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Knowledge and Practice of Breast Self-Examination among Nursing and Midwifery Students in Ibadan, Nigeria

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Abstract

Background: Breast self-examination (BSE) is a check-up that a woman does by herself at home to look for changes or problems affecting the breast tissue. BSE is still recommended as a general approach to increasing breast health awareness and thus potentially allow for early detection of any anomalies because it is free, painless and easy to practice. This study assessed the knowledge and practice of BSE among Nursing and Midwifery students of School of Nursing and Midwifery, Eleyele Ibadan.

Methods: The descriptive study was conducted with the use of structured questionnaires designed by the researchers. The internet resources and previous related studies served as the sources of content of the questionnaire. A simple random technique was used to select the participants for the study; the Nursing and Midwifery Council indexing record for the school being the sample frame. Thus, a total of 142 participants were recruited for the study.

Results: The findings show that, majority (84.5%) of the respondents had good knowledge of BSE, while all of them had heard about BSE as at the time of data collection. However, over 90% had been practicing it prior to the period of data collection appropriately. Less than 15% of the respondents, had been able detect breast lumps while performing BSE. This category of the respondents claimed to have informed their parents before any action was taken.

Conclusion: Breast cancer is the most severe and serious health problem faced by the public, majorly women. These nursing and midwifery students, most of whom were within the transitive phase from adolescent to adulthood have potential influence on one another, their immediate families and the society at large. This category of the nation's population has been less studied in previous related researches. Therefore, educating them particularly during their professional training is very important.

Key Words: Knowledge, Practice, Breast self-examination, Nursing and midwifery students

Introduction

The efficient practice of BSE for early detection of breast cancer diseases is still very relevant today in Nigeria. Breast cancer is a global health concern and a leading cause of morbidity and mortality among all the cancers that affect women[1]. Yearly, this malignant disease of the breast is responsible for over one million of estimated of 10 million neoplasms diagnosed worldwide[2].

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Globally, it is the primary cause of cancer deaths among women. In the year 2000, about 375,000 deaths were reported[2]. Breast cancer mortality rate is highest in women within ages 20 and 59 years[3]. According to Imaginis cited in[3], the incidence of breast cancer is low in younger women; however, when younger women are diagnosed, the cancer tends to progress rapidly.

In 2008, the estimated prevalence of breast cancer was 235 per 100,000 women. The reported prevalence was teenage ladies. Of course, it exceeded this figure in Sub-Saharan Africa[4]. It has been identified as a major public health problem in both developed and the developing nations because of its high incidence-prevalence, over-burdened health system and direct medical expenditure[5]. Studies have shown that in most of the developing nations breast cancer is diagnosed in advanced stages of the disease when compared with developed nations and thus has a poor outcome and high fatality rate [6].

The morbidity and mortality rate of cancer of the breast among Nigeria women is alarming and it is a serious health issue to health professionals especially respondents[7]. Findings from[8], documented that the incidence of breast cancer in Nigeria has risen significantly with incidence in 2009–2010 at 54.3 per 100 000, thereby representing 100% increase in the last decade. In Nigeria, late presentations of breast cancer cases have been consistent for three decades. It is, therefore, pertinent to assess the knowledge of breast cancer and its early detection measures.

Breast self-examination (BSE) is a technique which allows an individual to examine his/her breast tissue for any physical or visual changes [9]. It is often used as an early detection method for breast cancer. Both men and women should perform a BSE at least once each month beginning at age 18. Breast self-examination (BSE) has been identified as the only realistic approach in early detection of breast cancer in developing nations[6] Even though the American Cancer Society has chosen to advise women that BSE is an "optional" screening tool. Breastcancer.org still believes that BSE is a useful and essential screening strategy, especially when used in combination with regular physical exams by a doctor and mammography.

A wide knowledge-application gap has been observed across the globe between the knowledge and the actual practice of BSE. Multiple socio-demographic factors, myths, cultural beliefs, lack of accessibility to the health care services have been identified as the reasons for the poor uptake of BSE. Considering the potentials of BSE, there is an immense need for a public health education program to inculcate the practice of breast self-examination among women to minimize the fear, denial, myths and misconceptions. This requires a sustained political commitment and further studies to recognize the perceived barriers which are interfering with the uptake of BSE so that the greatest challenge of late presentation can be curbed and the chances of survival improved.

Studies conducted in Nigeria over the past years, on BSE and breast cancer among women in the south-east, south, south-west and north of the country have proven that knowledge of BSE as a screening method for breast cancer and the right time to carry out BSE was very poor. The only contrast in the present study is that knowledge about postures involved in performing BSE was good[10].

Materials and methods
Study design
The descriptive cross-sectional design was used for this study. This involved collecting data from the research participants, regarding the knowledge and practice of Breast self-examination.

Setting of the study
This study was conducted at Oyo State School of Nursing and Midwifery, Eleyele, Ibadan. The two institutions owned by Oyo State government. It is located within same compound in Ibadan North Local Government Area, along Eleyele road, behind Fan milk factory.

Population sample
A total sample of 142 nursing and midwifery students was recruited to participate in the study.

Instrument for data collection

A 4-section structured questionnaire was employed for data collection. The section A elicits the socio- demographic information of the respondents. Section B and C were designed to capture knowledge and awareness of BSE among the respondents, respectively, while section D assesses the practice of BSE among the respondents. The instrument was validated through expert reviews. The reliability coefficient of the researcher-designed instrument was 0.8.

Data collection and analysis

Data were generated from the responses of the respondents to items contained in the self-administered questionnaires. The retrieved questionnaires were cross-checked by the researchers for appropriateness and completeness. Data obtained entered into computer and analyzed using Statistical Package of the Social Sciences (SPSS) software (version 20.0). The results of the analyses were presented in the forms of descriptive and inferential statistics such as frequency/percentages, mean, standard deviation chi- square. In respect of the inferential statistics, the level of significance of relationship between paired variables was set at p-value ≤ 0.05.

Ethical considerations

Ethical clearance for the study was obtained from the UI/UCH Ethical Review Committee (UI/EC/16/0248). All relevant ethical issues around the study such as informed consent, anonymity, confidentiality and autonomy were strictly addressed before, during and after data collection.

Results

The age distribution of the study showed that 14.8 % of the respondents were below 20 years, 69.7 % were between 20 – 29 years, while 15.5 % within 25 – 29 years. Also, the study revealed that 65.5% of the respondents were Christians and remaining were Muslims. The study further revealed that 85.2 % of the respondents were single, and 14.8 % are married. A total of 94.4% were Yoruba and the remaining belonged to Igbo ethnic group. Table 1 presents the entire socio-demographic variables of the respondents.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency	%
Age (years)		
Below 20	21	14.8
20 – 24	99	69.7
25 – 29	22	15.5
Religion		
Christianity	93	65.5
Islam	49	34.5
Marital Status		
Single	121	85.2
Married	21	14.8
Tribe		
Yoruba	134	94.4
Igbo	6	4.2
Others	2	1.4
Level of study		
100 level	31	21.8
200 level	35	24.6
300 level	33	23.2
Pupil midwife	43	30.3

Out of the 142 student nurses and midwives studied, 77.5% claimed that no member of their families had ever suffered from breast diseases. Out of the 32 respondents whose family members had suffered from breast diseases, 53.1% other type of breast problems, 25.0% of respondents' grandmothers had breast cancer in the past, while 21.9 % of the respondents' mother had breast cancer.

Knowledge of breast self-examination

The student nurses and midwives were assessed with 14 item knowledge of BSE based questions. A correct response was scored as 1 point, while a wrong response was scored as 0 point. The aggregate scores of respondents were calculated accordingly. The mean score ± standard deviation was 11.6 ± 1.63. In addition, 9.2% of the students had high knowledge of BSE.

Table 2: Level of knowledge of BSE among respondents

Knowledge	Frequency	%	Mean	SD
Low	58	40.8	11.6	1.63
High	84	59.2		

The practice of BSE among respondents

All the student nurses and midwives were demonstrated good knowledge of how to practice BSE correctly and about 93% of them actually practiced it. However, the students performed BSE at varying intervals; 82.4% were performing it monthly, 12.7 % were doing it weekly or yearly. The respondents were assessed on 12 items that elicited the practice of BSE among the respondents. A correct response was scored as 1point, while a wrong response was scored as 0. There are 12 correct answers, which imply that a score of 12 indicated a perfect practice of breast self-examination, while a score of 0 indicated that the respondents do not practice breast self-examination. However, the mean score for each individual was computed, and the grand mean (11.4) for all the scores was also computed. Any respondent whose individual mean score was more than 11.4 indicated that the person had a high practice of BSE, while a mean score less than 11.4 indicated that the respondent had a low practice of BSE. Out of those practicing BSE, 14.1 % claimed to have detected breast lump by themselves. Those students who claimed to have successfully made self-detection of breast lumps informed their parents about it. Furthermore, the study showed that 74 (52.1%) of the respondents had high practice of breast self-examination with mean and standard deviation 11.4 ± 1.64.

Table 3: Level of practice of BSE

Practice	Frequency	%	Mean	SD
Low	68	47.9	11.4	1.64
High	74	52.1		

Discussion

The awareness of the respondents of this study was 100%, but this has not led to a 100% practice among them. This is because this awareness has not been transcribed into practice, and some people who are aware do not know how and when to carry out breast self-examination. Knowledge about BSE was also high 59.2% with a mean score and standard deviation of 11.6 and 1.63 respectively, which is in tandem with a study carried out by[11], amongst all nursing students of Lagos University Teaching Hospital, who found out that the respondent's knowledge of breast cancer and BSE was high (97.3%), and also a study conducted by[12], among female secondary school teachers in Ilorin, where it was found that Breast Self-Examination was known by most of the respondents as about 95.6% had heard about it before. This means that majority of the respondents of this study also have adequate knowledge about the meaning of BSE and this should serve as a means to improve their health. At the same time it was also seen that about 40.8% of the respondents have poor knowledge of BSE which can deter practice of BSE and invariably affect their health.

Furthermore, results from the study revealed that 100% of respondents knew how to carry out breast self-examination and 93% have carried it out before; this means that people need to be more educated on proper methods of carrying out BSE, in order to have 100% of them performing it to improve their health status through early detection of any changes in breast tissue. 82.4% carried it out monthly which indicates good performance on the part of respondents. 62% started BSE from age 20 because majority of them enter Nursing school at this age and they were thought how to perform BSE. 73.2% of the respondents performed BSE in the last month before collection of data; this result signifies effective practice. During BSE about 14.1% of them have detected lump in their breast and they reported to their parents before they took any action, but 50% of them took an action of reporting to the hospital at around 1-3 months of detection. This entails that a proper education of actions to take

when a lump is detected needs to be passed across.

Also about 52.1% claimed to have high level of practice while 47.9 had poor level of practice. This study was supported by[11]. Who found out that respondents' practice of breast self-examination was good with 80.2% of the respondents claiming to carry out breast self-examination regularly. From the findings above, it was discovered that majority of the respondents had good knowledge and understanding of what breast self-examination and thus practice it effectively, but it is very important to transfer this knowledge to the community level and the general populace as well, whenever the health care professionals especially nurses come in contact with them.

For educational purposes also, it is very important to incorporate BSE into health educational programs in various clinics and hospitals in order to promote awareness and knowledge of practice of BSE; this will help to prevent the risk of breast lumps becoming breast cancer among women especially illiterate ones.

Implication for nursing education and practice

Although, majority of the student nurses and midwives had good knowledge of breast self-examination and they practice it correctly, it is very important to transfer knowledge to the community and the populace as well on BSE and its practice whenever the health care professional nurses come in contact with them.

For educational purpose, it is very important to incorporate BSE on health educational program in the various clinic and hospitals in order to promote their awareness and knowledge of practice of BSE, this will help to prevent the risk of breast lump becoming breast cancer among women especially those that are not in health line and for thus that are not educated.

Conclusion

The studies that will be carried out on this issues in future, should examined the attitude and perception of the female nursing and midwifery students of BSE, also other studies should also be carried out to examine knowledge, attitude, perception and practice of BSE among other students too and compare the two results from both students. Comparative studies should be done to determine other factors that influence practice of breast self-examination such as educational level, time and profession.

Recommendations

To improve the health of the populace most especially women because they contributed to the largest population and reduce the risk of cancer among women requires a collaborative effort from government, NGO, religions group and health care personnel. It is very important for government to help in creating awareness on mass media about breast self-examination and its practice and its effectiveness in reducing the problem associated with advance stage of breast cancer. It also pertinent that during health awareness session in schools and clinics, students and clients should be informed educated and thought on practice of BSE. Nurses in health care setting should also help in giving practical example of how to carry out BSE because majority of people heard about it, practice it but in a wrong ways.

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