

Breast Cancer: Knowledge And Practice Of Breast Self Examination Among Women In Rural Community Of Ondo State, Nigeria.

Makanjuola O.J., Amoo .P. O., Ajibade B.L., Makinde .O.Y.
RN, RPHN, BNSc Ondo State School of Nursing, Igbatoro Road, Akure, Ondo State.
RN, RM. BNSc, MSc, FWACN Department of Nursing, C.H.S. LAUTECH, Osogbo
RN, PhD. FWACN, MCANDepartment of Nursing, C.H.S. LAUTECH, Osogbo.
RN, RM. BNSc, MSc, FWACN Department of Nursing, C.H.S. LAUTECH, Osogbo

Abstract: Introduction: Breast cancer is a public health problem that is increasing throughout the world especially in developing countries. The study was aimed at assessing the knowledge of breast cancer and practice of breast self examination (BSE) among women in Ala (rural) community, in Akure North Local Government. Ondo state, Nigeria.

Methods: A descriptive cross sectional study was carried out among women in Ala community in Akure North Local Government, Ondo State. The tool for data collection was a structured self administered questionnaire. Data were analyzed using SPSS version window 21. Frequencies and percentages were used in the answering of the research questions.

Results: One hundred women participated in the study. Their mean age was 26 years. A greater proportion of respondents (60%) had poor knowledge of BSE. nearly all the participants had knowledge of the existence of breast cancer. The most frequent perceived cause of breast cancer was “hereditary” (55%). Breast cancer was attributed to witchcraft by (50%) of the participants. The risk factor most frequently indexed by respondents was “Excessive alcohol consumption” (65%). Overall (45%) of participants were partially aware of the causes of breast cancer. Although (60%) of respondents believed that breast cancer could be prevented with a vaccine, only (34%) recognized breast examination as a breast cancer prevention method. The major source of information for breast cancer and BSE among the respondents was the mass media. Only (13%) of respondents had practiced BSE.

Conclusion: This study concluded that there was poor knowledge of BSE and with unsatisfactory practice among women in Ala community area of Akure Local Government. Ondo state Nigeria. It therefore, suggests that breast awareness campaign and self efficacy development is important for women in this community to aid early detection and better prognosis of breast cancer in this community, and this will have a multiplier effect on female secondary school girls. Also, Further studies need to explore what interventions could be best used to improve the uptake and practice of BSE and other methods for early breast cancer detection.

Keywords; Breast cancer, Breast Self-Exam, Knowledge, Practices, Rural.

I. Introduction

Breast cancer is the top cancer in women worldwide and is increasing particularly in developing countries where the majority of cases are diagnosed in late stage. It also comprises 16% of all female cancers and is more common in women than men [1]. Breast cancer is curable if detected early and there are two major components of early detection of breast cancer: education to promote early diagnosis and screening. Most of the total deaths from the disease are accounted for in the developing world. The low survival rates in less developed countries may be explained mainly by lack of early detection programmes, lack of adequate diagnosis and treatment facilities which results in a high proportion of women presenting with late stage disease. It is estimated that the prevalence of breast cancer in women aged 15 and over in sub-Saharan Africa was 23.5 per 100,000 women in 2008 [2]. During the same period an estimated 3 5 , 4 2 7 women died from breast cancer - a crude mortality rate of 12.8 per 100.000 women [3].

It is the second principal cause of cancer deaths among women in the world as well as Nigeria [3, 4]. The actual burden of breast cancer in Nigeria is unknown due to lack of adequate cancer statistics [5]. However, the prevalence rate of breast cancer in study in Nigeria was 116 per 100,000 and 27,840 cases were expected to occur in 1999 [4]. Nigerian women usually present with advanced stages of the disease at which time little or no benefit can be derived in form of therapy. Further reports show that majority of cases occurred in pre-menopausal women and the mean age of occurrence ranged between 43-50 years across regions in Nigeria and the youngest age recorded was 16 years from Lagos [6].

Prevention remains the cornerstone of the fight against breast cancer worldwide. Although some prevention methods have been proposed, many remain inaccessible to women in developing countries who, ironically, given the limited diagnostic and curative facilities available to them, need prevention the most. Breast self-examination (BSE), although not having been shown to be effective in reducing mortality [4], is still recommended as a general approach to increasing breast health awareness and thus potentially allow for early detection of any anomalies [5]. Furthermore, BSE continues to be recommended by health care practitioners because it is free, painless and easy to practice. Kayode, Akande and Osagbemi [10] also asserted that despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self-examination. Okobia *et al.*, [8] also stressed that there is evidence that most of the early breast tumors are self-discovered and that the majority of early self-discoveries are by breast self-examination (BSE) performers. Previous studies on cancer detection practices have focused on women in urban and semi urban setting and little or no research have been conducted among women in rural and remote area. In most Nigerian villages, access to health care services, especially comprehensive diagnostic services is very low, if not completely unavailable hence, individual self health empowerment is very important. Despite this potential, there is very little data indicating the uptake and practice of BSE in rural communities of Ondo State Nigeria. Little is known concerning women's knowledge about breast cancer, their knowledge on BSE and their practice of BSE. Better documenting women's knowledge on breast cancer and BSE as well as their practice of BSE would be useful in the design of interventions aimed at preventing breast cancer through increased awareness and or improved screening.

OBJECTIVES

The objectives for this study were to:

- Assess women's knowledge of breast cancer and breast self-examination (BSE).
- Describe the extent of practice of breast self examination among respondents.
- Describe their perceptions on the causes, risk factors and prevention of breast cancer.

Research Questions

The following were the research questions that to guide the study.

1. What is the respondents' level of knowledge about breast cancer and breast self-examination?
2. To what extent do respondents practice breast self- examination?
3. What are respondents' perceptions on the causes, risk factors and prevention of breast cancer?

II. Methodology

Study Design: A Cross-sectional descriptive study was adopted to find out the knowledge and practice of breast self examination among women in Ala community in Akure North Local Government of Ondo State, Nigeria. This design was used as the researchers were not ready to manipulate variables in the study but would be described as they occurred in the study.

Study Population: The study population was women living in Ala community of Akure North Local Government between the ages of 18-50yrs.

Sample Size and Sampling Technique: Multistage sampling technique was adopted for the study. The first stage involved clustering of the community into zones and three zones were randomly selected and thirty three (33) respondents each were randomly selected from zones 1&2, while thirty four(34) respondents were selected from zone 3. Therefore, the sample size was one hundred (100) respondents.

Research Instrument: Researchers developed questionnaire consisting of twenty-eight (28) items were used. The questionnaire was divided into four (4) sections. Section one contains demographic information of the respondents while section two contains information on the knowledge of women on breast cancer and breast self examination, section three contains information on the respondents' practice of breast self examination, while section four contains information on perceptions of women on the causes, risk factors and prevention of breast cancer.

Data Collection Procedure: Data for the study were collected using self designed structured questionnaire. The instrument was tested for validity and reliability by an expert in the field and all corrections were corrected before final usage. It consisted of closed and open ended questions that were used to collect data that would meet objectives of the study. The questionnaire was distributed to all respondents, same was interpreted to those who were non literate, and all questionnaires were retrieved from the respondents. The questionnaire has four sections.

Research Ethics: Approval for the study was obtained from the Local Inspector of Education, Akure North Local Government Area, Also, informed consent was obtained from each respondent and they were assured of

their confidentiality and anonymity of the information provided.

Data Analysis: Statistical analysis was carried out using the statistical product and service solutions (SPSS) version window 20 . Frequencies and percentages were used in answering the research questions.

III. Results

Table 1 :Demographic data of respondents

AGE [years]	FREQUENCY	PERCENTAGE (%)
18-20 years	21	21
21-25 years	41	41
26-30 years	18	18
31 -50 years	20	20
Total	100	100
EDUCATIONAL STATUS		
Primary education	34	34
Secondary education	46	46
Tertiary education	14	14
None	6	6
Total	100	100
RELIGION		
Christianity	70	70
Muslim	30	30
Total	100	100
OCCUPATION		
Civil servant	12	12
Trading	52	52
Farming	8	8
Hair dressing	20	20
Total	100	100
ETHNICITY		
Yoruba	50	50
Igbo	22	22
Hausa	10	10
Others	18	18
Total	100	100

The above table shows the socio-demographic characteristics of the respondents. Respondents' age ranged from 18 to 50 years with a mean 26 with ± 7.5 SD. Forty-one respondents were between 21 - 25 years of age, the educational status revealed that a large proportion (46%) had West African Examination certificate, 50% of the respondents were Yoruba. Fifty-two of the respondents were traders while 70% of them were Christian.

Table 2: what is the respondents' level of knowledge toward breast cancer and breast self-examination?

Variables	%
Have you heard about breast self examination?	
Yes	40
No	60
What do you understand by breast self examination?	
BSE is to detect lump in the breast.	18
BSE is using your fingers around your breasts to detect lump.	22
It is an assessment do by doctors and nurses check for lump.	56
All the above.	4
At what age should breast self examination be commenced?	
From 15 years	25
From 20 years	10
Above 30 years	65
The following is/are the advantage(s) of breast self examination?	
It helps to know the shape and size of the breast.	66
It is done to make it more firm.	12
It helps to detect breast lump earlier.	22

Participants' knowledge on breast self-examination was very low as (60%) were not aware of BSE (Table 2) only 22% had understanding of what BSE assessment is all about. Sixty percent of the respondents said BSE should be commenced from 30 years and above. The respondents' knowledge about BSE was poor as (66%) believed that It only helps to know the shape and size of the breast. Only (22%) understood that BSE helps to detect breast lump earlier.

Table 3: To what extent do respondents' practices breast self examination?

Variables	%
Have you examine your breast before?	
Yes	25
No	75
How often do you examine your breast?	
Daily	0
Weekly	2
Monthly	13
Yearly	10
Never	75

Table 3 shows that only (25%) of the respondents practiced BSE, (10%) of respondents practiced BSE annually, while (13%) of respondents practiced BSE correctly at every month. Seventy-five percent of the participants had never practiced BSE.

Table 4: What are respondents' perceptions on the causes, risk factors and prevention of breast cancer ?

Variables	%
Knowledge of breast cancer's existence	85
perceived causes of Breast Cancer	
Exposure to sun	40
Can be inherited	55
Exposure to x-rays before 30 years of age	10
Overweight after menopause	8
Prolonged and early use of oral contraceptives	10
Witchcraft	50
Perceived Risk factors for Breast Cancer	
Excessive alcohol consumption	65
Excessive cigarette smoking	60
Inactivity and sedentary lifestyle	30
Use of cream and soap that can change skin colour	45
Perceived methods of preventing Breast cancer	
Dieting	40
Exercise	55
Vaccination	60
Breast examination	34

Table 4, showed respondents' perceptions about the causes, risk factors, and prevention of breast cancer. Respondents' knowledge and perceptions on breast cancer, nearly all the participants had knowledge of the existence of breast cancer. The most frequent perceived cause of breast cancer was "hereditary" (55%). Breast cancer was attributed to witchcraft by (50%) of the participants.

The risk factors most frequently indexed by respondents were "Excessive alcohol consumption" (65%), Excessive cigarette smoking (60%), Use of cream and soap that can change skin colour (45%), and an inactive sedentary lifestyle (30%). Overall (45%) of participants were partially aware of the causes of breast cancer (recognized at least two accepted causes of breast cancer). On the other hand (50%) were aware (recognized at least two accepted breast cancer risk factors). Although (60%) of respondents believed that breast cancer could be prevented with a vaccine, only (34%) recognized breast examination as a breast cancer prevention method. Fifty-five percent thought that breast cancer could be prevented with exercise, while (40%) thought that dieting would prevent breast cancer.

IV. Discussion

The study was carried out to find out the knowledge and practice of breast self examination among women in rural community of Ondo State, Nigeria. The results of the study showed that the respondents had good awareness about cancer but awareness on BSE was very low 40 % claimed to have heard about BSE through radio and television. However, out of 40% that claimed to have heard about BSE only 13% of respondents practiced BSE correctly. Oluwatosin & Oladepo [12] asserted that it is important for individual women to perform breast self examination monthly so that she will become familiar with her own breasts. Findings from this study however, revealed that majority of women (60%) had poor knowledge of breast self

examination. This supports the earlier studies [13] that reported that 75.8% of women had insufficient knowledge of BSE .

These findings were similar to those of these other studies of African women in showing considerable awareness about the existence of breast cancer, but poor knowledge on the risk factors and causes of breast cancer, as well as infrequent and in- consistent practice of BSE in various groups of women in Nigeria, Angola, Senegal and South Africa [7,17]. Specifically, in Nigeria, a study of female secondary students in Abuja indicated that while a high proportion knew about BSE being used to prevent breast cancer very few (10.1%) practiced it [15]. Similarly, close to three quarters of female undergraduate students in Nigeria had heard about BSE, although only about one in five had ever practiced it [18]. A study of rural women revealed poor knowledge similarly perceptions about a mystical origin of breast cancer such as it being due an “attack from the enemy” [19]. Further, a study of women in a semi-urban area of Nigeria, found that despite close to three quarters being aware of breast cancer less than half could identify associated symptoms or risk factors [9]. In Angola, a study of 595 university students indicated that a majority of them were not knowledgeable about breast cancer [17]. In Senegal a survey of 300 women indicated only 42.7% having knowledge about BSE and only 29% practicing it [12]. The situation appeared worse in women of African descent in South Africa in whom a survey indicated that close to one-fifth of women had not heard of breast cancer and half were not aware of BSE [8].

V. Conclusion

The study showed that the practice of BSE among the respondents was very poor while perceived as being important is not frequently practiced in these women in Ala community of Akure North of Ondo State. Considering the substantial role that can be played by BSE in such settings with limited prevention methods (mammography is unavailable) combined with the high burden of breast cancer, these findings suggest an urgent need for interventions to implement and reinforce existing cancer awareness and cancer screening programs. Health education campaigns will be needed to elucidate the public on the causes, risk factors and prevention of breast cancer. These education and information sessions would also need to dispel myths such as that witchcraft playing a role in the genesis of breast cancer while also inculcating the substantial role of genetics and unknown factors. Further studies need to explore what interventions could be best used to improve the uptake and practice of BSE and other methods for early breast cancer detection.

Implication for Nursing

This study had revealed that there exists a gap in the knowledge, awareness and practice of women towards breast self examination. It is therefore, call for Nurses to encourage women to carry out monthly breast self examination for early detection of lump in the breast thereby reducing the incidence of breast cancer and health educate women to avoid those things that can predispose to breast cancer such as smoking and alcohol consumption . This could be achieved through designing and implementing an intensive health education programme for women on the necessity and practice of breast self examination. Educational materials such as handbills, poster and leaflets should be freely made available during such teachings so as to facilitate better learning. Nurses could also be involved in advocacy visit to media houses to disseminate appropriate information on breast self examination through radio and television programs. This will increase people’s awareness and knowledge on importance of BSE.

References

- [1] World Health Organization (WHO). Breast cancer: prevention and control. <http://www.who.int/cancer/detection/breastcancer/en/print.html> (last access: 28/09/12).
- [2] World Health Organization (WHO). Screening and early detection of cancer. <http://www.who.int/cancer/detection/en/> (last access: 27/09/12).
- [3] Parkin DM, Bray F, Ferlay J, et al. Global cancer statistics,2002. *CA Cancer J Clin* 2005;55:74-108.
- [4] Adebamowo CA, Ajayi OO. Breast cancer in Nigeria. *West Afr J Med* 2000;19:179-91.
- [5] Ferlay J, Shin H-R, Bray F, Forman D, Mathers C, Parkin DM: Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. *Int J Cancer* 2010,127:2893–2917.
- [6] Banjo AAF. Overview of breast cancer and cervical cancers in Nigeria: are there regional variations? Paper presented at the international workshop on new trends in management of breast and cervical cancers, Lagos, Nigeria 2004
- [7] Bray F, Ren J-S, Masuyer E, Ferlay J: Global estimates of cancer prevalence for 27 sites in the adult population in 2008. *Int J Cancer* 2012, [doi:doi:10.1002/ijc.27711](https://doi.org/10.1002/ijc.27711). [Epub ahead of print] *Pub Med PMID: 22752881*.
- [8] Okobia, M.N., Bunker, C.H., Okonofua, F.E. and Osime, U. (2006) Knowledge, attitude and practice of Nigerian women towards breast cancer; a cross sectional study. *World Journal of Surgical Oncology*, 21, 1-9
- [9] Aderounmu AOA, Egbewale BE, Ojofeitimi EO, Fadiora SO, Oguntola AS, Asekun-Olarinmoye EO, Adeoti ML, Akanbi O: Knowledge, attitudes and practices of the educated and non-educated women to cancer of the breast in semi-urban and rural areas of Southwest, Nigeria. *Niger Postgrad Med J* 2006, 13:182–188.
- [10] Kayode, F.O., Akande, T.M. and Osagbemi G.K. (2005) Knowledge, attitude and practice of breast self examination among female secondary school teachers in Ilorin, Nigeria. *European Journal of Scientific Research*, 10, 42.

- [11] Heidari, Z., Mahmoudzadeh-Sagheb, H.R. and Sakhavar, N. (2008) Breast cancer screening knowledge and practice among women in southeast of Iran. *Acta Medica Iranica*, 46, 321-328.
- [12] Oluwatosin, O.A. and Oladepo, O. (2006) Knowledge of breast cancer and its early detection measures among rural women in Akinyele local government area, Ibadan, Nigeria. *BMC Cancer*, 6, 271-273.
- [13] Gueye SMK, Bawa KDD, Ba MG, Mendes V, Toure CT, Moreau JC: [Breast cancer screening in Dakar: knowledge and practice of breast self examination among a female population in Senegal]. *Rev Med Brux* 2009,30:77–82.
- [14]. Gwarzo UMD, Sabitu K, Idris SH: Knowledge and practice of breast-self examination among female undergraduate students of Ahmadu Bello University Zaria, northwestern Nigeria. *Ann Afr Med* 2009, 8:55–58.
- [15] Isara AR, Ojedokun CI: Knowledge of breast cancer and practice of breast self examination among female senior secondary school students in Abuja, Nigeria. *J Prev Med Hyg* 2011, 52:186–190.
- [16] Oluwatosin OA: Rural women's perception of breast cancer and its early- detection measures in Ibadan, Nigeria. *Cancer Nurs* 2006, 29:461–466.
- [17] Sambanje MN, Mafuvadze B: Breast cancer knowledge and awareness among university students in Angola. *Pan Afr Med J* 2012, 11:70.