

Knowledge, attitude, and practice of breast self-examination among female nurses in Aminu Kano teaching hospital, Kano, Nigeria

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ABSTRACT

Background: The incidence of breast cancer is increasing and the presentation is often late in our environment with poor prognosis. Breast self-examination (BSE) remains an important diagnostic tool for the early detection of breast cancer in a resource-limited community. Nurses being in closer contact with patients should be in the forefront in educating the general public on BSE. **Objectives:** This study investigates the knowledge, attitude and practice of BSE among female nurses in Aminu Kano Teaching Hospital (AKTH) with regard to the number that practice, method and the frequency of BSE. **Materials and Methods:** The study is a descriptive cross-sectional study of female nurses employed in AKTH using self-administered questionnaire. Respondents were selected by simple random sampling methods from the register of nursing staff at AKTH. The data collected were on socio-demographic profile, knowledge, attitude and practice of BSE. The relationships between these factors were studied. **Results:** All the nurses studied are aware about BSE, with 91.2% practicing it. There is appallingly poor knowledge of its timing, frequency and method. Only 45 (41.2%) of the respondents practice BSE monthly, and none of the respondents can accurately describe the exact method of BSE. **Conclusion:** There is universal awareness of the BSE among nurses, with dismal awareness of its purpose, method, timing, and frequency among the female nursing staff studied. However, there is a lot of enthusiasm to encourage others to do it. Therefore, nurses need to be also further trained and educated about the procedure.

Key Words: Breast self-examination, female nurses, Kano, knowledge

INTRODUCTION

The breast is the most common site of cancer in women; approximately one in nine women develops the disease in her life time.^[1] The incidence is raising and the presentation is often late in our environment.^[2] Early detection and appropriate treatment is the best chance for cure. In a resource-limited community, an important method of early detection is breast self-examination (BSE). Among women who practise breast self-examination (BSE), breast cancers may be detected when they are at an earlier stage

and are smaller than in women who do not practise BSE.^[3-12] However, the efficacy of BSE for decreasing breast cancer mortality is unproven.^[3] Early detection allows more efficient, less aggressive and less mutilating treatment.^[13] Breast self-examination is a simple, affordable, non-invasive adjuvant screening method for the detection of early breast cancer in women.^[14]

Nurses, by the nature of their work play a unique role in educating the patients on the early detection of breast cancer, risk factors and available screening methods and practices as they usually have the

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closest contacts with female patients.^[14] Additionally, the knowledge and practice of BSE will improve early detection in themselves and the community.^[14,15]

MATERIALS AND METHODS

This is a cross-sectional study of 102 female nurses employed in Aminu Kano Teaching Hospital, (AKTH) carried out in December 2009. The respondents were selected by simple random sampling method from staff payroll register in the finance unit of the hospital. Male nursing staffs were excluded. Informed consent was obtained from all the participants who were involved in the study.

A self-administered pre-tested and structured questionnaire was administered. The questionnaire elicited information on socio-demographic, working experience, workplace details, reasons, methods, attitude towards BSE, and encouragement of others to perform BSE.

The generated data was analysed using Epi-Info version 3.2.2 by center for disease control (CDC) software for analysis. Qualitative data were presented as frequencies, percentages or proportions, whereas quantitative data were described using measures of central tendencies and those of dispersion as appropriate. Chi-square (χ^2) test statistical significance was used to examine association between qualitative variables.

RESULTS

Socio-demographic profile

At the time of data collection, there were a total of 563 nurses within the work force of AKTH; out of which 102 were recruited for the study. The number of female nurses entered into the study was 102. The mean age of the participants was 36.48 ± 3.4 years. The majority (51.0%) of the participants are between the age ranges of 30–39 years. About a quarter of the respondents (24.5%) work in specialties related to surgery. About half of the respondents (43.1%) have 1–10 years of work experience. All the respondents were married [Table 1].

Knowledge of breast self-examination

All the 102 respondents (100%) are aware about BSE, with the source of their knowledge being: Colleagues 27 (26.5%), media 13 (12.7%), friends 5 (4.9%), school 38 (37.3%), lectures 7 (6.9%) and other sources 12 (11.8%). Most of the respondents (69%) are aware of the correct purpose of doing BSE. However, none of the respondents provided accurate description of how BSE is done. Responses provided by the respondents include “observing in front of the mirror”

3 (2.94%), “by palpation of breast” 71 (69.6%) and “by pressing the nipple” 1 (0.98%). Only 14 (13.7%) of the respondents know that BSE should be conducted around the 5th day after menstrual cycle.

Attitude towards breast self-examination

All the 102 respondents (100%) unanimously agree that BSE is useful, with up to 86 (84.3%) of the respondents saying that they encourage others to do BSE.

Practice of breast self-examination Only 45 (41.2%) of the respondents practice BSE monthly, all others indicated less frequent or rarely more frequent BSE [Table 2].

Relationship between socio-demographic factors and knowledge and practice of breast self-examination

The responders that work in surgery related specialty wards were found to be associated with higher practice of BSE ($P = 0.01$). No association was found between practice of BSE and age ($P = 0.1$), years of service ($P = 0.51$).

In relation to the correct timing of BSE, an association was found in responders that work in surgery related specialty wards ($P = 0.00$), and years of service ($P = 0.00$) [Table 3].

DISCUSSION

Several studies have shown increasing incidence of carcinoma of the breast in our environment; the presentation in vast majority is late.^[2] Efforts must be made to curtail this disturbing trend through continuous health

Table 1: Socio-demographic profile of respondents

Characteristic	Frequency (n=120)	Percentage
Age (years)		
20-29	18	17.6
30-39	52	51.0
40-49	28	27.5
50-59	4	3.9
Ward		
Surgical specialty wards	25	24.5
Non-surgical wards	77	75.5
Years of service (years)		
<1	18	17.6
1-10	44	43.1
11-20	34	33.3
21-30	6	5.9

Table 2: Depicts the distribution of BSE practice among respondents

	Frequency	Percentage
Practise	93	91.2
Don't practise	9	8.8

BSE: Breast self-examination

Table 3: Relationship between the practice and timing of BSE and the respondents' characteristics

Characteristic	Do BSE	No BSE	χ^2	P
Age (years)				
20-29	13	5		
30-39	50	2		
40-49	27	1		
50-59	3	1	11.9	0.1
Ward				
Surgical specialty wards	19	6		
Non-surgical wards	27	50	12.8	0.01
Years of service (years)				
<1	14	4		
1-10	40	4		
11-20	33	1		
21-30	5	=1		
	BSE monthly	Not monthly		
Ward				
Surgical specialty wards	21	4		
Non-surgical wards	25	52	20.24	0.00
Years of service (years)				
<1	4	14		
1-10	8	36		
11-20	28	6		
21-30	5	1	39.41	0.00

BSE: Breast self-examination

education when contact is made by health workers with the community. Among health workers, the nurses are often in closer contact with the community, and it is therefore imperative to update their knowledge to train them to carry out this role properly. As expected, all the 102 respondents (100%) are aware of BSE, which is higher than the value found in a similar study in Ebonyi (92.9%) in 2007.^[16] The slight difference in BSE awareness may be accounted for by increase awareness of BSE overtime in Nigeria. Only about two-third of the respondents (69%) was aware of the correct purpose of doing BSE. This indicated that even among those who claim knowledge about BSE, their understanding is shallow since they do not know the purpose of it. Only about one-third of the respondents 38 (37.3%) indicated their source of knowledge on BSE to have been from nursing school. Most of the other respondents indicated other less formal methods with their attendant inaccuracies. This is possibly what is reflected in the respondents' shallow knowledge of BSE. None of the respondents provided accurate description of how BSE is done. Responses provided include "observing in front of the mirror" in 3 (2.94%), "by palpation of breast" in 71 (69.6%) and "by pressing the nipple" in 1 (0.98%). Only 14 (13.7%) of the respondents know that BSE should be conducted around the 5th day after menstrual cycle. This poor knowledge of timing and method of BSE will affect the usefulness of BSE among those nurses that perform BSE and subsequently in accurate knowledge will be imparted to patients and clients. This is similar to the finding in

Ebonyi^[16] were up to 87.0% of the nurses do not perform BSE correctly.

All the 102 respondents (100%) unanimously agree that BSE is useful, with up to 86 (84.3%) of the respondents saying that they encourage others to do BSE.

Up to 93 (91.2%) said they practice BSE. This observation is slightly different with the finding in Aba^[17] where only 84% of the nurses practice BSE.

Only 45 (41.2%) of the respondents practice BSE monthly, all others indicated less frequent or rarely more frequent BSE. This frequency is within the range of 47.9% and 50% of respondents that practice BSE monthly in other studies.^[15,17] These studies and the current report showed higher percentage of monthly BSE than Ebonyi study, where only 28.0% of the nurses perform BSE monthly, similar to findings by Jebbin and Adotey in Port-Harcourt, where BSE is practiced only occasionally, despite the majority being aware and consider it worthwhile.^[18] Similar study among health professionals at the Abia State University Teaching Hospital, Aba found that 84% are aware of BSE, but the number that examine their breast monthly was only 45 (47.9%).^[17] Haji-Mahmoodi *et al.* reported that among female healthcare workers in Iran, more than 70% of subjects had strong belief on its beneficial effects but only 6% of them were performing BSE regularly.^[19]

Several studies have shown that knowledge or awareness does not correlate with practice or effective performance of the exercise.^[4,15] This may be related to the sources of information that is not well articulated or is inadequate.^[4,14,15,18]

Only subjects in surgery-related specialty wards were found to high practice of BSE ($P = 0.01$) compared to others. No association was found between practice of BSE and age ($P = 0.1$), years of service ($P = 0.51$). Furthermore, only responders working in surgery related specialty wards ($P = 0.00$) and the number of service years ($P = 0.00$) were found to be associated with knowledge of the correct timing of BSE. Abu Salem *et al.* found that 52% of their study subjects in Pakistan perform BSE. A significant relationship was found between higher levels in work experience and BSE practice. Except for age, no significant relation was found between the socio-demographic factors and BSE practice.^[20] The relationship of age to BSE was also established by several other reports.^[15,19,21]

Working in surgical or its related specialty wards expose the nurses to cases of breast disorders and will probably serve as a motivation for BSE. Additionally, those who

work in surgical or its related specialties in a teaching hospital are more likely to be in closer contact with surgeons and participate in ward rounds, seminars and teaching programmes and are therefore better motivated and more aware of timing of BSE. This is similar to a study of female nurses in Ebonyi State University Teaching Hospital, Abakaliki that found 91 (92.9%) of the respondents have heard of BSE, mainly (64.3%) through seminars. Only 28 (28.6%) practiced BSE monthly, 77 (87.0%) did not adopt the correct steps.^[16] In a similar study among the nurses in Jordan, 81.5% had knowledge about BSE. The most common sources of information in the respondents were written materials (42.6%), nursing school education (38.6%) and health professionals (37.6%). Of the respondents in the study, 69.3% knew the correct timing of BSE.^[14]

CONCLUSION

BSE remains an important investigation tool for the early diagnosis of breast cancer in our environment due to lack of facilities and screening programme. Nurses being the closest in contact with patients among health workers need to be properly educated to efficiently carry out this procedure. There is universal awareness about the BSE among nurses, with dismal awareness of its purpose, method, timing, and frequency among the nurses studied. BSE and breast cancer education programmes should be integrated into the curriculum or nursing schools and as part of hospitals continuing medical education (CME) programmes.

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