



Original Article

Knowledge, Attitude and Practice of Breast Self-Examination among University Students

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ARTICLE INFO

Key Words:

Attitude, Knowledge, Breast Cancer, Breast Self-Examination, University Students, Practice

How to Cite:

Gul, A. E., Saddique, H. ., Batool, S. ., Sabir, M. ., & Ullah, K. . (2023). Knowledge, Attitude and Practice of Breast Self-Examination among University Students : Breast Self-Examination. Pakistan Journal of Health Sciences, 4(05).
<https://doi.org/10.54393/pjhs.v4i05.718>

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ABSTRACT

The leading cause of cancer among women is breast cancer. Almost 9 out of 10 women are suffering from breast cancer. **Objective:** To access the knowledge, attitude and practice of self-breast examination among university students. **Methods:** A descriptive cross-sectional study design was used to access the KAP of breast self-examination among university students by adopted and modified questionnaire and was conducted among 133 female students of superior university (nursing department). The convenient sampling technique was used. The population that is targeted was students of Superior University (Nursing Department) Lahore. **Results:** The overall results of the study show that the students have sufficient knowledge of breast cancer and BSE were 88(60.2%) with moderate attitude were 107(80.5%) with poor practice were 82(61.7%). **Conclusions:** The current study concluded that the many students of university (nursing department) have knowledge about breast self-examination with moderate attitude regarding self-breast examination but many have poor practice towards breast self-examination due to moderate attitude, lack of interest and clinical exposure or considered it not necessary.

INTRODUCTION

According to worldwide research, cancer is considered as the second largest cause of death [1]. Pakistan has highest cases of cancer [2]. In Asia, 9 out of 10 women are suffering from the breast cancer [3]. The previous study shows that the cancer of breast leads to the death of women in Pakistan [4]. So, breast cancer appears to be a greater health problem among develop and undeveloped countries [5]. The (BHGI) breast health global initiative was developed in 2006 [6]. Which give awareness about breast self-examination for the purpose of early breast cancer detection in the countries those have limited resources.

This resulted in awareness talks and activities in the developing countries [3]. In 2012, 1.7 million women were detected with cancer of breast according to (IARC) the international agency for research on cancer [7]. And it is responsible for deaths in women worldwide in 2012, it also affected both developing and developed countries [8]. The advancement of Breast self-examination (BSE) is essential and it must be performed as normal body maintenance [9]. Approximately 90% of breast swellings are first noticed by woman herself [10]. The increase death rate of breast cancer can be minimized through mammography and

(breast self-examination) strategies which is used for early detection of the cancer [11]. Therefore, it is necessary to enhance self-breast checkup awareness, understanding and preparation in nursing students because they are the future of health community [12]. BSE could be reasonable, basic, method which helps women to know her breast and allow her to differentiate changes within the breast, such as breast masses and protrusions [13]. Self-breast examination could be a screening strategy used to differentiate early breast cancer, which include the examining for any palpable lumps, distortion or swelling [14]. In spite of the fact that self-breast examination may be a cost free, basic, and fast method, it shows up that most of the women do not do it or do it wrongly [15]. The components that leads to breast cancer is family history, age, menopause, weight, alcohol and smoking [16]. The increasing trend has been linked to factors surrounding lifestyle changes like high fat, diet, lack of early detection programs resulting in a high percentage of late-stage disease appearance and lack of adequate diagnosis and treatment facilities [17]. In addition, studies have shown that poor knowledge and attitude of women for breast cancer plays a significant role to late-stage appearance of breast cancer [18]. The prevalence rate of cancer in breast is higher in older as well as young population [19]. It was concluded that by giving education breast cancer can be controlled. But it was also observed many organization colleges and university has already initiated awareness program but the situation is still the same hence current is aim to assess the knowledge among those who have education either their attitude or practice are poor or the knowledge [20].

METHODS

Descriptive cross-sectional research study was used. The study setting was in Superior University (Nursing Department). The study was approximately 9 months. The study target population were the female students of the superior university (Nursing Department). The study sample size was calculated by Slovin's formula. The convenient sampling technique was used to gather sample from the students. Only female students were included in the study. Only the students of Superior University (Nursing Department) was included. Male students of Superior University (Nursing Department) were excluded from this study. The students from outside the superior university was excluded. Data were analyzed by using SPSS version 21.0

RESULTS

Table 1 shows that from total no of participants who responded in this study. Those with the age group 17-19 years were 8(6.0%), 20-22 years were 79(59.4%), above 23 years were 46(34.6%). Those who were married

6(4.5), single 127(95.5). related to the medical field of education 133(100). Those who were in 1st year 44(33.1), 2nd year 13(9.8), 3rd year 15(11.3), 4th year 17(12.8) others than that 44(33.1).

Table 1: Demographic analysis

Variable	Frequency (%)
Age of respondent	
17-19	8(6.0)
20-22	79(59.4)
>23	46(34.6)
Marital status of respondent	
Married	6(4.5)
Single	127(95.5)
Field of education	
Medical	133(100)
Year of education	
1st year	44(33.1)
2nd year	13(9.8)
3rd year	15(11.3)
4th year	17(12.8)
Others	44(33.1)

Table 2 shows that total no of respondent who respond to question "is breast self-examination important in early detection of breast cancer? Those who respond important were 117(88), not important were 6(4.5), don't know were 10(7.5). "how often should breast self-examination be performed?" those who respond weekly were 50(37.6), monthly were 69(51.9), yearly were 3(2.3), don't know were 11(8.3). "the correct method of breast self-examination" those who respond 'usage of the opposite hands for palpitations of breast' were 41(30.8%), 'palpitate with palm and minimum of three fingers' were 38(28.6%), 'examine the armpit while performing breast self-examination' were 7(5.3%), 'all of the above' were 47(35.3%). "Do you think BSE helps in early detection of breast cancer", those who respond yes were 120(90.2%), no were 5(3.8%) they don't know were 8(6.0%). "signs of breast cancer" those who respond to 'lumps in the breast and around the armpit' were 41(30.8%), 'change in the color and shape of the breast' were 14(10.5%), 'nipple discharge and retraction' were 2(1.5%), 'all of the above' were 76(57.1%).

Table 2: Knowledge of participants regarding breast self-examination

Questions	Frequency (%)
Is breast self-examination important in early detection of breast cancer?	
Important	117(88.0)
Not important	6(4.5)
Don't know	10(7.5)
How often should breast self-examination be performed?	
Weekly	50(37.6)
Monthly	69(51.9)
Yearly	3(2.3)
Don't know	11(8.3)

The correct method of breast self-examination	
Use of opposite hands for palpitations of the breast	41(30.8)
Palpitate with palm and minimum of three fingers	38(28.6)
Examine the armpit while performing BSE	7(5.3)
All of the above	47(35.3)
Do you think breast self-examination helps in early detection of breast cancer?	
Yes	120(90.2)
No	5(3.8)
Don't know	8(6.0)
Signs of breast cancer	
Lumps in the breast or around the armpit	41(30.8)
Change in color and shape of the breast	14(10.5)
Nipple discharge and retraction	2(1.5)
All of the above	76(57.1)

Table 3 shows that from total Number of respondent who respond to question "BSE is/will be embarrassing to me" those who respond strongly agree were 41(30.8), neutral 40(30.1) strongly disagree were 52(39.1). "All women should do breast self-examination" those who respond strongly agree were 106(79.7%), neutral were 16(12.0%), strongly disagree were 11(8.3%). "I am not afraid to think about breast cancer" those who respond strongly agree were 32(24.1%), neutral were 32(24.1), strongly disagree were 69(51.9%). "I avoid breast self-examination because I worry about having breast cancer" those who respond strongly agree were 19(14.3%), neutral were 31(23.3%), strongly disagree were 83(62.4%). "I am interested in doing breast self-examination" those who respond strongly agree were 47(35.3%), neutral were 42(31.6%), strongly disagree were 44(33.1%).

Table 3: Attitude of participants regarding breast self-examination

	Frequency (%)
Breast self-examination is/will be embarrassing to me.	
Strongly agree	41(30.8)
Neutral	40(30.1)
Strongly disagree	52(39.1)
All women should do breast self-examination.	
Strongly agree	106(79.7)
Neutral	16(12.0)
Strongly disagree	11(8.3)
I am not afraid to think about breast cancer.	
Strongly agree	32(24.1)
Neutral	32(24.1)
Strongly disagree	69(51.9)
I avoid breast self-examination because I worry about having breast cancer.	
Strongly agree	19(14.3)
Neutral	31(23.3)
Strongly disagree	83(62.4)
I am interested in doing breast self-examination.	
Strongly agree	47(35.3)
Neutral	42(31.6)
Strongly disagree	44(33.1)

Table 4 shows that the participants who respond to question "have you ever performed breast self-examination before?" those who respond 'yes' were 51(38.3%), 'no' were 82(61.7%). "if you perform breast self-examination, then for what purpose did you perform it?" those who respond 'advice from family and friends' were 4(3.0%), 'medical reason' were 7(5.3%), they noticed a breast lump were 2(1.5%), routine medical examination was 32(24.1%), 'none' were 88(66.2%). "How do you prefer your BE to be done?" those who respond 'by doctor or nurse' were 29(21.8%), 'by yourself' were 104(78.2%). "On identifying an anomaly in your breast, what would you do" those who respond 'That they tell their mother or mother in law' were 33(24.8%), 'tell spouse' were 3(2.3%), 'consult doctor/nurse' were 97(72.9%).

Table 4: Practice of participants regarding breast self-examination

Practice regarding breast self-examination	Frequency (%)
Have you ever performed BSE before?	
Yes	51(38.3)
No	82(61.7)
If yes, then for what purpose did you perform it?	
Advice from Friends/Family	4(3.0)
Medical reason	7(5.3)
You noticed a breast lump	2(1.5)
Routine medical examination	32(24.1)
None	88(66.2)
How do you prefer your breast examination to be done?	
By a Nurse/Doctor	29(21.8)
By yourself	104(78.2)
How do you prefer your breast examination to be done?	
Tell Mother/Mother in law	33(24.8)
Tell spouse	3(2.3)
Consult doctor/nurse	97(72.9)

DISCUSSION

The descriptive study was examining "knowledge, attitude and practice of breast self-examination among university students" the study result shows that the total respondent who respond to the study all were females, the tool used for this study was adopted. The BARTLETT'S & KMO values has been checked to insure the validity and reliability in our context. The value shows significant and positive results and tool were consider as reliable and valid for performing statistical analysis showed that from total participants who responded about the question. "is breast self-examination important in early detection of breast cancer?" Those who respond important were 117(88), not important were 6(4.5), don't know were 10(7.5). majority of the people respond important so, this percentage shows positive results. "how often should breast self-examination be performed?" those who respond weekly were 50(37.6%), monthly were 69(51.9), yearly were 3(2.3%), don't know were 11(8.3%). Majority of

the people respond monthly so this percentage shows positive results. "the correct method of breast self-examination" those who respond 'usage of the opposite hands for palpitations of breast' were 41(30.8%), 'palpitate with palm and minimum of three fingers' were 38(28.6%), 'examine the armpit while performing breast self-examination' were 7(5.3%), 'all of the above' were 47(35.3%). Majority of the people respond all of the above. So, this percentage shows positive results. "Do you think BSE helps in early detection of breast cancer", those who respond yes were 120(90.2%), no were 5(3.8%), they don't know were 8(6.0%). Majority of the people respond yes so; this percentage shows positive results. "signs of breast cancer" those who respond to "lumps around the armpit or in the breast" were 41(30.8%), 'change in the color and shape of the breast' were 14(10.5%), 'nipple discharge and retraction' were 2(1.5%), and those who respond to 'all of the above' were 76(57.1%). Majority of the people respond all of the above so this percentage shows positive results. In comparison with the previous studies those who have poor knowledge were 165(95.9%) those who have satisfactory knowledge were 7(4.1%) and those who have good knowledge were .00(.00%) [21]. "Breast self-examination is/will be embarrassing to me" those who respond strongly agree were 41(30.8%), neutral were 40(30.1%), strongly disagree were 52(39.1%). "All women should do breast self-examination" those who respond strongly agree were 106(79.7%), neutral were 16(12.0%), strongly disagree were 11(8.3%). "I am not afraid to think about breast cancer" those who respond strongly agree were 32(24.1%), neutral were 32(24.1), strongly disagree were 69(51.9%). "I avoid breast self-examination because I worry about having breast cancer" those who respond strongly agree were 19(14.3%), neutral were 31(23.3%), strongly disagree were 83(62.4%). "I am interested in doing BSE" those who respond strongly agree were 47(35.3%), neutral were 42(31.6%), strongly disagree were 44(33.1%). In comparison with the previous studies those who respond with negative attitude were 144(83.7%) and those who respond with positive attitude were 28(16.3%) [21]. "Have you ever performed BSE before?" those who respond 'yes' were 51(38.3%), 'no' were 82(61.7%). "if you perform BSE, then for what purpose did you perform it?". Those who respond "advice from family and friends" were 4(3.0%), 'medical reason' were 7(5.3%), they noticed a breast lump were 2(1.5%), routine medical examination was 32(24.1%), 'none' were 88(66.2%). "how to you prefer your BE to be done?" those who respond "by a doctor or nurse" were 29(21.8%), 'by yourself' were 104(78.2%). "On identifying an anomaly in your breast, what would you do" those who respond that they tell their mother or mother in law were 33(24.8%), 'tell spouse' were 3(2.3%), 'consult doctor/nurse' were 97(72.9%). In comparison with the previous studies

those who respond with the poor practice were 168(97.7%) and those who respond with good practice were 4(2.3%)(21). The study results are consistent with the results of the previous study.

CONCLUSIONS

The knowledge of the respondent towards breast self-examination and breast cancer was high as they studied about breast cancer and how to do the breast self-examination. Students attended workshops and seminars arranged in university about breast cancer and their attitude towards breast self-examination and breast cancer was moderate but their practice is poor because some female students considered it unnecessary where as some have fear of detecting any abnormality and some don't understand how to do it.

Authors Contribution

Conceptualization: AEG, HS

Methodology: SB

Formal analysis: KU

Writing-review and editing: AEG, HS, SB, MS, KU

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

Conflicts of Interest

The authors declare no conflict of interest.

Source of Funding

The author received no financial support for the research, authorship and/or publication of this article.

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