Original Research Article

Knowledge, Attitude and Practice of Breast Self-Examination among Female workers in the Ladoke Akintola University of Technology Teaching Hospital, Osogbo, South Western Nigeria

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Abstract: Several studies have shown the importance of breast self examination (BSE) in early detection of breast lesions. Breast cancer is one of the leading causes of cancer related deaths in women worldwide. Early detection of the tumour through BSE coupled with medical consultation goes a long way in reducing the morbidity associated with breast cancer. A cross sectional study among female workers was carried out over a period of one week in August 2013, using a structured questionnaire designed by the researchers. The information sought included the demographic characteristics, knowledge of breast cancer, knowledge, attitude and practice of BSE. The sample included female doctors, nurses, pharmacists, laboratory scientists, physiotherapists, ward orderlies, medical social workers, and administrative staff. Data analysis was done using SPSS version 16. The results in this study were Knowledge (awareness) of BSE is very high among the respondents (97.3%). Health professionals were the major sources of information.81.8% believed that BSE reduces chance of late presentation of breast cancer. 92.7% of them know that BSE should be done monthly and with fairly high degree of acceptability. In spite of the high levels of awareness and acceptability, 58.6% of them do it monthly, while only 49.1% actually practice it during the first week after menstruation. In conclusion Knowledge and acceptance of BSE are high among the respondents, but the practice is slightly above average. Therefore, there is the need for continuing education programs and encouragement on utilization of this simple breast cancer screening method, as way of reducing incidence of late presentation.
Keywords: Breast cancer, Breast Self-Examination, Knowledge, Attitude, Practice, Nigeria

INTRODUCTION

Breast cancer is the most common cancer affecting women worldwide [1]. Majority of breast cancer related death occurs in the developing countries including Nigeria [2, 3]. In developing countries, most patients present late in the advanced stages of the breast cancer when curative treatment may no longer be feasible [3-6]. Breast self-examination (BSE) can be a valuable tool in the diagnosis of breast cancer at an early stage [7-10]. The key to successful treatment of breast cancer, however, lies in early detection and this is because early stage malignancy may not have metastasized [2, 7]. Finding and treating a breast cancer tumour at early stage greatly increases the likelihood for survival [11, 12]. Early detection offers the chances of breast-conserving surgery and thus avoiding mastectomy. This may also reduce or obviate the need for radiotherapy or chemotherapy. To achieve early detection of breast lump, every woman needs to follow the recommended breast examination guideline, which includes regular BSE. Adult women of all ages are encouraged to perform BSE at least once a month. Nine out of ten breast lumps are found by women themselves. Eighty percent of breast lumps are benign. Forty percent of diagnosed breast cancers are detected by women who feel a lump, thus establishing the importance of a regular BSE [13]. Acceptance and regular utilization of this simple screening method will have a significant impact in reducing the morbidity and mortality associated with breast cancer. Although mammography is the mainstay of breast cancer screening, this is however, not commonly within the reach of most clients because of its inaccessibility and relatively high cost. Also, it is not routinely recommended for individuals of less than 50years of age. The other breast cancer screening modality is the clinical breast examination (CBE). CBE is possible only when the client presents herself to the medical personnel with breast complaints or as part of the routine physical examination for other consultations. Thus, if a hypothetical individual young woman who does not observe BSE and has no reason to visit the medical personnel develops breast cancer, she is likely to present late with advanced stage breast cancer. The

objective of this study is, therefore, to determine the knowledge, attitude and practice of BSE as it relates to breast cancer; among a cohort of female workers of LTH, Osogbo, where awareness is naturally expected to be high.

METHODOLOGY

A cross-sectional study was conducted over a period of one week in August 2013 among female workers of LTH, Osogbo; on morning duty. Selection of respondents was by convenience sampling technique. Informed consent was obtained and self administered questionnaire was given to each participant to fill when they were less busy at work. Also anonymity and confidentiality of responders were guaranteed. Information obtained included the demographic characteristics, knowledge, attitude and practice of self breast examination. Specific yes or no questions on BSE included awareness, practice, frequency and timing of BSE. Check questions were included to verify the respondents understanding of the self breast examination as a form of screening method for breast lesions. For those participants who were not practicing,

apart from forgetfulness, reasons or discouraging factors were sought for. The role of BSE on time of detection of breast cancer was also sought. The sample included doctors, nurses, pharmacists, laboratory scientists, ward orderlies, physiotherapists, medical social workers, and administrative staff, all of whom were females. Those female staff that had filled this questionnaire previously was exempted so as to avoid duplication of response and bias. This study was ethically approved by Research Ethics Committee of LTH, Osogbo. A total of 232 questionnaires were distributed out of which 220 responded. The data was entered into Statistical Package for Social Sciences (SPSS) versoin-16 and analyzed by using descriptive statistics.

RESULTS

There were 220 respondents; giving a response rate of 94.8%.The age range was 20 to 57years with a mean age of 34.8years. The age group and other demographic characteristics of the respondents are as shown in figure 1 and table 1 below.

Table 1: Other Demographic Characteristics of Respondents

CHARACTERISTICS	FREQUENCY (N)	PERCENTAGE (%)
Tribe:		
Yoruba	211	95.9
Igbo	6	2.7
Others	3	1.4
Total	**220**	**100**
Marital Status:		
Single	41	18.6
Married	170	77.3
Divorced	9	4.1
Total	**220**	**100**
Cadre:		
Doctors	15	6.8
Nurses	105	47.7
Pharmacist	2	0.9
Physiotherapists	1	0.5
Laboratory Scientists	23	10.5
Ward Orderlies	17	7.7
Social Workers	5	2.3
Administrative Staff	52	23.5
Total	**220**	**100**
Years of Service:		
1 – 5	102	46.4
6 – 10	78	35.5
11 – 15	24	10.9
16 – 20	11	5.0
> 20	5	2.3
Total	**220**	**100**

Table-2: Reasons for not practicing BSE other than forgetfulness.

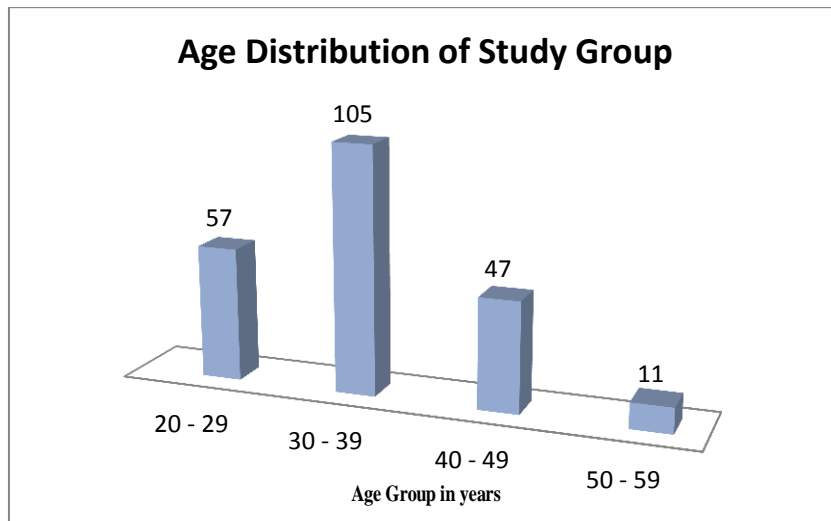| BSE	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Time consuming	17 (18.7%)	48 (52.7%)	5 (5.5%)	15(16.5%)	6 (6.6%)
Technical and Difficult	23 (25.3%)	44 (48.3%)	6 (6.6%)	14 (15.4%)	4 (4.4%)
Painful	23 (25.3%)	45 (49.4%)	7 (7.7%)	10 (11.0%)	6 (6.6%)
Increases Anxiety	13 (14.3%)	29 (31.8%)	9 (9.9%)	32 (35.2%)	8 (8.8%)

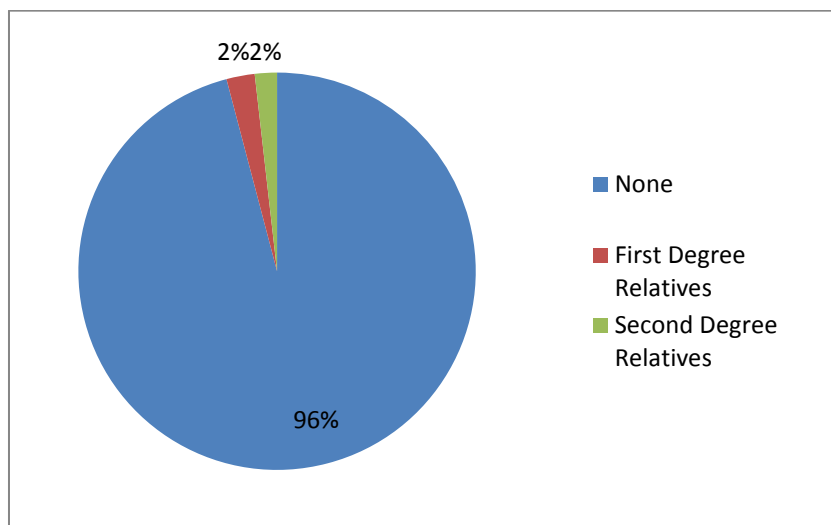**Fig-1: Age Distribution of study group**

Fig-2: Subjects with Positive Family History of Breast Cancer

Figure 2, depicts the distribution of participants with positive family history of breast cancer in their relatives.

Two hundred and fourteen of the respondents (97.3%) were aware of BSE. The most common sources of information being through health professionals (86.8%), followed by mass media (6.4%), while other sources accounted for the least (4.1%).One hundred and eighty of those studied (81.8%) believed that BSE reduces the chance of late presentation. Two hundred and four of the respondents (92.7%) know that BSE should be done monthly, and with fairly high degree of acceptability (76.4%). One hundred and twenty-nine (58.6%) of them do it monthly, while 108 (49.1%) actually practice it during the first week after menstruation. For those participants who were not observing the BSE, table 2 indicate reasons other than forgetfulness for failure to observe it.

DISCUSSION
The role of breast self examination (BSE) in the early detection of breast lesions particularly, breast cancer cannot be overemphasized; hence the multiplicity of publications on this subject of interest. BSE can be a valuable tool in diagnosing breast cancer

at an early stage [7-10]. Till date, emphases have been on knowledge, attitude and practice of BSE because habit needs to be formed among the group of individuals at risk of breast cancer. The habit can only be formed through regular self effort.BSE is simple, cheap, and non-invasive but requires time to perform. To achieve its desired goal (which is early detection of the problem, in case it occurs), BSE to be sustained for as long as the risk exists. The best time to perform the examination is 3 to 5 days after the menstrual period. The breasts are not as tender or lumpy at this time of the cycle. Post menopausal women should do the examination about the same time each month. Aside the limitations/controversies about BSE, and not being a substitute for mammography, it is however, a useful, reliable, simple screening method for those women who choose to do it; particularly if done regularly every month and with the right timing [14, 15].

In this study, the age range was 20 to 57years with a mean age of 34.8years. The age group with the highest frequency being 30 to 39years (105 out of 220); in whom the mainstay, mammographic modality of screening would not normally be recommended unless there are other strong reasons such as occurrence of breast cancer at younger age in the first degree relatives of the individual or Gail's model relative lifetime risk assessment for breast cancer of greater than 2. Previous international and local studies have also reported similar age distributions in their studied groups [8, 10, 16-20]. An overwhelming majority of the respondents are of the Yoruba tribe (95.9%). South Western region of Nigeria where L.T.H-Osogbo is located is occupied predominantly by the Yorubas. Also, most of the respondents were married (77.3%). More than half of them had been in service for six years and above (54.6%). In this study, all cadres of female staff were represented thereby eliminating the professional bias. The respondents in this study population were therefore suitable for studies on BSE with meaningful deductions.

Almost all of the respondents in this study had heard of BSE before (97.3%) and with high acceptability rate (76.4%). This is similar to findings of previous workers [16-18]. In this study, high level of awareness and fairly high degree of acceptability notwithstanding, the attitude towards the practice of BSE monthly is disappointing; slightly above average (58.6%).Only 49.1% of them actually perform it during the first week after menstruation. Being a tertiary health institution where future health workers are being trained, one would expect the observance to be much higher than this. Majority of the participants have no family history of breast cancer among their first or second degree relatives (96%). The misconception that individuals with no family history of breast cancer are protected may partly explain the lack of zeal to observe BSE regularly every month by those that are not practicing it. However, the practice of BSE in this study is slightly higher than the finding of a study conducted by Oluwole *et al.;* in Benin among similar category of female hospital workers where 50% of them perform it monthly [17].

Reasons for failure to utilize BSE are multi-factorial. Apart from being a bit time demanding and technical, BSE should not be painful when carried out 3 to 5 days after the menstrual period. As stated above, the breasts are not as tender or lumpy at this time of the cycle. To obviate forgetfulness, employing a reminder; by putting a mark on the calendar for next BSE has been suggested by some authors [16]. Continuing education programs and enlightenment campaigns to teach and encourage women on the utilization of BSE can bring about increase in the proportion of women observing it regularly, every month. Health care providers should also as a matter of duty, discuss BSE at every opportunity on contact with their patients, so as to bring about overall improvement in its utilization.

Our results showed that the knowledge and acceptance of BSE are high among the respondents, but the practice slightly above average. This implies that, awareness of BSE does not necessarily translate into its utilization (practice). A cheap, simple breast cancer screening method like this could be used as a powerful tool in reducing incidence of late presentation of patient with breast cancer, in resource poor economy. Therefore, there is the need for continuing education and enlightenment programs on BSE to encourage its utilization on regular basis.

Competing interests
We (the authors) hereby declare that we have no competing interests.

Authors' contributions
IOL conceived the study, performed the statistical analysis and drafted the manuscript. AMO participated in the design of the study and the statistical analysis and assisted in the drafting of the manuscript. KOA helped in the design of the study and assisted in the drafting of the manuscript. BRN and OAG assisted in the design of the study and helped in the acquisition of data. All the authors read and approved of the final manuscript.

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