AWARENESS AND PRACTICE OF BREAST CANCER SCREENING METHODS AMONG FEMALE STUDENTS OF UNIVERSITY OF MAIDUGIRI

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ABSTRACT

BACKGROUND Global statistics show breast cancer prevalence is rising at a faster rate in populations of developing countries. This study intends to evaluate the awareness of breast cancer, risk factors, screening methods and practice of the screening methods among female university students.

METHODS A descriptive survey design was adopted. Data was collected via, a 13-item, structured, questionnaire, containing demographic data, knowledge of breast cancer, awareness of screening methods and source of information on breast cancer, screening methods and its practice. Informed consent was sought from respondents. Data analysis was done using SPSS version 16. Descriptive statistics (frequencies and percentages) were generated.

RESULTS Of the 300 questionnaires distributed; 290 were returned giving a response rate of 96.9%. Respondents were within the ages of 17 and 56. A total of 194 (68.1%) respondents have heard of breast cancer. Most popular source of information was from newspapers/magazines 127(44.6%). Risk factor awareness showed that 164 (51.2%) believe that breast cancer is curable and 59 (20.7%) believe that breast cancer cannot be inherited. Of the total respondents, 190 (69.7%) claimed to have heard of Breast Self Examination and 198 (69.5%) were ignorant of mammography screening.

CONCLUSION Based on this study the awareness of breast cancer is high, but the practice of the screening methods is not consistent with the level of awareness. There is still an avenue for increasing knowledge and practice being a university where the quest for knowledge is high.

Keywords: *awareness, breast cancer, screening methods, breast self-examination and practice*

INTRODUCTION

Breast cancer in women has been identified as a major health problem and the most common cause of death among women in the developed and in developing countries. Recent global studies and statistics have it that breast cancer incidence is rising at a fast rate in populations of developing countries [1]. Breast cancer is responsible for 10.4% of the global burden of cancer in women and half of this occurs in developing countries [2]. According to the American cancer society [3], about 1.3 million women are diagnosed with cancer annually.

In Nigeria, like in many developing countries, current reports have noted an increase in the incidence of breast cancer. The prevalence in Nigeria in 1976 was 15.3 per 100,000, but this has risen to 33.6 per 100,000 by 1992 [4].

Breast cancer is an uncontrolled growth originating from breast tissue, most commonly from the inner lining of milk ducts or lobules that supply the ducts with milk. Cancers originating from ducts are known as ductal carcinomas while those originating from lobules are known as lobular carcinomas [5]. It is unique from other cancers in that it presents financial cost coupled with both physiological and psychological consequences for both the impacted women and their families [6].

Some risk factors linked to breast cancer are; age and family history, others include; menstrual period, early menarchy or late menopause, nulliparity, use of postmenopausal hormone therapy (PHT) and use of birth control pills [7].

Timely diagnosis is important as it reduces mortality and improves prognosis of breast cancer. Several screening tests such as Breast Self Examination (BSE), Clinical Breast Examination by a physician (CBE), mammography and breast cancer awareness and screening method have been used [1].

An individual's life style factors are known contributors to rates of breast cancer [6]. However, breast feeding appears to be protective against breast cancer [7].

Most common breast cancer presentation could be symptomatic with a painless breast lump and a smaller proportion with no breast lump symptoms. Adequate patient education on breast self examination and breast cancer screening methods will enhance awareness, compliance and early presentation to the hospital as patients will be able to recognise symptoms of breast cancer through routine practice [8]. The benefits of increasing awareness of breast cancer in the cure of the disease are enormous; Since breast cancer is a progressive disease, having a predilection of early dissemination and consequently detection of small tumours are more likely to be early stage disease which would have a better prognosis and higher probability of getting efficiently treated. It is recommended that women in general and especially those over the age of 35 years be more educated about the many available screening modalities for breast cancer and also need to be encouraged to adopt the measures as efficiently as they can [2].

The purpose of this study is to evaluate the level of awareness of breast cancer screening and its pre-disposing factors among female university students in North Eastern Nigeria.

MATERIALS AND METHODS

A descriptive, cross-sectional study design was adopted. Participants included female students of faculty of arts in University of Maiduguri from 100 level - 400 level. The departments include; English, History, Languages and Linguistics and Creative Arts. A sample size of 285 was arrived at using sample size estimate for a known population. An inclusion criterion was all female students of the faculty of Arts. All female students outside the faculty of Arts and all the male students were excluded from the study. Data was collected using a validated, 13-item, self-administered structured questionnaire. This was divided into three sections which contained demographic data, knowledge of breast cancer, awareness of screening methods and source of information on breast cancer, screening methods as well as practice of screening methods. Informed consent was sought from respondents and confidentiality of information was strictly maintained throughout the study. The study was conducted for a period six months (April, 2014 to September, 2014). Data was analyzed using SPSS version 16, where descriptive statistics (frequencies, percentages) were generated.

RESULTS

Three hundred (300) questionnaires were distributed, two hundred and ninety (290) were retrieved (response rate of 96.6%). Out of which, two hundred and eighty five (285) were analysed as five of the questionnaires were not completely filled.

Table 1.0 Demographic Characteristics of the Respondents

Parameters Assessed	Frequency	Percentage
Age		
17 - 26	98	34.4
27 - 36	35	12.3
37 - 46	96	33.7
47 - 56	36	19.6
Marital Status		
Single	246	86.3
Married	38	13.3
Divorced	1	4
Level		
100	43	15.1
200	89	31.2
300	71	24.9
400	82	28.8

Table 1.0 shows the demographic details of the respondents and the following can be deduced: the respondents were within the ages of 17 and 56, with the age range of 17 - 26 having the highest with 98 (34.4%). On marital status, 246 (84.6%) of the respondents were single, 38 (13.0%) were married and 1(4%) is divorced. Of all the levels studied, 200 level were the majority with 86 (31.2%).

Table 2.0 Respondents' Awareness and Knowledge of Breast Cancer

Parameters Assessed		Frequency	Percentage
Have you ever heard of Breast Cancer	Yes	194	68.1
	No	91	31.9
If Yes, what is your source of information?			
Newspapers/Magazines		127	44.6
Television/Radio		49	17.2
Family friend		85	27.8
Health Worker		24	8.4
Do you think breast cancer is curable?	Yes	163	57.2
	No	31	10.8
Can breast cancer be inherited?	Yes	135	47.3
	No	59	20.7

Table 2.0, shows respondents' awareness and knowledge of breast cancer. A total of 194 (68.1%) respondents have heard of breast cancer, while 91 (31.9%) have not. Multiple sources of information were indicated with newspapers/magazines being the most popular 127 (44.6%). Knowledge of facts and risk factors revealed that 164 (57.2%) of the respondents think that breast cancer is curable, while 31(10.8%) did not think so. Also 59 (20.7%) believe that breast cancer cannot be inherited, while 135 (47.4%) believe that it can be inherited.

Table 3.0 Awareness of Breast Cancer Screening Methods

Parameters Assessed		Frequency	Percentage
Have you ever heard of breast cancer examination?	Yes	190	66.7
	No	93	33.3
Have you ever heard of mammography?	Yes	87	30.5
	No	198	69.5
Have you ever heard about clinical breast examination?	Yes	120	42.1
	No	165	57.9
Have you ever practiced any of the methods?	Yes	80	28.7
	No	20.5	71.9
If yes for what purpose?			
Advice from health worker		70	24.6
Based on medical grounds		51	17,9
Noticed a breast lump		28	9.8
If no, forward what purpose?			
I don't know it		58	20.4
I'm not interested		37	13.0
I don't think I can do it		9	3.2

Table 3.0 shows the awareness of breast screening methods and its practice. Of the total respondents, 190 (66.7%) claimed to have heard of BSE, while 95 (33.3%) were ignorant of it. Mammography as a screening tool was not popular as only 87 (30.5%) have heard of it while 198 (69.5%) have not. On clinical breast examination, 120 (42.1%) were aware of it but 165 (57.9%) were not.

A total of 205 (71.9%) have not practiced any of the methods while 80 (28.1%) have. Out of those that practiced, 70 (24.6%) did so on advice from a health worker, 51(17.9%) practiced based on medical reasons.

Those that noticed a breast lump as basis for practice were 28 (9.8%) while 23 (8.1%) were due to routine medical check-up. Reasons for not practising any of the methods include: 'I don't know about it' - 58 (20.4%), 'I don't think I should do it' - 9 (3.2%) and 37 (13.0%) said they were not interested.

DISCUSSION

There is an above average level of awareness about breast cancer, as 194 (68.1%) have heard of breast cancer. This differs from a study by Irurhe et al., [9] in which an excellent proportion of the respondents 194 (97%) had heard of the disease. Also the most common source of information based on their study as is consistent with our study was newspapers/magazines, 127 (44.6%). This is in sharp contrast to the study by Omotara et al., [7] where health workers were the main source of information. This could be attributed to the fact that since the present study was conducted in a learning environment, most of the respondents could gather information from literature and print media rather than relying on information from health care workers only, in a community based study where access to literature and print media is low.

Knowledge of risk factors was average 52.6% which is higher than that in the research conducted by Omotara et al., [7] and Irurhe et al., [9] where knowledge of risk factors were 21.4% and 36.7% respectively. This average awareness was brought about by misconceptions which were also opined by Bi Suh et al.,[10]. Another possible reason for the average awareness from the authors' point of view could be attributed to the respondents background, since they were not from medical or health related disciplines.

The respondents were aware of the screening methods with BSE 19 (66.7%) being the most popular which corroborates the research by Guilford [6] where 82% of respondents were aware of it and Sambanje et al.[11], whose results showed that 72.4% of non-medical students were aware of BSE, as opposed to university-based studies where BSE awareness was high. Awareness of BSE was as low as 38.7% in a community-based study by Omotara et al,[7]. Mammography was relatively unknown, only 87 (30.5%) were aware of it, this corresponds to the study by Ahuja and Chakrabart [2].

This ignorance was due to mammography being non-readily available and accessible, coupled with the high cost and expertise required as stated by Ogunbode et al., (2013). However, this cannot be the case in the present study since the state is also a host to the oldest teaching hospital in the geopolitical zone equipped with a mammography unit and qualified experts: Mammography radiographers and Mammography radiologists.

Practice of the methods was very low: 80 (28.1%), which agrees with the research by Ahuja and Chakrabart [2], where practice was as low as 15% and also that of Lemlem et al., [12] where the performance was 15 (57.8%). Major response to not performing the methods especially BSE was "not knowing about it": 58(20.4%) which is in line with the conclusion drawn by Ahuja and Chakrabart [2].

This research concurs with all the reviewed literature that there is no in-depth knowledge of breast cancer and its screening methods. Ignorance on how to correctly practice the BSE method was high among respondents. Therefore, more information and knowledge is needed on this particular subject.

CONCLUSION

Awareness of breast cancer and its screening methods among female students in the faculty of arts is high but not in-depth. Though, knowledge based on facts and risk factors is on the average. The respondents were very much aware of the screening methods, although mammography awareness was low despite the fact that there is a functional mammography unit in the university teaching hospital. The practice of the screening methods was also low. From the foregoing we therefore recommend that emphasis should be laid on breast screening methods especially mammography even though most of the respondents might not benefit from it due to age-related factors, armed with adequate information they can be of help to other relations in need. We therefore suggest that sensitisation campaigns be organised by the radiography students' association on breast cancer screening programs and practical approaches to it during their health week campaigns and other social functions.

Conflict of interest: Nill
Sponsorship: Nill

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