

## BREAST CANCER SCREENING (BCS) AND THE MILLENNIUM DEVELOPMENT GOAL: THE NEED FOR AWARENESS ON BREAST CANCER SCREENING

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### Abstract

In developing economies typical of Nigeria, Breast cancer has become a nightmare with minimal hope for intervention to stop its progression. This has contributed significantly to economic and social burden experienced by most women in these parts of the world. However, Breast Cancer Screening (BCS) plays a vital role in the early detection of cancer among women. This study aimed at investigating the awareness of female patients about Breast Cancer Screening. A total of 100 questionnaires were distributed to female patients that visited the Usmanu Danfodiyo University, Teaching Hospital (UDUTH), Sokoto, Nigeria within first quarter of 2015. Data collected were entered into Microsoft Excel Spreadsheet and analyzed using SPSS version 20. Out of the sampled 100 respondents, 31% have never heard about Breast Cancer Screening while 24% do not know whether BCS improves outcome of treatment or not. However, 8% believed that BCS leads to loss of breast with 46% not sure if BCS leads to loss of breast or not. From this study, we can deduce that up till now a high percentage of females have never heard about Breast Cancer Screening. Thus, the increased awareness on the need for routine Breast Cancer Screening among women. This makes the place of mass media as well as other relevant advocacy frameworks become absolutely necessary in the context of best practices and conventional standards. This bears implications for the millennium development goals and the post 2015 development agenda especially in programming the implementation framework of the said agenda as they facilitate service delivery improvement and quality of life in the developing parts of the world.

**Keywords:** *Breast, Cancer, Screening, Women, Nigeria.*

### Background to the Study

Breast cancer is the most common cancer among women in most parts of the world; but there is a marked geographic variation in the different countries (Ferley *et al.*, 2004). The incidence is higher in northern Europe and North American, intermediate in Mediterranean countries and South America and lower in Asia and Africa (Ferley *et al.*, 2004). It has been estimated that one out of every nine women living in western world is likely to be associated with breast cancer in her lifetime (American Cancer Society 2010). Although the cancer was thought to be disease of developed world, the majority of death was generally related to detection of neoplasm in advanced stage which reduces the chance for effective treatment (World Health Organization, 2006).

In Nigeria like other parts of the world, the incidence of breast cancer is increasing and mostly at the late stage with minimal hope of any intervention that stop disease progression and reduce mortality rate Okobia *et al.* (2006) also in Nigeria over 1000,000 people develop cancer annually with majority of patients arriving hospital at a late stage, thus resulting in a high mortality rate (Sasco, 2001). Over the years, people had the belief that breast cancer is an older women's disease, therefore, the primary focus has been on prevention; detection and treatment of breast cancer for women who are 50 and older (Kinnon, 2003).

There are different methods of breast cancer screening which include breast self examination (BSE). Clinical breast examination and Mammography constitute the mainstay of Breast cancer screening although a new screening method it is yet to be widely available especially in the low-resource countries such as Nigeria. Mammography is the only breast screening procedure for which empirical evidence exists and believed to have significantly reduced breast carcinoma mortality by about 63% (Tabar *et al.*, 2001). The level of awareness and utilization of these screening methods in Nigeria, as in most other parts of the world is quite poor Okobia *et al.* (2006), and research revealed that women still present late due to low level of awareness or poor knowledge about use and benefits of mammography (Akhigbe *et al.*, 2009). So, in an attempt to meet this need, our study aims at identifying/exploring the factors that influence awareness and knowledge of breast cancer screening among patients attending the outpatient department of the tertiary hospital; understanding the relationship between patients attitude, perception towards breast cancer screening and how it could assist in identifying key variables in planning interventions for women in Nigeria and similar low resources settings.

### Material and Method

This is a hospital based cross sectional study investigating the level of awareness and knowledge of female patients attending the General outpatient department (GOPD) of the Usmanu Danfodiyo University Teaching Hospital, Sokoto (UDUTH) North-western Nigeria. The GOPD is the outpatient department dealing with all new cases excluding accidents and emergencies. Patients were sorted and referred for specialized care after consultation at the GOPD.

Women of 15 years and above attending the GOPD for care were studied within the first quarter of 2015. A total number of 100 patients were recruited through convenient sampling.

The data was obtained from the sampled patients through administration of questionnaire which elicited responses regarding bio data, age, marital status, education, knowledge, awareness and attitude. All patients aged 15 years and above presented in GOPD irrespective of their primary complaint were included in this Study while all patients aged below 15 years were excluded. Also patients with emergency situations were also excluded. Data collected were entered into Microsoft Excel Spreadsheet and analyzed using SPSS version 20.

#### Ethical Consideration:

Permission to carry out this study was sought from the Medical Ethical Committee of the institution before the commencement of the study.

#### Results

There were 100 respondents women sampled for the study on their awareness, knowledge and attitude about breast cancer screening. The minimum and maximum ages of the respondents were 15 and 50 years and above respectively, while a low proportion of women's age were found between 15-19 years (4%) followed by (27%) aged between 20-29 years. Age range of 30-39 years had a frequency of 43% which is the highest percentage. Those of age between 40-49 years (constituted 15%) and 11% is the proportion of women aged 50 and above as shown in Figure 1.

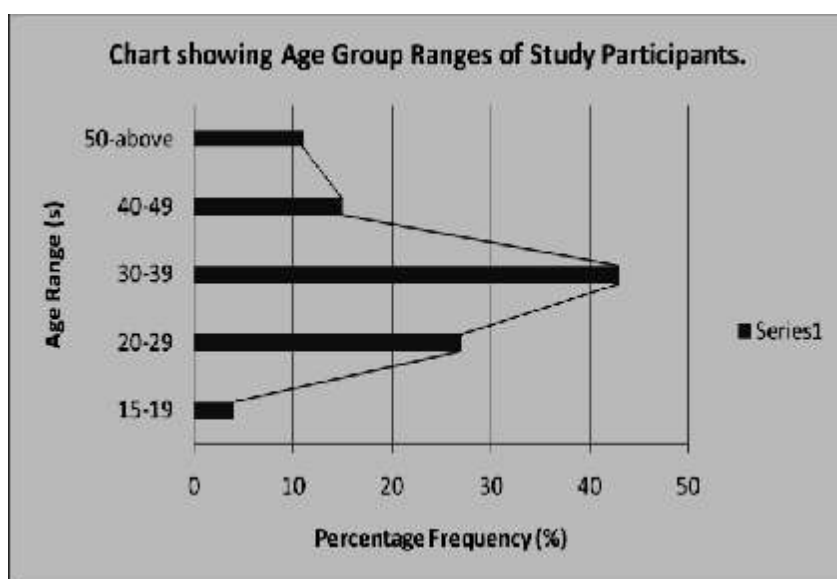


Figure 1: Chart Showing Age Group Ranges of Study Participants.

Meanwhile 36% percent of the women had no formal education but only informal education followed by those with secondary education (17%). About 33% of the respondents attained up to tertiary level of education, 11% had primary education (see figure 2). Majority (60%) of the women respondents were married while (16%) were single, (12%) were divorced, and (8%) were widowed and the remaining (4%) did not respond to the question as shown figure 3.

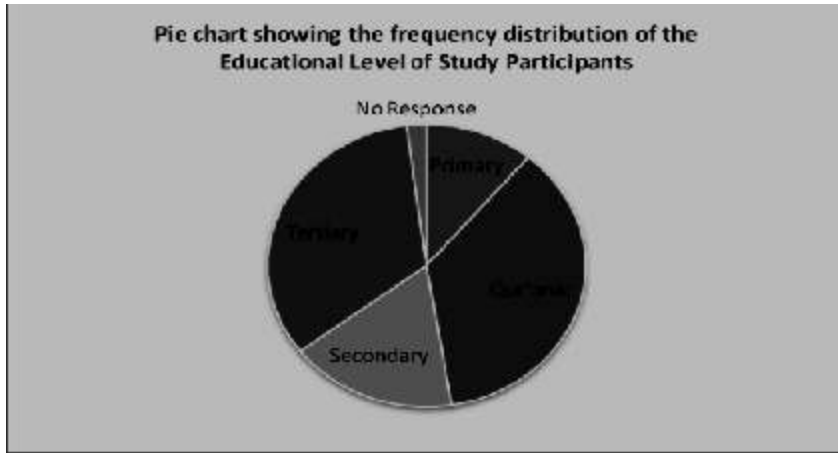


Figure 2: Pie Chart Showing the Frequency Distribution of Educational Level os Study Participants.

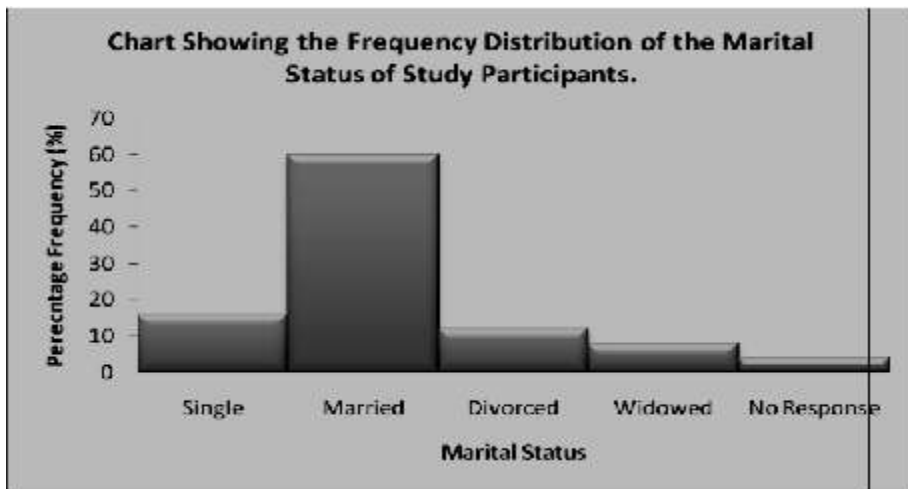


Figure 3: Chart Showing the Frequency Distribution of the Marital Status of Study Participants.

Respondent level of their awareness and knowledge about breast cancer screening is provided in Figure 2. More than thirty percent (31% n=31) of the study population had poor knowledge about the breast cancer screening, since they never heard about the screening. This means that women who heard about breast cancer screening dominated the study (65% n=65) they were women who have not responded to this question hence, scored at (4% n = 4). Pertaining to the issue concerning if early breast cancer screening improves the outcomes of the treatment, responses indicated that awareness was considerable where more than half

(69% n = 69) of the respondents are in the know with more than twenty percent claiming that they don't know whether early detection can improve the treatment outcome or not. 24% n = 24 were women who scored five percent (5% n = 5) as they believe early detection cannot change anything. Similarly, other women did not respond to that question (2% n=2).

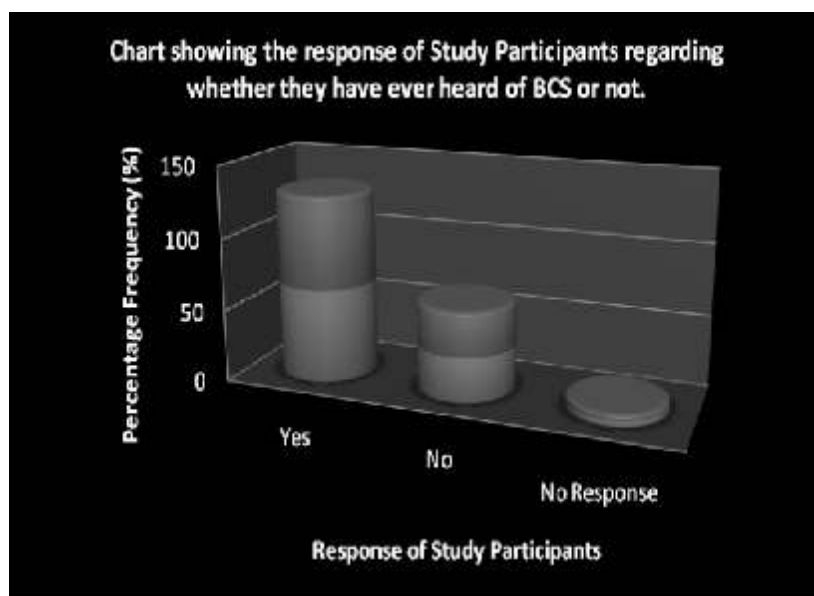


Figure 3: Chart Showing the response of Study Participants regarding whether they have ever heard of BCS or not.

As to whether Breast cancer screening leads to the loss of the breast, most of the women don't know that breast cancer screening leads to loss of the breast or not i.e (46% n = 46) while eight percent of respondent women have agreed that breast cancer screening leads to the loss of the breast (8% n = 8) and forty three percent (43% n = 43) of the women did not agree that breast cancer screening leads to the loss of the breast (3% n = 3) of the women didn't respond to this questionnaire.

### Discussion

The importance of awareness when it comes to tackling cancer emerged in an article in one of the recent bulletins of the World Health Organization (WHO) concluding that awareness is the first in battle against breast cancer (Bello, 2012). It is apparent by now that cancer screening /early detection is not high priority in terms of policy for low-or middle income countries (LMICs) in fact, most LMICs focus on maternal health component of the Millennium Development Goal (MDGs) as opposed to other health issues. This is in spite of the fact that 200,000 more women die each year due to breast and cervical cancer than from complications due to pregnancy and childbirth (World Health Organization 2014). That is why our study is committed to determine the level of awareness and knowledge about breast

cancer screening among female patients who are attending General Out patients Department GOPD at Usmanu Danfodiyo University Teaching Hospital Sokoto, (UDUTH) Nigeria. The study has revealed a low level of awareness and knowledge about breast cancer screening, 31% of respondents were not aware of breast cancer screening while 24% of women don't know whether breast cancer screening improves outcome of treatment or not. This sharply contrasts with the study reported by other authors in Nigeria likely due to variability in the characteristic of the study population Emmanuel, (2011) revealed high level of awareness of breast cancer and breast examination practice at 96% of the respondents among students in tertiary institution (Gali 2013). As regards breast cancer screening awareness, 75% of Health workers prove aware at University of Maiduguri Teaching Hospital Onyiye (2012), revealed that 43.6% know early symptom of breast cancer as being breast lump this is higher than 1.8% from women traders in Ibadan as argued Oluwatosun (2006), higher percentage equating 5% from women who attend General Outpatient Clinic (GOOC) at university of Ibadan teaching hospital never had a mammography screening. Similarly, Obajemi et al, (2013) also discovered that higher than 21% from community dwellers in Benin, supported by Akinola et al., (2011) reported a level of awareness of 40.5% among a hospital sample. To Okobia et al., (2006), 43% of the respondent are aware of breast cancer screening. The higher proportion from these studies is likely attributed to the level of literacy, in our study population, 36% of women conferred that they had no formal but only Qur'anic education compared with 57% that had informal education and only 33% of women had tertiary education, 27% secondary education, 11% primary education the remaining 2% fail to respond. The majority of studies from low-or middle income countries clearly indicate that the knowledge and attitude of women regarding breast cancer screening does not correlate well with the actual screening behavior (Harirchi et al., 2009; Okobia et al, 2006).

The findings from this study further showed that 8% of the respondents believes that breast cancer screening leads to the loss of breast while 46% of the women don't know whether it leads to the loss of the breast or not. The study also demonstrated very poor knowledge among this hospital population which is disappoint the given the exposure to health education session and also contact with health workers such as doctors and nurses. A low level of skills in conducting health education by health staff and poor attitude of health workers which has been previously demonstrated in Nigeria may contribute to this (Bello et al 2007) similarly (Bello et al, 2007) only 3.3% of medical practitioners referred patients for yearly mammography screening method. The failure of health workers to educate patients on important issue such as breast cancer screening greatly reduces the opportunity which hospital attendances have to gain information related issues Obajemi et al (2013).

This study found that none of the women had ever had a breast screening done. Very low proportions of women from others studies reported they had mammography screening. Ibrahim et al, 2009, Khigbe et al 2009 and Kinola et al 2011. On average, less than 50% of women aware of BSE actually practiced it, with the majority of women practicing incorrect techniques. Contrary to the expected view, health care producers were not knowledgeable about screening techniques, to implement screening behavior. Harirch et al 2009, Okobia et al 2006. One of the limitations of this study included the fact that is hospital based and may not

truly reflect the level of awareness among the general population.

#### Conclusion and Recommendations

In conclusion, our study has pointed out that in spite of more women dying from cancer than from pregnancy or childbirth related complications, a high percentage of female are still not aware of breast cancer screening. Thus, the need for increased awareness on the relevance of routine breast cancer screening among women. This make the place of mass media as well as other relevant advocacy frameworks becomes absolutely necessary in the context of best practices and conventional standards. This bears the implication of millennium development goals and the post 2015 agenda especially in the programming the implementation framework of the said agenda as they facilitate service delivery improvement and quality of life in the developing parts of the world.

There is need for most LMICs to focus on cancer issues instead of keeping cancer at the back seat and focusing mainly on maternal health interns of resources. Also, policy maker awareness remains low in LMICs regarding breast cancer screening /early detection being cost-effective and the "best buy " opportunity to reduce health costs. This coupled with a lack of research regarding cost-effective screening/early detection methods and little community awareness about breast cancer being a treatable disease results in most LMICs losing large number of women at an early age, a situation that is unfair from a human rights perspective while also creating "cancer orphans"(Ginsburg et al,2013).

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