

Full Length Research Paper

Breast cancer knowledge and screening practices among female secondary schools teachers in an urban local government area, Ibadan, Nigeria

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Breast cancer a major public health challenge is often associated with high morbidity which often times is not unconnected with poor knowledge and screening practices. Teachers who are seen as role model are the key stakeholders in prevention of breast cancer (BC). However their knowledge and screening practices have not been fully explored. Therefore this study was designed to investigate knowledge of breast cancer and screening practices of female Senior Secondary (SS) school teachers in an urban local government area of Ibadan, Nigeria. The study was cross-sectional in design and it involved all the 411 female teachers in SS school. A semi-structured questionnaire was used to assess breast cancer awareness, knowledge of BC; self reported practice of Self Breast Examination (SBE), Clinical Breast Examination (CBE) and Mammography as well as factors influencing screening practices. Knowledge of BC was measured using a 30-point scale categorized into poor 0-14, fair 15-21, and good 22-30 knowledge respectively. Respondents' mean age and years of service were 39.8 ± 8.5 and 12.0 ± 8.5 years respectively. About two-thirds (79.8%) were married, 70.0% had first degrees and 46.0% masters degrees. Majority (93.2%) had heard of BC and the main sources of information were television (66.4%) and radio (42.0%); 76.2% claimed to have heard about SBE, 10.7% knew the appropriate age for commencing SBE. One hundred and eleven (36.2%) had ever practiced SBE and only 27.6% of these examined their breast monthly. Of the 73 and 163 respondents who have heard of mammography and CBE 1.6 and 4.6% had ever gone for either of the screening respectively. The mean knowledge score of BC was 8.8 ± 4.5 . About 86.3% had poor knowledge, 13.0% had fair knowledge and 0.7% had good knowledge of BC. Some respondents believed that BC could be cured (42.3%) and 64.5% believed that BC was a disease of young girls. Almost thirty five percent (34.8%) did not practice BC screening because they did not know how it is done. There was no statistically significant difference in the knowledge of BC and the age of respondents. Knowledge and screening practice for BC is low among the respondents. There is a need to organize series of health education programmes aimed at improving knowledge of breast cancer and screening practices.

Key words: Breast cancer, secondary school, teachers, breast screening and practices.

INTRODUCTION

Breast cancer is the most common cause of cancer death among women in 140 of 184 countries worldwide and the

most frequently diagnosed cancer among women which now represents one in four of all cancers in women

(GLOBOCAN 2012). Developing countries are going through rapid societal and economic changes, and there is a shift toward western lifestyles with resultant changes in reproductive, dietary, and hormonal risk factors, are contributing to the rising cancer rates. However, even though incidence rates of breast cancer are still highest in more developed nations, mortality is greater in less developed countries, owing to lack of access to treatment as well as early detection of the disease (International Agency for Research on Cancer (IARC), 2012).

There is variation of breast cancer incidence worldwide in which Africa is not excluded. In sub-Saharan Africa the incidence of breast cancer was 15% compare with 27% in North African countries (Algeria and Egypt) (Parkin et al., 2003). In the North-central geopolitical zone in Nigeria, breast cancer constituted 22.41% of new cancer cases registered in 5 years and accounted for 35.41% of all cancers in women (Afolayan et al., 2012). Breast cancer was second to cancer of the cervix in the North-Western geopolitical zone of Nigeria while at University College Hospital (UCH) in Ibadan which is situated in the South-Western geopolitical zone of Nigeria; breast cancer was the leading malignancy among women (Ogunbiyi et al., 2010).

Most of the breast cancer cases in Nigeria are detected late due to poor utilization of screening facilities and lack of awareness (Okobia et al., 2006; Anyanwu, 2008). In many African countries, the true incidence of breast cancer is generally not known (Boulos et al., 2005) however, several publications indicate a trend towards an increasing incidence of the disease in many parts of Africa (Onwere et al., 2009). In Nigeria, the main reasons for high mortality from breast cancer among women include poor knowledge and lack of education (Akinola et al., 2011). Other reasons could be related to lack of culturally sensitive community-based programmes religion, fear, language barriers, persisting breast cancer myths or taboos, and other sociocultural barriers (Renshaw et al., 2010).

Lack of knowledge about breast cancer has also been identified as an important factor preventing women from participating in breast cancer screening (Akpo et al., 2010). It additionally adds to delay in presentation and treatment. Therefore, it is important to understand the factors that influence patients' screening behaviours. Among Nigerian women, the peak age of breast cancer presentation is about 10-15 years later than what is observed in Caucasian women, where it occurs between the ages of 35-45 years and 70% of Nigerian women present with advanced staged disease while the 5-year survival rate is less than 10% compared with over 70% in Western Europe and North America (Okobia et al., 2006).

Breast self-examination, clinical breast examination and mammography are the most commonly known and used breast cancer screening methods in the world (American Cancer Society 2013; Onwere et al., 2009). In Nigeria, about two thirds of women with breast cancer are diagnosed at an advanced stage, with the possibility of metastatic spread (Akarolo-Anthony et al., 2010). Therefore, the purpose of this study was to assess the knowledge of female teachers in public Senior Secondary Schools in Ibadan North Local Government Area of Oyo State, Nigeria.

METHODOLOGY

This study was a descriptive cross-sectional in design. The study population comprised of all female teachers of Senior Secondary Schools in Ibadan North Local Government Area.

Sample size and sampling

Sample size was determined using the formula for sample size determination for a cross-sectional descriptive study (Araoye, 2003) with a 95% confidence interval, a precision of 5%, and using a prevalence of knowledge of breast cancer risk factors among teachers 59% (0.59) (Nur, 2010). The calculated sample size was 372 and by adding 10% non-response rate, the total sample size was found to be 391 out of 411 female teachers at the time of the study. Three hundred and seven 307 (74.7%) female teachers consented to participate in the study.

Study instrument

A pre-tested, self-administered questionnaire was used. Questions were drawn using information on breast cancer from the various literature reviewed. The self-administered semi-structured questionnaire used was divided into 6 sections; Section A: The socio-demographic variables, Section B, Awareness of breast cancer, screening practices and sources of information, Section C, Knowledge of Breast Cancer was assessed by asking questions on breast Cancer Symptoms and Risk Factors, Section D, Previous breast cancer screening practices, Section E, Perceived susceptibility of breast cancer, perceived severity of breast cancer and perceived benefits of early detection and Section F, Factors influencing the practice of BSE, CBE and mammography was assessed. The survey instrument included 25 items.

Method of data collection

Semi-structured questionnaire was used to elicit information from the respondents with the help of two trained research assistants. Permission was first taken from all the principals of each schools enlisted for this research, who later introduce the investigator to the teachers to inform them about the research that was been conducted. The consent of each teacher was also taken before questionnaires were distributed.

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Ethical consideration

Ethical approval was obtained from the ethics committee of the Ministry of Health in Oyo State Secretariat in the Department of Health Planning, Research and Statistics. Further permission and approval was obtained from principal of each school before the commencement of the study. The respondents were assured of the confidentiality of their answers and that total participation in the study was voluntary.

Data analysis

Knowledge of breast cancer was measured by posing questions on prevention, risk factors and symptoms of breast cancer. A total of thirty questions were asked and one point was allocated to every correct answer thus bringing the total points to thirty. Afterwards the points were categorized between 0-14 as Code 1, 15-20 as Code 2 and 21-30 as Code 3. Participants that score between 0-14=Code 1 was poor knowledge of breast cancer, 15-20=Code 2 was fair knowledge of breast cancer and 20-30=Code 3 was good knowledge of breast cancer. The screening practice was measured by asking the respondents to indicate which of the breast screening have they ever practice. The following was put in place to ensure proper and effective management of data. The questionnaires were serially numbered for control and recall purposes and data collected were checked for completeness and accuracy after which data was sorted, edited and coded manually. The data analysis was being carried out using the SPSS statistical software. A summary measure such as means and standard deviations were used for quantitative variables, while chi square test was used to test for association.

Limitations of the study

The sample included only the teachers that were present at the time of data collection. The study population is a specific group and profession of the country and this may affect the generalization of the findings.

RESULTS

Socio-demographic characteristics

Respondents' age ranged from 22-59 years with a mean age 39.8 ± 8.5 years and the years of service ranged from 2-34 years and the mean years of service was 12.0 ± 8.5 years two hundred and fifty two (82.1%) were Christian and 17.3% were Muslim. Almost all the respondents were Yoruba 288 (93.8%). The majority of the respondents 79.8% ($n=245$) were married, more than half 215 (70.0%) had first degree and 46 (15.0%) had masters (Table 1).

Awareness of breast cancer, screening methods and sources of information

Most of the respondents 286 (93.2%) had heard of breast cancer while 219(71.3%) claimed that someone has ever discussed the harmful effect of breast cancer with them (Figure 1).

Awareness of breast self-examination

Two hundred and thirty four respondents (76.2%) were aware of breast self-examination while 42.7% knew someone who practices BSE (Figure 1). Of those who knew someone who practices BSE, 17.6% were friends, 5.9% were their sisters, and 2.9% were mothers and 1.0% aunts. To the question on what is the recommended age of breast self-examination to start only 33(10.7%) knew the appropriate age of commencing breast self-examination to be 20 years, 55(17.9%) indicated that should be started at all age, 121 (39.4%) once breast formation starts, and 10(3.3%) at the age of 30 and 88(28.7%) did not know when to start.

Awareness of clinical breast examination

One hundred and sixty three (53.1%) were aware of clinical breast examination while 74 (24.1%) knew some who had gone for clinical breast examination before (Figure 1) and thirty eight respondents 12.4% of these were friends, 1.0% were mothers 0.7, 1.3 and 0.7% were their sisters and aunts to the respondents respectively. The response for the question what is the recommended age of CBE examination to start: 39 (12.7%) reported it should be started at all age, 67(21.8%) once breast formation starts, 45(14.7%) at the age of 30, 15 (3.3%) at the age of 40, 3(1.0%) indicated at the age of 50 and 201 (65.5%) did not know when to start.

Awareness of mammography

Seventy three respondents (23.8%) of the respondents had heard of mammography while the same percentage of respondents (23.8%) knew someone who had gone for the mammogram (Figure 1) and out of which 10.4% of them were friends, 2.0% were mothers and 1.6% each was their sisters and aunts respectively. The respondents response for the question what is the recommended age of mammography examination to start: 23 (7.5%) reported it should be started at all age, 33 (10.7%) once breast formation starts, and 31(10.7%) at the age of 30, 16 (5.2%) at the age of 40 and 3(1.0%) at age of 50, 201(65.5%) did not know when to start.

Knowledge of breast cancer

Less than half (42.3%) believed that breast cancer can cured and eighty six percent (86.6%) believed that breast cancer can be cured if discovered early. Sixty nine (22.5%) held the belief that surgery is the only method of treatment for breast cancer and 67.4% for breast cancer is the disease of the white. Sixty five (21.2%) identified bloody nipple as a symptom of breast cancer while 70 (22.8%) recognized inversion, pulling in of the breast as a

Table 1. Socio-demographic characteristics of the respondents.

Variable		Frequency	Percent
Age (years)	20-29	38	12.4
	30-39	112	36.5
	40-49	114	37.1
	50 above	43	14.0
Religion	Christianity	252	82.1
	Muslim	53	17.3
	Traditional	1	0.3
	Others	1	0.3
Ethnicity	Yoruba	288	93.8
	Igbo	1	0.3
	Hausa	11	3.6
	Other	7	2.3
Marital Status	Single	47	15.3
	Married	245	79.8
	Divorce	8	2.6
	Widow	7	2.3
Years of service	1-9	130	42.3
	10-19	115	37.5
	20-29	42	13.7
	30 above	20	6.5
Educational Status	NCE	41	13.4
	Degree	215	70.0
	Master	46	15.0
	M.Phil	3	1.0
	PhD	2	0.7
Present position	Principal	11	3.6
	Vice principal	24	7.8
	Counselor	8	2.6
	Head of department	22	7.2
	Class Teacher	242	78.8
Types of marriage	Monogamy	229	74.6
	Polygamy	28	9.1
	Others	50	16.3

symptom, 71.0% answered correctly the question lump in the breast, 40.1% for lump in the armpit and 56.7% for pain in the breast region. When asked about breast cancer risk factors 9.1% for obesity, 6.2% breast feeding, 47.9% for family history of breast cancer, 20.8% for as age increases, 27.0% for it is caused by the devil, 26.7% for history of benign breast and the least recognized risk factors were 7.5% for early age of menstruation, 6.5% for late age at menopause. The mean knowledge score of BC was 8.8 ± 4.5 with score range of 1-23. About 86.3% had poor knowledge, 13.0% had fair knowledge and

0.7% had good knowledge of BC. There is no significant association between breast cancer knowledge and age (* $p < 0.05$; $X^2 = 4.40$, $df = 6$, $p = 0.623$) (Tables 2 to 4).

Screening practices

Only 111 (36.2%) had ever practiced BSE and of these only 27.6% were doing it monthly. Fourteen (4.6%) respondents reported ever having clinical breast-examination and only 4(1.3%) reported to be doing it

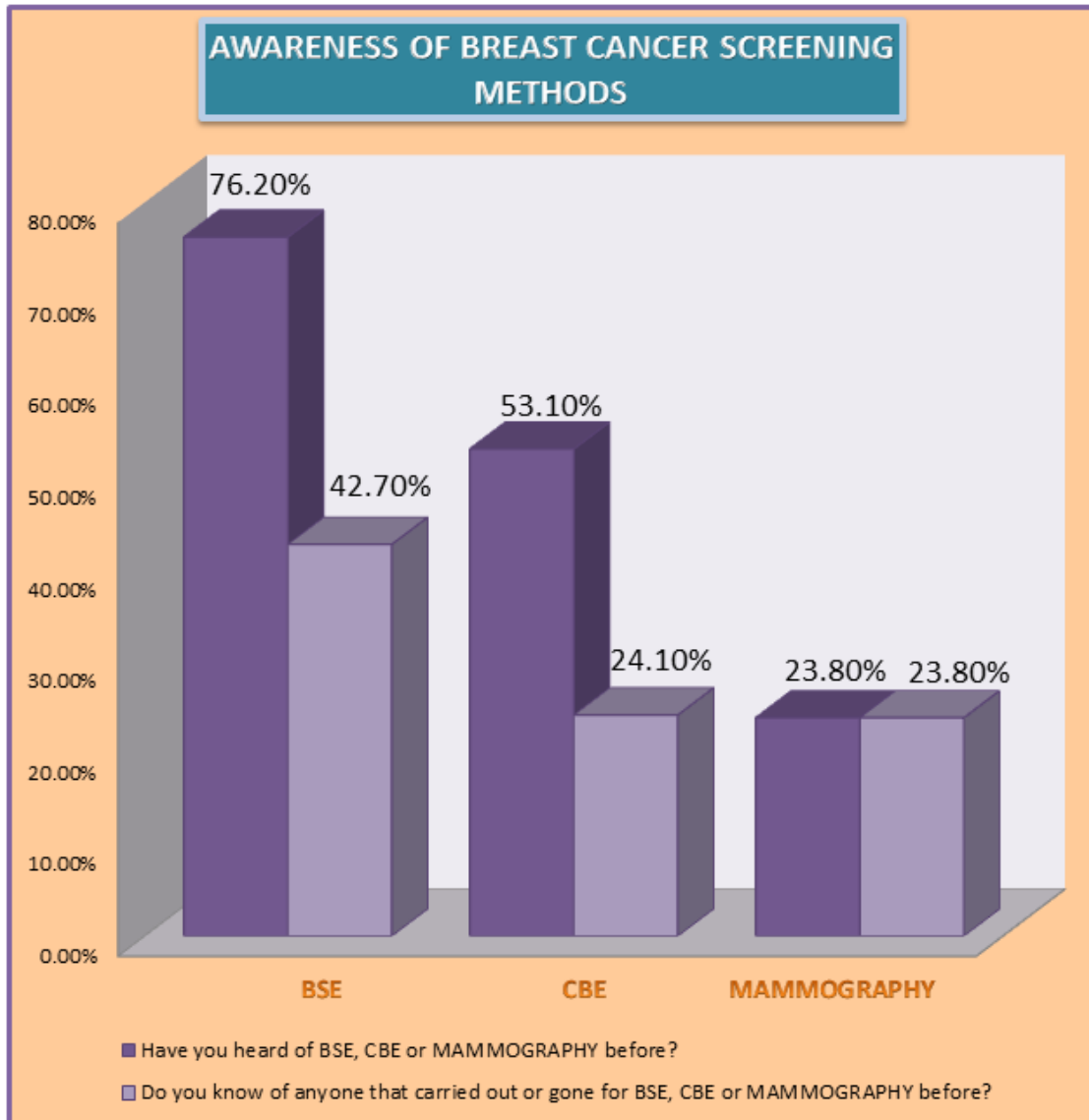


Figure 1. Awareness of screening practices (BSE, CBE and MAMMOGRAPHY).

Table 2. Knowledge of breast cancer.

Variables	Frequency (%)		
	Yes	No	Don't know
Breast cancer cannot be cured	82(26.7%)	130(42.3%)*	95(30.9%)
Breast cancer can be cured if discovered early	266(86.6%)*	14(4.6%)	27(8.8%)
Breast cancer can be cured by surgery only	69(22.5%)*	123(40.1%)	115(37.5%)
Breast cancer is caused by excessive sucking and massage	12 (3.9%)	161(52.4%)*	134(43.6%)
BC is difficult to discover until the symptoms manifest	134(43.6%)	95(30.9%)*	78(25.4)
Breast cancer can be detected by oneself	203(66.1%)*	42(13.7%)	62(20.2%)
Breast cancer is harmful to health	273(88.9%)*	11(3.6%)	23(7.5%)
Breast cancer is the disease of young girls only	198(64.5%)	49(16.0%)*	23(7.5%)
Breast cancer is disease of the white	8(2.6%)*	270(67.4%)	92(30%)
Breast cancer is the disease of old women only	6(2.0%)	231(67.4%)*	60 (19.5%)

*Correct responses.

Table 3. Knowledge of breast cancer symptoms.

Variables	Frequency (%)		
	Yes	No	Don't know
Bloody nipple	65(21.2%)*	55(17.9%)	187(60.9%)
Inversion, pulling in of the breast	70(22.8%)*	55(17.9%)	182(59.3%)
Breast ulceration	50(16.3%)*	47(15.3%)	210(68.4%)
Headache	64(20.8%)	55(17.9%)*	188(61.2%)
Abdominal pain	41(13.4%)	72(23.5%)*	194(63.1%)
Lump in the breast	218(71.0%)*	15(4.9%)	74(24.1)
Lump under the arm pit	123(40.1%)*	52(6.9%)	132(43.0%)
Pain in the breast region	174(56.7%)	26(8.5%)*	107(34.9%)
Scaling, dry skin in the nipple region	92(30.0%)*	35(11.4%)	180(58.6%)
Breast enlargement	116(37.8%)*	53(17.3%)	138(45.0%)

*Correct responses.

Table 4. Knowledge of breast cancer risk factors.

Knowledge of breast cancer risk factors	Frequency (%)		
	Yes	No	Don't know
Putting money between the breast and brassier	147(47.9%)	56(18.2%)*	104(33.9%)
Family history of breast cancer	151(49.2%)*	55(17.9%)	101(32.9%)
Older age	64(20.8%)*	104(33.9%)	139(45.3%)
Obesity	28(9.1%)*	111(36.2%)	168(54.7%)
Breast feeding	19(6.2%)	190(61.9%)*	98(31.9%)
Bruising the breast	47(15.3%)	83(27.0%)*	177(57.7%)
It is caused by the devil	92(30.0%)	94(30.6%)*	121(39.4%)
Previous history of benign breast problems	82(26.7%)*	59(19.2%)	166(54.1%)
Early age of menstruation (age 12 or before)	23(7.5%)*	135(44.0%)	149(48.5%)
Late age at menopause (age 55 or after)	20(6.5%)*	114(37.1%)	173(56.4%)

*Correct responses.

every year and for mammography only 5(1.6%) of the respondents had ever gone for mammography. There is an association between breast self-examination, age and years of service ($p < 0.05$; $X^2 = 11.5$, $df = 3$, $p = 0.018$; $p < 0.05$; $X^2 = 11.7$, $df = 3$, $p = 0.018$). The most frequently endorsed reason for non-performance of breast cancer screening was that people did not like someone touching their breast 111(36.2%) followed by, did not know how the test is done 107(34.9%) and complexity of the hospital registration 94(30.6%) (Table 5 and 6).

DISCUSSION

The age range of the respondents in this study falls within (22-59); this age group belong to reproductive age and what is require of a civil servant. This is related to a study by Kayode et al. (2005) which was carried out in Ilorin and a study by Alice and Okeowo (2014) among female

secondary school teachers. Breast cancer tend to occur in women after the age of 20 years, leveling up to a plateau at the age of 45-55 years, and thereafter increasing to a peak at 50-60 years (Bassey et al., 2011). Most of the respondents (93.2%) in this survey were aware of breast cancer and 71.3% has someone who had discussed the harmful effects of breast cancer with them, this result is contrary to the study conducted in other region of Nigeria where 58.2% of the respondents were aware of breast cancer as a disease entity (Omotara et al., 2012). The major sources of information about breast cancer were television (69.1%) and closely followed by radio (43.6%) in this study. It is similar to other researchers (Iruhe et al., 2011; Bassey et al., 2011) and also Nur (2010) who studied breast cancer knowledge and screening behaviors of the female teachers found that, leading sources of information was television (59.0%). This finding was in contrast to the study of Afaf and Mona (2015) who found that the

Table 5. Socio-demographic characteristics and breast self-examination.

Variables	Breast self-examination		Chi-square tests
	Yes	No	
Age			
20-29	11(28.9%)	27(71.1%)	p=0.018*
30-39	33(29.5%)	79(70.5%)	
40-49	55 (48.2%)	59(51.8%)	
50above	12(27.9%)	31(72.1%)	
Years of service			
1-9	36(27.7%)	94 (72.3%)	p=0.018*
10-19	52(45.2%)	63(54.8%)	
20-29	18(42.9%)	24(57.1%)	
30 above	5(25.0%)	15(75.0%)	
Level of education			
NCE	10(24.4%)	31(75.6%)	p=0.301
Degree	82(38.1%)	133(61.9%)	
Master/ M.Phil/ PhD	18 (37.7%)	33(62.3%)	
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Heard of harmful effect of BC			
Yes	91 (41.4%)	129 (58.6%)	p=0.002*
No	20 (23.0%)	67 (77.0%)	
Knew somebody who had carried out BSE before of BC			
Yes	57 (43.5%)	74 (56.5%)	p=0.014*
No	54 (30.7%)	122 (69.3%)	

Table 6. Socio-demographic characteristics and knowledge of breast cancer.

Variables	Poor knowledge	Good knowledge	Chi-square test
Age			
20-29	33 (86.8%)	5 (13.2%)	p=0.623
30-39	96 (85.7%)	16 (14.30%)	
40-49	97 (85.1%)	17 (14.9%)	
50 above	39 (90.7%)	4 (9.3%)	
Years of Service			
1-9	115 (88.5%)	15(11.60%)	p=0.439
10-19	95 (82.6%)	-	
20-29	35 (83.3%)	7(16.7%)	
30 above	20 (100%)	-	
Level of education			
NCE	34 (82.9%)	7 (17.1%)	p=0.446
Degree	191 (88.8%)	24 (11.2%)	
Master	35 (76.1%)	11 (23.9%)	
M.Phil	3(100.0%)	-	
PhD	2(100.0%)	-	

commonest source of information about BSE was health professionals and teachers (62.8%). The least reported

primary source of information on breast cancer in the study was internet. It may be that teachers do not see the

internet as a useful tool for health information or they may lack computer literacy skills. This should be addressed in any future programs targeted towards health education of educators. Breast self examination, clinical breast examination and mammography are considered as screening methods for early detection breast cancer (Lam et al., 2008). Breast self-examination is one of the essential screening methods for early detection of breast cancer and the procedures are easy, non-invasive and involve little time. In this study more than two-third of the respondents (76.2%) claimed to have heard of BSE, while 42.7% knew someone who practices BSE and only 10.7% knew the appropriate age for performing BSE. Our findings are in concordance to those of other studies (Isara and Ojedokun, 2011; Iruh et al., 2011; Matalqah et al., 2011). More than half of the respondents (53.1%) have heard of clinical breast examination as one of the breast screening methods and 14.7% knew the appropriate of commencing clinical breast examination. In a study by Parsa et al. (2008), 25% of women have had a CBE. Similarly, Dundar et al. (2006) study found that 18.4% of women in rural areas in Turkey had a CBE (2006). In the study by Ho et al. (2005), the annual CBE percentage was 45% in educated women. Almost twenty four percent (23.8%) of the respondents had heard of mammography and knew someone who had gone for mammogram before respectively and 5.2% knew the appropriate age of commencing mammogram. This study is in tandem with a study by Obajimi et al. (2013) found a low level of awareness of mammography. This figure contrasts with much higher proportions reported from other authors in Nigeria likely due to variability in the characteristics of the study population. Osime et al. (2008) found a prevalence of mammography awareness of about 35% among civil servants while Akinola et al. (2011) reported an awareness level of 40.5% among a hospital sample.

Less than half (42.3%) believed that breast cancer can be cured and eighty six percent (86.6%) believed that breast cancer can be cured if discovered early. Sixty nine (22.5%) held the belief that surgery is the only method of treatment for breast cancer. One of the strongest risk factors of breast cancer is family history of the disease (Tsuchiya et al., 2007) and in this study more than half of the respondents (50.8%) were not aware that family history of breast cancer is a major risk associated with breast cancer and 79.2% did not know that as age increase tendencies of having breast cancer increases and this may be the reasons why some of them thought that breast cancer is the disease of young girls and some believe that breast cancer is the disease of old women. Although women with a strong family history of breast cancer have a higher risk, a larger percentage of cases occur in women without a positive family history (McPherson et al., 2000). In this study less than 10% of teachers knew that obesity, early age of menstruation and late age at menopause are breast cancer risk

factors. Thirty percent believed that breast cancer is caused by the devil. More than half (56.7%) of respondents in this study shared the view that lumps in the breast that are cancerous would be painful. This, as reported by Powe et al. (2005), is a widespread misconception as most people associate pain with the occurrence of cancer. Ukwenya et al. (2008) reported in a study in Nigeria that a majority of breast cancer patients cited ignorance of the seriousness of a painless lump as a reason for prolonged delay before seeking medical advice. Inadequate knowledge about risk factors of breast cancer were also reported by previous researches (Alam, 2006; Amin et al., 2009), female teachers and health providers such as nurses were found to have inadequate knowledge on breast cancer (Parsa et al., 2008; Ahmed et al., 2006). In this study 92(30.0%) belief that breast cancer is caused by the devil and in a study by Mitchell et al. (2002) strong religious beliefs were found to be common among women in Eastern North Carolina in United States of America. Poor knowledge of risk factors and knowledge of their relative risk of developing breast cancer also explains why they do not engage in health promoting behaviour or breast-screening practices.

Of all the teachers (307), only 111 (36.2%) had ever practiced BSE but only 27.6% were doing it monthly and this is less than the figure reported from a study by Mbanaso et al. (2005) found that 84.0% of their study population practiced BSE, however only 47.9% of them performed it monthly. Variables such as higher level of education and years of service were not significant determinants of BSE practice in this study; age was significantly related to BSE practice and practice of BSE increased significantly with age from among those who were 20-29 years to those who were 40 years and above. Our results show that teachers have low rates of CBE as only 14 (4.6%) had ever gone for clinical breast examination before while only 4(1.6%) did it once in a year, which is lower than the report among Nurses in Lagos (7.8%) and an abysmally low rate compared with similar studies in Saudi Arabia (42.7%) and Singapore (35%) (Seah and Tan, 2007). However, this study is at a very low CBE rate compared to the US (78%) and the neighboring country Qatar (23.3%). Among the screening methods mammography is the appropriate tool for screening, diagnosis and examining breast lumps (Mahbubi et al., 2004). Out of seventy three (23.8%) who claimed to had heard of mammography as breast screening method but only 5(1.6%) had ever gone for mammography. Okobia et al. (2006) also reported that none of the participants in a study among semi-urban community-dwelling women in Nigeria ever had mammography screening. With regard to mammography in Dundar et al. (2006) study showed that only 5.5% of women above 40 years had undergone it. One of the well-known educational models in health education is health belief model, which is a psychological pattern

(Fuladi et al., 2012), and it is widely used in the context of research studies concerned with predicting health-related behaviors. In this study 4(1.3%) are those who believe that they are likely to get breast cancer as others and only 5(1.6%) see themselves developing breast cancer in the future. Low level of involvement in screening practices could be attributed to the knowledge level of the respondents, since knowledge and attitudes are stage-setting factors in a health behavior (Ghorchaei et al., 2013). Breast cancer perceived severity has to do with a belief and perception that this ailment is serious and the consequences can be serious or can lead to death (Mishra et al., 2007), this is in conformity with our study in which majority 267(87.0%) agreed with the statement that breast cancer can cause death if untreated, 149 (48.5%) also agreed with the same statement "breast has to be removed". With perceived severity of this study being high among female teachers but this did not translate to the use of screening methods among these professionals. It is essential to address screening tests among these professional, especially use of BSE, CBE and mammography. One hundred and forty three (46.6%) respondents agreed with the statement that one of the benefits of early detection of breast cancer is that it helps in early detection of abnormal mass. In some studies, susceptibility, seriousness and benefits were variables that found no relationship with screening practices performance (Petro-Nustus and Mikhail, 2002; Lee et al., 2004; Secginli and Nahcivan, 2006) while in some studies it was reported that these variables were significant predictors of the breast cancer screening performance (Petro-Nustus et al., 2002; Canbulat and Uzun, 2008). The results in this study clearly demonstrate that improved knowledge would produce a corresponding improvement in screening because, according to the conceptual modeling that guided the study there was high level of perceived benefit which indicate that improved knowledge will affect increase in recommended breast cancer screening practices. However, poor practice of breast cancer screening methods has been reported in many studies in Nigeria (Akhigbe and Omuemu, 2009; Okobia et al., 2006).

RECOMMENDATIONS AND CONCLUSION

Teachers constitute one group of professionals who have regular contact not only with their students in schools but with the community members who look at them as change agents and role models. The importance of secondary education in educational system cannot be overemphasized. Apart from serving as the link between primary and tertiary education, it provides opportunity for a child to acquire additional knowledge, skills, and traits beyond the primary level through their teachers. Teachers are the fulcrum on which the lever of educational system rests (Achimugu, 2005). Periodic

intervention programmes targeting teachers in public schools should be undertaken. This could comprise of talks and demonstrations carried out by interest groups. Relevant nongovernmental organizations (NGOs) can make significant contribution to breast cancer and screening methods education by sponsoring health talks and workshops for teachers to reposition them better to reach out to their students and the community at large. Information, Education and Communication materials (IEC) can be made use of in the school environment and in various educational professional bodies.

Conflict of Interests

The authors have not declared any conflict of interests.

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