Practice of Breast Self- Examination among female undergraduate students of Adeleke University, Ede, Osun State

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Abstract

Objectives: Breast self-examination (BSE) is one of the important screening techniques for early detection of malignancy of the breast. The procedure is simple and non-invasive, however, there is inadequate information of breast self-examination practice among students. The study assessed the breast self-examination practice among female undergraduate students of Adeleke University, Ede, Osun State.

Methods: This was a cross sectional survey conducted in 2016 among two hundred and fifty undergraduate students of Adeleke University, Ede who were female. Stratified random sampling technique was used to select respondents for the study. Self-administered questionnaire was used to elicit information on the practice of breast self-examination among the study participants. Statistical Package for Social Sciences (SPSS) version 21 was used to analyze data.

Results: The mean age of respondents was 20.41±2.52 years. Two third of the study participants were of the Yoruba ethnicity (65.6%) and majority were never married (98.8%). Majority (89.2%) of them were aware of BSE and their main source of information was seminar (42.0%). Only a 35.2% of the study participants stated they practice BSE monthly.

Conclusion: There is poor practice of breast self-examination among the study participants. To achieve utmost breast cancer prevention, public health programs should focus on regular and correct performance breast self-examination among female students.

Keywords: Practice, Breast Self-Examination, female, undergraduate students

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Pratique de l'auto-examen des seins chez les étudiantes de premier cycle de l'Université Adeleke, Ede, État d'Osun

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Abstrait

Objectifs: L'auto-examen des seins (ESB) est l'une des techniques de dépistage les plus importantes pour la détection précoce de la malignité du sein. La procédure est simple et non invasive. Cependant, les informations relatives à la pratique de l'auto-examen des seins chez les étudiantes sont insuffisantes. L'étude a évalué la pratique de l'auto-examen des seins chez les étudiantes de premier cycle de l'Université Adeleke, à Ede, dans l'État d'Osun.

Méthodes: Il s'agissait d'une enquête transversale menée en 2016 auprès de deux cent cinquante étudiants de premier cycle de l'université Adeleke, à Ede, qui étaient des femmes. Une technique d'échantillonnage aléatoire stratifié a été utilisée pour sélectionner les répondants à l'étude. Questionnaire auto-administré utilisé pour obtenir des informations sur la pratique de l'auto-examen des seins chez les participantes à l'étude. Le paquet statistique pour les sciences sociales (SPSS) version 21 a été utilisé pour analyser les données.

Résultats: L'âge moyen des répondants était de 20,41 ± 2,52 ans. Les deux tiers des participants à l'étude appartenaient à l'ethnie yoruba (65,6%) et la majorité d'entre eux n'étaient jamais mariés (98,8%) respectivement. La majorité d'entre eux (89,2%) étaient au courant de l'ESB et leur principale source d'information était le séminaire (42,0%). Seuls 35,2% des participants à l'étude ont déclaré pratiquer l'ESB chaque mois.

Conclusion: l'auto-examen des seins est peu pratiqué par les participantes à l'étude. Pour parvenir à une prévention optimale du cancer du sein, les programmes de santé publique doivent mettre l'accent sur l'auto-examen régulier et correct des performances du sein chez les étudiantes.

Mots-clés: pratique, auto-examen des seins, femmes, étudiantes de premier cycle

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INTRODUCTION

Worldwide, the most frequent malignancy among women in low and middle income countries is Breast cancer and it is presently the second leading cause of cancer deaths in women (1). The survival rates for breast cancer has worldwide variations, it ranges from below forty percent (40%) in low income countries to sixty percent in middle income countries and above eighty percent in North America and Japan (2). This is majorly because many women in developing countries present in late stage as a result of unavailability of early detection programmes, insufficient diagnosis and treatment facilities (1, 3).

Studies have documented that when breast malignancy is detected timely, it reduces morbidity and mortality associated with breast cancer (4, 5). Several methods of screening for breast malignancy are mammography, clinical breast examination, breast MRI, breast ultrasound and breast-self-examination (3). BSE is the awareness of the woman about her breasts' normal appearance and feel and ability to identify changes should they occur in terms of the breast size or shape, existence of lumps, dimples in the skin, skin redness and discharge (6). The best time to do a BSE is about 3– 5 days after a woman's menstrual period, at such point the breast is not tender or lumpy thus it's done once a month (7). In addition, practice of breast self-examination has been seen to empower women, making them take responsibility for their own health (8).

Other screening techniques such as mammography, breast scan e.t.c are not routinely done in most developing countries like Nigeria due to low level of awareness, ignorance, illiteracy and cost (9). A consistent BSE is economical, non-invasive, personal and straight forward method (10, 11). This has been linked with early tumor detection which may facilitate prompt treatment and reduce mortality associated with breast cancer (10, 12, 13). Regardless of these advantages, only 18 to 36 per cent of women perform BSE (14). Breast malignancy outcome and survival especially in low and middle income countries where diseases are diagnosed in advanced stages and with very limited resources, can be enhanced with timely detection which remains a vital strategy. There are documented evidences that BSE strategy can heighten the percentage of breast malignancy detected at an early stage, hence reduce the burden of disease to more treatable levels (15, 16).

Lately, the growing problems of cancer of the breast in Nigeria has been receiving much attention and inputs from international and non-governmental organizations. However, many women in Nigeria still present with late stage breast cancer which may or may not be amenable to treatment.

This study therefore assessed the practice of breast self-examination among female undergraduate students of Adeleke University, Ede, Osun State, Nigeria.

MATERIALS AND METHODS

This was a cross sectional study conducted in April 2016 among female undergraduate students of Adeleke University, Ede, Osun State, Nigeria. It is a higher institution with six faculties and sixteen departments.

The minimum sample size of two hundred and fifty for the study was calculated using Kish and Leslie formula. Stratified sampling technique was used to select study participants. Here, the method of proportional allocation was used to calculate the number of study participants to be selected from each stratum/faculty. Data was collected using self-administered questionnaire. The questionnaire was divided into three sections: Socio-demographic data, knowledge and practice of breast self-examination. Data analysis was done using Statistical Package for Social Sciences (SPSS) software version 21. Participants gave their consent to participate in the study and Ethical approval was sought from the institution ethical review committee.

RESULTS

Most (70.4%) of the respondents were between the ages of 16-21 years, and 29.6% were between the ages of 22-27 years. The mean age of the respondents was 20.41±2.52 years. Two third (65.6%) of the respondents were Yoruba, 15.6% were Igbo, 6.4% were Hausa, and 12.4% were from other tribes (igbira, ijaw). Majority (98.8%) of the respondents were single and only 1.2% of them were married. Eighty-six percent (86.8%) were Christians and 13.2% were Islam. This is shown in Table 1.

Two hundred and twenty-three (89.2%) of the respondents reported they had heard of breast self-examination while 27(10.8%) reported they had not heard of breast self-examination. This is shown in Figure 1. Only 57.6% of the respondents gave the correct definition of BSE as examination done by the woman herself to know her breasts' normal

appearance and feel and ability to identify changes should they occur in terms of the breast size or shape, existence of lumps, dimples in the skin, skin redness and discharge while 42.4% of the respondents did not state the correct definition of BSE. One hundred and five (42.0%) reported they got information about BSE from seminar, 96(38.4%) from school teachings, 93(37.2%) from health workers, 86(34.4%) from television, 85(34.0%) from friends, 79(31.6%) from internet, 59(23.6%) from newspaper and magazine. This is shown in Figure 2.

Two hundred and twenty-one respondents (88.4%) had done breast self-examination before, 25(10.0%) had never done breast self-examination and 4(1.6%) of the respondents did not respond to the question. Two hundred and ten of the respondents (84.0%) reported that they started breast self-examination between ages 10-19years while 29 (11.6%) of the respondent reported that they don't know when they started breast self-examination and 11 (4.4%) reported that they started breast self-examination between ages 20-29years. Eighty-eight (35.2%) reported they do breast self-examination monthly, 85(34.0%) reported weekly, 40(16.0%) reported anytime they remember, 8(3.2%) reported rarely, while 29(11.6%) have no idea. This is shown in Figure 3.

Regarding which day respondents practiced BSE, some of the respondents 107(42.8%) reported they practice breast self-examination a week after menstruation, 46(18.4%) reported anytime they remember, 45(18.0%) reported during menstruation, 23(9.2%) reported two weeks after menstruation, while 29(11.6%) did not respond to the question.

DISCUSSION

This was a cross sectional study which assessed the practice of BSE among female undergraduate students of Adeleke University, Ede, Osun State. The mean age of the respondents was 20.41±2.52 years.

Majority of the study participants had heard of BSE; this is similar to a study conducted among nursing students in India by Elamurugan which documented that majority of the respondents had heard of BSE (18). This is also similar to another study conducted by Irurhe among medical students in Lagos and another study by Gwarzo et al among female undergraduate students in Zaria, Northwestern Nigeria (9,17). The high level of awareness could be because the respondents were university

students. About half of the respondents could correctly define BSE as an examination done by the woman herself to know her breasts' normal appearance and feel and ability to identify changes should they occur in terms of the breast size or shape, existence of lumps, dimples in the skin, skin redness and discharge. Respondents main source of information on BSE was seminar, followed by school teachings and then health workers. This is unlike most other studies where television, radio (media) were the main source of information (17, 20).

Over eighty-five percent of the female undergraduate students had ever practiced BSE. This is higher than 57% of females that had ever practiced BSE documented in a survey by Gwarzo et al in Zaria and Doshi among female nursing students in India (17, 19). However, only thirty-five percent practiced BSE on a monthly basis despite the high knowledge level reported. This is surprising considering their level of awareness of BSE. This is similar to a report by Elamuragan in India among female nursing students which reported 33.3% performed BSE monthly and another study by Mernoosh among Malaysian female students which reported thirty-one percent practiced BSE monthly (18, 20). However, this report is higher than 19% documented by Gwarzo et al among female undergraduate students in Zaria and 9% reported by Motilewa among female undergraduate students in Uyo (17, 21). Less than half of the respondent practice BSE a week after menstruation which is the right time to do a BSE. This is higher than the proportion (20.4%) reported by Motilewa in a survey among female undergraduate student in Uyo (21). Most of the respondents started BSE before age 19 years. This is unlike a study in India among nurses where 65.8% started practicing BSE after 19 years (18).

CONCLUSION

The study concludes that there is high level of awareness of Breast self-examination among the studied students, however, the regular practice of breast self-examination is poor. Breast self-examination is an excellent preventive practice against breast cancer hence health education on its importance and benefits should be intensified in order to improve regular BSE practice among the female undergraduate students of Adeleke University. This could be through regular delivery of seminar or use of the media (Television, radio) to inform the students and even train some of them as peer educators to

educate other female students.

Conflict of interest: The authors declare no conflicts of interest.

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Table 1: Socio Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Age (years)		
16-21	176	70.4
22-27	74	29.6
Mean age (years)	20.41±2.52	
Tribe		
Yoruba	164	65.6
Hausa	16	6.4
Igbo	39	15.6
Others	31	12.4
Marital status		
Single	247	98.8
Married	3	1.2
Religion		
Christianity	217	86.8
Islam	33	13.2
Faculty		
Science	51	20.4
Health science	29	11.6
Engineering	5	2.0
Business and social science	115	46.0
Law	22	8.8
Art	28	11.2
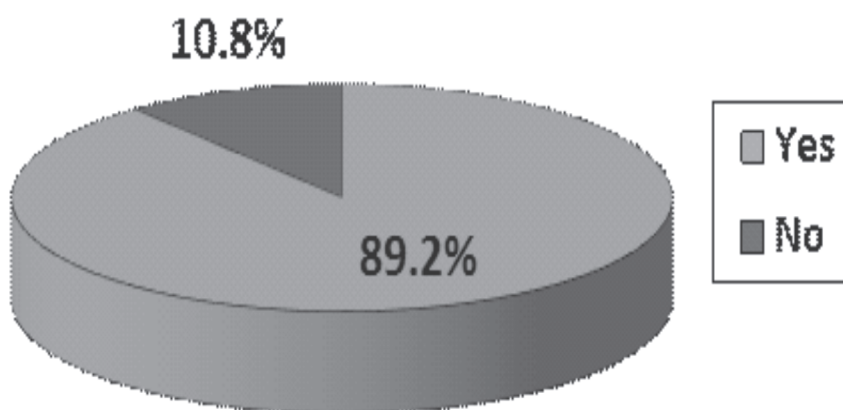
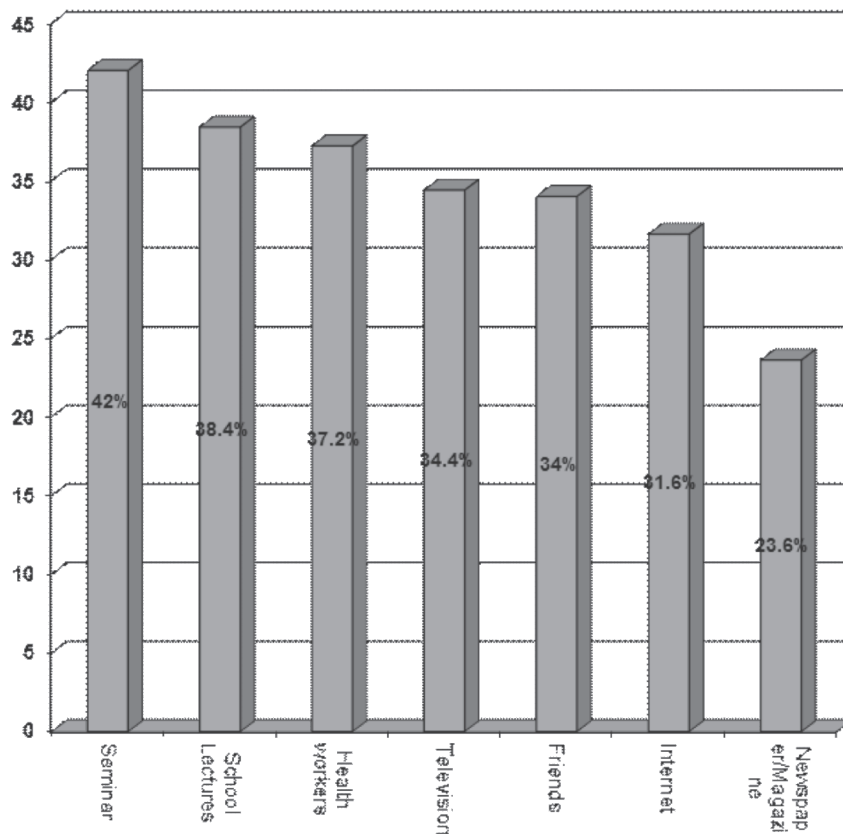**Figure 1: Respondents' awareness about Breast Self-Examination**
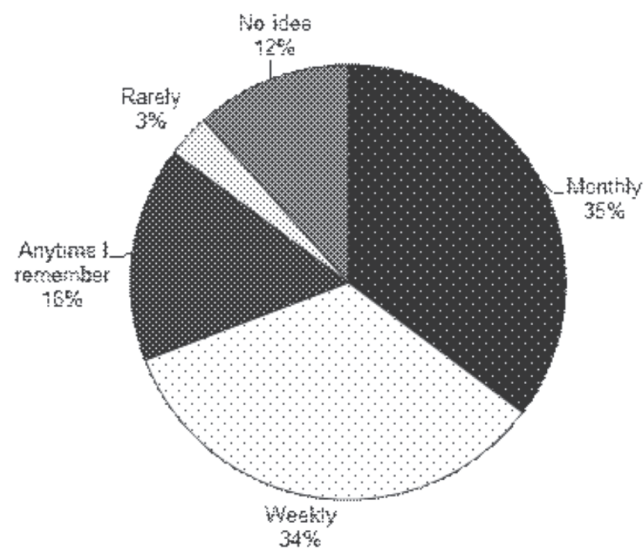
Figure 2: Respondents' sources of information

Figure 1: Respondents' frequency of practicing BSE