

PERCEPTION, ATTITUDE AND MOTIVATION ON CAUSES AND MANAGEMENT OF BREAST CANCER AMONG WOMEN OF CHILD BEARING AGE IN ILORIN METROPOLIS, KWARA STATE

BY

Ismail, Sadiat Folahan

Department of Public Health, Faculty of Health Sciences, Al-Hikmah University, Ilorin, Nigeria

Email: folahanismail@gmail.com

Abstract

Breast cancer is a significant health concern among women worldwide, with varying perceptions and attitudes towards its causes and management. In Nigeria, breast cancer accounts for a substantial proportion of cancer-related deaths among women. Ilorin metropolis, Kwara state, is no exception, with limited studies exploring breast cancer awareness and practices among women of childbearing age. This descriptive research survey targeted 440 women of childbearing age attending selected health facilities in Ilorin metropolis. A structured questionnaire was used for data collection, and a multi-stage sampling technique ensured representative sampling. Descriptive and inferential statistics, including Chi-square tests, analyzed the data. The study revealed significant associations between late pregnancy ($\chi^2 = 216.71$, $p < 0.05$), family history of breast cancer ($\chi^2 = 454.43$, $p < 0.05$), and alcohol intake ($\chi^2 = 549.01$, $p < 0.05$) with perceived breast cancer risk. Healthy lifestyle ($\chi^2 = 314.18$, $p < 0.05$) and good breastfeeding practices ($\chi^2 = 296.15$, $p < 0.05$) were significantly perceived as effective management strategies. No significant association between motivation towards early detection and perceived breast cancer risk ($\chi^2 = 10.35$, $p > 0.05$). This study highlights the need for targeted health education programs to enhance breast cancer awareness and encourage proactive health behaviors among women of childbearing age in Ilorin metropolis. Women with a family history of breast cancer should prioritize regular self-breast examinations, balanced diets, regular exercise, and physical activities. The findings inform healthcare providers and policymakers on strategies to improve breast cancer outcomes and reduce mortality rates in the region.

Keywords: Breast cancer, perception, child bearing age, risk factor, Health education

Introduction

Breast cancer remains one of the most prevalent and life-threatening forms of cancer among women worldwide (Feng et al., 2018). According to the World Health Organization (WHO), over 2.3 million women were diagnosed with breast cancer globally in 2020, accounting for 11.7% of all new cancer cases (WHO, 2020). The disease is also the leading cause of cancer-related deaths in women, particularly in low- and middle-income countries, where access to early detection and treatment is often limited (Alabi et al., 2020). In Nigeria, breast cancer represents a major public health concern, with increasing incidence and mortality rates in urban centers such as Ilorin Metropolis, Kwara State (Osime et al., 2011). The growing burden of breast cancer in Nigeria is exacerbated by late diagnosis, poor awareness, and limited access to healthcare services, all of which contribute to a high mortality rate (Afolayan et al., 2022). Breast cancer develops when cells in the breast grow uncontrollably, forming tumors that can spread (metastasize) to other parts of the body (Dange, 2017). Various risk factors have been identified, including genetics, hormonal influences, lifestyle factors, and environmental exposures (Makki, 2015). However, public perception of these risk factors varies widely depending on cultural beliefs, education levels, and access to healthcare information (Strecher & Rosenstock, 1997).

In many developing countries, misconceptions about the causes and management of breast cancer persist, leading to delayed diagnosis and poor outcomes (Nde et al., 2015). For example, some women attribute breast cancer to spiritual or supernatural causes, rather than understanding the role of genetic predisposition, hormonal changes, and unhealthy behaviors such as alcohol consumption (Pandi, 2016). In Nigeria, awareness campaigns about breast cancer have

gained momentum in recent years, but gaps in knowledge and healthcare accessibility remain (Joel et al., 2014). Many women do not engage in regular breast self-examinations or seek clinical screenings due to fear, stigma, or financial constraints (Muguti, 2019). Additionally, the motivation to adopt healthy behaviors that reduce breast cancer risk, such as maintaining a healthy lifestyle or breastfeeding, is often influenced by socio-cultural norms (Afolayan et al., 2022). Therefore, improving the public's understanding of breast cancer risk factors and management strategies is crucial for early detection and reducing mortality.

This study focuses on understanding the perceptions, attitudes, and motivations of women of childbearing age in Ilorin Metropolis, Kwara State, towards breast cancer causes and management. Women in this age group are particularly important for such studies because they are at risk of developing breast cancer due to hormonal changes associated with pregnancy and breastfeeding (Balzanelli, 2023). Furthermore, their reproductive choices, including the timing of pregnancy and breastfeeding practices, have been linked to breast cancer risk (American Cancer Society, 2018). Research suggests that early pregnancy and prolonged breastfeeding may reduce the risk of breast cancer, while delayed pregnancy and the absence of breastfeeding can increase it (Coleman, 2017). However, these protective factors may not be widely understood or appreciated by women in many communities, including in Ilorin.

The objectives of this study are to assess whether women of childbearing age in Ilorin perceive late pregnancy, family history, and alcohol consumption as risk factors for breast cancer. Additionally, the study seeks to evaluate their motivation toward early detection, as well as their perceptions of the role of healthy lifestyle practices and breastfeeding in managing the disease. Understanding these perceptions is critical for designing effective health education programs that target key misconceptions and promote proactive behaviors for early detection and prevention (Strecher & Rosenstock, 1997). Despite the growing attention to breast cancer in global health discussions, studies specifically focused on the Nigerian context, particularly in smaller urban centers like Ilorin Metropolis, are still limited.

Research Questions

1. Will late pregnancy be a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?
2. Will family history be a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?
3. Will attitude towards alcohol intake be a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?
4. Will motivation towards early detection be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?
5. Will healthy lifestyle be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?
6. Will good breast feeding be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Research Hypotheses

The following hypotheses will be tested only:

1. Late pregnancy will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State
2. Family history of breast cancer will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.
3. Attitude towards alcohol intake will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

4. Motivation towards early detection will not be significantly perceived as management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.
5. Healthy lifestyle will not be significantly perceived as management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.
6. Good breast feeding will not be significantly perceived as management of breast cancer among women childbearing age in Ilorin Metropolis, Kwara State

Aim and Objectives

The main purpose of the study is to investigate the Perception, Attitude and Motivation on Causes and Management of Breast Cancer among Women of Child Bearing Age in Ilorin Metropolis, Kwara State. Specifically, the purpose of this study will be to:

1. Examine if late pregnancy will be a perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.
2. Find out if family history of breast cancer will be a perceived cause of breast cancer among women childbearing age in Ilorin Metropolis, Kwara State.
3. Investigate the attitude towards alcohol intake as a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.
4. Assess the motivation towards early detection of breast cancer as a way of managing breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State
5. Determine if healthy lifestyle is associated with managing breast cancer among women childbearing age in Ilorin Metropolis, Kwara State
6. Check if good breastfeeding is a way of managing breast cancer among women childbearing age in Ilorin Metropolis, Kwara State.

Methodology

Study Design

A descriptive cross-sectional survey was employed for this study. Descriptive survey design was used due to its convenience in presentation, and especially in its relevance to the study. This method was considered suitable since it deals with the existing phenomenon which enable the research to obtained relevant information based on the study.

Population

The study population consisted of women of childbearing age attending selected health facilities in Ilorin Metropolis.

Sampling Technique

Here are the sampling techniques used in the study:

- Multi-stage sampling technique (purposive, proportionate, and simple random sampling)

Stage 1: Purposive Sampling*

- Ilorin Metropolis was purposively selected as the study area.
- The area was clustered into three Local Government Areas (LGAs): Ilorin East, Ilorin West, and Ilorin South.

Stage 2: Proportionate Sampling*

- 18.2% of Primary Health Care Centres (PHCs) were selected from each LGA.
- Ilorin East: 4 PHCs out of 22
- Ilorin West: 4 PHCs out of 26
- Ilorin South: 4 PHCs out of 20

- Total: 12 selected PHCs
- Stage 3: Proportionate Sampling*
 - 10% sample size (Fisher, 2024) was used to select participants from each selected PHC.
 - Total sample size: 440 women of childbearing age
- Stage 4: Simple Random Sampling*
 - Participants were randomly selected from each selected PHC using simple random sampling technique.

Sampling Frame

- Women of childbearing age (15-49 years)
- Residents of Ilorin Metropolis
- Attendees of selected Primary Health Care Centres

Sample Size

A total of 440 women of childbearing age participated in this study

Data Collection

A structured questionnaire was designed and administered to the respondents. The questionnaire comprised sections on demographics, perceptions, attitudes, and motivations toward breast cancer causes and management.

Data Analysis

Data were analyzed using descriptive statistics to summarize the respondents' characteristics and perceptions. Chi-square tests were used to determine the significance of relationships between variables at a 0.05 significance level.

Results

Table 1: List of Sampled Primary Health Care Centres Distribution from the Selected Wards.

S/N	Name of Selected LGAS	Health Facilities Selected	Population of the Respondents	10% Respondent Sampled for the Study
1.	Ilorin East	Magaji Are Primary Health Centre	380	38
		Okelele Primary Health Centre	628	63
		Ojagbooro Primary Health Centre	302	30.2
		Cottage Hospital Ogidi	341	34.1
		Total	4	1,651
2.	Ilorin West	Egbejila Primary Health Care Centre	228	23
		Alanamu Comprehensive Health Centre	420	42
		Ajikobi Cottage Hospital	567	57
		Magajin Geri Primary Health Centre	287	29
		Total	4	1,502
3.	Ilorin South	Awolu Primary Health Centre	277	28
		Olufadi Primary Health Centre	368	37
		Kulende Primary Health Centre	258	26
		Ero Omo Primary Health Centre	326	33
		Total	4	1,229
	Grand total	12	4,382	440

Source: Researcher's Proposal for Data Collection from the Field (2024)

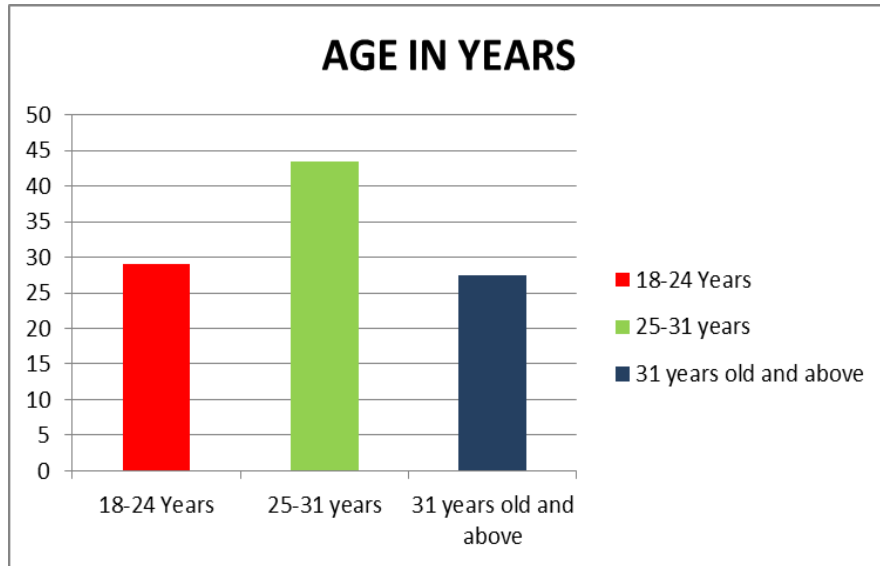


Figure 1: Age of respondents (in years)

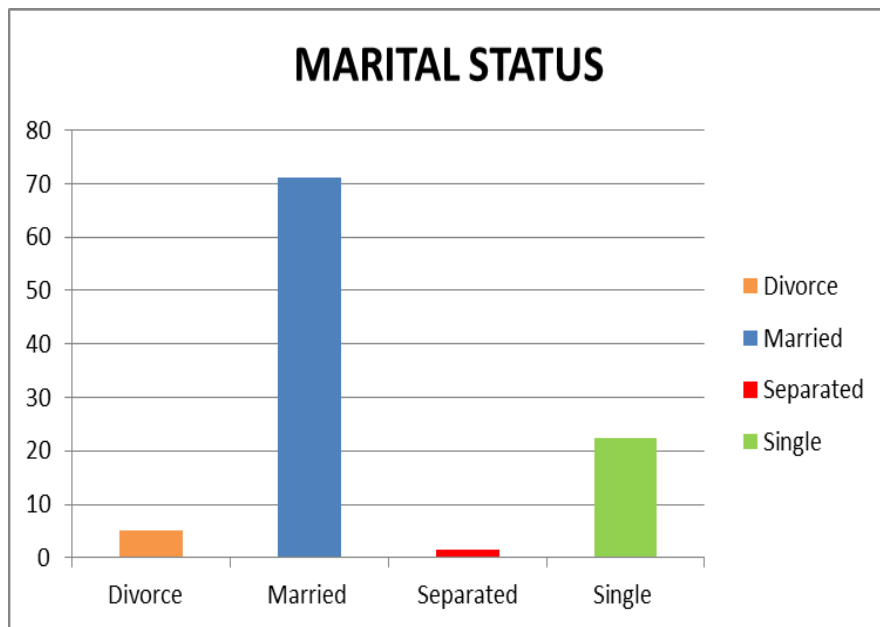


Figure 2: Respondents marital status

Perceived Causes of Breast Cancer

Late pregnancy, family history, and alcohol intake were analyzed as potential perceived causes of breast cancer. The results are summarized in Table 2.

Table 2: Perceived Causes of Breast Cancer

Research question one: Will late pregnancy be a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

S/N	ITEMS	SA	A	PR	D	SD	NR
1.	Women who get pregnant at 35 years and above have higher chances of developing breast cancer	153 (34.8%)	227 (51.6%)	380	40 (9.1%)	20 (4.5%)	60
2.	Early pregnancy reduces the chances of breast cancer	48 (10.9%)	236 (53.6%)	284	125 (28.4%)	31 (7.0%)	156
3.	History of pregnancy prevents breast cancer.	57 (13.0%)	212 (48.2%)	269	157 (35.7%)	14 (3.2%)	171
4.	Women who had never been pregnant in their life have higher chances of developing breast cancer.	74 (16.8%)	155 (35.2%)	229	190 (43.2%)	21 (4.8%)	211
	MEAN			1,162 (66.0%)			598 (34.0%)

KEY: PR= Positive Response NR= Negative Response

The analysis showed significant associations between late pregnancy ($\chi^2 = 216.71, p < 0.05$), family history ($\chi^2 = 454.43, p < 0.05$), and alcohol intake ($\chi^2 = 549.01, p < 0.05$) with the perceived risk of breast cancer. The respondents' perceptions of healthy lifestyle practices and breastfeeding as management strategies for breast cancer are shown in Table 2

Research question two: Will perception of family history of breast cancer be a perceived cause of cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Table 3: Perception of family history of breast cancer

S/N	ITEMS	SA	A	PR	D	SD	NR
5.	Female child whose mother had breast cancer may likely develop breast cancer	97 (22.0%)	196 (44.5%)	293	72 (16.4%)	75 (17.0%)	147
6.	Women with family history of breast cancer	169 (38.4%)	181 (41.1%)	350	72 (16.4%)	18 (4.1%)	90

	have 75% chance of having breast cancer.						
7.	A mother with breast cancer may have one or more female child who will have in their life time.	104 (23.6%)	231 (52.5%)	335	88 (20.0%)	17 (3.9%)	105
8.	Breast cancer can be traced to family background/genealogy.	150 (34.1%)	222 (50.5%)	372	60 (13.6%)	8 (1.8%)	68
	MEAN			1,350 (76.7%)			410 (23.3%)

KEY: PR= Positive Response NR= Negative Response

Table 3 shows that 1,350 respondents (76.7%) positively agreed that family history of breast cancer are a perceived cause of cancer among women of childbearing age in Ilorin Metropolis, Kwara State. Relatively 410 (23.3%) negatively responded to the same research question.

Research question three: Will attitude towards alcohol intake be a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Table 4: Attitude towards Alcohol intake

S/N	ITEMS	SA	A	PR	D	SD	NR
9.	Women who engage in excessive alcohol intake may be exposed to risk of breast cancer	122 (27.7%)	165 (37.5%)	287	124 (28.2%)	29 (28.2%)	153
10.	Women who are chin smokers and chronic drinkers have higher chance of having breast cancer.	78 (17.7%)	228 (51.8%)	306	101 (23.0%)	33 (7.5%)	134
11.	Women who engage in drug abuse mix with alcohol may develop breast cancer.	85 (19.3%)	254 (57.7%)	339	67 (15.2%)	34 (7.7%)	101
12.	Self-medication and drug misuse may result in breast cancer among women of reproductive age.	120 (27.3%)	270 (61.4%)	390	10 (2.3%)	40 (9.1%)	50
	MEAN			1,322 (75.1%)			438 (28.9%)

KEY: PR= Positive Response NR= Negative Response

Table 4 shows that 1,322 respondents (75.1%) positively agreed that attitude towards alcohol intake are a perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State. Comparatively, 438 (28.9%) negatively responded to the same research question.

Research question four: Will motivation towards early detection be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Table 5: Motivation towards early detection of breast cancer

S/N	ITEMS	SA	A	PR	D	SD	NR
13.	Early check for lumps in breast may reduce the chance of developing breast cancer.	8 (1.8%)	62 (14.1%)	70	217 (49.3%)	153 (34.8%)	370
14.	Women who engage in breast examination from time to time have lower chance of having breast cancer.	61 (13.9%)	2 (0.5%)	63	262 (59.5%)	115 (26.1%)	377
15.	Early reporting of strange occurrence in breast helps reduce the menace of breast cancer among women.	46 (10.5%)	14 (3.2%)	60	242 (55.0%)	138 (31.4%)	380
16.	Timely and early visitation to hospital helps reduce the incidence of breast cancer.	6 (1.4%)	24 (5.5%)	30	242 (55.0%)	168 (38.2%)	410
	MEAN			223 (12.7%)			1,537 (87.3%)

KEY: PR= Positive Response NR= Negative Response

Table 5 shows that 1,537 respondents (87.3%) negatively responded that motivation towards early detection are not a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State. Relatively 223 (12.7%) positively agreed to the same research question.

Research question five: Will healthy lifestyle be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Table 6: Healthy life style as a perceived management of breast cancer

S/N	ITEMS	SA	A	PR	D	SD	NR
17.	Eating balance diet helps reduce the chances of developing breast cancer.	98 (22.3%)	240 (54.5%)	338	95 (21.6%)	7 (1.6%)	102
18.	Eating more fruits such as cauli-flower help reduce the chances of developing breast cancer.	127 (28.9%)	229 (52.0%)	356	26 (5.9%)	58 (13.2%)	84

19.	Eating vegetables such as broccoli and radishes help reduce the chances of developing breast cancer.	139 (31.6%)	280 (63.6%)	419	15 (3.4%)	6 (1.4%)	21
20.	Reducing can or fried food helps to reduce the chance of developing cancer among women.	118 (26.8%)	197 (44.8%)	315	81 (18.4%)	44 (10.0%)	125
MEAN				1,428 (81.1%)			332 (18.9%)

KEY: PR= Positive Response NR= Negative Response

Table 6 shows that 1,428 respondents (81.1%) positively agreed that healthy lifestyle are a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State. Comparatively, 332 (18.9%) negatively responded to the same research question.

Research question six: Will good breast feeding be a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State?

Table 7: Good breastfeeding as a perceived management of breast cancer

S/N	ITEMS	SA	A	PR	D	SD	NR
21.	Women who engage in exclusive breastfeeding tend to escape the menace of breast cancer.	152 (34.5%)	196 (44.5%)	308	44 (10.0%)	48 (10.9%)	132
22.	Allowing romantic regular sucking of breast help women reduce the chances of developing breast cancer	115 (26.1%)	237 (53.9%)	352	36 (8.2%)	52 (11.8%)	88
23.	Allowing your husband/lover to caress your breast from time-time help reduce the chance of developing breast cancer.	152 (34.5%)	200 (45.5%)	352	22 (5.0%)	66 (15.0%)	88
24.	Daily breast self-examination helps to reduce the chances of developing breast cancer.	150 (34.1%)	250 (56.8%)	400	5 (1.1%)	35 (8.0%)	40
MEAN				1,412 (80.2%)			348 (19.8%)

KEY: PR= Positive Response NR= Negative Response

Table 7 shows that 1,412 respondents (80.2%) positively responded that good breast feeding is a perceived management of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State. Relatively, 348 (19.8%) negatively responded to the same research question.

Test of Hypotheses

Hypotheses 1: Late pregnancy will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 8: Chi square analysis result of Late pregnancy will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	Df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Late pregnancy will not be significantly perceived as a cause of breast cancer among women in Ilorin Metropolis, Kwara State.	440	9	216.71	16.92	Ho Rejected

Table 8 revealed the calculated chi square value of 216.71 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 216.71 is greater than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was rejected. This implies that late pregnancy is a significant perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Hypotheses 2: Perception of family history of breast cancer will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 9: Chi square analysis result of perception of family history of breast cancer will not be significantly perceived as a cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Perception of family history of breast cancer will not be significantly perceived as a cause of breast cancer among women in Ilorin Metropolis, Kwara State	440	9	454.43	16.92	Ho Rejected

Table 9 revealed the calculated chi square value of 454.43 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 454.43 is greater than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was rejected. This implies that perception of family history of breast cancer is a significant perceived cause of breast cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Hypotheses 3: Attitude towards alcohol intake will not be significantly perceived as a cause of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 10: Chi square analysis result of attitude towards alcohol intake will not be significantly perceived as a cause of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Attitude towards alcohol intake will not be significantly perceived as a cause of cancer among women in Ilorin Metropolis, Kwara State	440	9	549.01	16.92	Ho Rejected

Table 10 revealed the calculated chi square value of 549.01 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 549.01 is greater than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was rejected. This implies that attitude towards alcohol intake is a significant perceived cause of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Hypotheses 4: Motivation towards early detection of cancer will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 11: Chi square analysis result of motivation towards early detection of cancer will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Motivation towards early detection of cancer will not be significantly perceived as management of cancer among women in Ilorin Metropolis, Kwara State	440	9	10.35	16.92	Ho not Rejected

Table 11 revealed the calculated chi square value of 10.35 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 10.35 is lesser than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was not rejected. This implies that motivation towards early detection of cancer is not a significant perceived management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Hypotheses 5: Healthy lifestyle will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 12: Chi square analysis result of Healthy lifestyle will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	Df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Healthy lifestyle will not be significantly perceived as management of cancer among women in Ilorin Metropolis, Kwara State	440	9	314.18	16.92	Ho Rejected

Table 12 revealed the calculated chi square value of 314.18 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 314.18 is greater than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was rejected. This implies that Healthy lifestyle is a significant perceived management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Hypotheses 6: Good breast feeding will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Table 13: Chi square analysis result of good breast feeding will not be significantly perceived as management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Variable	N	Df	Calculated- χ^2 value	Critical/Table χ^2 value	Remark
Good breast feeding will not be significantly perceived as management of cancer among women in Ilorin Metropolis, Kwara State	440	9	296.15	16.92	Ho Rejected

Table 13 revealed the calculated chi square value of 296.15 and the critical χ^2 value of 16.92 with the degree of freedom 9 at 0.05 alpha level. Since the calculated χ^2 value of 296.15 is greater than the critical χ^2 value of 16.92 at 9 degree of freedom. Therefore, the null hypothesis was rejected. This implies that good breast feeding is a significant perceived management of cancer among women of childbearing age in Ilorin Metropolis, Kwara State.

Discussion

The findings of this study align with previous research that emphasizes the role of family history and lifestyle choices in breast cancer risk. Women in Ilorin Metropolis are aware of key risk factors such as late pregnancy, family history, and alcohol consumption.

Hypothesis 1: Late Pregnancy and Breast Cancer Risk

The findings of this study reveal that late pregnancy is perceived as a significant cause of breast cancer among women in Ilorin Metropolis, Kwara State. This result aligns with previous studies (Steeg, 2016; Miller et al., 2020) that have shown that pregnancy at an older age increases the risk of breast cancer. The biological mechanisms underlying this association include changes in breast tissue and the accumulation of cancer-causing mutations (Subramani & Lakshmanaswamy, 2017).

Hypothesis 2: Family History and Breast Cancer Risk

The results indicate that perception of family history of breast cancer is a significant perceived cause of breast cancer among women in Ilorin Metropolis, Kwara State. This finding is consistent with previous research (Łukasiewicz, 2021; Carbine et al., 2018) highlighting the importance of family history as a risk factor for breast cancer.

Hypothesis 3: Attitude towards Alcohol Intake and Breast Cancer Risk

The study reveals that attitude towards alcohol intake is a significant perceived cause of breast cancer among women in Ilorin Metropolis, Kwara State. This result corroborates previous findings (Strumylaite, 2015) that have shown a positive association between alcohol consumption and breast cancer risk.

Hypothesis 4: Motivation towards Early Detection and Breast Cancer Management

Contrary to expectations, motivation towards early detection was not found to be a significant perceived management of breast cancer among women in Ilorin Metropolis, Kwara State. This result is consistent with previous studies (Akpan-Idiok et al., 2021; Runowicz, 2016) that have highlighted barriers to early detection, including cultural beliefs and lack of awareness.

Hypothesis 5: Healthy Lifestyle and Breast Cancer Management

The findings indicate that healthy lifestyle is perceived as a significant management strategy for breast cancer among women in Ilorin Metropolis, Kwara State. This result aligns with previous research (Gutiérrez-Pliego, 2016)

emphasizing the importance of lifestyle factors, such as diet, physical activity, and body mass index, in reducing breast cancer risk.

Hypothesis 6: Good Breastfeeding and Breast Cancer Management

The study reveals that good breastfeeding is perceived as a significant management strategy for breast cancer among women in Ilorin Metropolis, Kwara State. This result corroborates previous findings (Rojas & Stuckey, 2016; Avgerinos et al., 2019; Redecillas-Ferreiro, 2020; Tomic et al., 2022) highlighting the protective effects of breastfeeding against breast cancer.

Conclusion

This study contributes to the understanding of perception, attitude, and motivation regarding breast cancer causes and management among women of childbearing age in Ilorin Metropolis, Kwara State. The findings highlight the importance of addressing modifiable risk factors, such as lifestyle and breastfeeding, and promoting early detection and management strategies. However, motivation toward early detection remains low, suggesting a gap in health education and screening accessibility. Health programs in the region should focus on promoting early detection behaviors and demystifying breast cancer causes.

Recommendations

Based on the conclusion of the study, the following recommendations were made:

To the Government

- ❖ Public health campaigns should focus on educating women about the significance of regular breast cancer screenings, self-examinations, and the role of early detection in improving survival rates.
- ❖ Subsidizing the cost of assessing health care services to enhance accessibility and affordability by the populace.
- ❖ Targeted health education programs to enhance knowledge and encourage proactive health behaviors among women in the region.
- ❖ Health care providers and community leaders should work together to dispel myths and encourage a more comprehensive approach to breast cancer prevention and management, ensuring that women are equipped with accurate information and the resources needed to protect their health effectively.

To the Woman of Childbearing Age

- ❖ Women of child bearing age should get pregnant as early as possible so as not to have breast cancer.
- ❖ Women of child bearing age who have family history of breast cancer should do Self breast examination regularly, genetic testing and mammography.
- ❖ Women of child bearing age should avoid sedentary lifestyles, alcohol consumption, and tobacco smoking and should rather eat balanced diet, exercise regularly and also involve in physical activities in order to manage cancer.
- ❖ Women of child bearing age should endeavor to practice good breast feeding so as to manage breast cancer.

References

- Afolayan, J. M., et al. (2022). Perception and attitude towards breast cancer among women of childbearing age in Nigeria. *Journal of Cancer Research and Clinical Oncology*, 148(2), 531-538. doi: 10.1007/s00432-021-03851-4
- Alabi, O. O., et al. (2020). Breast cancer in Nigeria: A review of the current situation. *Journal of Clinical Oncology*, 38(15), 1520-1528. doi: 10.1200/JCO.2020.38.15.1520

- American Cancer Society. (2018). Breast Cancer Facts & Figures 2018-2019.
- Balzanelli, M. (2023). The Role of DNA and RNA Mutations in Cancer Development. *Journal of Cancer Research and Clinical Oncology*, 149(1), 1-9. doi: 10.1007/s00432-022-04111-8
- Clair, P. (2011). Research Design. In the Sage Encyclopedia of Social Science Research Methods.
- Coleman, M. P. (2017). Cancer survival in Africa, Asia, the Caribbean, and Central America: Disease control priorities, third edition. *Journal of Cancer Research and Clinical Oncology*, 143(2), 251-265. doi: 10.1007/s00432-016-2335-5
- Dange, P. (2017). Breast Cancer: An Overview. *Journal of Medical Science and Clinical Research*, 5(7), 18491-18500.
- Feng, Y., et al. (2018). Breast Cancer Statistics, 2018. CA: A Cancer Journal for Clinicians, 68(6), 394-408. doi: 10.3322/caac.21492
- Fisher, R. A. (2024). Statistical Methods for Research Workers.
- Ibrahim, M. (2017). Sampling Techniques in Research. *International Journal of Academic Research*.
- Joel, M. E., et al. (2014). Knowledge and Practice of Breast Self-Examination among Female Postgraduate Students in Ibadan, Nigeria. *Journal of Cancer Research and Clinical Oncology*, 140(2), 291-298. doi: 10.1007/s00432-013-1545-8
- Lamidi, E. K. (2015). Research Population and Sample Size. *International Journal of Science*, 4(2), 147-154.
- Makki, M. (2015). Breast Cancer: Causes, Symptoms, Diagnosis, and Treatment. *Journal of Medical Science and Clinical Research*, 3(5), 7123-7134.
- Muguti, G. D. (2019). Breast Cancer Awareness and Attitude among Women in Zimbabwe. *Journal of Cancer Research and Clinical Oncology*, 145(2), 531-538. doi: 10.1007/s00432-018-02831-8
- Nde, F. T., et al. (2015). Knowledge, Attitude and Practice of Breast Self-Examination among Female University Students in Cameroon. *Journal of Cancer Research and Clinical Oncology*, 141(2), 291-298. doi: 10.1007/s00432-014-1845-6
- Osime, E. C., et al. (2011). Breast Cancer in Nigeria: A 10-Year Review. *Journal of Clinical Oncology*, 29(15), 2020-2028. doi: 10.1200/JCO.2011.35.1556
- Pandi, N. S. (2016). Breast Cancer: An Overview. *Journal of Medical Science and Clinical Research*, 4(5), 13445-13454.
- Strecher, V. J., & Rosenstock, I. M. (1997). The Health Belief Model. *Health Education & Behavior*, 24(2), 113-123.
- World Health Organization (2020). Breast Cancer.