



LEVEL OF KNOWLEDGE, ATTITUDE, AND PRACTICES REGARDING BREAST SELF-EXAMINATION AMONG UNDERGRADUATE NURSING STUDENTS OF KPK PAKISTAN

Sheraz Khan^{1*}, Noor ul islam², Jehan Badshah³, Abdul Hameed⁴, Hina Ajmal⁵, Nadia Sajid⁶,
Sabiha Khanum⁷

^{1*} Assistant professor / Principal, Elizabeth Rani College of Nursing and Allied Health sciences
Mardan, Email: skhan.bmu@gmail.com

² Assistant professor/principal, Pak international nursing college peshawar Pakistan,
Email noorsalarzai5033@gmail.com

³ Principal, Nowshera College of Nursing and Health Sciences,
Email armaanbadshah666@gmail.com

⁴ Assistant professor & Principal Nursing, Khyber Pukhtoonkhwa Institute of Medical Sciences,
Peshawar, Email hamid.inskmu@gmail.com

⁵ Principal, Naseem Nursing Institute & Public Health School Peshawar,
Email hina.ajmal1168@gmail.com

⁶ Principal, college of nursing, NOVA Institute of Modern Studies, Email nadiasajid030@gmail.com

⁷ Associate Professor Institute of Nursing Sciences Khyber Medical University
Email sabiha.ins@kmu.edu.pk

***Correspondence Author:** Sheraz Khan,

Assistant professor / Principal, Elizabeth Rani College of Nursing and Allied Health sciences
Mardan, Email: skhan.bmu@gmail.com

Abstract:

Objective: This study's objective was to assess female undergraduate students' knowledge, attitudes, and practices regarding BSE in order to gather information that would be useful in developing interventions.

Background: Breast cancer remains the most common type of cancer diagnosed and the leading cause of female death. A breast self-exam (BSE) is a regular check-up of their own breasts by a female to check for any alarming changes or abnormal growth that require medical attention. In order to find breast cancer early and reduce the risk of breast cancer death, breast self-examination (BSE) has always been recommended.

Material and method: The study was carried out using a descriptive cross-sectional exploratory design. The data was collected from 154 undergraduate nursing students from different nursing collages of KPK. The time frame of data collection was from September 01, 2022 to September 24, 2022.

Result: Eighty-seven percent received information about BSE and 13% received information regarding BSE. Most of the information comes from radio, mass media, and newspapers followed by health care professionals. The majority of females (90.7 percent) described their menstrual cycle as regular. The student's overall knowledge level was good regarding BSE. More than four-score 83.3% of the participants knew that all women should take the BSE and more than half of the participants do it regularly.

Conclusion: The majority of students knew what BSE was and what it was used for; the students' favorable attitudes towards BSE were encouraging. More than half of the participants do it regularly. They could prevent early detection of breast cancer and impede screening programs.

Keywords: BREAST SELF EXAMINATION, KNOWLEDGE, UNDERGRADUATE NURSES, PRACTICE, ATTITUDE

Background

Breast cancer remains the most common type of cancer diagnosed and the leading cause of female death (1). In both developed and developing nations, cancer is a growing public health issue that affects almost two-thirds population of the world. According to estimates from the WHO, breast cancer (BC) is among one of the most frequently occurring and one of the main reason of cancer death in women (2). When compared to the course of breast cancer in the older population, the onset of breast disease and later development of cancer are generally more aggressive in young women. The mortality rate for breast cancer in young women (20 to 29 years of age) was 72.4%. Insufficient breast cancer awareness leads to high mortality rates among young women (3). For white women and 7.3% for black women, the lifetime risk of breast cancer is roughly 10%. The risk population's life expectancy is decreased, particularly for people between the ages of thirty and fifty. 3.5% of these women are expected to die from breast cancer (4). Breast cancer, as a chronic disease, seems to be very common in females., so it is impossible to totally prevent breast cancer from occurring. Early detection and timely treatment are the best strategies for dealing with the condition and avoiding its negative effects (2). Early diagnosis and effective treatment are the most significant factors that can diminish the mortality and morbidity linked with breast cancer (5).

Worldwide, there is a huge discrepancy in breast cancer survival rates, with developed nations reporting rates of 80% or more and low-income countries reporting rates of less than 40%. Unavailability of early diagnostic techniques, which cause a significant number of women to arrive with advanced disease, and inadequate facilities for diagnosis and treatment, have been attributed to the low survival rates in developing countries (6). One of the main methods of population-based breast cancer control is to increase public awareness of the occurrence of breast cancer and the methods for fighting it and advocate for appropriate policies and initiatives (7). HIS is frequently used to improve data management procedures for breast self-examination in the healthcare system (8). Evidence suggests that the majority of early breast cancers are identified by the patient themselves and that BSE performers are mostly responsible for these early self-discoveries. Furthermore, there is an increasing need to comprehend the social-psychological variables that influence people's acceptance of BSE (9).

A breast self-exam (BSE) is a regular check-up of their own breasts by a female to check for any alarming changes or abnormal growth that require medical attention (10). In order to find breast cancer early and reduce the risk of breast cancer death, breast self-examination (BSE) has always been recommended. (11). BSE is still a useful screening process for detecting breast cancer early in underdeveloped nations since it is economical, widely accessible, and does not necessitate complicated technical expertise (12). Turkish studies have shown that 7.5% to 27% of university students participate in BSE on a monthly basis (13). It was discovered that education level and awareness of breast self-examination were connected. Women with higher education were more familiar with performing breast self-examination (14).

Despite being aware of its significance, the research indicates that less than 15% of women undergo monthly BSE. Studies have revealed significant correlations between women's attitudes, behaviors, and health beliefs towards early diagnosis (15). The most controversial method for detecting breast cancer is still breast self-examination (16). Many studies carried out in various nations discovered that university students had a fair amount of knowledge about BSE but that few of them actually performed BSE on a regular basis (17). The breast self-examination technique was well known by 78% of the candidates. Only 43.8 knew how to perform it but only 24.9% of them performed it consistently. (18).

Although it typically affects women over 35, the prognosis for this age group is worse due to late diagnosis in women between the ages of 20 and 30 (19). Another study's findings indicated that participants knew relatively little about BSE and breast cancer. This might be a factor in the delayed detection and identification of breast cancer patients (20).

Nurses and nursing students should have a basic understanding of and proficiency with BSE. In order to set an example for their patients, they should be aware of their own health. Nursing students will become more aware of breast cancer and be better equipped to start BSE at younger ages if they have been taught how to diagnose the disease early (21). The US Preventive Services Task Force and the American Cancer Society both agree that screening is essential for detecting breast cancer in its earliest, most curable stages. The nurse practitioner's (NP) responsibility is to recognize sociocultural elements that may affect screening and incorporate them into women's health messages (22). Nurses who instruct their patients on breast self-examination and early detection strategies have a greater understanding of these topics than nurses who do not. Consequently, it is crucial to comprehend nurses' knowledge about breast cancer and early diagnosis (23).

There is a knowledge gap regarding undergraduate students' degree of awareness. So, in order to assess the stages and frequency of BSE, as well as to assess college students' knowledge of Breast self-Examination (BSE), BC disease, BC signs and symptoms, and BC risk factors. The purpose of this study was to evaluate the knowledge, attitudes, and practices of female undergraduate students regarding BSE in order to acquire data that may be helpful in creating interventions aimed at promoting BSE as a screening technique for the early diagnosis of breast cancer.

Methodology:

The study was carried out using a descriptive cross-sectional exploratory design. The data was collected from 154 undergraduate nursing students from different nursing colleges of KPK. The time frame of data collection was from September 01, 2022 to September 24, 2022. The study's goal was to evaluate the knowledge, attitudes, and practices of female nursing students regarding BSE. Nursing students with age 18 and above were the part of the study.

The tool of the study comprises of four sections. Demographic information is included in the first section. The second section comprises 15 questions regarding BSE knowledge, followed by third sections 13 questions of attitude toward BSE and the fourth section contain 7 questions regarding BSE practice.

Breast self-examination: Women should examine their breasts every month by going through the five main steps of breast self-examination, which include: looking in the mirror with their arms straight, on their hips, and over their heads; palpating or feeling the breasts while standing and lying down using the three finger pads.

Knowledge: It is defined as the fact or condition of being familiar with something thanks to experience or association (24).

In this study, "knowledge" refers to nursing students' awareness of breast self-examination as determined by an organized knowledge questionnaire on the procedure.

nursing student: Female nursing students are individuals who are enrolled in nursing courses at the nursing colleges in Peshawar.

Five medical and academic experts revised and validated the questionnaire; they agreed but did not offer any suggestions. The survey items' internal consistency was 0.80, which was rated acceptable by Cronbach's alpha.

Table. 1 Demographic Information

Demographic details	Total (n=162)	%
Age groups		
18 to 20	24	14.8
Above 20	138	85.2
Breast cancer Family history		
Yes	6	3.7
No	156	96.3
Education Level		
First year	21	13
Second year	66	40.7
Third year	15	9.3
Fourth year	60	37
Residency		
Urban	93	42.6
Rural	69	57.4
Information of BSE		
Yes	141	87
No	21	13
If yes		
Mass Media, Newspaper, Radio	54	38.9
From Health care personnel	63	33.33
Information from relatives	9	5.6
other	36	22.2
Menstrual		
Regular	147	90.7
Irregular	15	9.3

Result:

Demographic Information

The majority (85.2%) of the study's participants were above the age of 20, and 14.8% spanned the ages of 18 and 20. Ninety-six point three percent (96.3%) of had no history of breast cancer in their families. while three point seven percent (3.7%) did. Two-fifths of students (40.7%) enrolled in the second year, 37.5% in the fourth year, 13% in the first year, and 9.3% in the third year.

More than half of the study participants (57.4%) lived in rural areas, while 42.6% lived in urban areas. Eighty-seven percent received information about BSE and 13% received information regarding BSE. Most of the information comes from radio, mass media, and newspapers followed by health care professionals. The majority of females (90.7 percent) described their menstrual cycle as regular, while 9.7 percent described it as irregular as shown in Table 1.

Level of Knowledge regarding BSE

The student's overall knowledge level was good regarding BSE. Almost a third-quartile (74.1%) correctly answered the monthly BSE recommendation to perform it. More than four-score (81.5%) of students were

Table 2. Assessment the student’s knowledge level of breast self-exam

No.	Items	Correct	Incorrect
1	BSE is recommended to be done monthly	120(74.1)	42(25.9)
2	Suitable time for BSE is 7th day after the start of menstruation	129(79.6)	33(20.4)
3	BSE is done in front of mirror only	60(37)	102(63)
4	Axilla should be examined while doing BSE	132(81.5)	30(18.5)
5	Breast lump is an early warning sign for breast cancer	112(68.5)	51(31.5)
6	Palm of the hand should be used while doing BSE	90(55.6)	72(44.4)
7	BSE could be done in supine position	75(46.3)	87(53.7)
8	Use finger pulps to examine any lumps or thickening of the skin	156(96.3)	6(3.7)
9	BSE can be done using the vertical strip and circular technique	156(96.3)	6(3.7)
10	Need to press on the nipple to check any unusual discharge	141(88.9)	21(13)
11	BSE includes arm-pit examination to check for any lump	123(75.9)	39(24.1)
12	Need to observe any unusual change in the shape and size of breast	156(96.3)	6(3.7)
13	Retraction of the nipple is a warning sign that should be observed	159(98.1)	3(1.9)
14	Lump is the early sign for cancer	114(70.4)	48(29.6)
15	Palpate in the right breast while left-sided lying when doing the BSE	120(74.1)	42(25.9)

aware that the axilla should be examined during BSE. The vast majority of participants (96.3%) believed that any unfamiliar change in the size and shape of the breast should be monitored. It can be done using the vertical strip and circular technique and by using finger pulps to examine any lumps or thickening of the skin.

However, more than half of the students reported that there was no need for a mirror for BSE, and almost half of the students reported that BSE could be done in a supine position. 29.6% of those polled did not report a lump as an early sign of breast cancer as shown in Table.2.

Level of attitude towards BSE

More than four-score 83.3% of the participants knew that all women should take the BSE. More than two-thirds of the students, 68.5%, indicated that they were interested in conducting BSE. Almost nine-tenths of the students, 88.9%, claimed they took care of their breasts. More than half of the participants said they were at ease and routinely engaged in BSE. Almost a third to a fourth of the students said they constantly seek out fresh material about BSE from magazines, the internet, and newspapers. The majority of study participants (94.4%) rated BSE as a time-efficient and helpful process.

However, 9.3% of them stated that BSE causes embarrassment, and 61.1% feared having to think about breast cancer. About 18.5% weren’t interested in doing BSE, and 18.5% felt unpleasant during BSE. 5.6% didn’t really care much about their breasts.as shown in Table.3.

Table 2. Assessment the student's attitude level of breast self-exam

No.	Items	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	During BSE makes me feel so funny	102(58.8)	9(5.6)	42(25.9)	6 (3.7)	3(1.9)
2	BSE will be embarrassing to me	45(27.8)	60(37)	42(25.9)	12(7.4)	3(1.9)
3	Doing BSE is wasting time	93(57.4)	60(37)	0 (0.0)	6 (3.7)	3(1.9)
4	Doing BSE makes me feel unpleasant	48(29.6)	63(38.9)	21(13)	24(14.8)	6 (3.7)
5	If there is lump, I prefer to get treatment from atraditional healer	54(33.3)	42(25.9)	9(5.6)	45(27.8)	12(7.4)
6	Feel uncomfortable, can't do BSE once in a month	33(20.4)	54(33.3)	21(13)	39(24.1)	15(9.3)
7	All women should do BSE	6(3.7)	21(13)	0(0.0)	48(29.6)	87(53.7)
8	I really care about my breasts	6(3.7)	3(1.9)	9(5.6)	75(46.3)	69(42.6)
9	I'm not afraid to think about the breast cancer	42(25.9)	57(35.2)	12(7.4)	36(22.2)	15(9.3)
10	A void BSE because I worry about having breast cancer	63(38.9)	30(18.5)	12(7.4)	45(27.8)	12(7.4)
11	Interested in doing BSE	6(3.7)	24(14.8)	21(13)	87(53.7)	24(14.8)
12	Always search for information regarding BSE from the internet, magazine, and newspaper	6(3.7)	12(7.4)	24(14.8)	96(59.3)	24(14.8)
13	Discuss with my friends about BSE	42(25.9)	57(35.2)	12(7.4)	36(22.2)	15(9.3)

Level of practice towards BSE

More than half of the students performed BSE regularly, and almost one-third of the students reported learning the correct method of BSE and having been taught by its health staff The majority of the participants stated that they discuss the significance of BSE with their friends. More than 90% of students seek medical attention if they notice any abnormalities. However, two-thirds and one-third of the students never advised their parents and friends regarding BSE, respectively. One-third of the students did not perform BSE on a regular basis as shown in Table 4.

Table 4. Assessment the students practice level of breast self-exam

No.	Items	Never	sometimes	Often	Usually	Always
1	Do BSE once a month	24(14.8)	27(16.7)	27(16.7)	21(13)	63(38.9)
2	learning the correct method of BSE	9(5.6)	39(24.1)	12(7.4)	24(14.8)	78(48.1)
3	Parents advise me to do BSE	75(46.3)	27(16.7)	9(5.6)	15(9.3)	36(22.2)
4	Advise friends to do BSE	27(16.7)	27(16.7)	21(13)	27(16.7)	60(37)
5	Discuss the importance of BSE with friends	6(3.7)	33(20.4)	27(16.7)	33(20.4)	63(38.9)
6	Have been taught on BSE by health staff	9(5.6)	27(16.7)	27(16.7)	33(20.4)	66(40.7)
7	If notice any breast abnormality, directly go to public health care	3(1.9)	9(5.6)	6(3.7)	9(5.6)	135(83.3)

Discussion:

The fact that breast cancer affects women more frequently than any other type of cancer makes it essential for women to be aware of the disease. It is essential and advised to assess the BSE knowledge, attitudes, and practices of female nursing students who will eventually work in the healthcare field. Breast self-examination is a simple, cheap, and practical procedure. BSE is surprisingly effective at raising women's knowledge of breast cancer, promoting the adoption of preventative health behaviors, and enhancing self-responsibility for their health.

This study showed that most of the information comes from mass media, radio, and newspapers, followed by health care professionals. Support by the study (12) found that the media, followed by brochures, friends, doctors, and nurses, were the primary sources of information regarding breast cancer and breast self-examination. Another study (25) claimed radio and television were the primary media used by female students at Namk Kemal University in Turkey to learn about breast cancer and BSE. Another study (26-27) of a similar nature revealed that the media was the main source of knowledge regarding BSE and breast cancer for nearly half of the students. Some research, on the other hand, found that literacy was significantly associated with increased breast cancer knowledge and that literate women were significantly more likely to perform breast self-exams (28-29).

This study revealed that participants had overall good knowledge, but, in contrast, research revealed that the respondents knew little about breast cancer and breast cancer screening (25). According to the findings of this study, 87 percent of students were aware of BSE, but less than half of them practiced it on a regular basis. This finding matches with the result of the study (25) in which the majority of individuals (97%) reported hearing about breast cancer; however, only 26% of them did BSE, supported by the study (3) in which 97% of the participants said they had heard of BSE, but only 36.7% said they had actually used it among them.

In the current study, around 4% of the participants reported having family members with breast cancer. Other studies showed 9 and 9.8%, respectively (30-31). The majority of the study participants had positive opinions regarding breast cancer education and screening, supported by the study (30) in which most of the participants showed a positive attitude toward BSE. Another study (32) result revealed that the majority of respondents (98.5%) believed that BSE was essential, and the study (33) indicated that while 42.8% of the respondents thought it was required to conduct a breast self-examination.

Conclusion:

The majority of students knew what BSE was and what it was used for; the students' favorable attitudes towards BSE were encouraging. More than half of the participants do it regularly. They could prevent early detection of breast cancer and impede screening programs. Therefore, more intensive awareness campaigns among nursing students are required to keep an eye on their present level of BSE and breast cancer knowledge.

Recommendation:

Based on the results of the study, it is advised that in order to improve the use of BSE, female nursing students need to be made aware of its significance. Additionally, the necessity of BSE should be brought to the public's attention through the media, and health service providers should advocate for BSE whenever they interact with female clients. Nurses and nursing students should have proper knowledge of the disease and its early identification, as well as the right attitude and practice, in order to be successful supporters of breast cancer control through early detection. Nurses should use this and serve as examples for the community through preventive screening measures.

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