Original Article

Breast Cancer Screening Practices among Women in Akure South Local Government Area of Ondo State, Nigeria

Obalase, Stephen Babatunde, RN, RPN, BSC, MSC, PhD (c)
Principal Nursing Officer, Federal University of Technology, University Health Centre, Akure, Ondo State, Nigeria

Adegboro, Joseph Sunday, PhD
Senior Lecturer, Human Kinetics And Health Education Department, Faculty Of Education, Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria

Correspondence: Obalase, Stephen Babatunde, Principal Nursing Officer, Federal University of Technology, University Health Centre, Akure, Ondo State, Nigeria   E-mail: obalase@yahoo.com

Abstract

This study examined breast cancer screening practices among women in Akure South Local Government area of Ondo State. The descriptive research of the survey type was adopted for the study. The sample consisted of 180 respondents between the ages of 18 and 50 selected from all political wards in Akure South Local Government Area of Ondo State. The validity of the instrument was established by three experts in health education, while the reliability coefficient of 0.87 was obtained and deemed fit for the study. Descriptive statistics was used to analyze the research questions while   inferential statistics were used to test the two hypotheses raised for the study at 0.05 level of significance. The results showed that the prominent source of information and knowledge about breast cancer screening came from hospitals, at home and mass media. The respondents conducted breast self examination once a while. Level of education has a significant influence on women susceptibility to breast cancer screening and they used to involve in breast self examination often than clinical screening and mammography

Key words: Influence, psychosocial, breast cancer, screening.

Background

Breast cancer is a type of cancer that originates from breast tissues, most commonly from the inner lining of milk ducts or the lobules that supply the ducts with milk (Sariego, 2010).Cancer   that originate from duct are known as ductal carcinomas while cancer that originate from lobules are known as lobular carcinomas. It is observed that every year about one million women worldwide are diagnosed with breast cancer out of which18% of all the cases of cancer reported are breast cancer (Ozmen, 2008). Prognosis and survival rates for breast cancer vary greatly depending on the cancer type, stage, treatment and geographical location of the patient. Survival rates in the western world as reported are high while survival rates in the developing countries are however very poor (World Cancer Report, 2008) as if the burden of the death from breast cancer among women in Nigeria is rapidly increasing and it is likely to continue as women are left without deliberate attempt to guide them on issues relating to breast cancer and the risk factors. Some notable personalities in Nigeria had died through the disease called breast cancer; the characteristics of the breast cancer also determine the treatment which may include surgery, medication, radiation and chemotherapy (America Cancer Society, 2013).

There are several types of breast cancer; the majority of breast cancer cases are classified as either in situ or invasive.   The carcinoma in situ may be lobular carcinoma in situ or ductal carcinoma in situ. In the same vein, invasive breast carcinoma comprises of invasive lobular carcinoma. This develops in the milk producing glands {lobules} of the breast. It has the ability to spread to other parts of the body. invasive ductal carcinoma is the most common type of invasive breast cancer, responsible for almost 85% of cases. Invasive ductal carcinoma has the ability to move to other parts of the body {world cancer report, 2008}.

The first noticeable symptom of breast cancer is typically a lump that is quite different from the rest of the breast tissues. It is observed that more than 80% of breast cancer cases are discovered when the woman fells a lump (Merck Manual, 2003). According to American Cancer Society (2009), Breast Self Examination (BSE) is a screening method that is being used to detect early breast cancer that involves a woman examining her own breast. It involves looking and feeling the breast for possible lumps, swelling or distortion based on this, breast self examination was once promoted as a means of detecting breast cancer at a more curable stage on a monthly basis to check for any abnormalities in appearance size and shape.

Another way of detecting breast cancer is through mammogram which is an X ray of the tissues inside the breast. This may likely show a breast lump even before it can be felt. The burden of breast cancer as observed is rapidly increasing and it is likely to continue as more people are exposed to the risk factors of breast cancer. The aim of breast cancer control program in Nigeria is to reduce the risk factor for breast cancer and improve the quality of life, this can be achieved by prevention, early detection or diagnosis and treatment as well as palliative care and psychosocial support. Breast cancer, like other cancer occurs because of the interaction between an environmental (external) factor and a genetically susceptible host. Normal cells are to divide as many times as needed and stop. They attach to other cells, to stay where they belong and to die at the proper time. Normal cell are to commit cell suicide called apoptosis when they are no longer needed. Many prominent Nigerian women have reportedly died of breast cancer following inability to detect the cancer at early stage of development (Adebamowo , 2007) .

menarche, obesity, low level of physical activity, smoking, consumption of alcohol, use of hormone replacement therapy (WHO, 2007). Screening can be done through periodic breast examination for early diagnosis, treatment and probably for survival. Breast Cancer Screening refers to testing of women for breast cancer in an attempt to achieve an early diagnosis with the assumption that early detection will improve outcomes.

Educational background and individual attitudes appear to be connected to the underlying issues contributing to the prevalence of breast cancer in women as observed by the researcher. Lifestyle practices which are under an individual's control such as smoking, drinking of alcohol and lack of body exercise could all contribute to breast cancer risk negatively. The environment may even be a potential cause of breast cancer which needs an urgent attention. Likewise, overweight, obesity and lack of physical activity may all play a role in breast cancer risk. Factors which could be attributed to breast cancer may include genetics, cultural and social factors such as poverty, psychological problems and family issues and social concerns. Breast cancer mortality rate appears to be higher in developing countries like Nigeria as a result of late detection and diagnosis. The aim of breast cancer control program in Nigeria is to reduce the risk factor for breast cancer and improve the quality of life, this can be achieved by prevention, early detection or diagnosis and treatment as well as palliative care. Without knowing the screening practices of women and those factors that can influence it, it will be difficult to plan effective preventive and cancer control programme, this is the gap in knowledge that this study wish to cover.

Statement of the Problem

Breast cancer unlike cervical cancer has no precise etiological agent. It therefore constitutes a major public health issue globally. The morbidity and mortality rate of breast cancer is on the increase especially in developing countries like Nigeria

(Adebamowo & Ajayi, 2000). It is observed that every year about one million women worldwide are diagnosed with breast cancer out of which 18% of all the cases of cancer reported are breast cancer (Ozmen, 2008). Prognosis and survival rates for breast cancer vary greatly depending on the cancer type, stage, treatment and geographical location of the patient. Survival rates in the western world as reported are high while survival rates in the developing countries are however very poor (World Cancer Report, 2008) as if the burden of the death from breast cancer among women in Nigeria is rapidly increasing and it is likely to continue as women are left without deliberate attempt to guide them on issues relating to breast cancer and the risk factors. The multi- disciplinary approach adopted by both western world, developing and under developed nations in the campaign for exclusive breast feeding for the children for prevention of infant mortality has yielded good result world-wide. Hence, there is need for this present study to fill the gap and to prevent mortality among women of reproductive age.

Objectives of the Study

The purpose of this study is to identify different types of breast self examination practices among women of child bearing age in Akure South Local Government Area of Ondo State and specifically to ascertain :

i.   how often the women conduct self breast examination and breast screening
examination
ii.   the influence of psycho-social variables on breast screening practices of women in Akure community
iii.   the influence of educational background on breast screening practices of women in Akure community

Significance of the Study.

The study would benefit women, health care providers, students in various places of learning, breast cancer patients, survivors, health educators, and health institutions. The study would help increase the knowledge and awareness of women on the dangers involved in late detection of breast cancer symptoms that could lead to death. This study would help the policy makers to adopt a standardized methods and guidelines on how women should make themselves available for clinical and mammography examinations for early detection of signs and symptoms of breast cancer.

Research Questions.

The following research questions were generated to guide the study:

1. How often do the women conduct self breast examination and breast screening examination?.

2.what is the influence of psycho-social variables on breast screening practices of women in Akure community?

3. What are the sources of getting information as regards breast cancer screening among women of Akure South LGA ,Ondo State?.

4. what is the influence of educational background on breast screening practices of women in Akure community?

Research Hypothesis

The following research hypotheses were formulated to guide the study at 0.05 level of significance

1.   There is no significant relationship between the breast cancer screening types among women
2.   The educational background of women will not significantly influence their susceptibility
to breast cancer screening.

Methods

A descriptive research of the survey type was used for this study. The population for the study were all women of child bearing age in Akure South Local Government Area of Ondo State. One hundred and eighty (180) women of childbearing age in Akure South Local Government Area of Ondo State participated in the study. They were selected using cross sectional research survey. This method was adopted because it was used successfully by Isara and Ojedokun (2011)when conducting study on knowledge of breast cancer and practice of breast self examination among female secondary school students in Abuja, Nigeria.In addition, Jebbin and

Adotey (2006) used cross section research survey successfully when conducting study on attitudes to knowledge and practice of breast self examination in Port -Harcourt, Nigeria. Therefore ,cross section research survey was adopted for this study. The sample were selected among women of child bearing age attending the basic health centres and health posts/clinics in the entire Local government area. The details of the research work was discussed with them and those agreed to participate in the study were enjoined to sign a consent form and they were assured of confidentiality and anonymity. The exclusion criteria and eligibility for the study include all those pregnant women were excluded from participating in the study due to vigorous activities and time frame for the study. More importantly, those women of child bearing age with one ailments or the others were also excluded from participating in the study. The study was built on health belief model according to Rosenstock (1966) in his article titled 'why people use health services'. A self designed questionnaire was used to elicit information from respondents and same was interpreted in local dialect for their better understanding of the subject matter. The questionnaire was validated by three experts in health education. A reliability coefficient of 0.87 was obtained using Pearson Product Moment Correlation Analysis. The instrument was administered to 180 respondents by the researcher and his research assistants. The data generated were analyzed using descriptive and inferential statistics while alpha was set at 0.05 level of signifjcance. One hundred percent return rate was realized in the collection of administered instrument for the study, no mortality recorded.

Results

Research Question 1 .How often do the women conduct self breast examination and breast screening examination?

The table 1 shows that the largest percentage of the respondents conduct breast self examination once a while which accounted for 65%, about 19.4% conduct self breast examination regularly while 15.6% of the respondents conduct self breast examination monthly .By implication, the women of child bearing age in Akure South Local government area of Ondo State had poor attitude towards the practice of breast cancer screening.

Question 2:   What are the factors influencing women in subjecting themselves to breast cancer screening.?

The table 2 revealed that knowledge about breast cancer accounted for 18.9% of the factors influencing women to subject themselves to breast cancer screening, age factors 16.7 %, economic status 13.3%, Level of education and   family history accounted for   12.2%, Religious belief accounted for 11.7%, emotional feelings and anxiety accounted for   11.1%   and   9.4% respectively..However, social factors and location of the respondents accounted for 8.3%

Research Question 3 What are the sources of getting information as regards breast cancer screening among women of Akure South LGA ,Ondo State?. T

he result from table 2   revealed that the major sources of information by the respondents on breast cancer screening and breast examination is hospitals which accounted for 48.9%, mass media 32.8%, friends 25%, market places 11.1% while the least source of information about breast cancer examination and screening was home which accounted for 4.4%.

Table 4   revealed the influence of level of education on women subjecting themselves to breast cancer screening methods. Those respondents with WASC 'O'L conduct breast self examination, clinical examination and mammography by 13.8 %, 7.2% and 5.6% respectively.NCE/ HND accounted   for 7.2% breast self examination, clinical examination 5.6% and mammography 2.8%.First degree accounted for 9.4% of breast self examination, 10.6% clinical examination and mammography 5.6 % while higher degree accounted for 17.2 % of breast self examination, 9.4% clinical examination and 6.7% of mammography.

The table 5   shows that there is significant relationship between breast self examination and clinical breast examination (r = 0.3980, P < 0.05).Similarly, the correlation between breast self

examination and mammography (r = 0.4080, P < 0.05).

Clinical breast examination and mammography (r = 0.3080, P < 0.05) is statistically significant at 0.05 level of significance in each case. Therefore, there is enough evidence to reject the null hypothesis.

By implication, there is a significant relationship between the breast cancer screening types among women of Akure South Local Government Area of Ondo State.

Hypotheses Testing

H01. There is no significant relationship between the breast cancer screening types among women

H02: The educational background of women will not significantly influence their susceptibility to breast cancer screening.

In order to test the hypothesis, scores relating to educational background of women and their susceptibility to breast cancer screening were subjected to statistical analysis involving Pearson Product Moment Correlation at 0.05 level of significance. The result is presented below.

Table 1 Showing How Women Conduct Breast Self Examination

SN	CONDUCT OF BREAST SELF EXAMINATION	Frequency	Percentage
I	Regularly	35	19.4%
II	Monthly	28	15.6%
III	Once a while	117	65%
	TOTAL	180	100%

Table 2.Factors that Influence Women to Subject themselves to Breast Cancer Screening

SN	FACTORS	Frequency percentage
I	Anxiety	17 (9.4%)
II	Emotional feelings	20 (11.1%)
III	Social factors	15 (8.3%)
IV	Family history	22 (12.2%)
V	Age factors	30 (16.7)
VI	Religious belief	21 (11.7%)
VII	Knowledge about breast cancer	34 (18.9%)
VIII	Economic status	24 (13.3%)
IX	Location	15 (8.3%)
X	Level of Education	22 (12.2%)

Table 2 Showing sources of Information and Knowledge of Breast Screening

SN	Sources Of Information	Frequency percentage
I	Mass media	59 (32.8%)
II	Friends	45 (25%)
III	Hospitals	88 (48.9%)
IV	At home	08 (4.4%)
V	Market places	20 (11.1%)

Table 4 Showing Influence of Educational Background on Women Subjecting Themselves to Breast Cancer Screening Methods

SN	Level Of Education	Breast Self Examination	Clinical Examination	Mamography
I	WASC"O"LEVEL	23 (13.8%)	13 (7.2%)	10 (5.6%)
II	NCE/HND	13 (7.2%)	10 (5.6%)	05 (2.8%)
III	FIRST DEGREE	17 (9.4%)	19 (10.6%)	10 (5.6%)
IV	HIGHER DEGREES	31 (17.2%)	17 (9.4%)	12 (6.7%)

Table 5: Correlation Matrix of Breast Cancer Screening Types Among Women

VARIABLES	BREAST SELF EXAMINATION	CLINICAL BREAST EXAMINATION	MAMMOGRAPHY
BREAST SELF EXAMINATION	1.0000	0.3980*	0.4080*
CLINICAL BREAST EXAMINATION		1.0000	0.3080*
MAMMOGRAPHY			1.0000

*P ≤0.05

Table 6: Pearson Product Moment Correlation Showing the Educational Background of Women and their Susceptibility to Breast Cancer Screening.

VARIABLES	N	Mean	SD	r cal	R tab	Remarks
Educational Status	180	1.48	2.57	0.49*	0.195	Sig
Susceptibility to breast cancer screening	180	6.04	10.46	0.49*	0.195	Sig

*P < 0.05

The result shows that the educational background of the women have significant influence on their susceptibility to breast cancer screening (r = 0.490, P < 0.05).The null hypothesis is rejected. This implies that the educational background of women will significantly influence their susceptibility to breast cancer screening practices

Discussion

The psychosocial factors affecting the Breast Cancer Screening in Akure South include anxiety, age, knowledge of family history, knowledge about breast cancer, religious belief, location and socio-economic status of the respondents. This finding was in agreement with the findings made by Magai-et-al; (2007) where they reported that psychosocial factors added a significant and substantial variance to the prediction of screening behaviour of women .This could had been as a result of the fact that breast cancer screening as a behavior is characterized largely by the women's psychosocial attributes (Akpo et al.,2009).

The sources of information and knowledge of breast cancer screening from the study came from hospital and residential area. This was consistent with the result cited by Olowokere et al.(2012) who reported in their study that health care providers   remain the major source of information to the people on breast cancer issues. The study revealed that women do not conduct breast self examination monthly (22.2%).This disagreed   with the findings of Nwagbo and Akpala (1996) from Enugu, and that of Odeyemi and Oyediran (2002) from Lagos State that breast self examination was known to be practiced by the respondents monthly. The findings of this study

also revealed that breast self examination are more effective methods of breast screening than mammography. This was explained by Janz and Becker (1984) in accordance with the principles and assumption of Health Belief Model that personal risk or susceptibility is one of the more powerful perceptions in prompting people to adopt healthier behaviour. The greater the perceived risk, the greater the likelihood of engaging in behavior to decrease the risk.

This study is in agreement with the studies conducted by Jebbin and Adotey (2006) when studying attitudes to knowledge and practice of breast self examination in Pot-Harcourt and Isara & Ojedokun (2011) when conducting research on knowledge of breast cancer and practice of breast examination among female secondary school students in Abuja, Nigeria respectively. The result of this study revealed that the religious beliefs of women significantly influence their disposition to breast cancer screening as 52.8 % agreed that religious belief was   one of the critical psychosocial factors influencing breast cancer screening in Akure South Local Government Area of Ondo State. This result agreed with the findings of Ahmadian (2011) that Iranian women are not interested in those practices that require their bodies to be touched by physicians , so breast screening practices would be neglected by those women.

Conclusion

It could be concluded that   social factors, socioeconomic status, age, location, family history, knowledge about breast cancer, religious beliefs, and emotional   feelings of women   constituted

psychosocial factors that influenced women to subject themselves to breast cancer screening .It is concluded that breast self examination and clinical breast examination are more effective methods of breast cancer screening than mammography .It is concluded that religious beliefs of women is a barrier to their disposition to breast cancer screening and there is a significant relationship between the breast cancer screening types among women.

Recommendations

Based on the findings of this study the following recommendations were made:

- Health educators should design effective programme that would create awareness of women's health issues as a way of detecting breast cancer in its early stage through breast screening.

- Health care providers should carefully address the misconceptions about breast screening and actively plan for strategies that will have great effect on women's adherence to breast cancer screening behavior.

- There should be a regular routine breast check by health care providers which will help women to feel at ease and become more confident , education and training about performing breast self examination and its benefits should be stressed.

- Mass media should be saddled with the great responsibility to create adequate awareness about breast cancer screening.

- Government should oversee the strict applicability of breast cancer prevention programme through breast screening.

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