ASSESSMENT OF INCIDENCE OF BREAST CANCER AMONG FEMALES IN ETHIOPE EAST AND ETHIOPE WEST L.G.A, OF DELTA STATE

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Abstract

This study was carried out to assess the incidence of breast cancer among females in Ethiope East and Ethiope West L.G.A.s of Delta State. Five research questions were raised and answered. A descriptive survey research design was adopted for the study. The population of the study consists of 265,349 females from Ethiope East and Ethiope West Local Government Areas of Delta State. The sample size of the study was 400 respondents. Data for this study was collected using a questionnaire. A reliability coefficient value of 0.75 was obtained for the questionnaire. The questionnaires were administered to 400 respondents; however, only 360, which represent 90% of the total number of administered questionnaires, were retrieved and used for data analysis. The collected data was analysed using frequency counts and percentages. The findings of the study, among others, are that: there are numerous prevalent symptoms of breast cancer among females, including lumps in the breast, pain in the armpits or breast that does not appear to be related to the woman's menstrual period, and others; the causes of breast cancer among females include environmental factors, alcohol and tobacco use, genetic risk factors and DNA changes and obesity and lack of exercise; the factors influencing the practise of breast self-examination among females include forgetfulness and procrastination, fear of finding a lump, ignorance of breast self-examination technique; and there are numerous treatment procedures for breast cancer among females are drugs therapy, radiation therapy, chemotherapy, surgery and physical exercise and dieting. Based on the findings, it was recommended, among others, that sources and methods of education and the development of effective educational resources aimed at reducing the barriers against the early detection of breast cancer should

be combined, and information campaigns through audience segmentation could be used to promote behaviour. Effective campaign strategies for increasing breast cancer awareness among women should be developed.

Keywords: Assessment, Incidence, Breast Cancer, Females

Introduction

Breast cancer affects women of all races without exception even though severity and survival rate are often diverse. Breast cancer is the second most common cause of cancer death in women after lung cancer (American Cancer Society, 2018). Most prominent cause of cancer among women in low- and middle-income countries is breast cancer, accounting for 269,000 deaths (12.7% of all cancer deaths) in 2018 (Ferlay & Lancet, 2018). Breast cancer burden differs between countries and regions showing variations in incidence, mortality and survival rates (Coughlin & Ekwueme, 2019; World Health Organization, 2019).

In Western countries, breast cancer is the most commonly diagnosed cancer in women and the second leading cause of mortality and morbidity in women. The International Agency for Research on Cancer (IARC) provides statistics on the incidence, prevalence, and mortality rates of cancers in 184 countries and reports that breast cancer affects women in 145 countries, which include the US, UK, Australia, Canada, and Denmark, and is ranked higher than Africa and Asia (International Agency for Research on Cancer (IARC) 2018). Breast cancer is now considered the second most common form of cancer (besides skin cancer) in the United States, as well as the second leading cause of cancer- related death, after lung cancer (Centre for Disease Control, 2017; National Cancer Institute, 2019). In developing or low income countries, breast cancer is often characterized by late clinical presentations or advanced stages of the disease, when only chemotherapy and palliative care can be offered (Adeniji, 2018; Anyanwu, 2019; Parkin, 2018). Late diagnosis in breast cancer has been shown to impact differently on survival between affluent groups and those from socioeconomically deprived backgrounds (Jack & Downing, 2017). Awareness and health seeking practices have been shown to be poor in many developing countries, necessitating the need for proper awareness programmes (Khokhar & Montazeri, 2018).

There is variation of breast cancer incidence worldwide in which Africa is not excluded (Ojewusi & Arulogun, 2019). Incidence of breast cancer varies from 27% of cancers in North African countries (Algeria and Egypt) to 15% in sub- Saharan Africa (Parkin, 2018). The actual incidence of breast cancer is generally not known (Boulos, 2017) however, an increasing incidence of the disease in many parts of Africa was indicated by several publications (Onwere & Anyanwu,

2018). Women in any age range are at risk of breast cancer and the risks increase with advanced age (Omotara, 2019).

According to WHO (2019) published breast cancer deaths in Nigeria is 13,264 or 0.70% of total deaths. The age adjusted Death Rate is 28.11 per 100,000 of population ranks Nigeria 4th in the world." Adebamowo and Ajayi (2019) stated that breast cancer is the most common cancer in Nigeria. In the North-West geopolitical zone of Nigeria, cancer of the breast is second to cancer of the cervix, while at University College Hospital (UCH), Ibadan (situated in the South-West geopolitical zone of Nigeria) it is leading malignancy among women (Afolayan, 2017; Ogunbiyi, 2017). Also, in the North-central geopolitical zone, breast cancer constitutes 22.41% of new cancer cases registered in 5 years and accounts for 35.41% of all cancers in women (Afolayan, 2017).

The establishment of cancer registries by the Nigerian Government is an attempt to curb the menace of breast cancer disease starting from 1960. These serves as tools for collecting accurate and complete information on cancer incidence, prevalence, and mortality in a given geographical location and that can be used to conduct research, plan and implement cancer control, allocate resources for treatment and prevention, and other public health programme planning (Parkin, 2018). The cancer registry centre generates information that can contribute to cancer control policies and resource allocation. Federal Ministry of Health set up a committee to draw a National Cancer Policy after the World Cancer Congress in 2016, titled "bridging the gap and transforming knowledge into action". In 2008 the Federal Government of Nigeria established a 5-Year Nigeria Cancer Control Plan between (2008 - 2013) but the impact of advocacy, awareness creation, cancer prevention, early detection through regular screening and cancer management are not felt. At state level, there are various comprehensive health policies aimed at coping with health care delivery services and breast cancer awareness campaigns. There is currently no National policy on cancer control in Nigeria; however, control of reproductive cancers is included in the „National policy on reproductive health and strategic framework" (WHO, 2019).

In some communities in Ethiope East/West L.G.A., Delta State, despite the comprehensive health policies aimed at coping with health care delivery services, breast cancer awareness campaigns only came to lime-light in the early 2000s. This was strengthened with the installation of detecting machines in some hospitals in Ethiope East and West L.G.A. Non-government organizations such as Care Organization Public Enlightenment (COPE), Bloom Cancer Care and Support Services, Medical Women Associations and other individuals supported the programmes of the State government with activities geared towards creating awareness on the disease.

Statement of the Problem

Breast cancer mortality rates are higher in developing countries like Nigeria as a result of late detection and diagnosis. Another reason has been identified as a lack of knowledge about genetic risk factors for breast cancer. Also, social factors such as lack of awareness and knowledge about the disease and suspected poor attitudes towards breast self-examination (BSE), clinical breast examination (CBE), mammography, and other screening methods These explain the fact that breast cancer is not well understood by women. The increased mortality rate is also attributed to the lack of periodic practise of early detection methods like mammography and the lack of screening facilities.

Awareness and knowledge about alleviating the incidence of breast cancer vary among communities and population groups worldwide. For example, the MTN Foundation, National Breast Cancer Coalition, Breast Cancer Action, and Miss University Nigeria campaigners do not seem to know whether to attribute this increase in death rate to inefficiency in campaign message delivery or timing for target audiences in campaign slots. Also, they do not know whether to blame it on audience members' predispositions towards vital instructions and teachings adopted in the breast cancer campaigns.

While studies conducted to assess the knowledge and awareness of the incidence of breast cancer among women showed satisfactory levels in some places, other reports, especially from developing countries like Nigeria, reveal inadequate knowledge and awareness about the disease. Whereas patients in rural communities in Ethiope East and Ethiope West L.G.A. of Delta State with a high level of incidence usually present with less advanced stages of breast cancer as a result of the adoption of screening methods, those in communities with a low level of awareness often present their analysis and results late. This has implications for treatment success and patient survival. It is against this background that this study seeks to investigate the incidence of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State.

Purpose of the Study

The purpose of this study is to investigate incidence of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State. Specifically, the study aims at;

i. Ascertain the prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State

ii. Determining the causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State.

iii. Ascertain the knowledge of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State.

iv. Determining the factors that influence practice of breast self-examination among females in Ethiope East and Ethiope West L.G.A. of Delta State.

    v.   Examine the treatment procedures for breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State

Research Questions

    This following research questions have been formulated to guide this study;

    i.   What are the prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

    ii.   What are the causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

    iii.   What is the level of knowledge/awareness of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State?

    iv.   What are the factors that influence practice of breast self-examination among females in Ethiope East and Ethiope West L.G.A. of Delta State?

    v.   What are the treatment procedures for breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Significance of the Study

Theoretically, this study provides an academic platform for health educators to test claims put up by some theories on attitude and behavioural change that will best understand and explain the nature of breast cancer to women at risk. The Ministry of Health and other health organisations and agencies (local and international) will equally find the outcome of this study interesting. Again, statistical data on mortality rates might stir up concerns for better promotion of knowledge on self-examination and early detection, placing emphasis on prevention rather than cure. When this is achieved, the increase in the death rate will have been reduced.

This study will be beneficial to women, mothers, and girls in Ethiopia's East and West LGAs and will help to increase and create awareness about breast cancer by reducing the mortality rate in society. It will serve as a reference tool for further studies on the topic since one of the serious problems that have been identified in the academic community in Nigeria is the limited data base for research.

Scope and Delimitation of the Study

This study centred on the assessment incidence of breast cancer among females. It is delimited to adult females (18 years and above) in Ethiope East and Ethiope West L.G.A of Delta State.

Method and Materials

This study adopted descriptive survey research design. Descriptive survey design is a time-saving research technique that involve the subjects who are the focus of the study's goal. This design was considered appropriate because

it enable the researchers to obtained data from large number of respondents with the aid of questionnaire. The population of the study consists of 265,349 females from Ethiope East and Ethiope West Local Government Areas of Delta State. The population comprises all females in all the community, towns and villages within the study area. The population was obtained from Projected 2006 National Population Census Figures to 2015. A sample size of 400 respondents was used for the study. The sample size was determined with use of Yamane (1967) statistical table. The researchers chose this sample size bearing in mind the principle of parsimony, which allows for the need for representativeness in carrying out a research work of this magnitude.

The sampling technique adopted for this study was a purposive sampling technique. The sampling technique was used because the researchers needed respondents who, in one way or another, had knowledge of breast cancer and were willing to participate in the study. Besides, Hence, in selecting sampling units using this sampling technique, the researcher decided to visit secretariats, hospitals, schools, and offices in the study area where potential respondents go about their professional duties. The intended respondents (females) were approached by the researcher and politely asked if they would like to be sampled; if "yes" is the response, they are then included in the sample. Two hundred (200) females from each LGA were included in the sample, making 400 respondents. The research instrument used was a structured questionnaire. The questionnaire used for this study consists of two sections (A and B). Section A consists of the demographic data of the respondents, while Section B consists of 15 items that seek to answer the research questions after fieldwork. The type of validity used is face validity; therefore, it has to do with the confidence gained from careful inspection of the measuring instrument to see whether it is appropriate enough to be used as a verifiable tool of data collection. To establish the validity of the instrument, it was presented to three experts in the Department of Health and Safety Education, Delta State University, Abraka. The final draught copy was corrected based on recommendations. The reliability of the questionnaire was tested using the test-retest method. Using this method, 25 copies of the questionnaire were administered to the respondent, who selected five communities out of the study's local government areas. After an interval of two weeks, the instrument was administered to the same set of respondents. The data collected from the two separate administrations of instruction was used to compute the reliability of the instrument using Pearson Product Moment Correlation, and a reliability coefficient of 0.78 was obtained for the entire instrument. To collect data for the study, the researchers, with the help of three research assistants, administered the instruments to the respondents. The questionnaires were administered to 400 respondents; however, only 360, which represent 90% of the total number of administered questionnaires, were retrieved

and used for data analysis. The collected data were analysed using descriptive statistics such as frequency count and percentage. The formula for the percentage is illustrated below:

$$Percentage = \frac{total\ number\ of\ respondents}{total\ number\ of\ sample\ size} \times \frac{100}{1}$$

Presentation of Data

In this research, 400 copies of questionnaire were administered to respondents and 360 copies were returned,24 were lost or irretrievable all together while 16 were invalid due to incomplete filling. As a result, 360 questionnaires was used for the analysis of this study. The percentage used for the analysis of the research questions.

Demographic Characteristics

Table 1: Marital Status of Respondents

Marital Status	No. of Respondents	Percentage
Single	196	54.4
Married	164	45.6
Total	360	100

Source: Field Work, 2022

Table 1 shows that out of the 360 respondents, 196 are single consisting of 54.4% while the married respondents are 164, consisting of 45.6%.

Table 2: Age of Respondents

Age	No. of Respondents	Percentage
18-25	126	35
26-33	114	31.7
34 and above	120	33.3
Total	360	100

Source: Field Work, 2022

Table 2 shows that out of the 360 respondents, 126 (35%) are within the age bracket of 18-25, 114(31.7%) are within the age bracket of 26-33 and 120(33.3%) are above 34 years old.

Table 3: Religious Affiliation

Religion	No. of Respondents	Percentage
Christianity	332	92.2
Islam	28	7.8
Others	-	-

Total	180	100.0

Source: Field Work, 2022

Table 3 shows that 332 (92.2%) respondents are Christians while 28(7.8%) of the respondents are Muslims.

Table 4: Educational Levels

Educational Levels	No. of Respondents	Percentage
No formal education	64	17.8
Primary	82	22.8
Secondary	136	37.8
Tertiary	78	21.6
Total	360	100.0

Source: Field Work, 2022

Table 4 shows that 64 (17.8%) respondents have not obtained formal education, 82(22.8%) of the respondents have attained primary education, 68(37.8%) respondents have attained secondary education and 78(21.6%) respondents have attained tertiary education.

Table 4: Occupation

Occupation	No. of Respondents	Percentage
Unemployed	142	39.4
Employed	72	20
Business	146	40.6
Total	360	100.0

Source: Field Work, 2022

Table 4 shows that 142(39.4%) respondents are unemployed, 72(20%) of the respondents are employed, 146(40.6%) of the respondents are into business.

Answering of Research Questions Based on Data Analysed

Research Question 1: What are the prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Table 5: Percentage Responses of Respondents on the Prevalent Symptoms of Breast Cancer Among Females in Ethiope East and Ethiope West L.G.A. Of Delta State

S/N	ITEMS	SA	A	D	SD	Total
1	A lump in a breast	360 100%	-	-	-	360 100%
2	A pain in the breast	194 53.8%	166 46.1%	-	-	360 100%
3	Pitting or redness of the skin of	186	80	74	20	360

	the breast	51.6%	22.2%	20.5%	5.5%	100%
4	A swelling (lump) in one of the armpits	158 43.8%	158 43.8%	40 11.1	20 5.5%	360 100%
5	The nipple changes in appearance	226 62.7%	112 31.1%	14 3.8%	8 2.2%	360 100%

Source: Field Survey, 2022

In item 1, all the respondent strongly agreed that a lump in a breast is prevalent; In item 2, 53.8% strongly agreed, 46.1% agreed that a pain in the breast is prevalent. In item 3, Pitting or redness of the skin of the breast; Strongly Agree 186(51.6%), Agree 80(22.2%), Disagree 74(20.5%), Strongly Disagree 20(5.5%). In item 4, A swelling (lump) in one of the armpits; Strongly Agree 158(43.8%), Agree 158(43.8%), Disagree 40(11.1%), Strongly Disagree 20(5.5%). In item 5, The nipple changes in appearance; Strongly Agree 126(62.7%), Agree 112(31.1%), Disagree 14(3.8%), Strongly Disagree 8(2.2%). This implies that there are numerous prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State.

Research Questions 2: What are the causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Table 6: Percentage Responses of Respondents the Causes of Breast Cancer Among Females in Ethiope East and Ethiope West L.G.A. Of Delta State

S/N	ITEMS	SA	A	D	SD	Total
6	Environmental factors	126 62.7%	112 31.1%	8 2.2%	14 3.8%	360 100%
7	Alcohol and tobacco use	132 36.6%	144 40%	20 11.11%	44 12.2%	360 100%
8	Genetic risk factors and DNA changes	226 62.7%	112 31.1%	14 3.8%	8 2.2%	360 100%
9	Obesity and lack of exercise	198 55%	152 42.2%	6 1.66%	4 1.11%	360 100%
10	Aging	6 1.66%	4 1.11%	198 55%	152 42.2%	360 180%

Source: Field Survey, 2022

In item 6, Environmental factors; Strongly Agree 226(62.7%), Agree 112(31.1%), Disagree 14(3.8%), Strongly Disagree 8(2.2%). In item 7, Alcohol and tobacco use; Strongly Agree 66(36.6%), Agree 72(40%), Disagree 40(11.11%), Strongly Disagree 44(12.2%). In item 8, Genetic risk factors and DNA changes; Strongly Agree 226(62.7%), Agree 112(31.1%), Disagree 7(3.8%), Strongly Disagree 4(2.2%). In item 9, Obesity and lack of exercise; Strongly Agree 198(55%), Agree 152(42.2%), Disagree 6(1.66%), Strongly Disagree 4(1.11%). In item 10, Aging; Strongly Agree 6(1.66%), Agree 4(1.11%), Disagree 198(55%), Strongly Disagree 4(1.11%). This implies that majority of

respondents agreed that the causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State include Environmental factors, Alcohol and tobacco use, Genetic risk factors and DNA changes and Obesity and lack of exercise.

Research Questions 3: What is the level of knowledge/awareness of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Table 7: Percentage Responses of Respondents the Level of Knowledge/Awareness of Breast Cancer Risk Factors Among Females in Ethiope East and Ethiope West L.G.A. Of Delta State

S/N	ITEMS	SA	A	D	SD	Total
11	Awareness about breast cancer varies among females of different communities	244 67.7%	88 24.4%	18 5%	10 2.7%	360 100%
12	Most females do not know anything about breast cancer	186 51.6%	170 47.2%	4 1%	-	360 100%
13	Every female understands the dangers of breast cancer and its causes	194 53.8%	166 46.1%	-	-	360 100%
14	Most females understand that early detection could improve the chances of survival	186 51.6%	80 22.2%	20 5.5%	74 20.5%	360 100%
15	Females understand the nature of breast cancer through self-examination	158 43.8%	158 43.8%	20 5.5%	40 11.1%	360 100%

Source: Field Survey, 2022

In item 11, Awareness about breast cancer varies among females of different communities; Strongly Agree 244(67.7%), Agree 88(24.4%), Disagree 18(5%), Strongly Disagree 10(2.7%). In item 12, Most females do not know anything about breast cancer; Strongly Agree 93(51.6%), Agree 170(47.2%), Disagree 4(1%). In item 13, Every female understands the dangers of breast cancer and its causes; Strongly Agree 194(53.8%), Agree 166(46.1%). In item 14, Most females understand that early detection could improve the chances of survival; Strongly Agree 186(51.6%), Agree 80(22.2%), Disagree 74(20.5%), Strongly Disagree 20(5.5%). In item 15, Females understand the nature of breast cancer through self-examination; Strongly Agree 158(43.8%), Agree 158(43.8%), Disagree 40(11.1%), Strongly Disagree 20(5.5%). This implies that there is high level of knowledge/awareness of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State.

Research Questions 4: What are the factors that influence practice of breast self- examination among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Table 8: Percentage Responses of Respondents on the Factors That Influence Practice of Breast Self-Examination among Females in Ethiope East and Ethiope West L.G.A. of Delta State.

S/N	ITEMS	SA	A	D	SD	Total
16	Forgetfulness and procrastination	180 360%	-	-	-	360 100%
17	Fear of finding a lump	192 53.3%	154 42.8%	-	14 3.9%	360 100%
18	Ignorance of breast self-examination technique	130 36.1%	112 36.7%	50 13.9%	48 13.3%	360 100%
19	Females not considering it necessary	360 100%	-	-	-	360 100%
20	Some females believe they can never have breast cancer	360 100%	-	-	-	360 100%

Source: Field Survey, 2022

In item 16, Forgetfulness and procrastination; Strongly Agree 360(100%). In item 17, Fear of finding a lump; Strongly Agree 192(53.3%), Agree 154(42.8%), Strongly Disagree 14(3.9%). In item 18, Ignorance of breast self- examination technique; Strongly Agree 65(36.1%), Agree 112(36.7%), Disagree 50(13.9%), Strongly Disagree 48(13.3%). In item 19, Females not considering it necessary; Strongly Agree 360(100%). In item 20, Some females believe they can never have breast cancer; Strongly Agree 360(100%). This implies that the factors influencing the practice of breast self-examination among females in Ethiope East and Ethiope West L.G.A. of Delta State are forgetfulness and procrastination, fear of finding a lump, ignorance of breast self-examination technique, females not considering it necessary and that some females believe they can never have breast cancer.

Research Questions 5: What are the treatment procedures for breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State?

Table 9: Percentage Responses of Respondents on the treatment procedures for breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State

S/N	ITEMS	SA	A	D	SD	Total
21	Drugs therapy only	226 62.7%	112 31.1%	8 2.2%	14 3.8%	360 100%
22	Radiation therapy only	132	144	40	44	360

		36.6%	40%	11.11%	12.2%	100%
23	Chemotherapy only	226 62.7%	112 31.1%	14 3.8%	8 2.2%	360 100%
24	Surgery	198 55%	152 42.2%	6 1.66%	4 1.11%	360 100%
25	Physical exercise and dieting only	6 1.66%	4 1.11%	198 55%	152 42.2%	36\0 100%

Source: Field Survey, 2022

In item 21, Drugs therapy only; Strongly Agree 226(62.7%), Agree 112(31.1%), Disagree 14(3.8%), Strongly Disagree 8(2.2%). In item 7, Radiation
therapy only; Strongly Agree 132(36.6%), Agree 144(40%), Disagree 80(11.11%), Strongly Disagree 44(12.2%). In item 8, Chemotherapy only; Strongly Agree 226(62.7%), Agree 112(31.1%), Disagree 14(3.8%), Strongly Disagree 8(2.2%). In item 9, Surgery; Strongly Agree 198(55%), Agree 152(42.2%), Disagree 6(1.66%), Strongly Disagree 4(1.11%). In item 10, Physical exercise and dieting only; Strongly Agree 6(1.66%), Agree 41.11%), Disagree 198 (55%), Strongly Disagree 4(1.11%). This implies that respondents are well aware of the numerous treatment procedures for breast cancer among females which are drugs therapy only, radiation therapy only, chemotherapy only, surgery and physical exercise and dieting only

Discussion of Findings

In the first finding, it was revealed that there are numerous prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West
L.G.A.s of Delta State. This finding agrees with the National Cancer Institute (2009), which opined that a symptom is only felt by the patient and is described to the doctor or nurse, such as a headache or pain. A sign is something the patient and others can detect, for example, a rash or swelling. The first symptoms of breast cancer are usually an area of thickened tissue in the woman's breast or a lump. The majority of lumps are not cancerous; however, women should get them checked by a health care professional. A lump in a breast, pain in the armpits or breast that does not appear to be related to the woman's menstrual period, pitting or redness of the skin of the breast, like the skin of an orange, a rash around (or on) one of the nipples, a swelling (lump) in one of the armpits, an area of thickened tissue in a breast, and one of the nipples having a discharge that sometimes may contain blood are the prevalent symptoms of breast cancer among females in the studied area.

It is also discovered in the second finding that respondents are well aware of the numerous causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State, but most of them agreed that the major causes of breast cancer are environmental and genetic risk factors. This finding corroborates that of Al-Abadi (2016), who observed that a number of chemicals

found in the environment, such as benzene (found in vehicle exhausts), are known carcinogens, although they have no definite connection to breast cancer. Some pesticides have been shown to mimic the effects of oestrogen, and it is plausible that they could increase breast cancer risk, although the current epidemiological evidence is weak. Also, Breckler and Wiggings (2012) further reported that the attribution of breast cancer development to inherited or genetic factors was the most commonly identified cause among control women, a finding previously reported by others. About 5–10% of breast cancer cases are thought to be hereditary, caused by gene changes (mutations) inherited from a parent. Inherited mutations in breast cancer one (BRCA1) or breast cancer two (BRCA2) are the most common cause of hereditary breast cancer. Women with BRCA mutations have a high risk of developing breast cancer during their lifetime. When they do develop it, they are often younger than other women with breast cancer who are not born with one of these gene mutations. Mutations in other genes are less common causes of inherited breast cancer.

In the third finding, it was obtained that there is a high level of knowledge and awareness of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State. Awareness about breast cancer varied among communities and population groups worldwide. Some respondents who were aware of breast cancer as a disease entity knew that breast cancer was the most common cancer among women worldwide (Yakubu, 2016); that breast cancer could be treated if detected early (Obaji, 2018); that breast cancer was associated with a high incidence of death; and that early detection could improve the chances of survival (Bassey, 2018). Female healthcare professionals have greater influence on women's positive perception of breast cancer and motivation to practise screening methods for early detection of the disease. In addition, the level of knowledge and attitudes of healthcare providers towards breast cancer are important determinants of their influence on the adoption of screening methods by women in their localities (Isara & Ojedokun, 2017). Reports have shown varying levels of knowledge about breast cancer among healthcare workers (Kayode, 2015; Islam & Aziz, 2018; McTiernan, 2019). Improving their knowledge and screening practises through targeted interventions has positively influenced the adoption of early detection methods by women in their communities. In Nigeria, previous studies on breast cancer knowledge assessment were conducted mainly among community-dwelling women (Oche, Ayedele, and Umar, 2012; Okolie & Uchenna, 2015). Reports from these studies showed a low level of awareness of breast cancer and practise of screening methods. In view of the large proportion of patients with breast cancer in Nigeria who present with advanced stages of the disease, there is a need for greater awareness of measures for early detection. Adequate knowledge and a positive attitude towards breast cancer screening are essential for female healthcare professionals if they are to play their expected role

in the breast cancer awareness campaign in Nigeria. Studies in Nigeria on the knowledge, attitude, and practise of healthcare providers towards breast cancer are few.

In the fourth research finding, it was ascertained that there are numerous factors influencing the practise of breast self-examination among females in Ethiope East and Ethiope West L.G.A. of Delta State. Other reasons provided for non-performance of BSE included not having a family history of breast cancer (Isara and Ojedokun, 2017), fear of finding a lump (Isara and Ojedokun, 2017), forgetfulness (Aniebue and Aniebue, 2018), ignorance of technique (Aniebue and Aniebue, 2018), not considering it necessary (Aniebue and Aniebue, 2018), and feeling of discomfort when touching the breast (Aniebue and Aniebue, 2018) were other reasons provided for non-performance of BSE Many studies expressed that the most important factor for not doing BSE is lack of knowledge regarding the conduct of BSE (Agboola, 2019); some believed they could never have breast cancer (Bassey, 2017); others felt they were violating their bodies by palpating their breasts (Bassey, 2017; Aniebue and Aniebue, 2018; Gali, 2018).

In the fifth research finding, it was determined that the respondents are well aware of the numerous treatment procedures for breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State, most especially drug therapy and chemotherapy. However, the main breast cancer treatment options are surgery and radiation therapy. Others may include biological therapy (targeted drug therapy), hormone therapy, and chemotherapy (Kaiser, 2013). Others are surgery, radiation therapy (radiotherapy), dieting, and physical exercise.

Conclusion

Based on the research findings, the following conclusions were drawn: there are numerous prevalent symptoms of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State. These include a lump in the breast; pain in the armpits or breast that does not appear to be related to the woman's menstrual period; pitting or redness of the skin of the breast; a rash around one of the nipples; a swelling (lump) in one of the armpits; and thickening of tissue in an area of the breast where one of the nipples has a discharge that may contain blood.

Furthermore, it was discovered that there are numerous causes of breast cancer among females in Ethiope East and Ethiope West L.G.A. of Delta State, especially environmental and genetic risk factors. It has been ascertained that there are a number of chemicals found in the environment, such as benzene (found in vehicle exhausts), that are known carcinogens, although there is no definite connection to breast cancer. Also, the attribution of breast cancer development to inherited or genetic factors was the most commonly identified

cause among control women, a finding previously reported by others. Mutations in other genes are less common causes of inherited breast cancer.

From the above study, it can also be concluded that there is a high level of knowledge and awareness of breast cancer risk factors among females in Ethiope East and Ethiope West L.G.A. of Delta State. Awareness about breast cancer varied among communities and population groups worldwide. In Nigeria, previous studies on breast cancer knowledge assessment were conducted mainly among community-dwelling women. Reports from these studies showed a low level of awareness of breast cancer and practise of screening methods. Studies in Nigeria on the knowledge, attitude, and practise of healthcare providers towards breast cancer are few.

It can also be inferred that there are numerous factors influencing the practise of breast self-examination among females in Ethiope East and Ethiope West L.G.A. of Delta State. The reasons provided for non-performance of BSE included not having a family history of breast cancer, fear of finding a lump, forgetfulness, ignorance of technique, not considering it necessary, and a feeling of discomfort at touching the breast, among others. It can be consequently ascertained that there are numerous treatment procedures for breast cancer among females in Ethiopia East and Ethiopia West L.G.A. of Delta State, most especially drug therapy and chemotherapy. However, the main breast cancer treatment options are surgery and radiation therapy. Others may include biological therapy (targeted drug therapy), hormone therapy, and chemotherapy. Others such as surgery, radiation therapy (radiotherapy), dieting, and physical exercise

RECOMMENDATIONS

In view of the above research findings, the following recommendations were made.

1. Several studies have emphasised that early detection through appropriate uptake of breast cancer screening interventions remains key to its prevention and cure. These educational efforts must be continued and expanded to include signs of breast cancer and advice as to changing life patterns to avoid cancer.

2. Sources and methods of education and the development of effective educational resources aimed at reducing and removing barriers like fear to breast health promotion and early detection must be combined with high levels of exposure among the audience to provoke change and have an impact on social norms.

3. Information campaigns through audience segmentation could be used to promote behaviour. Educational leaflets can be disseminated in settings where time, educator preparation, cost, recipient attention span, and generally limited resources are constraints.

4. The emphasis of health care practitioners should be on susceptibility and the seriousness of not making a change, and they should outline the costs of unhealthy behaviours and the benefits of change. The emphasis should be on educating women about "breast cancer awareness".

5. Breast cancer campaign planners should lower the age for screening and mammograms so that early detection and presentation at the hospital are enhanced, even though it has been discovered that early detection is not a guarantee of survival given that some types of breast cancer resist all forms of medication as they spread to the bones and brain.

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