



Original Article

Awareness about Breast Self-Examination among Nursing Students

Khawer Saeeda¹, Kishwar Ilyas², Rubina Yasmin^{3*}, Nabeela Rani⁴ and Irshad Lal Din⁵¹Punjab Institute of Mental Health, Lahore, Pakistan²Govt. Teaching Hospital Shahdara, Lahore, Pakistan³College of Nursing, DHQ Hospital, Narowal, Pakistan⁴Mayo Hospital, Lahore, Pakistan⁵Punjab Institute of Cardiology, Lahore, Pakistan

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*Corresponding Author:

Rubina Yasmin

College of Nursing, DHQ Hospital, Narowal, Pakistan
rubinayasmin73@gmail.comReceived Date: 9th September, 2023Acceptance Date: 29th September, 2023Published Date: 30th September, 2023

ABSTRACT

Breast cancer is an invasive tumor which mainly affect females and it has high mortality rate in developing countries due to lack of awareness and late diagnosis. The early diagnosis of breast cancer is not as much dangerous. The tools to detect breast cancer include mammography, breast self- examination (BSE) and fine needle aspiration cytology. The studies conducted shows the lack of awareness about knowledge, attitude and practice about BSE. **Objective:** To determine the awareness about BSE among nursing students. **Methods:** It was observational descriptive study conducted at College of Nursing DHQ Hospital Narowal. 174 nursing students between age 19 to 30 were enrolled in the study. A self-structured questionnaire in form of google document was used which includes information about demographic data, knowledge, attitude and practice regarding BSE. Data were analyzed by using IBM- SPSS V-23. **Results:** The level of knowledge among nursing students about BSE was high and most of them know the accurate way of conducting BSE. The attitude of nursing students about BSE was positive. Most of them were agreed about the regular BSE. The practice about BSE shows mixed responses. **Conclusions:** In conclusion we can say that knowledge about BSE among nurses is good. However students seem to be unaware of the frequency and time of practicing BSE. This indicates the importance of conducting workshops to enhance perception about BSE.

INTRODUCTION

Breast cancer (BC) is an invasive tumor which mainly affects females but it can also affect males [1]. It is associated with high mortality and morbidity rates in developing countries due to lack of awareness, resources and late diagnosis [2]. The incidence of breast cancer in Pakistan is highest among Asian countries. On average 1 in 9 females are at threat of being detected with breast cancer in their whole life [3]. BC in females of young age pose a big trial to patients, their families, and healthcare professionals [4]. Although BC is less common in age less than 40 years but it appears in old age with destructive features that can be difficult to treat [5]. There are three

major tools for early detection of breast cancer: Breast Self-Examination (BSE), Fine needle aspiration cytology and Mammography [6]. World Health Organization (WHO) does not endorse BSE as a screening method but it is beneficial to increase awareness among females concerning their well-being [7]. American Cancer Society endorses starting BSE during high-school years once-a-month, as this is a serious stage of each adult female fitness regime [8]. Various studies conducted showed lack of perception about knowledge, attitude and practice about BSE among nursing students. Mostly females are diagnosed with BC at advanced stage, however with BSE

can help in early detection and treatment. In Pakistan the awareness of BSE is area of concern to avoid for future complications. This study aims to determine awareness about BSE among nursing students.

METHODS

An observational descriptive study was conducted at the department of College of Nursing DHQ Hospital, Narowal from March 2023 to June 2023. The participants of this study included nursing students of BSc. Nursing (1st, 2nd, and 3rd Year) between age 19 to 30 years. The students of Post RN (1st and 2nd Year) and those who did not give consent were excluded from the study. Total Sample was 174.

Sample was calculated from Slovin's formula:

$$n = \left[\frac{N}{1 + Ne^2} \right] = \left[\frac{307}{1 + 307(0.05)^2} \right] = 174$$

N = No. of Nursing Students = 307

e = margin of error = 0.05

After reviewing the literature, a self-administered questionnaire was designed. The data was collected through google document. The questionnaire was filled by participants, after the approval and consent from students. The questionnaire consist of four sections Demographics, Knowledge, Attitude and Practice. The data were entered and analyzed using IBM-SPSS version 23.0. Continuous variables were described as Mean \pm SD, whereas categorical variables were expressed in the form of frequency and percentage. The ethical approval was obtained from ethical committee of College of Nursing DHQ Hospital, Narowal.

RESULTS

A total of 174 nursing students participated in the study. This study was completed in a duration of about 4 months (From March 2023 to June 2023) in the College of Nursing DHQ Hospital Narowal. Baseline demographic features are summarized in Table 1.

Table 1: Baseline Characteristics of Individuals

Variable	Category	N (%) / Mean \pm SD
Age		20.18 \pm 1.3
Academic Level	1 st Year	68 (39.08)
	2 nd Year	56 (32.18)
	3 rd Year	50 (28.73)
Family History of BC	Yes	27 (15.51)
	No	147 (84.49)
Heard about BC	Yes	167 (95.97)
	No	7 (4.03)

Table 2, 3 and 4 explains the knowledge level and attitude of nursing students towards BSE.

The frequencies of knowledge shows that nursing students possess good knowledge about BSE. As it helps to diagnose various breast abnormalities. They know the

basic examination points which is a positive outcome as if they do not possess good knowledge then it will be difficult for them to train and guide female patients (Table 2).

Table 2: Knowledge Questions

Knowledge Questions	Yes N (%)	No N (%)	Don't Know N (%)
Ever performed BSE	138 (79.4)	36 (20.6)	0 (0)
BSE should be done between day 7 until day 10 after menses	83 (47.70)	15 (8.63)	76 (43.67)
BSE should be done in front of mirror	138 (79.31)	14 (8.05)	22 (12.64)
Undress until the waist when doing BSE	123 (70.69)	22 (12.64)	29 (16.67)
Hands should be raised up alternately above head	136 (78.16)	0 (0)	38 (21.84)
Need to press on the nipple to check any unusual discharge	138 (79.31)	7 (4.02)	29 (16.67)
Need to observe any unusual change in the shape and size of breast	152 (87.36)	8 (4.60)	14 (8.04)
Lump is early sign of tumor	138 (79.31)	29 (16.67)	7 (4.02)

Results showed that attitude of nurses regarding performing BSE is optimistic. Majority nurses agreed that BSE should be performed on regular basis and if lump is indicated then they should not prefer traditional healer. Fear about breast cancer had mix response while majority of nurses are comfortable in discussing the BSE with their friends (Table 3).

Table 3: Attitude Questions

Attitude Questions	Strongly Agreed N (%)	Agreed N (%)	Neutral N (%)	Disagreed N (%)	Strongly Disagreed N (%)
BSE should be performed on regular basis	101(58.05)	51(29.31)	22(12.64)	0(0)	0(0)
Doing BSE is wasting time	0(0)	0(0)	0(0)	98(56.33)	76(43.67)
Doing BSE makes me feel uncomfortable	7(4.02)	36(20.69)	51(29.31)	51(29.31)	29(16.67)
If there is lump, I prefer to get treatment from traditional healer	29(16.67)	29(16.67)	0(0)	94(54.02)	22(12.64)
Feels uncomfortable, can't do BSE once a month	7(4.02)	29(16.67)	51(29.31)	58(33.33)	29(16.67)
All women should do BSE	109(62.65)	58(33.33)	7(4.02)	0(0)	0(0)
I really care about my breasts	87(50)	58(33.33)	29(16.67)	0(0)	0(0)
I am not afraid to think about breast cancer	22(12.64)	43(24.72)	22(12.64)	58(33.33)	29(16.67)
Avoid BSE because I worry about having breast	6(3.45)	8(4.60)	29(16.67)	73(41.95)	58(33.33)
Always search for information regarding BSE	58(33.33)	58(33.33)	43(24.72)	8(4.60)	7(4.02)
Discuss with my friends about BSE	58(33.33)	51(29.31)	51(29.31)	14(8.05)	0(0)

Results showed that the practice level was better but a large number of nurses were neutral in their views. Although majority of nurses aimed to learn correct method of BSE but data shows that a large number of nurses will avoid to advise their friends to do BSE. This parameter has mixed response. A great number of nurses complained that they had not been properly taught on BSE by health Staff. So, the results suggest that women usually despite of having good knowledge and attitude do not focus mainly on practices (Table 4).

Table 4: Practice Questions

Practice Questions	Never N (%)	Seldom N (%)	Neutral N (%)	Frequent N (%)	Always N (%)
Do BSE once a month	22(12.64)	14(8.05)	29(16.67)	51(29.31)	58(33.33)
Avoid learning the correct method of BSE	130(74.71)	22(12.64)	14(8.05)	0(0)	8(4.60)
Parents and partners always advise to do BSE	36(20.69)	7(4.02)	51(29.31)	15(8.62)	65(37.36)
Advise friends to do BSE	14(8.05)	22(12.64)	30(17.24)	43(24.71)	65(37.36)
Discuss the importance of BSE with friends	7(4.02)	22(12.64)	43(24.72)	44(25.28)	58(33.33)
Have been taught on BSE by health staff	29(16.67)	51(29.31)	29(16.67)	36(20.69)	29(16.67)
If notice any breast abnormality, directly go to public health care	5(2.87)	20(11.49)	36(20.69)	4(2.30)	109(62.64)

DISCUSSION

Lack of awareness about BC causes late diagnosis and increased rate of mortality in female population [1]. So proper screening is required to detect BC at early stage which involves different diagnostic procedures. These procedures contain BSE, which is a diagnostic compartment related to female's health. It is an exceptional technique in several ways i.e. inexpensive, non-invasive, includes less time and energy. Moreover it is simple and not dependent on qualified help [4]. Our study suggests that more than half nursing students have good knowledge about BSE. A large number of students were unaware of examination after 7 to 10 days of Menstruation cycle. The knowledge section shows that most students are well aware of the basic information about BSE. This can be attributed to their professional education. This knowledge domain supports the results by Godfrey *et al.*, where they observed that nursing university students have high to moderate level information about BSE. This level of knowledge may be attributed to increased awareness regarding health issues by means of mass media. Health Issues are regularly discussed in mainstream media have make the people aware about concerning diseases that can

be harmful [9]. Attitude wise data suggests that most students agrees that they should perform BSE regularly but some students feel shy about talking and uncomfortable about BSE [10]. Students get information from different modes like TV, magazines and social media regarding BSE [11]. This attitude of nursing students have positive impact on the practice of BSE as positive attitude leads to positive outcomes [12]. In a study conducted by Umbreen *et al.*, on breast self-examination it was concluded that students usually do not show positive attitude towards BSE which is contradictory to our results as in our study the attitude towards BSE is quite good [13]. In practice section the results are mixed as usually students do not practice BSE despite of good knowledge and positive attitude. Some students agree with the practice guidelines of the BSE while some were neutral in their views. It has been described that BSE enhances the number of benign mass cultures and it causes pointless spending of health-care reserves, and unnecessary anxiety in the patients [14]. In a study conducted by Abo Al Sheikh *et al.*, the results showed that students have not been knowledgeable about number of times practicing BSE. Consistent practicing of BSE will be enhanced among the students if they are taught them

and update them about the phases of practicing BSE [4]. So, BSE education should be given to the females along with the practice session so it can avoid unnecessary burden on the health care resources. In a study conducted by Kulakci *et al.*, it was concluded that importance perception of nursing students was adequate, their insight of health inspiration, BSE benefits and BSE self-effectiveness was high [15]. Keeping in view of above discussion female must be facilitated to dodge misapprehensions about BC and learn more about the remunerations of early screening methods and appropriate treatment of BC [16]. Sometimes cultural norms also effect BSE as some female feel shy about conducting BSE. So, it is important that nursing students must be attentive of the issues that contribute to monthly performance of BSE. Cultural issues should be reflected in development of educational courses about BSE [17-19]. Female students must be more aware of BC and cheered to practice BSE regularly to identify abnormalities in their breasts and diagnose BC at an early stage [20]. Our study strongly suggests the need for continuous health education plans in health care settings to increase the self-assurance and inspiration among the nursing students who aims to serve in preventive well-being [21].

CONCLUSIONS

In conclusion we can say that knowledge about BSE among nurses is good. Attitude about breast exam is positive but practice is slightly lacking. Moreover students seem to be unaware of the frequency and time of practicing BSE. This indicates the importance of conducting workshops to enhance perception and awareness about BSE to avoid future complications.

Authors Contribution

Conceptualization: KS

Methodology: RY

Formal Analysis: NR

Writing-review and editing: KI, ILD

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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