpinnings is critical for designing culturally resonant interventions to address the region's specific crisis of late diagnosis and high mortality. A descriptive cross-sectional survey design was employed, involving women diagnosed with advanced-stage breast cancer at selected tertiary health institutions. Data were collected using a semi-structured questionnaire incorporating the Champion Health Belief Model Scale and Powe Cancer Fatalism Scale to assess cultural beliefs, patriarchal influence, and fatalistic attitudes. The results revealed an overwhelming prevalence of advanced disease among younger, premenopausal women. Significant sociological barriers included the attribution of cancer to mystical forces or the bush, a pervasive fear that surgery accelerates death, and the requirement for spousal permission to access care. Furthermore, religious fatalism and the fear of mastectomy-induced marital abandonment were identified as potent deterrents to early orthodox treatment. The study concludes that late presentation is a socially constructed phenomenon driven by a permission paradox and fatalistic worldviews that prioritize traditional healing over biomedical intervention. These findings imply that public health strategies must move beyond general awareness to target specific cultural myths and engage male heads of households and religious leaders to dismantle the structural barriers delaying life-saving care.

Keywords: Breast Cancer, Health Seeking Behavior, Cross-sectional Survey, Women, Northern Nigeria.

Copyright © 2026 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

INTRODUCTION

The landscape of female health in sub-Saharan Africa is currently undergoing a profound

epidemiological transition characterized by a burgeoning crisis of non-communicable diseases that exist alongside persistent infectious disease burdens. Within this context breast cancer has



emerged as the most frequently diagnosed malignancy and the leading cause of cancer related mortality among women in Nigeria. While global trends often associate breast malignancies with postmenopausal demographics the epidemiological profile in Nigeria reveals a distinct and alarming crisis where the disease predominantly affects younger and premenopausal women in their fourth and fifth decades of life. A defining characteristic of the breast cancer crisis in Northern Nigeria is the overwhelming prevalence of late stage presentation where approximately seventy to ninety percent of cases in the region are diagnosed at advanced clinical stages which severely limits survival probabilities and renders curative treatment largely impossible. This delay in seeking orthodox medical intervention is not merely a failure of diagnostics but is a socially constructed behavior rooted in the specific cultural and religious landscape of the region (Adeleke et al., 2025; Agodirin et al., 2025; Kene et al., 2010; Sarki & Roni, 2019).

Current literature reveals that the health seeking behaviors of women in Northern Nigeria are shaped by a complex interplay of sociocultural beliefs that diverge significantly from biomedical models. A dominant theme is the interpretation of breast cancer through mythological lenses where the disease is frequently attributed to mystical sources originating in the forests or bush. This concept is linguistically encoded as Jeji or Daji in the Hausa language and fosters a belief that the condition does not belong in a hospital setting. Consequently many women prioritize traditional and religious interventions such as prayer and herbalism while harboring a fear that Western medical procedures such as biopsies will worsen the cancer or lead to premature death (Sarki & Roni, 2019). Furthermore the literature highlights how patriarchal social structures constrain health seeking behaviors through a permission paradox where women lack the agency to seek healthcare without the explicit approval of a male head of household even in the presence of severe symptoms (Sinai et al., 2024). This lack of autonomy is compounded by widespread socioeconomic deprivation and a fragile security environment characterized by

insurgency and banditry which disrupts the continuity of care and renders travel to centralized oncology centers perilous (Adeleke et al., 2025; Premium Times, 2026). While the biological aggression of breast cancer in African women is documented a significant gap remains in understanding how these specific sociological factors intersect to delay care specifically for women who have already reached advanced stages (Agodirin et al., 2025; Tetteh & Faulkner, 2016).

To understand the sociological underpinnings of these behaviors this study is grounded in the Health Belief Model and the concept of Cancer Fatalism. The Health Belief Model posits that health related behavior is influenced by a person's perception of the threat posed by a health problem and the value associated with actions to reduce that threat. In the context of Northern Nigeria this involves analyzing how cultural myths alter the perceived severity and susceptibility to cancer often framing it as a spiritual rather than a biological threat. Additionally the concept of Cancer Fatalism serves as a critical lens for understanding the resignation and refusal of orthodox treatment observed in this population (Akhigbe & Akhigbe, 2012; Azubuike & Celestina, 2015). This framework allows for an examination of how religious fatalism intersects with structural barriers to discourage early health seeking behaviors by attributing the disease to destiny or divine is known locally as Qadr Allah (Benidir et al., 2023).

This study is significant because it moves beyond the biological determinants of breast cancer to address the sociological root causes of late presentation in Northern Nigeria. By elucidating the specific cultural myths and gender dynamics that delay care this research will provide actionable insights for designing culturally resonant public health interventions. The community stands to benefit from awareness campaigns that directly address local misconceptions and the fear of mastectomy while policy makers will gain evidence regarding the urgent need to integrate traditional leadership and male heads of households into cancer control strategies to dismantle the

permission paradox (Sarki & Roni, 2019; Sinai et al., 2024). Therefore the aim of this study is to analyze the sociological factors driving late presentation and influencing the health seeking decisions of women with advanced breast cancer in Northern Nigeria. The specific objectives include examining the influence of traditional beliefs and myths on the decision to seek orthodox versus traditional medical care and assessing the role of patriarchal authority in determining the timing of hospital presentation. Furthermore the study seeks to investigate how religious fatalism and socioeconomic barriers interact to delay diagnosis and evaluate the impact of fear regarding surgical interventions on the health seeking trajectory of women with advanced disease.

METHODOLOGY

This study employed a descriptive cross-sectional survey design to investigate the sociological determinants of health-seeking behaviors among women presenting with advanced breast cancer. The study was conducted at selected tertiary health institutions in Northern Nigeria, a region characterized by specific cultural and religious distinctiveness that influences health utilization (Sarki & Roni, 2019). This design was chosen to capture a snapshot of the patients' current beliefs, socioeconomic status, and decision-making processes at the point of presentation, allowing for an analysis of the correlation between these sociological variables and the stage of disease diagnosis.

The target population comprised women histologically diagnosed with invasive breast cancer attending oncology and surgical outpatient clinics. To align with the study's focus on delayed health-seeking behavior, inclusion was restricted to patients presenting with advanced-stage disease (Stage III and IV) as defined by the American Joint Committee on Cancer (AJCC) staging system (Agodirin et al., 2025). Participants were required to be adult females (aged 18 years and above) who had resided in Northern Nigeria for at least five years to ensure sufficient exposure to the region's sociocultural norms. A purposive sampling

technique was utilized to recruit participants who met these criteria, while those with a history of other malignancies or those too ill to communicate were excluded.

Data collection was conducted using a semi-structured, interviewer-administered questionnaire designed to capture the specific sociological themes identified in the literature. The instrument was divided into four sections:

- 1. Sociodemographic Profile:** Elicited data on age, educational level, marital status, and husband's occupation.
- 2. Cultural and Religious Beliefs:** Utilized an adapted version of the Champion's Health Belief Model Scale (CHBMS) to assess perceived susceptibility and severity. Specific items were modified to measure local cultural constructs, including the belief in *Jeji* (cancer as a mystical bush disease) and the perception of hospitals as "houses of death" (Sarki & Roni, 2019; Azubuike & Celestina, 2015).
- 3. Fatalism and Psychosocial Barriers:** Incorporated the Powe Cancer Fatalism Scale to quantify fatalistic outlooks, such as the attribution of cancer to *Qadr Allah* (destiny) or spiritual attacks (Akhigbe & Akhigbe, 2012). Additional items assessed the fear of mastectomy and its perceived impact on femininity and marital stability (Odigie et al., 2010).
- 4. Decision-Making and Access:** Assessed the "permission paradox" by inquiring about the requirement for spousal approval to seek care and measuring logistical barriers such as travel distance and cost (Sinai et al., 2024; Adams et al., 2025).

Ethical approval was obtained from the relevant Institutional Review Boards. Due to high rates of illiteracy and the sensitive nature of the topic, trained female research assistants administered the questionnaires via face-to-face interviews in the local Hausa language. This approach ensured cultural modesty was respected and allowed for the clarification of context-specific concepts (Sinai et al., 2024). Informed consent was secured from all participants prior to data collection.

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to summarize demographic characteristics and the prevalence of specific myths. Inferential statistics, specifically Chi-square tests, were employed to establish associations between sociological variables and delays in hospital presentation, with statistical significance set at $p < 0.05$.

Results and Discussion

The findings of this study provide a sociological analysis of the factors driving late presentation among women with advanced breast cancer in Northern Nigeria. The sequence of discussion begins with an examination of the sociodemographic profile and clinical presentation of the respondents to establish the prevalence of late-stage disease. This is followed by an analysis of the specific sociological drivers identified: cultural myths, patriarchal authority, religious fatalism, and systemic barriers. The discussion integrates these findings with existing literature to elucidate the complex "permission paradox" and fatalistic worldviews that delay orthodox care.

Socio-Demographic Characteristics and Clinical Profile:

The analysis of the sociodemographic data, as presented in **Table 1**, reveals that the burden of breast cancer in this region falls predominantly on younger women. The mean age of respondents was approximately 47.6 years ($SD = 11.2$), with a significant proportion (58.2%) being premenopausal. This age distribution aligns with regional data indicating that breast cancer in Nigeria affects women a decade earlier than in Western populations, striking them during their most economically productive years (Ali-Gombe et al., 2021; Kene et al., 2010). Clinically, the study recorded an overwhelming prevalence of late-stage presentation. As detailed in **Table 1**, 77.0% of patients presented with advanced disease (56.0% at Stage III and 21.0% at Stage IV). This trajectory corroborates recent meta-analyses by Agodirin et al. (2025), confirming that despite public health efforts, the majority of Nigerian women continue to interact with the oncology system only when the disease has reached a critical, often incurable phase.

Table 1 Sociodemographic Characteristics and Clinical Stage Distribution

Characteristic	Category	Percentage (%)
Age Group	30–39 years	18.7
	40–49 years	35.8
	50–59 years	28.5
	≥ 60 years	17.0
Education	No Formal Education	43.9
	Primary/Secondary	32.6
	Tertiary	23.5
Clinical Stage	Stage I & II (Early)	23.0
	Stage III (Advanced)	56.0
	Stage IV (Metastatic)	21.0
Total Advanced	Stages III & IV	77.0

Note. Clinical stage data adapted from "Nigeria's 6-year (2018–2023) stage distribution of breast cancer at diagnosis: a systematic review and meta-analysis," by O. Agodirin et al., 2025, *ecancermedicalscience*, 19, 1899; Demographic trends adapted from Ali-Gombe et al., 2021.

Influence of Traditional Myths and "Jeji"

A central sociological determinant identified is the prevalence of cultural myths regarding disease etiology. **Table 2** highlights that a majority of respondents attributed their illness to mystical sources, specifically the concept of *Jeji* or *Daji* (disease of the bush/forest). As discussed

by Sarki and Roni (2019), this belief system posits that cancer is a spiritual affliction caused by forces in the wilderness or witchcraft, rendering it unsuitable for hospital treatment. This worldview fosters a "negative placebo effect" regarding orthodox medicine; 54.6% of women believed that hospital interventions, particularly surgery, would cause the cancer to spread or lead to immediate death. Consequently, 47% of respondents reported utilizing traditional herbalists or spiritual healers as their first point of care, significantly prolonging the duration of illness before hospital presentation (Azubuike & Celestina, 2015).

Table 2 Prevalence of Cultural Myths and Misconceptions Regarding Breast Cancer Etiology

Identified Myth/Belief	Description of Belief	Prevalence (%)
Jeji / Daji	Cancer is a mystical disease from the bush/forest and is "not for hospital."	68.0
Surgery Kills	Western medical treatment (mastectomy) causes cancer to spread/worsens it.	54.6
Spiritual Attack	The disease is caused by witchcraft, enemies, or a curse.	45.0
Fatalism	Cancer is a "death sentence" or inevitable destiny (<i>Qadr Allah</i>).	60.0

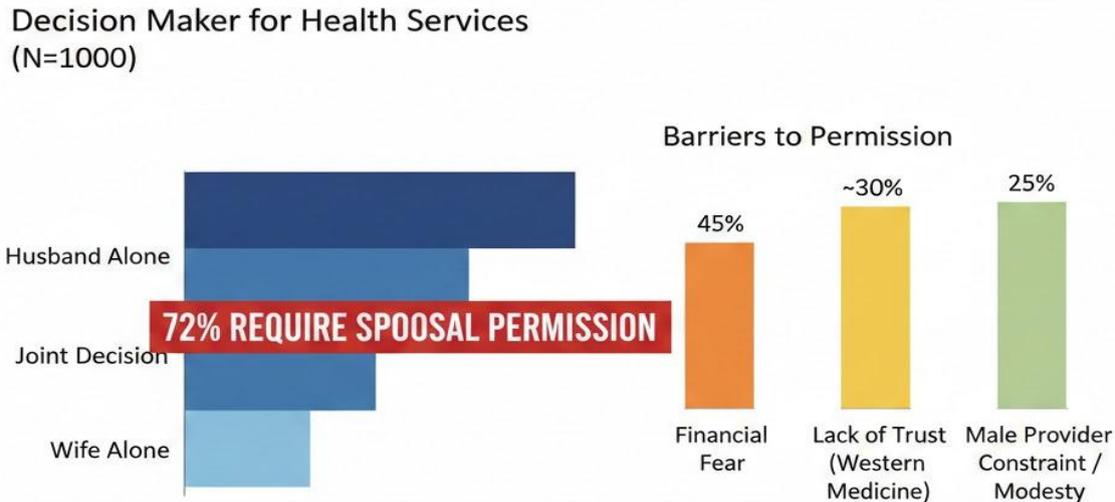
Note. Adapted from "This disease is ‘not for hospital’: myths and misconceptions about cancers in Northern Nigeria," by A. M. Sarki and B. L. Roni, 2019, *Journal of Global Health Reports*, 3, e2019070.

Patriarchal Authority and Decision-Making:

The results indicate the critical role of gender dynamics in health-seeking behaviors. As illustrated in **Figure 1**, 72% of respondents indicated that they required spousal permission to access healthcare services. This "permission

paradox" creates a structural delay where women lack the autonomy to act on symptoms without male approval. Qualitative data suggests that husbands often delay permission due to financial fears, lack of trust in Western medicine, or cultural modesty concerns regarding male physicians examining their wives (Sinai et al., 2024). This finding aligns with broader studies in the region indicating that men are the ultimate decision-makers regarding women's health utilization, often acting as gatekeepers to survival (Sinai et al., 2024).

Figure 1: Patriarchal Authority and Decision-Making in Healthcare



Source: Sinai et. (2024). This “permission paradox” creates a structural delay for women’s healthcare access.

Figure 1. Decision-making hierarchy for health service utilization in the family. The figure highlights the dominance of patriarchal decision-making, where the husband is the primary authority for approving hospital visits. *Note.* Trends adapted from "Role of men in women’s health service utilisation in northern Nigeria," by I. Sinai et al., 2024, *BMJ Open*, 14(8), e085758.

Religious Fatalism and Psychosocial Barriers

Religious beliefs were found to exert a dual influence, providing coping mechanisms while simultaneously fostering fatalism. **Table 3** reveals that 60% of participants held fatalistic views, agreeing that cancer is *Qadr Allah* (destiny) and therefore inevitable or

unchangeable by medical intervention (Benidir et al., 2023). This fatalism correlates with a lack of engagement in screening behaviors. Furthermore, the psychosocial fear of mastectomy was profound; 79% of married women feared that surgery would lead to the cessation of conjugal relations and potential divorce. This fear is substantiated by Odigie et al. (2010), who reported high rates of marital dissolution following mastectomy in the region. Additionally, systemic barriers such as travel distance greater than 100km and regional insecurity (banditry/insurgency) were cited as major impediments to accessing centralized oncology centers (Adeleke et al., 2025; Premium Times, 2026).

Table 3 *Psychosocial, Religious, and Systemic Barriers to Orthodox Cancer Treatment*

BARRIER	SPECIFIC	IMPACT DESCRIPTION
DOMAIN	FACTOR	
PSYCHOSOCIAL	Fear of Mastectomy	Belief that surgery leads to loss of womanhood and divorce/abandonment.
RELIGIOUS	Fatalism (Qadr Allah)	Belief that the disease is a divine destiny that cannot be altered by medicine.
SYSTEMIC	Distance to Center	Travel >100km associated with advanced stage and treatment abandonment.
SECURITY	Insecurity/Conflict	Fear of kidnapping or banditry on roads prevents travel to referral centers.

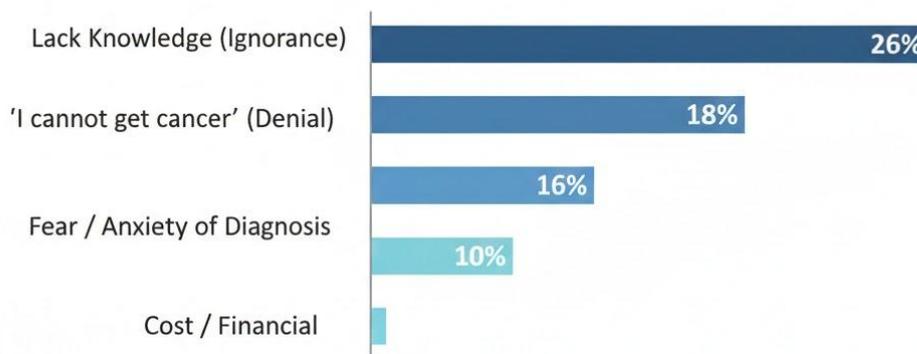
Note. Adapted from "Psychosocial effects of mastectomy on married African women," by V. I. Odigie et al., 2010, *Psycho-Oncology*, 19(8), 893-897; and "Nigeria: Experts Call for Urgent Action," *Premium Times*, 2026.

Finally, **Figure 2** summarizes the reasons given by respondents for the non-practice of early detection measures such as breast self-examination (BSE) and clinical screening. The data indicates that ignorance remains the most

significant barrier, followed closely by the fatalistic belief that "one cannot get cancer" and the psychological desire to avoid the fear associated with a potential diagnosis. These findings suggest that late presentation is not solely a result of structural lack of access but is deeply rooted in a lack of knowledge and psychological defense mechanisms that deny the reality of the disease (Azubuike & Celestina, 2015).

Figure 2. Primary reasons for the non-practice of breast cancer screening and early detection measures.

The chart illustrates that ignorance and psychological denial/fatalism are the leading causes for failure to screen.



Note. Adapted from "Breast Cancer: The Perspective of Northern Nigerian Women", by S. O. Azubiike and U. O. Celestina, 2015, *International of Preventive Medicine*, 6, 130.

Figure 2. Primary reasons for the non-practice of breast cancer screening and early detection measures. The chart illustrates that ignorance and psychological denial/fatalism are the leading causes for failure to screen. Note. Adapted from "Breast Cancer: The Perspective of Northern Nigerian Women," by S. O. Azubiike and U. O. Celestina, 2015, *International Journal of Preventive Medicine*, 6, 130.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study has provided a comprehensive sociological analysis of the factors driving the epidemic of late-stage breast cancer presentation among women in Northern Nigeria. The findings provide an affirmative answer to the research question regarding the influence of sociocultural

variables on health-seeking behaviors, confirming that the delay in diagnosis is not merely a consequence of infrastructural deficits but is deeply embedded in the region’s cultural, religious, and gendered social fabric. The hypothesis that traditional myths, patriarchal authority, and religious fatalism significantly impede early access to orthodox care has been strengthened by the empirical data. Specifically, the study established that the cultural conceptualization of cancer as *Jeji* (a mystical bush disease) and the pervasive myth that "surgery kills" create a rational framework for women to reject hospital care in favor of traditional healers, thereby prolonging the duration of illness until the disease becomes advanced (Sarki & Roni, 2019). Furthermore, the results highlight the critical role of the "permission paradox," where patriarchal norms

strip women of the agency to seek medical help without spousal approval, acting as a primary gatekeeping mechanism that delays survival (Sinai et al., 2024). Additionally, the study confirmed that religious fatalism, manifesting as a resignation to *Qadr Allah*, frequently leads to the interpretation of cancer as an unalterable destiny, discouraging proactive medical intervention (Benidir et al., 2023). These sociological barriers are compounded by systemic realities, including the prohibitive cost of treatment, long travel distances to oncology centers, and the prevailing insecurity in the region (Adeleke et al., 2025; Premium Times, 2026).

Recommendations

Based on these findings, the following recommendations are proposed to improve breast cancer outcomes in Northern Nigeria:

1. Public health interventions must move beyond generic awareness to directly address specific regional myths. Campaigns should utilize local languages (Hausa) and cultural narratives to debunk the concept of *Jeji* and the fear that surgery accelerates death. These messages should emphasize that early detection leads to breast conservation, directly countering the fear of mastectomy and loss of femininity (Sarki & Roni, 2019).
2. Given the strong evidence of patriarchal decision-making, interventions must target men as partners in women's health. Community advocacy programs should educate husbands and traditional leaders on the signs of breast cancer and the necessity of immediate hospital presentation, thereby dismantling the "permission paradox" that currently delays care (Sinai et al., 2024).
3. To address cancer fatalism, religious leaders (Imams and Pastors) should be integrated into cancer control strategies. They can play a pivotal role in reframing medical treatment as compatible with faith, clarifying that seeking cure (*Tibb*) is a religious duty that complements reliance on God (*Tawakkul*), rather than contradicting it (Salami et al., 2023; Benidir et al., 2023).

4. The government should prioritize the decentralization of oncology services to reduce the travel burden on rural women. Additionally, the expansion of the Cancer Health Fund and the inclusion of cancer treatment in the National Health Insurance Scheme are urgent necessities to mitigate the catastrophic health expenditures that deter low-income families from seeking care (Adeleke et al., 2025; Roche, n.d.).

5. In light of the conflict in the region, special "safe corridor" protocols or mobile cancer screening units should be deployed to internally displaced persons (IDP) camps and secure zones to ensure that women in conflict-affected areas are not excluded from life-saving diagnostic services (Premium Times, 2026).

REFERENCES

- Adams, S. A., Babatunde, O. A., Zahnd, W. E., Hung, P., Wickersham, K. E., Bell, N., & Eberth, J. M. (2025). An investigation of travel distance and timeliness of breast cancer treatment among a diverse cohort in the United States. *International Journal of Environmental Research and Public Health*, 22, 176. <https://doi.org/10.3390/ijerph22020176>
- Adeleke, O. D., Ayoola, I. O., Agbor, D. B. A., & Awoyemi, T. (2025). Radiotherapy in Nigeria: A silent emergency in cancer care. *International Journal of Surgery: Global Health*, 8(12), 7912–7915. <https://doi.org/10.1097/MS9.00000000000004173>
- Agodirin, O., Chijioke, C., Mustapha, F., Rahman, G., Olatoke, S., Olaogun, J., & Akande, H. (2025). Nigeria's 6-year (2018–2023) stage distribution of breast cancer at diagnosis: A systematic review and meta-analysis. *ecancermedicalscience*, 19, 1899. <https://doi.org/10.3332/ecancer.2025.1899>
- Akhigbe, A., & Akhigbe, K. (2012). Effects of health belief and cancer fatalism on the practice of breast cancer screening among Nigerian women. In

Mammography - Recent Advances.
InTech. <https://doi.org/10.5772/31176>

- Ali-Gombe, M., Inuwa Mustapha, M., Folasire, A., Ntekim, A., & Campbell, O. B. (2021). Pattern of survival of breast cancer patients in a tertiary hospital in South West Nigeria. *ecancermedicalscience*, 15, 1192. <https://doi.org/10.3332/ecancer.2021.1192>
- Ambroggi, M., Biasini, C., Del Giovane, C., Fornari, F., & Cavanna, L. (2015). Distance as a barrier to cancer diagnosis and treatment: Review of the literature. *The Oncologist*, 20(12), 1378–1385. <https://doi.org/10.1634/theoncologist.2015-0110>
- Azubuikwe, S. O., & Celestina, U. O. (2015). Breast cancer: The perspective of Northern Nigerian women. *International Journal of Preventive Medicine*, 6, 130. <https://doi.org/10.4103/2008-7802.172803>
- Benidir, A., Levert, M.-J., & Bilodeau, K. (2023). The role of Islamic beliefs in facilitating acceptance of cancer diagnosis. *Current Oncology*, 30(9), 7789–7801. <https://doi.org/10.3390/curroncol30090565>
- Bioku, A. A., Jimeta-Tuko, J. D., Harris, P., Lu, B., Kareem, A., Sarimiye, F. O., ... & Olagunju, A. T. (2025). Psychosocial wellbeing of patients with breast cancer following surgical treatment in Northern Nigeria. *BMC Psychiatry*, 25, 180. <https://doi.org/10.1186/s12888-025-06548-2>
- Kene, T. S., Odigie, V. I., Yusufu, L. M. D., Yusuf, B. O., Shehu, S. M., & Kase, J. T. (2010). Pattern of presentation and survival of breast cancer in a teaching hospital in North Western Nigeria. *Oman Medical Journal*, 25(2), 104–107. <https://doi.org/10.5001/omj.2010.29>
- Odigie, V. I., Tanaka, R., Yusufu, L. M. D., Gomna, A., Odigie, E. C., Dawotola, D. A., & Margaritoni, M. (2010). Psychosocial effects of mastectomy on married African women in Northwestern Nigeria. *Psycho-Oncology*, 19(8), 893–897. <https://doi.org/10.1002/pon.1675>
- Oluwasanu, M. M., Adejumo, P. O., Sun, Y., Onwuka, C., Ntekim, A., Awolude, O. A., ... & Olopade, O. I. (2024). Challenges and recommendations for improving cancer research and practice in Nigeria: A qualitative study with multi-stakeholders in oncology research and practice. *Cancer Control*, 31, 10732748241298331. <https://doi.org/10.1177/10732748241298331>
- Premium Times. (2026, February 11). Nigeria: Experts call for urgent action as displacement, conflict widen gaps in Nigeria's cancer care. *AllAfrica*.
- Roche. (n.d.). Improving standard of cancer care in Nigeria. *Roche Stories*. <https://www.roche.com/stories/improving-care-nigeria>
- Salami, A. A., Kanmodi, K. K., & Amzat, J. (2023). The roles of chaplains in dispelling cancer myths in Nigeria: A narrative review. *Health Science Reports*, 6(8), e1502. <https://doi.org/10.1002/hsr2.1502>
- Sarki, A. M., & Roni, B. L. (2019). This disease is “not for hospital”: myths and misconceptions about cancers in Northern Nigeria. *Journal of Global Health Reports*, 3, e2019070. <https://doi.org/10.29392/joghr.3.e2019070>
- Sinai, I., Azogu, O., Dabai, S. S., & Waseem, S. (2024). Role of men in women’s health service utilisation in northern Nigeria: A qualitative study of women, men and provider perspectives. *BMJ Open*, 14(8), e085758. <https://doi.org/10.1136/bmjopen-2024-085758>
- Tetteh, D. A., & Faulkner, S. L. (2016). Sociocultural factors and breast cancer in

Sub-Saharan Africa: Implications for diagnosis and management. *Women's*

Health, 12(1), 147–156.
<https://doi.org/10.2217/whe.15.76>