

KNOWLEDGE AND PRACTICE OF SELF-BREAST EXAMINATION AMONG FEMALE UNDERGRADUATE STUDENTS IN A NORTHERN NIGERIA UNIVERSITY.

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ABSTRACT

Breast cancer is one of the leading causes of death among women and the commonest female malignancy world- wide. If detected early, it is often successfully treated but when detected late it is often fatal. Therefore early detection is the key to survival. Breast-Self Examination (BSE) is an inexpensive method for early detection of breast cancer. Thus, knowledge and consistent practice could protect women from severe morbidity and mortality due to breast cancer. The objective of the study was to determine the knowledge and practice of BSE amongst female undergraduate students in a Northern Nigerian University. A cross sectional descriptive study was conducted among the female undergraduate students. Multistage sampling technique was employed to interview 345 students using structured self administered questionnaires. The result showed that 87.3% of the respondents were aware of breast cancer. However, a significant proportion 20.0% did not know its aetiology. On the knowledge and practice of breast self examination, about three-quarters (74%) confirmed that they had heard of it while 55.0% confirmed practicing it. However, no association was established between the knowledge and practice of BSE and the level of study of the respondents. In conclusion, awareness of BSE among respondents was high while the practice was fairly good. There is therefore the need for more health education in order to improve the level of practice among the students. IEC means such as; Campus radio, pamphlets, posters and peer group educators would be of immense help.

INTRODUCTION

Breast cancer is one of the leading causes of death among women and the commonest female malignancy world-wide.¹ This cancer has a considerable variation in the geographical, racial and ethnic distribution, with a higher incidence among Caucasians than blacks.^{2,3} In America, it is the commonest type of cancer among women as

more than 193,000 cases are reported yearly and an average woman has one in eight chance of developing the cancer during her life time.^{4,5} In Nigeria, recent reports have indicated a rapid increase in the incidence of the disease among this multi-ethnic society.^{6,7,8} Despite the steady rise in the incidence, it is generally believed that the true prevalence is under reported as most studies are retrospective and hospital based with propensity for underestimation and bias.⁹

There is evidence that screening has a favourable effect on mortality.¹⁰ If detected early, it is often successfully treated but when detected late, it is often fatal. Therefore, early detection is the key to survival.¹¹ There are various techniques employed in the screening for breast cancer they include;

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mammography, clinical breast examination by medical practitioners, ultrasonography, thermography, diaphanography, digital tomosynthesis, Magnetic Resonance Imaging (MRI), Ductal lavage, Computerized Axial Tomography (CAT) Scan and Breast Self Examination (BSE).^{12,13}

BSE provides an inexpensive method for the early detection of breast cancer. Thus knowledge and consistent practice of the procedure could reduce morbidity due to breast cancer.¹⁴ Therefore, BSE is a vital strategy in the prevention and control of breast cancer.

MATERIALS/METHODS

The study was conducted in Ahmadu Bello University, Zaria campus. The campus is an annex of the main campus consisting of Faculties of Administration and Law with many departments. It has a total of 3217 female undergraduates spread from their first to the fourth years in all departments except for Faculty of Law that has students up to the fifth year.

A cross sectional descriptive study was conducted among the female students. A total of 380 questionnaires were administered using a multistage sampling technique after the calculation of the sample size using the appropriate statistical formula with the P value based on data obtained from a previous study.¹⁵ A pre-tested structured method consisting of both close and open-ended self administered questionnaire was used. The questionnaire contained information on socio-demographic profile, knowledge of breast cancer and detail information on knowledge and practice of Breast-Self Examination. Out of the 360 questionnaires administered, 352 were retrieved and 345 were fully completed and analyzed. Prior to the administration of questionnaires, informed consent was obtained from the Students Affairs Division as well as the

individual students. Questionnaires were coded and statistical analysis was done using Statistical Package for Social Sciences software programme (SPSS) Version 10 to calculate the frequencies and test associations.

RESULTS

Out of the 345 respondents more half (59.4%) were within the age range of 21-25 years, followed by 16-24 years with 26.7%; none of the respondents was below 16 years while less than 2% were above 30 years. About one-third (32.0%) of the respondents were Hausas followed by Yorubas (18.0%). Other numerous minority tribes like Fulanis, Tivs and Jabas constituted about half 44.0% of the respondents. More than half of the respondents (59.0%) were Muslims, 39.0% were Christians and 2.0% were of other religions. About four-fifth (88.4%) of respondents were single while divorcees constituted only 2.3% of the respondents. (Table 1)

On the knowledge of breast cancer about four-fifths (87.3%) knew about breast cancers while 12.7 were not aware of it. As to the causes of breast cancer there were multiple responses, while one-fifths 20.0% admitted having no idea. Among the causes given by the respondents 18.0% ascribed the occurrence to family history, 14.1% previous breast cancer, 13.4% cigarette smoking, 8.2% fatty diet, 7.9% late onset of menopause, 6.5% advance age and late onset of menarche accounting for 2.3%. About one-third of the respondents (30.2%) mentioned breast lump as a feature of Breast cancer. About half of the respondents (47.1%) mentioned breast removal as a treatment option for Breast Cancer (Table 2)

Most of the respondents (74%) have heard of BSE and their main source of information was the mass media (38.8%). Fifty five

Table 1: Socio-demographic characteristics of the respondents

Characteristics	Frequency	Percentage
Age (years)		
16-20	92	26.7
21-25	205	59.4
26-30	42	12.2
31-35	4	1.1
>35	2	0.6
N	345	100
Ethnic group		
Hausa	110	32.0
Igbo	21	6.0
Yoruba	62	18.0
Others	152	44.0
N	345	100
Marital Status		
Single	305	88.4
Married	32	9.3
Divorced	8	2.3
N	345	100
Religion		
Islam	204	59.0
Christianity	134	39.0
Others	7	2.0
N	345	100
Level of Study		
100	82	23.8
200	82	23.8
300	81	23.4
400	80	23.2
500	20	5.8
Total	345	100.0

Table 2: Knowledge of breast cancer of the respondents

Characteristics	Frequency	Percentage
Knowledge on breast cancer		
Yes	301	87.25
No	44	12.75
N	345	100.0
Causes of breast cancer		
Spiritual	30	4.9
Advanced age	40	6.5
Family history	110	18.0
Previous breast cancer	86	14.1
Not giving birth	30	4.9
Early age of 1st menses	14	2.3
Late age of menopause	48	7.9
Fatty food	50	8.2
Cigarette smoking	82	13.4
No idea	122	20.0
N	612	100.0
Features of breast cancer		
Lump	234	30.2
Swelling	108	14.0
Pain	138	17.8
Nipple discharge	76	10.0
Change in Nipple shape	52	6.7
Skin changes	74	10.0
Wound	50	6.5
No idea	38	4.9
N	774	100.0
Treatment options		
Drugs	124	32.5
Breast removal	180	47.1
Use of rays	72	18.8
No idea	6	1.6
N	382	100.0

Table 3: Knowledge of Breast-Self Examination of the respondents

Characteristics	Frequency	Percentage
Knowledge of BSE		
Yes	255	74.0
No	90	26.0
N	345	100.0
Source of information		
Friends	70	20.3
Relatives	28	8.1
Mass media	134	38.8
Health personnel	102	29.6
Other sources	11	3.2
N	345	100.0
Practice of BSE		
Yes	189	55.0
No	156	45.0
N	345	100.0
Interval of BSE		
Daily	26	13.8
Weekly	30	15.9
Twice a month	28	14.8
Monthly	48	25.4
Twice a year	20	10.5
When necessary	37	19.6
N	189	100.0
Duration of practice		
<1	72	38.1
1-5	82	43.4
>5	35	18.5
N	189	100.0

Table 4: Awareness of Breast-Self Examination by Level of Study

<i>Level of Study</i>	<i>Awareness of Self Breast Examination</i>		<i>Total</i>
	<i>Aware</i>	<i>Not Aware</i>	
100	62	20	82
200	57	25	82
300	62	19	81
400	58	22	80
500	18	2	20
Total	257	88	345

$\chi^2 = 3.98, df = 4, p < 0.05$

Table 5: Practice of Breast-Self Examination by Level of Study

<i>Level of Study</i>	<i>Practice of Breast Self Examination</i>		<i>Total</i>
	Yes	No	
100	39	43	82
200	48	34	82
300	50	31	81
400	42	38	80
500	10	10	20
Total	189	156	345

X² = 3.98, df = 4, p < 0.05

percent (55%) of the respondents had practiced BSE in the past (Table 3). There was no statistically significant association between knowledge and practice of BSE and the level of study of the respondents (X² = 3.98, df = 4, p < 0.05) (Tables 4 and 5).

DISCUSSION

The socio-demographic characteristics of the respondents show that majority were within the age group of 21-25 years. This is the typical age group of the university students who might have completed their secondary education at about the age of 18 years. Table 1 shows that even though Hausas constitute the single largest respondents, the minority populations put together constitute the majority. The study also revealed that most of the respondents were single. This social group constitutes a very good target for information, education and communication in any meaningful effort to reduce the occurrence of breast cancer. Having acquired knowledge of this dreadful disease in school, they may act as good ambassadors for information dissemination in their respective communities. The study revealed a very high knowledge of breast cancer among respondents, but showed varying responses on its causes and presentation. On the treatment options, it is important to observe that close to fifty percent (47.1%) of the

respondents believed that breast excision is a potent method of treatment.

The study also revealed a high level of knowledge of BSE among the respondents. This finding is similar to that of Jebbin in Port-Harcourt and Pillay in South Africa, where 85.5% and 50.0% of the respondents had good knowledge of BSE respectively. However, the figure is much higher than the 31.7% obtained among women traders in Ibadan, Southwest Nigeria and 11.9% obtained among Chinese women.^{18,19}

The study shows that the mass media constitutes the major source of information. This was closely followed by health personnel. Therefore, in waging a war against breast cancer, these sources of information could be viable tools. As a means of information, education and communication, some universities have developed campus radios where issues of importance are discussed among the students. Such medium of information can be used in reaching out to female students on the importance of breast self examination.

Regarding the practice of BSE, the study revealed that 55% of the respondents engaged in it. This figure is considerably higher than the findings in Southwestern Nigeria, South Asia and Brazil.^{18,20,21}

As to the frequency of BSE, the figure obtained is less than the figure obtained in Port Harcourt, Nigeria.¹⁵ Furthermore, the study did not establish any association between knowledge and practice of BSE and the level of study of the respondents, this study is in agreement with a similar study conducted in Ibadan, Nigeria where no association was found between level of education and the practice of BSE.¹⁸

CONCLUSION

In conclusion, this study shows that there was a good level of awareness of breast-self examination coupled with a fairly good practice of the procedure among female undergraduate students in Congo campus of ABU Zaria. However, for successful war against breast cancer, the percentage of students not practicing breast-self examination may be regarded as significant. This, therefore, calls for more information, education and communication on the need for such practice. IEC means such as; Campus radio, pamphlets, posters and Peer Group Educators would be of immense help.

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