

SELF-BREAST EXAMINATION PRACTICES AMONG SCHOOL TEACHERS: A CROSS SECTIONAL STUDY

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ABSTRACT

Objective: The study was conducted to evaluate the practice and awareness female teachers towards self-breast examination at schools of Larkana.

Background: Breast cancer is one of the most common cancers among females, both in industrialized and developing nations. Pakistan also has the ninth-highest incidence of breast cancer in the world in 2017. According to this, breast carcinoma is the second most common cause of cancer-related fatalities among Pakistani women.

Materials and Methods: A descriptive cross sectional study was carried out at public and private schools of the Larkana city, using stratified random sampling method 17 public and private sector schools were included, with response rate of 77.75%, 294 female teachers were included in the study. All the teachers were asked a set of questions regarding their practice and awareness towards self-breast examination. Data was analyzed using descriptive statistics, frequencies and percentage and chi square test of association.

Results: 129 (43.88%) females were practicing self-breast examination. 68.71% females had bachelor level of education. 58.84% teacher had urban residence. 73.47% teacher were married. 41.16% teachers were never taught about self-breast examination. 29.59% teachers did not know the early signs of breast cancer. Chi square test of association revealed that women practicing self-breast examination had significantly better awareness compared to the women not performing SBE.

Conclusion: Majority of women even from the educated community do not practice self-breast examination. Females in the study doesn't have reasonably sufficient awareness towards self-breast examination and breast cancer.

Keywords: Breast carcinoma, Self-Breast Examination, Female teachers, Pakistan

INTRODUCTION

Breast cancer is one of the most common cancers among females, both in industrialized and developing nations¹. Worldwide, there were more than 2 million instances of breast cancer recorded in 2018². According to the WHO Cancer Country profile for Pakistan, 34,038 instances of cancer were reported annually in 2014; by 2019, that number had increased to 83,000, with a death rate close to 50%^{3,4}. Pakistan also has the ninth-highest incidence of breast cancer in the world in 2017. According to this, breast carcinoma is the second most common cause of cancer-related fatalities among Pakistani women³.

The majority of people throughout the world are really concerned about cancer. Another issue with treating cancer is the lack of access to high-quality healthcare in developing nations, Because of this, early detection programmes are crucial⁴. One in six women will get cancer at some point in their lives, The 5 years prevalence, or the total number of persons surviving within 5 years following a cancer diagnosis, is predicted to be 43.8 million worldwide⁵.According to estimates, there were 96 million cancer-related deaths and 18.1 million new cases worldwide in 2018.An estimated 268, 6000 new instances of invasive breast cancer and 62,930 new cases of non-

invasive breast cancer were diagnosed in the US in 2019^{4,5}.

Pakistani females has the highest incidence of age-adjusted breast cancer among the other Asian nations⁶. Although the incidence of breast cancer (BC) is higher in industrialized nations, the proportional rate of mortality due to occurrences is higher in developing nations, accounting for more than 60% of breast cancer global death counts^{7,8}.Similar to the majority of Asian nations, Pakistan's national breast cancer case registries are not effectively kept, making the incidence and death rate information that is currently available deemed inadequate⁹.According to reports, 89% of BC patients in Pakistan present at advanced stages, primarily as a result of a lack of knowledge¹⁰, which is a significant factor in the higher incidence to fatality ratio.

Several authors have reported that the frequent Breast Self-Examination (BSE) as an important tool for empowering women to detect any changes in their mammary tissues and report them during clinical visits^{11,12}. BSE is a straightforward, private, and risk-free technique for early self-detection of breast lumps when carried out appropriately and often¹³.

SIGNIFICANCE OF THE STUDY This study demonstrates the BSE practices currently in use among female teachers in Larkana's

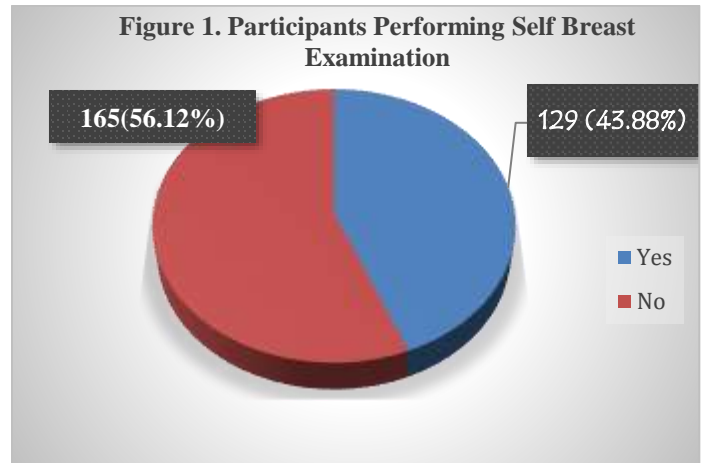
schools. It also describes the main obstacles that the research population has while trying to practice BSE. According to this study, self-examination of the breasts can be an effective technique for young women to detect cancer. Particularly for young women who are at increased risk for breast cancer.

METHODOLOGY

A descriptive cross sectional study was carried out at public and private schools of the Larkana city, we used stratified random sampling method to include participants in the study, 17 public and private sector schools were included in data collection, we distributed 400 research questionnaire, with response rate of 77.75%, we received back the questionnaire from 311 teachers, after data cleaning 294 female teachers were included in the study. All the teachers were asked a set of questions regarding their practice and awareness towards self-breast examination. Data was entered in and analyzed using SPSS version 23. We used descriptive statistics, frequencies and percentage and chi square test of association.

RESULTS

In this study, we observed that 129 (43.88%) females were practicing self-breast examination. Figure I.



Most of the study participants (52%) belonged to age group 26 to 35 years. Only 8.16% belonged to age group 18-25years. 68.71% females had bachelor level of education. 85.37% teachers belonged to private sector. 58.84% teacher had urban residence. 73.47% teacher were married. Table I.

Table I Sociodemographic Factors of the Study Participants

Variable	No.	%
Age		
18-25	24	8.16
26-35	153	52.04
36-45	71	24.15
46 or more	46	15.65
	294	100.00
Education Level		
Intermediate/Diploma	11	3.74
Bachelor	202	68.71
Master or higher	81	27.55
Employer Institution		
Public	43	14.63
Private	251	85.37
Residence		
Rural	121	41.16
Urban	173	58.84
Marital Status		
Married	216	73.47
Single	71	24.15
Other	7	2.38

In this study, 56.12% participants reported that they do not perform self-breast examination. Out of 129(43.88%) women practicing self-breast examination 20.16% were performing SBE every month and 41.86% were performing

SBE quarterly. 41.16% teachers were never taught about self-breast examination. 34.69% teachers did not know the most common cancer in women. 29.59% teachers did not know the

early signs of breast cancer. 52% teacher never searched about SBE on internet. Table II

Table II Practice and Awareness of the Participants Towards SBE

Practice and Awareness	No.	%
Do you perform Breast Self-Examination		
Yes	129	43.88
No	165	56.12
How often do you perform BSE		
Every Month	26	20.16
Every three months	54	41.86
Every six months	33	25.58
rarely	16	12.40
Have you been taught about BSE		
No	121	41.16
Yes	173	58.84
Do you Know the Most Common Cancer in Women?		
No	102	34.69
Yes	192	65.31
Do you know BSE can Help you detect early changes in Breast		
No	133	45.24
Yes	161	54.76
Do You know what are the Early Signs of Breast Cancer		
No	87	29.59

Yes	207	70.41
Have you ever searched about BSE on internet		
Yes	141	47.96
No	153	52.04

Chi square test of association revealed that women practicing self-breast examination had significantly better awareness compared to the women not performing SBE. Table III

Awareness and Practice	Do you perform Breast Self-Examination				X2 Square Test
	No.	%	Yes(129)	No(165)	
Have you been taught about BSE					
Yes	173	58.84	12	161	0.01
No	121	41.16	117	4	
Do you Know the Most Common Cancer in Women?					
Yes	192	65.31	102	90	0.04
No	102	34.69	27	75	
Do you know BSE can Help you detect early changes in Breast					
Yes	161	54.76	32	129	0.07
No	133	45.24	97	36	
Do You know what are the Early Signs of Breast Cancer					
Yes	207	70.41	106	101	0.23
No	87	29.59	23	64	
Have you ever searched about BSE on internet					
Yes	141	47.96	88	53	0.45
No	153	52.04	41	112	

DISCUSSION

Self-examination of the breasts is a crucial screening method for the early diagnosis of breast lumps. Although this technique is straightforward, simple, non-invasive, and not even time-consuming, however, the correct mindset and understanding are needed to put it into practice and maintain it over time in order to get the intended result. In this study, we observed that 129 (43.88%) females were practicing self-breast examination. A similar study conducted in Baluchistan Pakistan in 2020 reported that 50.5 % women included in the study were practicing self-breast examination¹⁴. Conversely, Ziaullah et al reported that only 2.5% performed breast self-examination¹⁵. While, Hina Khan et al reported that 26% of the participants effectively performed SBE¹⁶. In the meanwhile, Nida et al conducted a study among 110 students and reported that 39.1% female students were aware of steps involved in breast self-examination¹⁷. On contrary, Shahani MP et al while conducting a similar study among young female students reported that 88.3% of the participants were not practicing self-breast examination¹⁹. Despite a reasonable number of participants found to be involved in self-breast examination practice however, majority of the women were unaware about.

In the present Study, most of the study participants (52%) belonged to age group 26 to 35 years. Correspondingly, Roonjha Q et al reported that the majority (37.1%) of the women in the study were aged between 25 to 30 years in a similar study conducted in Baluchistan, Pakistan¹⁴. In the present study, 58.84% teachers had urban residence, comparatively Ziaullah et al¹⁵ reported that 61.8% of participants lived in rural settings. We found that, 73.47% teacher were married, this figure in our study is higher than 65.2% reported by Ziaullah et al¹⁵, and lower than findings of Hina Khan et al who reported that 18% were unmarried¹⁶. We report that, 68.71% females had bachelor level of education. On the other hand, Hina Khan et al conducted a similar study and reported that only 20% of participants had undergraduate and above education level¹⁶. In the present study, 34.69% teachers did not know the most common cancer in women. While another study reported that Overall, 259 (67.3%) subjects had adequate knowledge about breast self-examination, 123 (31.9%) had appropriate practice¹⁸. In our study, 29.59% teachers did not know the early signs of breast cancer. On the other hand, Roonjha Q et al, reported that only 16.2% participants knew about the warning features of the breast cancer¹⁴. We observed that, 52% teacher never searched about SBE on internet,

a study conducted in Lahore reported that 42% of women used to seek information from their friends regarding self-breast examination¹⁶.

Chi square test of association revealed that women practicing self-breast examination had significantly better awareness compared to the women not performing SBE. Other studies reported that the practice of breast self-examination was significantly higher ($p < 0.001$) among participants who reported having family member of breast cancer²⁰. Health literacy campaigns and engaging the media may raise awareness amongst women in the community, and self-breast examination may be taught through media in a culturally respectful way. Such health literacy may impact increasing breast cancer survival rates through early detection by 30-35%²¹. Education and information play an interlinked role. Health literacy and the appropriate and timely use of healthcare services is linked to higher levels of education which inherently breeds awareness²². In this study also self-breast examination practice appeared to be associated with reasonable awareness regarding breast cancer among female teachers.

CONCLUSION

Our study has observed that majority of women even from the educated community do not practice self-breast examination. Females in the study doesn't have reasonably sufficient

awareness towards self-breast examination and breast cancer.

LIMITATIONS

The limitations of the study include the choice of sample which is comparatively an educated group of the community, this might have exaggerated the knowledge and awareness and practices of females in the study settings. Community based women might have comparatively lesser awareness and poor practice towards the self-breast examination than the study sample. The cross-sectional design is limited in showing the direction of the relationship between self-breast examination and factors affecting it.

RECOMMENDATIONS

We strongly recommend that awareness campaigns should include self-Breast examination and the importance of regular clinical breast examination in their campaigns. Women should be effectively shown how to perform a SBE in breast clinics in Pakistan. Awareness through social media campaigns should demonstrate how to perform a self-breast examination in a culturally appropriate manner to bring positive influence on the practice and knowledge of BSE at the community level.

CONFLICT OF INTEREST

Authors declared no any conflict of interest

AUTHOR'S CONTRIBUTION

RG and ZS collected the data, AH analyzed the data, AD and EM drafted the manuscript and SW and MPS critically analyzed the draft.

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