

Knowledge, Attitude and Practice of Breast Self-Examination among Nursing Students in Lagos University Teaching Hospital

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Abstract: Breast cancer is the commonest cancer among women in Nigeria and globally. 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. The study was designed to assess level of knowledge, attitude and practice of breast self-examination (BSE) among nursing students. This study was a cross-sectional survey amongst all nursing students of Lagos University Teaching Hospital. Each participant was given a self-administered questionnaire, which was designed to evaluate information such as socio-demographic data, level of knowledge of breast cancer, the attitude of the participant toward BSE and practice of BSE. The respondent's knowledge of breast cancer and breast self-examination was high (97.3%); 85.6% knew how to carry out breast self-examination correctly. Majority, 58.6% obtained their information from television/ radio. The attitude of respondents to breast self-examination was good, most of the respondents, 98.5% thought breast self-examination was necessary and 84.3% claimed to have carried out breast self-examination before. Respondents' practice of breast self-examination was also good with 80.2% of the respondents claiming to carry out breast self-examination regularly. In conclusion, the level of awareness of breast cancer and breast self-examination was high among nursing students of the Lagos University Teaching Hospital.

Key words: Knowledge · Attitude · Practice · Breast self-examination (BSE) · Breast cancer

INTRODUCTION

Breast cancer is the most common cancer in women and the second leading cause of death from cancer [1, 2].

The incidence rates are high in developed countries [3]. Studies have shown increased incidence from African countries whereas low rates have previously been reported and an estimated world total incidence of 1.45 million would be expected by the year 2010 [4]. The peak age incidence of breast cancer in Nigeria is reported to be between 45-50 years, in contrast to Europe and America where it was reported to be 65-75 years. Some cases have been reported below 30 years in Nigeria [5, 6].

One potentially important strategy in reducing breast cancer mortality is breast cancer screening to achieve

earlier detection of cancer [7, 8]; so is creating awareness which is a very important tool needed to increase response to breast cancer screening.

Early diagnosis usually results in treatment before metastasis and signifies a better outcome of management. The main methods of screening involve breast self-examination (BSE), physical examination of the breasts by a physician or qualified health workers, clinical breast examination (CBE) and mammography.

Despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self-examination [8]. In many countries, especially developing countries like Nigeria, BSE will most likely be the only feasible approach to wide population coverage as it is a cheap and easy method.

Being on the frontline of patient care, nurses are in a unique position as they have a supportive role in educating and motivating patients on breast cancer screening in the primary health care setting. Due to their key role in patient education, it would be interesting to explore nurses' knowledge and practice on breast cancer screening which may indirectly influence their patients' understanding and practice of breast cancer and screening [9].

This study was therefore aim at assessing the knowledge and practice of breast self-examination among female nursing students in Lagos.

MATERIALS AND METHODS

Study Design: This study was a cross-sectional survey amongst all nursing students of Lagos University Teaching Hospital, Lagos State, Nigeria. The study was conducted in June 2010.

Informed consent of each participant was sought and obtained, and they were assured of the confidentiality of their responses.

Instrument: Each participant was given a self-administered questionnaire, which was designed to evaluate information such as socio-demographic data (such as age, marital status, ethnicity, parity and religion); their level of knowledge of breast cancer (such as what age should BSE start, how often should BSE be performed), the attitude of the participant toward BSE and questions relating to practices of BSE.

Analysis: The data were evaluated by descriptive statistics and chi-square using Epi-info 2004 series. The differences between the three variables were considered significant if the *p* value was less than 0.05.

RESULTS

The total number of questionnaires given out was one hundred and fifty (150) but only one hundred and thirty-five (135) was collected and analysed.

Table 1 shows the demographic profile of respondents. Majority of the respondents, 40.7% were of the 21-22 age groups with the mean age being 21. Most of the respondents (96.3%) were single, while 3.7% were married. Majority of the respondents (51.1%) were Yoruba, closely followed by 34.8% who were Igbo. Many of the respondents (82%) were Christians while the rest were either Muslims (16.5%) or from other religions (1.5%). Only 12.1% had a family history of breast cancer, 50% of which was an aunt.

Table 1: Demographic profile of respondents (N= 135)

Variable	Number (%)
Age	
15-19	21.2
20-22	40.7
23-25	29.6
26 and above	8.4
Ethnicity	
Yoruba	51.1
Igbo	34.8
Hausa	4.4
Others	9.6
Marital status	
Single	96.3
Married	3.7
Religion	
Christianity	82
Islam	16.5
Others	1.5
Family history of cancer	
Yes	12.1
No	87.9

Table 2: Respondent's knowledge of breast cancer and breast self-examination

Knowledge of breast cancer	% of Correct answers
Have you heard of breast cancer?	97.3
Is it common in this environment?	84.8
Can it be detected early?	99.3
Can early detection improve chances of survival?	99.3
Have you heard of breast self-examination?	97.3
How did you hear about it? Home	23.0
Peer group	25.0
Television/ Radio	58.6
Newspaper	37.1
Who should perform BSE?Male only	-
Female only	51.1
Both Male and Female	48.9
At what age should BSE begin? <19 years	49.2
>19 years	50.8
How often should perform BSE? Daily	33.3
Weekly	28.0
Monthly	35.6
Yearly	3.0
How is BSE done?	
Palpate with one finger	10.2
Palpate with palm and minimum of three fingers	85.6
Anyhow	8.4

Table 3: Attitude of respondents to breast self-examination

Attitude to breast self-examination	% of Correct answers
Do you think BSE necessary?	98.5
Have you done BSE before?	84.3
If yes, why?	
To examine my breasts regularly	83.1
Breast cancer in my family	2.7
Others	4.4
If no, why not?	
I don't know how to do it	87.5
I don't think it is important	26.7
I don't think I should touch my body like that	10.0
I don't believe in the efficacy of the test	10.0
I don't have any symptom	10.4
I know I can never have cancer	20.0
I am scared of being diagnosed with breast cancer	3.3

Table 4: Respondent's practice of breast self-examination

Practice of self-breast examination	% of Correct answers
How often do you perform BSE in a year?	80.2
At what age did you start BSE? < 19 years	49.2
>19 years	50.8
When was the last time you performed BSE?	
Less than a week ago	34.8
Less than three to six months	35.7
Less than one year	17.4
What time do you normally perform BSE? Morning	69.0
Afternoon	5.3
Evening	25.7
Where do you usually perform BSE? In front of mirror	50.0
Lying on the bed	56.1
In the bathroom	28.0
Would you want to know more about BSE?	96.0

Table 2 shows the respondent's knowledge of breast cancer and breast self-examination. 97.3% of the respondents were aware of breast cancer and breast self-examination. 37.1 % of the respondents had gotten their information from newspapers, 58.6% from television/ radio, 25% from their peer group and 23% from home. 84.8% knew it was common in our environment and 99.3% were aware that it can be detected early. 48.9% of the respondents were aware that breast self-examination should be carried out by both male and female and 49.2% picked the age in which one should start breast self-examination at less than 19 years.

35.6% of the respondents felt that breast self-examination should be carried out monthly, followed by 33.3% who felt it should be carried out daily, 28% felt it should be done weekly and 3% felt it should be done yearly.

Most of the respondents, (85.6%) knew how to carry out breast self-examination correctly.

Table 3 shows the attitude of respondents to breast self-examination. Most of the respondents, (98.5%) thought breast self-examination was necessary and 84.3% claimed to have carried out breast self-examination before. 83.1% of those who had carried out breast self-examination before did so to examine their breasts, while 2.7% carried out because they have a family history of breast cancer.

Most of the respondents, 87.5% of whom had not carried out breast self-examination said they did not know how to do it, 26.7% felt that it was not important, 20% believed they can never have breast cancer, 10% felt they were violating their bodies by palpating their breasts, 10% did not believe in the efficacy of the test, 10% said they did not have any symptom with only 3.3% scared of being diagnosed with breast cancer.

Table 4 shows the respondents' practice of breast self-examination. 80.2% of the respondents claimed that they carry out breast self-examination regularly. Most of the respondents, 50.8% started performing breast self-examination when they were above 19 years while 49.2% started at less than 19 years of age.

34.8% of the respondents last performed breast self-examination less than a week ago, 35.7% less than three to six months ago while 17.4% carried it out less than a year ago.

Most of the respondents, 69% carried out breast self-examination in the morning and majority of the respondents, 56.1%, carried it out lying on the bed. 96% of the respondents affirmed that they would want to know more about breast self-examination.

DISCUSSION

Breast self-examination is one of the vital screening techniques for early detection of breast lumps, especially cancer of the breast. The procedure, though simple, non-invasive requiring little time, can only be practised with the right attitude to sustain it and achieve the desired goal.

The age range of the respondents was between 15 and 26, mean age being 21 which was not surprising as this is the age range one finds among students in tertiary institutions [10].

The highest proportion of the respondents obtained their first information from the television/radio. This is in consonance with a study carried out by Yan [11] in which mass media, such as newspaper and television,

was the major information source of breast cancer. It is therefore important that effort should be intensified in using these media to create breast cancer awareness and emphasize the importance of early detection as this appears to be better media to reach a wider audience.

Breast cancer and breast self-examination awareness among nursing students in this study was relatively high (97.3%). A study carried out by Chong *et al.*[9] among public health nurses in Singapore corroborated this finding. This is also similar to a survey of 240 Nigerian nurses from a general hospital [12]. This may be because nurses play key role in breast cancer information dissemination and care because of their more frequent interaction with patients and their relatives, and are trained to carry out this function. There have been reports about knowledge, attitude and practice of breast cancer screening methods among health and non-health workers in various parts of Nigeria [1, 13].

Studies in developed countries show that attitude and orientation of healthcare providers are important determinants of use of breast cancer screening programs [14]. The attitude of the nursing students was satisfactory as 98.5% deemed the practise of breast self-examination necessary and 84.3% claimed to have carried it out before, primarily to examine their breasts. It was however surprising, following the nature of their training, that some of the nursing students did not practise breast self-examination. A similar study showed that there is no association however, between having been taught breast-self-examination and practice of breast cancer screening [9].

26.7% felt it was not important and 20% believed they can never have breast cancer. In a similar study carried out in the United States of America, Powe *et al.* [15] reported that significant number of myths and misperceptions related to breast cancer were prevalent within nursing and non-nursing college students . In order to function as effective promoters of breast cancer control through early detection, health workers must possess not only the relevant knowledge but the appropriate attitude and belief concerning the disease and its early detection.

Majority of the respondents claimed to practice breast self-examination regularly (80.2%). The practice of BSE in this study population is comparable to studies among Nigerian Nurses in Lagos from a general hospital (89%) and among registered Nurses with the Singapore Nursing Board (63%) [12, 16].

In conclusion, the level of awareness of breast cancer and breast self-examination was high among nursing students of the Lagos University Teaching Hospital.

RECOMMENDATION

There is need to further address the importance of breast self-examination among this category of student, since they are future nurses and they play vital role in disseminating information to the populace, especially the female gender.

REFERENCES

1. Okobia, M.N., C.H. Bunker, F.E. Okonofua and U. Osime, 2006. Knowledge, attitude and practice of Nigerian women towards breast cancer: a cross-sectional study. *World Journal of Surgical Oncology*, 4: 11.
2. Taleghani, F., Z.P. Yekta and A.N. Nasrabadi, 2006. Coping with breast cancer in newly diagnosed Iranian women. *J. Adv. Nurs*, 54: 265-272.
3. Parkin, D.M., P. Pisani and J. Ferlay, 1999. Global Cancer Statistics. *CA Cancer J. Clin.*, 49: 33-64.
4. Agboola, A.O.J., A.M. Deji-Agboola, K.S. Oritogun, A.A. Musa, T.Y. Oyebadejo and B.A. Ayoade, 2009. Knowledge, Attitude and Practice of Breast Self-Examination in Female Health Workers in Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria. *The International medical J.*, 8: 5-10.
5. Banjo, A.A.F., 2004. Overview of Breast Cancer and Cervical Cancer in Nigeria: are there regional variations? Paper presented at International workshop on new trends in the management of breast and cervical cancers, Lagos, Nigeria.
6. Okobia, M.N. and U. Osime, 2001. Clinico-pathological study of carcinoma of the breast in Benin City. *Afr J Reprod Health*, 5: 56-62.
7. Christmas, P. and S. Nicholas, 1982. Don't take a chance: A public campaign to encourage the early reporting of breast symptoms. *Health Education J.*, 41: 61-8.
8. Parkin, D.M., S.L. Muir and C.S. Whelan *et al.*, 1992. Cancer incidence in five continents. ARC Scientific Publication No. 120 IARC Lyon, 13-16.
9. Chong, P.N., M. Krishnan, C.Y. Hong and T.S. Swah, 2002. Knowledge and Practice of Breast Cancer Screening Amongst Public Health Nurses in Singapore. *Singapore Med. J.*, 43: 509-516.
10. Saludeen, A.G., T.M. Akande and O.I. Musa, 2009. Knowledge and Attitudes to Breast Cancer and Breast Self-Examination among Female Undergraduates in a State in Nigeria. *European J. Social Sci.*, 7: 157- 65.

11. Yan, Y.Y., 2009. Breast Cancer: Knowledge and Perceptions of Chinese Women in Hong Kong. *Global J. Health Sci.*, 1: 97-105.
12. Odusanya, O.O. and O.O. Tayo, 2001. Breast cancer knowledge, attitude and practice among nurses in Lagos, Nigeria. *Acta Oncol*, 40: 844-8.
13. Odusanya, O.O., 2001. Breast cancer: knowledge, attitude and practice of female schoolteachers in Lagos, Nigeria. *The Breast J.*, 7: 171-5.
14. Bekker, H., L. Morrison and T.M. Marteau, 1999. Breast screening. GPs Beliefs, attitudes and practices. *Fam Pract*, 16: 60-5.
15. Powe, B.D., S. Underwood, M. Canales and R. Finnie, 2005. Perceptions about breast cancer among college students: implications for nursing education. *J. Nurs. Educ.*, 44: 257-65.
16. Seah, M. and S.M. Tan, 2007. Am I breast cancer smart? Assessing breast cancer knowledge among healthcare professionals. *Singapore Med. J.*, 48: 158-62.