ORIGINAL ARTICLE
Breast Cancer Awareness Among Nursing Students of Jinnah Hospital Lahore

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ABSTRACT

Background: Breast cancer is a condition in which a mass of undifferentiated cells is formed as a result of an uncontrollable increase in the number of breast cells. The risk of breast cancer may be increased by physiological elements such as premature menarche, prolonged menstrual period, late age at first pregnancy, and low fertility. For every year that menopause is postponed, the risk of having breast cancer increases by 3%.

Objective: To determine the Breast Cancer Awareness among nursing students of Jinnah Hospital Lahore

Methodology: A descriptive cross-sectional study approach was used for this research. A sample size of 122 instances was calculated with a 95% confidence interval. The data was gathered using a random sample technique. Data was gathered from BSc Nursing students, Diploma students, LHV students, and BSC students. On a 20-point scale, knowledge about cancer in breast was evaluated.

Results: The findings of study revealed that majority of student nurses 45 (36.8%) were less than 18 years and more than two-third, 67(54.9%) of participants were BSN students. The result shows that majority of the participants have average information, only 13.9% participants have poor knowledge about breast cancer. While 32% participants have good knowledge. Findings of study also revealed that knowledge about breast cancer is significantly associated with age and qualification of participants.

Practical Implication: Therefore, there is a need to arrange the educational sessions and seminars on breast cancer to adequately inform about this illness.

Conclusion: it is concluded that the participants had adequate knowledge of breast cancer and there is no association between knowledge of participants and residence. While age and qualification had significant association with knowledge of participants about breast cancer.

Keywords: knowledge; Breast Cancer; Nursing Students; Breast Cancer Awareness; Cancer

INTRODUCTION

Breast cancer is a disorder in which breast cells proliferate out of control and aggregate into an immature mass (1). Breast cancer is divided into two categories by the American Cancer Society (ACS): in-situ and invasive. Localized in-situ breast cancer spreads from its origin in the milk duct (2). Ductal Carcinoma in Situ (DCIS) is a discrete or pre-invasive type of breast cancer (3). The breast tissues nearby could become infected by invasive breast cancer, which comprises invasive carcinoma of the ductal system and invasive lobular carcinoma (4).

It has been documented that growing old is connected with an increase in the chance of breast cancer (5). Furthermore, women with a family history of breast cancer are at an increased risk of having the disease (6). Early menstruation, late menopause, older age at first pregnancy, and low parity are all reproductive variables that may increase the risk of breast cancer. When menopause is postponed, the risk of breast cancer rises by 3% every year (7). Additionally, estrogen—both endogenous and exogenous—is connected to a higher risk of breast cancer (5). Furthermore, a high-fat, low-fiber diet may raise the chance of getting breast cancer (6).

The American Cancer Society identifies the following unusual changes in the breast as indicators of breast cancer: Enlargement of the breasts include irritation of the skin, cracking breast ache, nipple inflammation, nipple folding inward, swelling, scaliness, or thickness of the nipple or breast skin, drainage from the nipple other than breastfeeding milk, and a mass under the arm (7). These alterations could be symptoms of two less serious disorders, a cyst or an infection (8). Despite the fact that breast cancer symptoms can vary considerably, many breast cancers have no symptoms at all (9).

The top three screening procedures are mammography, breast self-examination (BSE), and expert breast examination (10). BSE is an in-home screening tool used to detect breast cancer early. This approach of examining the breast tissue for physical or evident irregularities is simple, rapid, and successful. BSE raises the likelihood of women obtaining treatment by increasing their chances of survival (11). Despite therapeutic advances, early detection of breast cancer is essential for enhancing health outcomes (12). All women are advised to initiate performing BSE routinely whenever their breasts are fully grown by organizations that support breast health (13).

The disease's awareness is critical for early detection. This understanding assists the population in avoiding disease-related risk factors (14). Knowledge of breast cancer indicators, symptoms, warning signs, and self and clinical evaluation practises have all been shown to play an important part in the early detection of this disease (15). Timely detection improves the chances of release and the frequency of breast cancer surveillance (16). Late diagnosis has a negative influence on breast cancer patients' recovery and surveillance, as well as putting further strain on the health care system (17). As a result, Seminars should be utilised for promoting public knowledge by the government health administration and other linked entities. Furthermore, it is advised that educational sectors integrate awareness weeks in their policies. Breast cancer assessment procedures should also be incorporated in their course materials. Furthermore, the administration should boost health professionals to disseminate knowledge among the common population, and health services should be available to the rural inhabitants (18).

Objectives: To determine the Breast Cancer Awareness among nursing students of Jinnah Hospital Lahore.

MATERIAL AND METHODS

A descriptive cross-sectional study approach was used for this investigation. The research was carried out at the Jinnah Hospital in Lahore. It is one of Lahore's largest public hospitals. This study was conducted among Jinnah Hospital Lahore BSN students from January 2023 to March 2023. This study's sample size was calculated to be 122 student nurses. A random sample technique was used to get the data. BSc Nursing students, Diploma students, LHV students, and BSC students provided data. A self-administered questionnaire was given to each participant at random after receiving their written informed consent in order to gather information on the respondents' knowledge of breast cancer. The study included student nurses between the ages of 18

and 26 who were willing to participate. Student nurses who were not accessible for data collection, as well as student nurses who had a chronic or mental disease, were excluded from the study. The questionnaire is divided into two sections: socio-demographic characteristics of the participants and knowledge of breast cancer. In the first segment, socio-demographic parameters such as age, marital status, employment history, and educational attainment were taken into consideration.[28,29] In the second section, The participants' knowledge about breast cancer was assessed using a 20-point scales [19]. It is a three-point Likert scale of yes, no, and don't know. Each correct response received a score of 2 (yes), 1 (don't know), and 0 (no). As a result, the total score ranged from 0 to 40, with a higher overall score indicating a higher overall score. Excellent knowledge. According to the modified Bloom's cut-off point, respondents with strong knowledge had 76-100% accurate responses, respondents with average knowledge had 50% - 75% correct responses, and respondents with weak knowledge had 50% correct(19).

Data was analyzed using descriptive statistics (frequency and percentages) in SPSS V.21. The bivariate correlations between patient knowledge and categorical demographic characteristics were examined using the Chi Square test. For all of the statistical tests, a p value of less than 0.05 was considered statistically significant (20).

RESULTS

In this study, the responses of 122 female nursing students were collected and analyzed. The majority of student nurses (45.8%) were under the age of 18, followed by 40 (32.8%) between the ages of 18 and 20, 24 (18%) between the ages of 21 and 23, and 13 (10.75) between the ages of 24 and 26. Most of nurses were single, 83(68%) and 37(30.3% were married. More than two-third, 67(54.9%) of participants were BSN students, 31(25.4%) were LHVS, 14(10.7%) were Diploma students, and 10(9%) were BSC students. Most of, 90(73.8%) students were living in hostel and 32(26.2%) were day scholar (Table 1).

Table 1: Participants' demographic characteristics

Variable	Group	Frequency	Percentage (%)
Age	Less than 18 years	45	36.9
	18-20 years	40	32.8
	21-23 years	24	18.0
	24-26 years	13	10.7
Marital Status	Single	83	68
	Married	37	30.3
	Divorced	1	.8
	Widow	1	.8
Qualification	Diploma Nursing	14	10.7
	BSN	67	54.9
	LHV	31	25.4
	BSC	10	9
Residence	Day scholar	32	26.2
	Hostelized	90	73.8

Table 2 shows the overall knowledge of students about breast cancer. The result shows that majority of the participants have average information about breast cancer. As shown in table 2, only 13.9% participants have poor knowledge about breast cancer. While 32% participants have good knowledge.

Table 2: knowledge of participants about breast cancer

Variable	Frequency	Percentage (%)
Poor Knowledge	17	13.9
Average Knowledge	66	54.1
Good Knowledge	39	32

At a p-value of 0.05 or less, the chi square test was employed to investigate the relationship between participant demographics and breast cancer awareness. Age of participants has statistical significant association with knowledge of participants as p-value is (p=0.01) is lower than expected p-value of

population. Therefore, null hypothesis rejected, as age has significant association with knowledge of participants (Table 3).

Table 3: Association of knowledge with age.

Variable	Knowledge			P-Value
	Poor	Average	Good	
Age				
Less than 18 years	10	4	2	
18-20 years	4	20	9	
21-23 years	2	40	25	0.001
24-26 years	1	2	3	

In addition, qualification has statistical significant association with knowledge of participants as p-value is 0.003. With p-value 0.003, Null hypothesis was rejected, as p-value was statistically significantly lower than expected p-value (Table 4).

Table 4: Association of knowledge with Qualification.

Variable	Knowledge			P-Value
	Poor	Average	Good	
Qualification				
Diploma Nursing	5	07	9	
BSN	1	50	26	0.003
LHV	9	05	01	
BSC	2	4	02	

In term of association between knowledge and residence, null hypothesis retained as p value of age was 0.192 that is higher than expected p-value of population, which mean residence has no significant association with participant's knowledge (Table 5).

Table 5: Association of knowledge with residence

Variable	Knowledge			P-Value
	Poor	Average	Good	
Residence				
Day scholar	7	45	26	0.192
Hostelized	10	21	13	

DISCUSSION

Examining the knowledge of breast cancer among student nurses was the aim of this study. One of the most readily preventable cancers that affect women is breast cancer (21).

This understanding assists the population in avoiding disease-related risk factors (14). Knowledge of breast cancer indicators, symptoms, warning signs, and self and clinical evaluation practises have all been shown to play an important part in the early detection of this disease (15). Timely detection improves the chances of release and the frequency of breast cancer surveillance (16). Late diagnosis has a negative influence on breast cancer patients' recovery and surveillance, as well as putting further strain on the health care system (17). As a result, Seminars should be utilised for promoting public knowledge by the government health administration and other linked entities. Furthermore, it is advised that educational sectors integrate awareness weeks in their policies. Breast cancer assessment procedures should also be incorporated in their course materials. Furthermore, the administration should boost health professionals to disseminate knowledge among the common population, and health services should be available to the rural inhabitants.

According to the current study, nursing personnel have average understanding of breast cancer. In this survey, 54% of participants said they were aware of the problem. According to a Chinese study, 39% of participants were aware of the risk factors for breast cancer, and 64% of respondents were aware of breast cancer (22). Similarly, A study conducted in New-valley Government revealed average knowledge (43.5%) of respondents about breast cancer (23).

At a p-value of 0.05 or less, the chi square test was employed to investigate the relationship between participant demographics and breast cancer awareness. Age of participants has statistical significant association with knowledge of participants

as p-value is (p=0.01) is lower than expected p-value of population. Therefore, null hypothesis rejected, as age has significant association with knowledge of participants (Table 3). The current study revealed that 32% of participants have good knowledge about cervical cancer screening. In contrast, another study conducted in Pakistan found that the majority of participants knew very little about breast cancer (24).

The finding of this study depicted that only 13.9% had poor knowledge about breast cancer. A research undertaken in Similarly, a study conducted in Ethiopia revealed similar findings, where 28% participants have poor knowledge about breast cancer (21). On contrary, a research conducted in Georgia, on the other hand, found that 42.9 percent of the participants had poor knowledge about breast cancer (25).

Furthermore, the current study demonstrates that significant association is found between age of participants, qualification and their knowledge about breast cancer. Similar results are found in a study conducted in North central Ethiopia, who reported significant association between age and knowledge of participants (26). In contrast, a study conducted in Pakistan found that younger nurses were more likely than older nurses to have appropriate knowledge (27).Age has no association with knowledge of participants as knowledge depends upon the efforts to gain knowledge. If participants are not interested to attend seminars, workshops or other educational activities, they cannot improve their knowledge throughout their life. Medical resources, diagnosis, and treatment must improve in developing countries. There are limited resources available on medical education and research in Pakistan: lack of access to medical and health resources to the patients about disease; limited knowledge and trainings, and awareness about disease. The trainings should be conducted to improve the health literacy and how to access the medical resources for patients in Pakistan.[30-37]

CONCLUSION

This study highlights adequate knowledge of breast cancer and among student nurses. It is found that there is no association between knowledge of participants and residence. While age and qualification has significant association with knowledge of the participants. Therefore, there is a need to arrange the educational sessions and seminars on breast cancer to adequately inform about this illness.

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