KNOWLEDGE AND PRACTICE OF BREAST-SELF EXAMINATION AMONG FEMALE YOUTH CORPERS IN LOKOJA, KOGI STATE, NIGERIA

Esewe R. E.

&

Amadi H. O

Abstract

Breast cancer, though a disease that affects the breast tissues of both women and men is more prevalent in women. The study aimed to determine knowledge and practice of breast-self-examination among female youth Corpers in Lokoja, Kogi State, Nigeria, and identify their awareness of early signs of the disease as a preventive measure. A descriptive survey research design was used to assess the knowledge of 310 female youth Corpers during their service year in 2016 in Lokoja using the convenient sampling method. Descriptive statistics and hypothesis testing at 0.05df were conducted with X^2. Results showed that all respondent 310 (100%) have heard of the concept of breast-self-examination, while 296(95.5%) believe it can be treated if detected early. However, 300(96.8%) opined that the presence of lumps, swelling and pains in the breast are signs of breast cancer, but 10(3.2%) do not know. It is recommended that health education modules should be included in the secondary and university education and made compulsory irrespective of faculty as well as free testing sites for all women of child bearing age.

Keywords: Breast cancer; Breast self-examination; Knowledge, Practice

INTRODUCTION

Breast cancer constitutes close to 23% of all cancer and ranks second overall when males and females sexes are considered together (Akhtari-Zavare, Latiff, Juni, Said, & Ismail, 2015). Apart from skin cancer, breast cancer is the most prevalent cancer that plaque the female folk. Some women are at higher risk for breast cancer than others because of their personal or family history and certain changes in their genes. Other risk factors such as age (>50 years), early menarche, late menopause (>55yrs), obesity or overweight, hormone therapy and oral contraceptives use are all implicated in the development of breast (CDC, 2016).

The adoption of lifestyle behaviors such as smoking, poor diets, physical inactivity and reproductive changes (lower parity and later age at first birth) have further increased the cancer burden in less economically developed countries (Torre, Bray, Siegel, Ferlay, Lortet-Tieulent, & Jemal, 2015). Reports by WHO (2016) indicates that breast cancer control is being promoted within the context of a comprehensive national cancer control programs that are integrated to non-communicable diseases and other related problems. Cancer control involves prevention, early detection, diagnosis, treatment, rehabilitation and palliative care. Raising awareness of the general public on the breast cancer problems and the mechanisms of control as well as advocating for the appropriate policies and programs are key strategies of population-based breast cancer control. Early diagnosis remains an important early detection strategy, particularly in low and middle-income countries like Nigeria where the disease is diagnosed in late stages due to limited material and physical resources. Breast-Self Examination practice (BSE) has been seen to empower women in taking responsibility for their own health. BSE is recommended for

raising awareness of early signs and symptoms of breast cancer among women at risk in order to facilitate early diagnosis and treatment .

Knowledge and empowerment are key to prevention and early detection of symptoms of breast cancer. Studies have reported poor knowledge, attitude and practice among female health science students at Adama Science and Technology University in Ethopia while health workers have demonstrated high knowledge of risk factors of breast cancer. It was asserted that respondents knew that breast cancer is a killer disease and can be treatable if it is detected early (Segni, Tadesse, Amdemichael, & Demissie, 2016). In India, very few female year one to four dental students investigated had good knowledge of BSE. Significant knowledge was found among the fourth year students (Doshi, Reddy, Kulkarni, & Karunakar, 2012). This is supported by a study in Nigeria which reported that the knowledge and practice of BSE was significantly correlated with the duration of stay in the University (Gwarzo, Sabitu, & Idris, 2009). Similar findings were reported in Cameroon among 120 women in Buea, where very few of the respondents know how to perform BSE. The respondents who were not aware of BSE, had absolutely not heard of BSE; had a slight idea on how to perform it and does not practiced it often, while those who were substantially aware of BSE had heard of BSE, knew how to perform it and practiced it often (Suh, Atashili, Fuh, & Eta, 2012). Also majority 185 (77.7%) of 238 women studied in Abakaliki, South Eastern part of Nigeria were aware of breast cancer while only 92 (39 %) were aware of BSE as a method of early detection of breast cancer (Obaji, Elom, Agwu, Nwigwe, Ezeonu, & Umeora, 2013).

Studies that have assessed the practice of BSE among women have reported a correlation between inadequate practices of BSE and awareness of breast cancer (Silva, Sanches, Ribeiro, Cunha, & Rodrigues, 2009). The interfering factors of BSE practice reported are forgetfulness, lack of attention for one's health, lack of knowledge of technique and correct procedures, fear of the diseases or afraid of finding nodules. Similarly, non- belief in BSE, unawareness of the importance of early detection, no family history of breast cancer and too young to develop breast cancer are reasons for non-practice of BSE by some nurses and nurse aids and agents investigated in Brazil and respondents believed they would never be affected by breast cancer (Silva, Sanches, Ribeiro, Cunha, & Rodrigues, 2009). Similar to these findings is that by Azubuike and Okwuosike (2013) who investigated female senior secondary school students in Abuja which reported that only very few of the respondents had practiced BSE. However, a study in Kogi, Benue state, Nigeria, reported more than half (337) women investigated had poor practice of BSE (Ezeah, Apeh, Omerigwe, & Ojo, 2012). Factors such as "it is embarrassing, I don't want to be examined by a male doctor, forgetfulness, lack of awareness, feeling that one cannot get cancer" were also reported. In contrast, female health workers in Edo State perform BSE (Akhigbe & Omuemu, 2009).

Despite the effect of breast cancer on the health of women, many of them still adopt lifestyle behaviours such smoking, poor diets and excessive alcohol consumption which are risk factors to breast cancer disease (Brinton, Figueroa, Awuah, Yarney, & Wiafe, et.al, 2014). Simple preventive measures and awareness creation that require no equipment can mediate the after mart of developing this disease. There is currently no known study done or reported in Lokoja, the Kogi state capital on female youth Corpers knowledge of breast cancer and BSE. Furthermore, it is unclear how much information relating to BSE is available to female Corpers in Lokoja the Koji state capital to mediate the challenges posed by this scourge.

Objectives of the Study

1. Assess the knowledge of breast self-examination among the female corpers in Lokoja, Kogi state.
2. Determine factors associated with the practice of BSE among the female corpers in Lokoja, Kogi state.
3. Determine if the female corpers are willing to impact the knowledge about breast cancer and BSE on their clients

Research Questions

1. What knowledge about breast cancer and BSE do female corpers in Lokoja, Kogi state possess?
2. What are the factors associated with the practice BSE among the female corpers in Lokoja, Kogi state?
3. What factors hinder the female corpers' willingness to impact the knowledge about BSE to their clients?

Hypothesis

There is no significant relationship between knowledge of breast cancer and practice of BSE among the female youth corpers' in Lokoja, Kogi State, Nigeria.

Significance of the Study

1. Assist the Kogi State government in planning awareness campaign against breast cancer through the ministry of health while encouraging the awareness of nurses and midwives to the task of promoting BSE among their clients especially the female folk during their prenatal, antenatal, post-natal and family planning clinics. Also, the paper will improve knowledge of Youth Corpers especially in Lokoja the Kogi state capital by highlighting the importance of BSE in the prevention of breast cancer and reduction of breast cancer mortality. Similarly, the ability of youth corpers in the Medical and Health Services (MHS) and reproductive health community development service (CDS) will be enhanced to educate people in the community on breast cancer and BSE during their various health outreach programs.

METHODOLOGY

The research design for this study was the descriptive survey design, a non-experimental design which involves carrying out survey for the purpose of providing an accurate description of a group of subjects with specific characteristics. The main purpose of which is to describe objectively the nature of the situations under study. This design was considered the best approach for this study because it allows smaller elements which can be generalized to be studied. A sample size of 310 was selected from a population of 1300 female Corpers in the 2016 batch "A" These are persons who had affiliation with the health profession and are posted to serve in health related facilities such as MHD and CDS groups. The YaroTamani (1987) formular was applied to arrive at this number: $n=N/1+N\,(d)^2$

Instrument Validity and Reliability

The instrument for data collection was a self-administered questionnaire developed by the researchers based on literature search, objectives of the study and personal experiences. The question consisted of 22 selected response items of "Yes" "No" "don't know" in three sections A, B, C excluding demographic details to decipher response pertaining to the objectives of the study. Due modifications were made based on the results and input from two experts in Obstetrics and Gynaecology and nursing education. Reliability of the instrument was by pretesting it among 15 female undergraduates in Kogi State College of Education who have same

characteristics as the study population. Result was measured by the Cronbach alpha which yielded 0.82, 0.85 and 0.88 respectively; this is regarded as high (Santos, 1999).

Data Collection Method and Analysis

A total of three hundred and ten (310) questionnaire were administered and retrieved giving a response rate of 100%. This was made possible because questionnaire were handed directly to respondents on one of the monthly meeting days of all corpers in the state and same was collected at the end of the days' proceedings with the help of three assistants who were stationed at the exit doors of the halls to ensure retrieval. Descriptive statistics SPSS (21) was used to summarize data in frequency tables and graphs while hypothesis was tested at a p-value ≤ 0.05. Scoring system of the participant's knowledge was done with each correct answer awarded one point and incorrect or "I don't know" answer was assigned zero. Correct responses were summed up to get total knowledge scores of 5 points. Score of between 4-5 points, is regarded as good; 3 points = fair, < 3 points= poor knowledge.

Ethical consideration

Table 1 Demographic details (N-310)

Variables	Attributes	Frequency	(%)
Age	20 years & below	14	4.5%
	21-25 years	171	55.2%
	26-30 years	125	40.3%
Marital Status	Single	290	93.5%
	Married	20	6.5%
	Divorced	0	0.0%
	Co-habiting	0	0.0%
Community Development Group (CDS)	Medical and health services	102	32.9
	HIV/Reproductive health	104	33.6
	Entertainment	54	17.4
	Road safety	50	16.1

Table 1 show that 14 (4.5%) of the respondents are less than 20 years old, 171 (55.2%) are between 21 and 25 years of age while 125 (40.3%) are within the age range of 26 and 30 years. None of the respondents were divorced or co-habiting. However, 290 (93.5%) were single, while 20 (6.5%) were married. In terms of the respondents' CDS group, 102 (32.9%) belong to medical and health services CDS group; 104 (33.6%) belong to HIV/reproductive health service CDS group; 54 (17.4%) belong to entertainment CDS group while the remaining 50 (16.1%) belong to road safety CDS group.

Table 2: Knowledge about breast cancer BSE (N=310)

Variable		N (%)
Have you heard about breast cancer.	Yes	310 (100)
	No	0 (0.0)
Breast cancer can be treatable if detected early.	Yes	296 (95.5%)
	No	4 (4.5%)
Source of information about breast cancer.	Mass media	220 (71%)
	School	208 (67.1%)
	Health professional	106 (34.2%)
	Friends	84 (27.1%)
	Parents	42 (13.6%)
Have you ever received information about breast cancer from your health care provider?	Yes	106 (34.2%)
	No	204 (65.8%)
Symptoms of breast cancer	Lumps, swelling, pains	309 (96.8%)
	Reddening of nipples, dimpling	204 (65.8%)
	Don't know	10 (3.2%)
Risk factors of breast cancer	Not having any children at all	206 (66.5%)
	Family history of breast cancer	302 (97.4%)
	Genetic mutation	204 (65.0%)
	Don't know	0 (0.0%)
Information received from health care provider about breast cancer	Breast cancer is an uncontrolled growth of cells in the breast	310 (100%)
	Breast cancer is a killer disease	310 (100%)
	Breast cancer can be treated if detected early	310(100%)
Are you aware of Breast Self-Examination	Yes	202 (65.2%)
	No	108 (34.8%)
What is the sole aim of BSE?	Prevention of Breast cancer	202 (65.2%)
	Early detection of breast cancer	296 (95.5%)
	All of the above	202 (65.3%)
From what age is Breast Self-Examination supposed to be done?	35-50 years	100 (32.3%)
	20 years and above	184 (59.4%)
	Don't Know	26 (8.4%)
Do you know how to perform Breast Self-Examination?	Yes	193 (62.3%)
	No	117 (37.7%)
Source of information on Breast-Self Examination	Health professionals	60 (31.1%)
	School	104 (53.9%)
	Friends	12 (6.2%)
	Magazine	11 (5.7%)
	Parents	6 (3.1%)
Are periods between 7 to 10days after menstrual period adequate for Breast Self-Examination performance?	Yes	190 (61.3%)
	No	120 (38.7%)

Table 2 showed that all the respondents 310 (100%) have heard about breast cancer, though only 296 (95.5%) know it can be treatable if detected early. However, 14 (4.5%) do not think it can be treated. One hundred and six (34.2%) have received information about breast cancer from their healthcare giver, 300 (96.8%) know that lumps, swelling, pains are symptoms of breast cancer, 204(65.8%) know that reddening of nipples, dimpling are symptoms of breast cancer, while 10 (3.2%) reported that they do not know the symptoms of breast cancer. Two hundred and two (65.2%) respondents were aware of breast self-examination (BSE), while 108 (34.8%) were not aware; 193 (62.3%) know how to perform BSE while 117 (37.7%) do not know how to perform BSE. Only 184 (59.4%) of the respondents know that breast self-examination should be performed from 20 years and above, while 100 (32.3%) feel it should be 35-50 years, and 26 (8.4%) reported that they do not know. Majority of the respondents got information about breast cancer from the mass media 220 (71%), school 208 (67.1%). Only 106 (34.2%) have their source of information as health personnel. Also, table showed that 193 (62.3%) of the whole respondents know how to perform BSE, with majority 60 (31.1%) having their source of information as health professionals and school 104 (53.9%). On the number or days between menstrual periods before BSE, 190 (61.3%) answered correctly, while 120 (38.7%) did not.

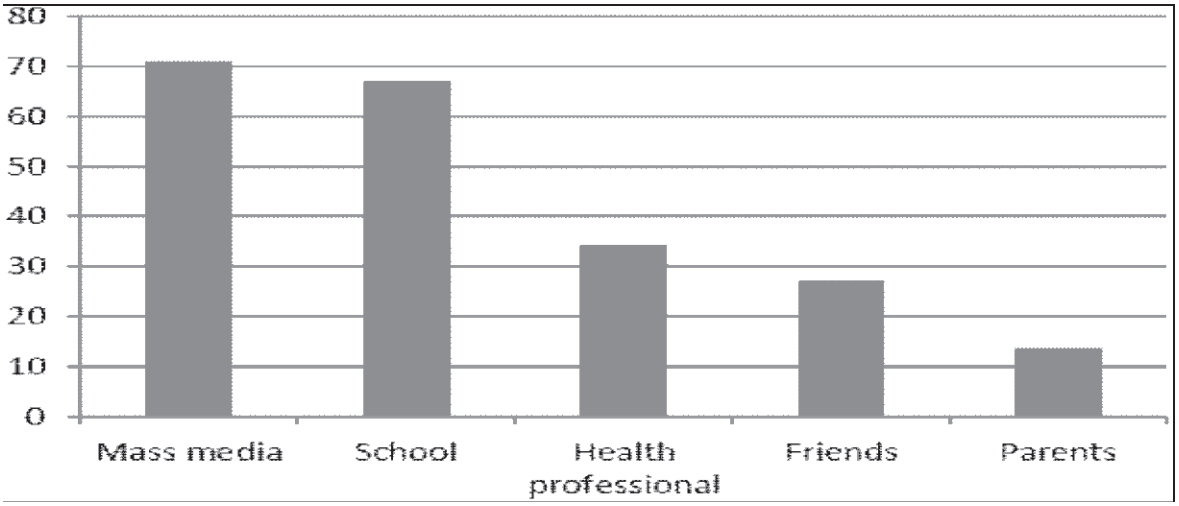

Figure 1: Source of Information

Figure 1 shows the source of information of breast cancer by the respondents. Mass media is the major source 70%, followed by school, and health professionals while the least source are the parents.

Table 3: factors Associated with practice of BSE

Variable	Frequency	Percentage
Ever practiced BSE? (Yes)	180	58.9%
Frequency of performance of BSE (N=180)		
Every month	164	(52.9%)
Once in a year	5	(1.6%)
Whenever I remember	10	(3.2%)
None	131	(42.3%)
Factors influencing practice of BSE (N=131)		
Forgetfulness	14	(10.7%)
Lack of knowledge about BSE technique	117	(89.3%)
Fear, don't believe I am at risk, I don't have cancer	None	None

Table 3 showed that only 180 (58.1%) respondents have ever practiced BSE; 164 (52.9%) carry out BSE every month, while 5 (1.6%) perform it once in a year. Ten (3.2%) perform BSE whenever they remember; and 131 (42.3%) have never practiced BSE. The table revealed that majority 164 (52.9%) of the respondents have good practice of BSE while 146 (47.1%) have poor practice of BSE.

Table 4: willingness to impact knowledge about breast self-examination

Variables	Frequency	Percentage
Would you impact knowledge about Breast Self-Examination to your adolescent students or patients?		
Yes	120	38.7%
No	190	61.3%
If No! Why?		
I don't know how to perform it	117	61.6
It is embarrassing	13	6.8%
I am shy	60	31.6%

Table 4 showed that majority of the respondents 190(61.3%) were not willing to impact knowledge about BSE, while 120 (38.7%) were willing to do so. Majority of them 117 (61.6%), claimed ignorance on how to perform BSE while 13 (6.8%) said it is embarrassing to teach breast self-examination technique to adolescent students or patients, but 60 (31.6%) say they are shy.

Table 5: Knowledge about breast cancer and BSE

Variables	Frequency	Percentage
Good knowledge CA breast	260	83.9%
Fair knowledge CA breast	10	3.2%
Poor knowledge CA breast	40	12.9%
Good knowledge of BSE	194	62.6%
Fair knowledge of BSE	10	3.2%
Poor knowledge of BSE	108	34.8%

Based on the scoring system of knowledge adopted for the analysis, participants score between 5-7 points knowledge is good; 3-4 points for fair knowledge while less than 3 points have poor knowledge. Hence, the table above showed that 260 (83.9%) of the respondents had good knowledge about breast cancer, 10 (3.2%) have fair knowledge while 40 (12.9%) have poor knowledge about breast cancer. Similarly, 194 (62.6%) of the respondents have good knowledge about BSE, 10 (3.2%) have fair knowledge while 108 (34.8%) have poor knowledge about BSE.

Table 5: Testing of Hypo thesis

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	74.225[a]	16	0.007
Likelihood Ratio	13.708	16	0.014
Linear-by-Linear Association	28.386	1	0.111
N of Valid Cases	310		

Table 5 showing the chi-square test result at 0.05 df. Also, table 5 shows that X^2 (16) = 74.225, p = 0.007. The chi-square test carried showed that the p-value for the test is 0.007 which is less than 0.05; hence the null hypothesis is rejected and the alternate accepted which states that there is a significant relationship between the female Youth Corpers' knowledge of and practice of BSE in Lokoja, Kogi State.

DISCUSSION OF FINDINGS

The study investigated the knowledge and practice of BSE as a preventive measure against breast cancer among female youth corpers in Lokoja, Kogi State, Nigeria. The result shows that the respondents have good knowledge about breast cancer as they have heard about breast cancer previously. This may be attributed to the fact that they are all in health-related postings due to their course of study in the tertiary institutions. The findings revealed that more than half of the total respondents have knowledge and are aware of the risks of breast cancer. This is in agreement with the findings in Edo state and Ethiopia (Akhigbe & Omuemu, 2009; Azubuike & Okwuokei, 2013; Segni et al., 2016). It is however contradictory to studies in Benue State and Abuja, Nigeria which reported that women in the state have superficial or

poor knowledge about breast cancer symptoms and causes (Isara & Ojedokun, 2011).

With regard to practice of BSE among the respondents, the findings show that majority of them had practiced BSE. This is in agreement with the findings in Brazil, Iran and Edo State, Nigeria where more than half of the respondents have performed BSE (Akhigbe & Omuemu, 2009; Reisi, Javadzade, & Sharifirad, 2013; Silva et al., 2009). The reason one could deduce for this high performance of BSE among the respondents was that they are health workers. This contradicts other findings in Abuja and Edo state where more than half of the population have never performed BSE (Azubuike & Okwuokei, 2013; Isara & Ojedokun, 2011).

The respondents in this study know the aim of BSE and more than half of them know when it should commence. This is unlike Azubuike and Okwuikei (2013) who reported ignorance of BSE in their Edo state study. Similarly, results reveal key hindrances associated with the practice of BSE among the respondents as forgetfulness and lack of knowledge of BSE technique. This agrees with studies that reported that knowledge of breast cancer among Benue women is superficial as genetic testing is quite a new subject to most of the respondents and hence their negative attitude towards breast cancer early detection campaigns (Ezeah et al.). Interfering factors of BSE practice in that study include forgetfulness, lack of attention to health, lack of knowledge of technique and or fear of finding nodules.

On respondent's willingness to impact the knowledge about BSE on their clients, findings indicate unwillingness to do so. Reasons adduced are shyness, embarrassment and lack of knowledge about BSE technique and performance. This is in agreement with Akhtari- Zavare et als' (2015) findings in Riyadh, kingdom of Saudi Arabia where it was reported that many of the student nurses will not be able to impact knowledge of BSE to women in their environment because they lack information. Like the popular saying that 'one cannot give what he does not have'; in other to be able to impact knowledge on others, one must be seen to possess such knowledge which can be accessed from diverse means in this era of information and communication technology.

Conclusion and Recommendations

Breast cancer remains one of the commonest cancers that plaque the female folk; BSE has been identified as a very important tool for early detection and prevention of the scourge. This study has shown that the female youth corpers in Lokoja have good knowledge about BSE, but majority of them are not willing to impact the knowledge on their clients. The failure to impact knowledge about BSE due to lack of knowledge will lead to poor practice of BSE among the population most at risk (adolescent girls and women), thereby increasing their chances of developing the disease. Thus, interventions that will improve the knowledge of causes of breast cancer and practice of BSE techniques are very important among this population.

The following recommendations were made: Government should organize enlightenment programme and workshops through the ministry of health to raise awareness of breast cancer and engage in practical demonstrations of BSE. Also, Government should introduce compulsory Health Education modules into the secondary and tertiary curriculum. There should be free mammography examination for all women above 40yrs of age.

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