

Knowledge, Attitude And Practice Of Breast Self-Examination Among Female Medical Students In The University Of Lagos

I NK, O OA, A RA, B RB, O AT

Citation

I NK, O OA, A RA, B RB, O AT. *Knowledge, Attitude And Practice Of Breast Self-Examination Among Female Medical Students In The University Of Lagos*. The Internet Journal of Health. 2009 Volume 12 Number 1.

Abstract

Background: Breast cancer is the leading cause of cancer mortality in women worldwide. The incidence of breast cancer is rising more rapidly in population groups that enjoyed a low incidence of the disease. **Objective:** The purpose of this study was to investigate the knowledge, attitude and practice of breast self-examination (BSE) among female medical students in University of Lagos. **Method:** The study was designed as a cross sectional survey of female students in the college of medicine. The aim was to assess level of their knowledge about breast cancer, attitude and their practice of BSE. A self-administered questionnaire prepared by the author was employed. Consent was obtained and assurance of confidentiality of responses was given to each respondent. **Results:** Majority of the respondents, 40.7% were from the age group 21-22 drawn from first to sixth year medical students. 97.3% had heard of breast cancer and breast self-examination. 54.8% of the respondents heard of breast cancer from television/ radio. Most of the respondents, 85.8% knew how to perform breast self-examination correctly. Only 65.4% of the respondents thought that breast self-examination was necessary. 43.5% of the respondents said that the last time they performed breast self-examination less than a year ago. Majority of the respondents, 69.6% preferred to perform breast self-examination in the morning while 47.7% of the respondents preferred to carry out breast self-examination in front of the mirror. **Conclusion:** There was a high level of awareness of breast cancer and breast self-examination among the respondents. Their attitude towards breast cancer and breast self-examination was fair though the practice was poor.

INTRODUCTION

Cancers in all forms are responsible for about 12 per cent of deaths throughout the world (Park, 2002). Globally, breast cancer is the most common malignant neoplasm among women (Leszczynska et al., 2004; WHO, 2006). Breast cancer causes 376,000 deaths a year worldwide; about 900,000 women are diagnosed every year with the disease (WHO, 1997).

Although the incidence of breast cancer in developing countries is relatively low (Koet al., 2003), about 50% of all cases of breast cancer are diagnosed in these countries (Haji-Mahmood et al., 2002; Sadler et al., 2001). Based on a study during 1975–1990, Asia and Africa have experienced a more rapid rise in the annual incidence rate of breast cancer than that of North America and Europe (Shirazi et al., 2006).

Although mammography remains the best single diagnostic tool in the detection of breast cancer it is not routinely performed in Nigeria due to low level of awareness,

ignorance, illiteracy, cost, high technology equipment and expertise required. False negative for mammography is higher in the younger age group, and this is likely to happen in Nigeria where cases below the age of 30 have been widely reported (Anyanwu, 2000; Wu and Yu, 2003; Banjo, 2004).

There is also evidence that most of the early breast tumours are self-discovered and that the majority of early self-discoveries are by breast self-examination (BSE) performers (Okobia et al., 2006).

Cavdaret al (2007) reported that most female physicians and nurses (65% and 70% respectively) believed that BSE was unnecessary; therefore the need to evaluate breast cancer awareness, attitude and practice among female students who are going to be our future health personnel.

METHOD

The study was designed as a cross sectional survey of female students in the college of medicine. The aim was to assess

level of their knowledge about breast cancer, attitude and their practice of breast self-examination (BSE).

PARTICIPANTS

The study was conducted in June, 2010 at College of Medicine of the University of Lagos, Nigeria. Consent was obtained and assurance of confidentiality of responses was given to each respondent.

A self-administered questionnaire prepared by the author was employed. Questions were partly drawn using information on breast cancer from the literature. Additional questions were adapted, after modification, from questionnaires used in similar studies conducted earlier in the country. The questionnaire was in three parts. The first part was to elicit socio-demographic data on age, ethnicity, and marital status of each participant. Questions relating to knowledge of breast cancer were asked in the second part. Participants' awareness of breast cancer and early detection methods were also assessed in this section. The third part of the questionnaire assessed practice of BSE among participants.

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 five hundred (500) but four hundred and ninety-nine were recovered. The respondents were drawn from first (17.8%), second (34.3%), third (23%), fourth (3.5%), fifth (7.4%) and sixth (13.9%) year female medical students.

Figure 1

Table 1: Demographic profile of respondents

Variable	Number (%)
Age	
15-19	21.2
20-22	40.7
23-25	29.6
26 and above	8.4
Ethnicity	
Yoruba	58.9
Igbo	29.4
Hausa	2.0
Others	9.7
Marital Status	
Single	95.4
Married	4.6
Religion	
Christianity	85.1
Islam	14.7
Others	0.2
Family history of breast cancer	8.8
Relation with breast cancer	
Aunt	53.6
Cousin	7.1
Grandmother	17.9
Uncle	3.6

Table 1 above shows the demographic profile of the respondents. Majority of the respondents, 40.7% were from the age group 21-22. Most of the respondents, 58.9% were Yoruba, 29.4% were Igbo, 2% were Hausa and 9.7% were from other tribes. 95.4% of the respondents were single while 4.6% were married.

Most of the respondents, 85.1% were Christians, 14.7% were Muslims while 0.2% were of other religions. Only 8.8% had a family history of breast cancer, most of which was an aunt (53.6%).

Figure 2

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

Knowledge of breast cancer	% Correct answers
Have you heard of breast cancer?	97.3
Is it common in this environment?	80.9
Can it be detected early?	98.6
Can early detection improve chances of survival?	98.2
Have you heard of breast self-examination?	97.3
How did you hear about it? Home	23
Peer group	24.5
Television/ Radio	54.8
Newspaper	30.8
Who should perform BSE? Male only	0.4
Female only	46
Both Male and Female	53.6
At what age should BSE begin? <19 years	54.5
>19 years	45.5
How often should perform BSE? Daily	23.8
Weekly	22.5
Monthly	50.8
Yearly	2.9
How is BSE done?	
Palpate with one finger	13.8
Palpate with palm and minimum of three fingers	85.8
Anyhow	8.4

Table 2 above shows the level of breast cancer and breast self-examination awareness of the respondents. Most of the respondents, 97.3% had heard of breast cancer and breast self-examination. 80.9% of the respondents knew it is common in our environment, 98.6% knew it can be detected early and 98.2% knew that early detection increases chances of survival. 23% of the respondents heard of breast cancer at home, 24.5% heard of it at school, 54.8% of the respondents heard of breast cancer from television/ radio and 30.8% heard of it from newspapers.

Only 53.6% knew that both male and female are required to perform breast self-examination, with 54.5% of the respondents having the view that breast self-examination should start at less than 19 years while 45.5% were of the opinion that it should start at over 19 years of age.

The respondents also felt that breast self-examination should be performed daily (23.8%), some weekly (22.5%), some monthly (50.8%) and some yearly (2.9%). Most of the respondents, 85.8% knew how to perform breast self-examination correctly.

Figure 3

Table 3: Attitude of respondents to breast self-examination

Attitude to breast self-examination	% of Correct answers
Do you think BSE necessary?	65.4
Have you done BSE before?	83.1
If yes, why?	
To examine my breasts regularly	87.4
Breast cancer in my family	6.8
Others	5.8
If no, why not?	
I don't know how to do it	22.6
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	46.7
I know I can never have cancer	20.0
I am scared of being diagnosed with breast cancer	3.3

Table 3 above shows the respondents' attitude to breast self-examination. 65.4% of the respondents thought that breast self-examination was necessary while 83.1% of the respondents have carried out breast self-examination. Of those that have carried out breast self-examination before, 87.4% did it to examine their breasts regularly while 6.8% did it because they have a family history of breast cancer.

Of those that have never performed breast self-examination, 46.7% did not because they do not have any symptom, 26.7% felt it was not important, 22.6% did not know how to do it, 20% felt they can never have cancer, 10% of the respondents felt they were violating themselves by touching their breast and did not believe in the efficacy of the test and 3.3% of the respondents were scared of being diagnosed with breast cancer.

Figure 4

Table 4: Respondents' 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	56.1
>19 years	43.9
When was the last time you performed BSE?	
Less than a week ago	20.9
Less than three to six months	28.0
Less than one year	43.5
What time do you normally perform BSE? Morning	69.6
Afternoon	6.6
Evening	23.3
Where do you usually perform BSE? In front of mirror	47.7
Lying on the bed	36.5
In the bathroom	13.3
Would you want to know more about BSE?	93.2

Table 4 above shows the respondents' practice of breast self-examination. Most of the respondents, 80.2% said they perform breast self-examination regularly. 56.1% of the respondents started performing breast self-examination at

less than 19 years while 43.9% started performing at over 19 years of age. 20.9% of the respondents said that the last time they performed breast self-examination was less than a week ago, 28% last carried it out less than three to six months ago while 43.5% last carried theirs out less than a year ago.

Majority of the respondents, 69.6% preferred to perform breast self-examination in the morning followed by evening with 23.3%. 47.7% of the respondents also preferred to carry out breast self-examination in front of the mirror, 36.5% preferred lying on the bed while 13.3% preferred performing it in the bathroom.

Most of the respondents, 93.2% indicated interest in knowing more about breast self-examination.

DISCUSSION

The age of the respondents ranged from 15 years to 26 years and above with the mean age group as 21 years. This age pattern is consistent with the present 9-3-4 educational system in Nigeria. The study was appropriate in this age group as most of them were young adults who should find out more information on breast cancer and breast self-examination before they reach the age of common occurrence of the disease and as future doctors, would be able to educate and advice their patients effectively.

Most of the respondents surveyed had heard of breast cancer (97.3%) and 85.8% claimed they knew how (BSE) is done; the level of breast cancer awareness of the respondents may have been due to their area of study and level of education. In a similar study, it was found that the women who had tertiary education were more knowledgeable about breast self-examination while those who had primary education were the least knowledgeable (Balogun and Owoaje, 2005).

Their primary source of information was the television/radio. This finding is consistent with the study conducted by the Family Planning Association of Hong Kong (1996) which revealed that the promotion activities by the media, billboards and advertisements effectively exposed the public to breast cancer information. Similar observation was reported in an Eastern state of Nigeria (Nwagbo and Akpala, 1996). The least reported primary source of information on breast cancer in the study was the home of the respondents (23%). This is one of the gaps existing in family life education as parents and care givers have no time to discuss pertinent health issues with their children. It might also be due to the fact that some of the parents have no information

or knowledge on some of these topics and as such have little or nothing to discuss (Saludeenet al., 2009).

A little more than half (65.4%) of the respondents believed that it is necessary to perform breast self-examination. This showed that the level of concern about screening for breast cancer is still low among the respondents considering their status as medical students and a lot much more would be expected from them as future doctors.

83.1% of the respondents claimed to have carried out breast self-examination before; this demonstrates that some attention is being given by the young adults in this study to check their breast for early onset of lump and other symptoms of breast cancer, though not regularly as nearly half (43.5%) of the respondents had not examined their breasts in nearly one year. This may partly be because of the assumption that they are free from breast pathology. As a result of this ignorance, little emphasis may be placed on regular BSE by such respondents (Kayodeet al., 2005).

RECOMMENDATION

There is need for further study to address the knowledge gaps on breast cancer and breast self-examination so that positive attitudes can be developed by the young adults towards breast self-examination, to assist in early breast cancer detection as well as reducing late breast cancer presentation.

References

1. Anyanwu SN. Breast cancer in eastern Nigeria: A ten year review. *West Afr J Med*. 2000; 19:120-5.
2. Balogun MO andOwoaje ET. Knowledge and Practice of Breast Self-Examination amongFemale Traders in Ibadan, Nigeria.*Annals of Ibadan Postgraduate Medicine*. 2005; 3:52-6.
3. Banjo AAF. 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. 2004.
4. Çavdar Ý, AkyolcuN, Özbaş A, Öztekin D, Ayoğlu T and Akyüz N. Determining female physicians' and nurses' practices and attitude towards breast self-examination in Istanbul, Turkey. *OncolNurs Forum*. 2007; 36:1218-21.
5. Family Planning Association of Hong Kong. Report on Women's Health Survey. Hong Kong: Family Planning Association of Hong Kong. 1996.
6. Haji-Mahmoodi M, Montazeri A, Jarvandi S, Ebrahimi M, Haghighat S and Harirchi I. Breast self-examination: knowledge, attitudes, and practices among female health care workers in Tehran, Iran. *Breast J*. 2002; 8: 222-5.
7. Kayode FO, Akande TM andOsagbemi GK. Knowledge, attitude and practice of breast self-examination among female secondary school teachers in Ilorin, Nigeria. *European Journal of Scientific Research*. 2005;10: 42-7.
8. Ko CM, Sadler GR, Ryujiin L and Dong A. Filipina

- American women's breast cancer knowledge, attitudes, and screening behaviours. *BMC Public Health*. 2003; 15:27.
9. Leszczynska K, Krajewska K and Leszczynski G. The knowledge of preventive measures and early detection of breast cancer among students of the Medical University in Lublin *Wiad Lek*. 2004; 57: 188 –91.
10. Nwagbo DF and Akpala CO. Awareness of breast cancer and breast self-examination among women in Enugu urban, Eastern Nigeria. *J Coll Med*. 1996; 1: 34-6.
11. Okobia MN, Bunker CH, Okonofua FE and Osime U. Knowledge, attitude and practice of Nigerian women towards breast cancer: a cross-sectional study. *World J Surg Oncol*. 2006; 21:11.
12. Park K. In Park's Textbook of Preventive and Social Medicine. 17th edition. Banarsidars Bhanot Publishers Jabalpur, India. 2002: 285-6.
13. Sadler GR, Ryujin LT, Ko CM and Nguyen E. Korean women: breast cancer knowledge, attitudes and behaviours. *BMC Public Health*. 2001; 1: 7.
14. Salaudeen AG, Akande TM and Musa OI. Knowledge and Attitudes to Breast Cancer and Breast Self-Examination among Female Undergraduates in a State in Nigeria. *European Journal of Social Sciences*. 2009; 7: 157- 65.
15. Shirazi M, Champeau D and Talebi A. Predictors of breast cancer screening among immigrant Iranian women in California. *J Womens Health (Larchmt)*. 2006; 15:485-506.
16. WHO. [www.who.int/cancer/detection/ breast cancer/en/index.html](http://www.who.int/cancer/detection/breastcancer/en/index.html) (accessed 23rd Jan 2006).
17. World Health Organization. The World Health Report. Conquering Suffering, Enriching Humanity, Report of the Director General. WHO, Geneva. 1997; 22.
18. Wu TY and Yu MY. Reliability and validity of the mammography screening beliefs questionnaire among Chinese American Women. *Cancer Nursing*. 2003; 26:131-42.

Author Information

Irurhe NK

Department of Radiation Biology, Radiotherapy, Radio-diagnosis and Radiography, College of Medicine, University of Lagos

Olowoyeye OA

Department of Radiation Biology, Radiotherapy, Radio-diagnosis and Radiography, College of Medicine, University of Lagos

Arogundade RA

Department of Radiation Biology, Radiotherapy, Radio-diagnosis and Radiography, College of Medicine, University of Lagos

Bassey RB

Department of Anatomy, College of Medicine, University of Lagos

Onajole AT

Department of Community Health, College of Medicine, University of Lagos