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Let's Start!

A Study To Assess Breast Cancer Awareness Among Young Nurses In Tertiary Care Hospitals Of Lahore

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Abstract

Background: The inadequate awareness of breast cancer among nurses poses a significant challenge in healthcare settings, potentially compromising patient care and outcomes. Nursing education often focuses on a broad array of medical conditions, and breast cancer education may not always receive adequate emphasis.

Objectives: The study aims to assess baseline knowledge, identify specific knowledge gaps, and implement evidence-based educational programs.

Methodology: A descriptive cross-sectional study was carried out with n=130 from young nurses of tertiary care hospitals. The questionnaire consisted of 31 items that defined 5 domains was used. Analysis was performed using SPSS version 25.0.

Results: The contributors showed a largely adequate understanding of breast cancer. They were moderately educated about risk factors, signs and symptoms, and breast cancer examination. Conclusion: it was accomplished that the members had satisfactory information about breast cancer and there's no affiliation between the information of members and home whereas age and capability had critical affiliation with information of members almost breast cancer.

Keywords: Cancer, knowledge, Breast Cancer; Young nurses, Awareness of Breast Cancer.

INTRODUCTION
BACKGROUND
Breast cancer (BC) is a condition characterized by the uncontrolled proliferation of abnormal cells in the breast, leading to the formation of tumors. If left unchecked, the tumors can spread throughout the body and become fatal. Breast cancer cells begin inside the milk ducts and/or the milk-producing lobules of the breast. The earliest form (in situ) is not life-threatening and can be detected in early stages. Cancer cells can spread into nearby breast tissue (invasion). This creates tumors that cause lumps or thickening (Tan, Ellis et al. 2020). Visible signs associated with breast cancer include dimpling, an orange-peel appearance (*peau d'orange*), erythema, edema, blistering, excoriations, sanguineous nipple discharge, and nipple retraction. Skin changes such as *peau d'orange* and blistering are strongly associated with inflammatory breast cancer and Paget disease of the breast. Sanguineous nipple discharge is associated with papillary breast neoplasia. Ulcerations can be seen in advanced disease. (Watkins 2019).Early detection of BC plays a key role for better outcomes, and BC is preventable and treatable if it is detected and treated early. In this aspect, there are two early detection strategies for BC. These are early diagnosis and screening. Breast cancer is categorized into 3 major subtypes based on the presence or absence of molecular markers for estrogen or progesterone receptors and human epidermal growth factor 2 . Young women's breast cancer continues to be a major concern for patients, families, and medical professionals. Despite being less common in women under 40, BC can nonetheless have a greater impact than in older women since it is more likely to manifest later in life and have aggressive characteristics (Waks and Winer 2019).

PROBLEM STATEMENT
The problem at hand is the inadequate awareness of breast cancer among nurses, potentially compromising the quality of patient care and outcomes (Brown & Johnson, 2019).

SIGNIFICANCE OF STUDY
The study on awareness of breast cancer among nurses holds paramount relevance for several reasons. Firstly, nurses play a pivotal role in the healthcare system, serving as front line caregivers and educators. Improved awareness among nurses translates to enhanced early detection, timely interventions, and better patient outcomes. Awareness surrounding breast cancer is incredibly important as early detection, often through screening, can catch the disease when it is most treatable Increased awareness also reduces stigma, encourages support networks, and fosters a global commitment to finding a cure for this prevalent cancer.

RESEARCH OBJECTIVES
To assess baseline knowledge regarding breast cancer among young nurses in Tertiary Care setups of Lahore.

RESEARCH QUESTION
What is the existing level of knowledge among nurses concerning breast cancer risk factors, symptoms, and screening methods?

METHODOLOGY
Descriptive cross-sectional study design was used. The study was conducted at Akhtar Saeed College of Nursing in collaboration with tertiary care Hospitals as Farooq Hospital Westwood

branch, Farooq Hospital Iqbal town branch, Akhtar Saeed Trust Hospital EME, Ittefaq Hospital and Bahria International Hospital Lahore . The length of consider was 03 months after endorsement of synopsis

In this ponder a helpful inspecting strategy was utilized to choose the members agreeing to the incorporation and prohibition criteria. The incorporation criteria was all enrolled medical attendants working in tertiary Care Clinics BSN and MSN medical attendants with one year of encounter whereas unit nurture supervisor PGs and administrators were excluded. The test measure was calculated by the taking after equation accepting the great mindfulness level is rise to 736 with the certainty level break even with to 95 and the edge of blunder equal to 6%. n= 130

$$Z^2_{1-\alpha/2}$$

= for 95% confidence level = 1.96   P   = Anticipated level   = 73.6%
d   = Margin of error = 5   n   = Sample size=130
n_o = Minimum size sample   N   = Estimated population

After moral endorsement by rundown survey committee and organization survey board IRB Akhtar Saeed College of Nursing Lahore the information was collected after regulatory endorsement from distinctive 5 establishing of Lahore will be looked for information collection The members were chosen agreeing to incorporation and avoidance criteria by utilizing helpful inspecting strategy The ponder reason was clarified to the members and educated assent was gotten The members were inquired to fill up the all segments of the consider Performa In this ponder embraced survey was utilized. This questionnaire consists of 31 items which are based on demographic, social, institutional and cultural factors. Questionnaire consisted of 6 parts. First part is based on the demographic data of nurse's name(optional), gender, marital status and education level, etc. Second part consisted of 5 domains from which First was Likert scale knowledge-based questions from Total disagree to Total agree. Second and Third was Likert scale which was Risk factor-based questions related to physical activities, lifestyle and different physiological conditions from strongly disagree to strongly agree. The fourth one was a Likert scale based on Sign and Symptoms questions from strongly disagree to strongly agree. Fifth one was the Interval scale based on examination. An adopted questionnaire was employed to collect information. All collected information was entered into a computer and an investigation was carried out using (SPSS) version 25.0. To recapitulate the outcome from descriptive information, mean ±SD (standard Deviation) was used. Confidentiality was ensured to protect the ethical rights of the participants and ethical consideration was strictly abided during the study period.

RESULTS

A total of 130 participants participated in the study, the response rate was 100%. Most respondents were in the 20-25 age group 68.5% **(Table 3)**. The vast majority of participants were unmarried. 70.0%**(Table-9)**. The highest number of respondents worked in the Medical department 26.9%, followed by 'Other' 23.1%, and the lowest in Pediatric 6.9% (**Table-2**). Most respondents hold a BSN Nursing (Generic) degree 46.2% (**Table-7**). The largest group of respondents worked at Farooq Hospital Westwood branch, Lahore 23.8% followed by Farooq Hospital Iqbal town branch, Lahore 13.1% and others 63.1% (**Table-4**). According to provincial

distribution, Punjab accounted for 94.5% of the participants, followed by Khyber Pakhtunkhwa (3.1%), Sindh (0.8%), and Baluchistan.0.8% (**Table 12**).

Table 1. Descriptive statistics of the demographic characteristics of the participants

Demographic characteristics	N	Minimum	Maximum	Mean	Std. Deviation
Department of respondent	130	1.00	7.00	3.8923	2.36002
Gender of respondent	130	1.00	2.00	1.0923	.29058
Age of respondent	130	1.00	5.00	2.3231	.66140
Qualification of respondent	130	1.00	5.00	1.9462	.84735
Hospital of respondent	130	1.00	5.00	3.0077	1.46534
Stay in organization	130	1.00	5.00	1.3923	.79237
Designation of respondent	130	1.00	3.00	2.3462	.75443
Marital Status of respondent	130	1.00	3.00	1.7308	.47883
Number of Children of respondent	130	1.00	6.00	1.3462	.85101
Residence of respondent	130	1.00	2.00	1.0769	.26750
Residential province	130	1.00	4.00	1.9923	.26402
Valid N (listwise)	130				

The table lists various demographic and professional attributes of the respondents, with their respective minimum, maximum, mean values, and standard deviations. High Standard Deviation indicates that the responses are widely spread out around the mean. For instance, the Department of respondent has a high standard deviation (2.36002), suggesting diverse responses regarding which departments the respondents belong to The replies are closely concentrated around the mean when the standard deviation is low. For example, the Residential province has a low standard deviation (0.26402), suggesting that most respondents are from a similar region (mainly Punjab).

Table 2. Number of respondents in different departments.

Department of respondent	N	%
Medical	35	26.9%
Surgical	14	10.8%
Ortho	10	7.7%
Gynae	17	13.1%
Pediatric	9	6.9%
Emergency	15	11.5%
Other	30	23.1%

Table 2 shows that the highest number of respondents work in the Medical department (26.9%), followed by 'Other' (23.1%), and the lowest in Pediatric (6.9%)

Table 3. Number of respondents different age groups

Age of respondent	N	%
Less than 20 years	4	3.1%
20-25 years	89	68.5%
26-35 years	29	22.3%
36-45 years	7	5.4%
45 years and above	1	0.8%

Tableshows that the most respondents are in the 20-25 years age group (68.5%).A small number of participants were either under 20 years old (4 people or 3.1%) or between 36-45 years old (7 people or 5.4%).

Table 4. Number of respondents in different hospitals

Table-4 shows that the Farooq Hospital Westwood branch, located in Lahore, had the highest representation among respondents with 31 individuals accounting for 23.8% of the total. The second highest was Akhtar Saeed Trust Hospital EME, also in Lahore, with 30 respondents, or 23.1% of the sample.

Table 5. Stay in the organization of respondents

This table 5 shows that most respondents have stayed in their organization for 0-5 years (73.8%).The second largest grouping was between six and ten years, comprising 18.5 percent of respondents. Those with 11-15 years of experience amounted to 3.1 percent. Slightly more, 3.8 percent, had been with their organization from 16-20 years. The smallest cohort was for those with over 21 years of experience, representing just 0.8 percent of survey participants.

Table.6. Gender Of Respondents

Gender of respondent	N	%
Female	118	90.8%
Male	12	9.2%

This table indicates that the majority of respondents are female (90.8%).

Table 7 shows that the early half of respondents (46.2%) held a Bachelor of Science in Nursing obtained through a generic/pre-licensure program

Table-7 shows that early half of respondents (46.2%) held a Bachelor of Science in Nursing obtained through a generic/pre-licensure program. Slightly over one-third (32.3%) had earned a nursing diploma. Post-RN BSN programs constituted 16.9% of respondent qualifications. Master's degrees in nursing (MSN) made up 3.8% of the sample.

Table.8. Designation of Respondent

Designation of respondent	N	%
Head nurse	22	16.9%
Senior Nurse	41	31.5%
Charge nurse	67	51.5%

Table-8 shows, the designation of each respondent was collected to understand their perspective. Sixteen point nine percent (22 individuals) of respondents held the designation of Head Nurse. As experienced leaders within the nursing department, Head Nurses are responsible for overseeing clinical operations and staff for a specific unit. Thirty-one point five percent (41 individuals) of respondents were designated as Senior Nurses. Senior Nurses provide direct patient care and serve as a resource and mentor for other nursing staff. They work autonomously but under the guidance of head nurses or charge nurses.

Table.9. Marital Status Of Respondent

Marital Status of respondent	N	%
Married	37	28.5%
Single	91	70.0%
Divorced	2	1.5%

Table-9 depicted the marital status of respondents. The majority of individuals, constituting 70.0% of the sample (N=91), reported being single. Approximately 28.5% of respondents (N=37) indicated that they are currently married. A small proportion, 1.5% (N=2), stated that they are divorced.

Table 10. Residence Of Respondent

Residence of respondent	N	%
Urban	120	92.3%
Rural	10	7.7%

However, the sample still included responses from those in both residential conditions, allowing for some insights into potential differences in experiences or attitudes between the two groups.

Table.11. Residential province

Residential province	N	%
Khyber Pakhtunkhwa	4	3.1%
Punjab	124	95.4%
Sindh	1	0.8%
Balochistan	1	0.8%

Table 11 indicates the vast majority (95.4% or 124 individuals) listed their residential province as Punjab. Khyber Pakhtunkhwa was the second most common response at 3.1% (4 individuals). Sindh and Balochistan each represented 0.8% of respondents with 1 individual selecting each respectively.

Conclusion and Recommendations

It is concluded that the participants had moderate knowledge of breast cancer and there is no alliance between the knowledge of participants and residents. While age and qualification had a significant association with the knowledge of participants about breast cancer. In conclusion, nurses working in tertiary care hospitals demonstrated a temperate level of understanding regarding the risk factors, signs, symptoms, and examination techniques related to breast cancer. Notably, despite a bulk of the participants having backgrounds in biological and medical sciences, their knowledge remained at a moderate level concerning breast cancer. A comprehensive understanding of the risk factors, signs, symptoms, and both self and clinical

examination practices is critical for the early detection of this disease. Furthermore, it is recommended that awareness initiatives be integrated into the policies of educational institutions, particularly nursing schools. Furthermore, the curriculum should incorporate techniques for breast cancer examination. Additionally, the government ought to promote initiatives that enable health professionals to raise awareness among nurses and the general public, ensuring that healthcare facilities are accessible to rural populations. It is expected that the results of this study will be applied effectively.

Limitations of the Study

This research also encountered several limitations. Firstly, it relied on a questionnaire, which introduces the likelihood of recall biases. Secondly, the study focused on nurses in Punjab, meaning that the conclusion may not be representative of the illiterate population that was expelled from this research. Lastly, since a momentous portion of the participants came from biological and medical fields, the potential for reaction bias remains a concern**.**

Study results could have been affected by confounding variables like the cognitive state, education level, and social support system of the patient which were intricate to overcome.

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A Study To Assess Breast Cancer Awareness Among Young Nurses In Tertiary Care Hospitals Of Lahore.

Please tick the box as appropriate where:

TD: Total disagree

ED: Extremely disagree

NA: Neutral

DA: Disagree

TA: Total agree

Study tool

Demographic characteristics of the participants	
What is your age (years)	
What is your marital status	Single or married
What is your major discipline?	Social sciences
	Pharmaceutical sciences
	Biological sciences
	Medical sciences
	Other
What is your highest level of education	Undergraduate Postgraduate
What is your residence	Urban
	Rural
What is your residential province?	Khyber Pakhtunkhwa
	Punjab
	Sindh
	Balochistan

Breast cancer knowledge

Risk factors for Breast cancer

History of breast cancer and benign disease, exposure to radiations, and use of medication		Responses				
		TD	ED	NA	DA	TA
D1	History of breast cancer in the first-degree relative	1	2	3	4	5
	Use oral contraceptive pills more than 5 years	1	2	3	4	5
	Hormone therapy after menopause	1	2	3	4	5
	History of benign breast disease	1	2	3	4	5
	Exposure to significant radiation to the chest or breast during childhood or adolescence, particularly through radiation therapy.)	1	2	3	4	5

Breast cancer's risk factors related to gynecological and obstetrics.	Responses				
	TD	ED	NA	DA	TA

D2	Started menstruating before age 12	1	2	3	4	5
	Late menopause (after age 55)	1	2	3	4	5
	Giving birth for the first time after age 30	1	2	3	4	5
	Not having a childbirth experience	1	2	3	4	5

Breast cancer's risk factors related to physical activities, and lifestyle

D3	Low physical activity	1	2	3	4	5
	Overweight and obesity	1	2	3	4	5
	Age over 40 years	1	2	3	4	5
	Lack of breastfeeding	1	2	3	4	5
	Smoking and alcohol consumption in the past or present	1	2	3	4	5
	Stress	1	2	3	4	5
	The consumption of red meat	1	2	3	4	5
	Decreased consumption of vegetables and fruits	1	2	3	4	5
	The high consumption of fatty foods.	1	2	3	4	5

Breast cancer signs and symptoms

		Responses				
		TD	**ED**	**NA**	**DA**	**TA**
D4	Watery discharge from nipples	1	2	3	4	5
	Painless and palpable breast lump	1	2	3	4	5
	Painless mass under armpit	1	2	3	4	5
	Bleeding or discharge from the nipple	1	2	3	4	5
	Pulling of the nipple inward	1	2	3	4	5
	Wound around the nipple	1	2	3	4	5
	Redness of the breast skin	1	2	3	4	5
	Sudden changes in the size of the breast	1	2	3	4	5
	Sudden changes in the shape of the breast	1	2	3	4	5

Best time to do breast examination for breast cancer — **Responses**

D5	When is the best time to start the breast exam by the doctor or Midwife?	After 20 years
		After 25 years
		After 30 years
	When is the best time to start mammography?	After 20 years
		After 30 years
		After 40 years
	When is the best time to start self-breast exam?	After 20 years
		After 30 years
		After 40 years
	When is the best time to do a self-breast exam in the menstrual cycle?	One week after the onset of menstruation
		15 days after the onset of menstruation

How often should breast cancer self-examination perform?	Monthly
	Quarterly