

Awareness of Self-Examination of Lump in the Breast among Married Women of Karachi

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ABSTRACT

Objective: To assess the knowledge and enactment of breast self-examination and to appraise the repercussion with educational status of the participant.

Study Design: A cross sectional study

Place and Duration of Study: This study was conducted at Jinnah Postgraduate Medical Centre Karachi, Dr. Ruth K. M. Pfau Civil Hospital Karachi, Fauji Foundation Hospital (Somh) Karachi, Dar ul Sehat Hospital Karachi from March 2022 to October 2022.

Materials and Methods: A cross sectional study was conducted on a sample size of 400 married females. The sample was taken through non probability purposive sampling. An informed verbal consent was taken from the females. A pilot study was conducted to assess the validity of questionnaire. A structured questionnaire was distributed which was filled. Data was analyzed using SPSS Version 22 with 95% confidence interval, margin of error was taken as 5% and P-value 0.05 was considered significant.

Results: A study was conducted to assess the awareness of self-examination of lump in the breast among married women of Karachi. Overall out of 400 women, 55.3% (p=0.000) had heard about breast self-examination but 84.0% (p=0.000) had no knowledge regarding the steps of self-examination. Similarly, 22.3% (p=0.001), 47.0% (p=0.003), 36.5% (p=0.045) and 76.5% (p= 0.000) women had no knowledge that small lump in the breast, discharge from the nipple, unusual changes in the shape of the breast can lead to breast cancer and breastfeeding can reduce the risk for having breast cancer respectively. 88.3% (p=0.005) women believed that awareness campaigns regarding breast cancer should be initiated under government supervision and 30.3% (p=0.000) believed that women should teach their daughters regarding self-examination of breast at the age of menarche.

Conclusion: This study suggests that women of Karachi have moderate level of knowledge regarding breast self-examination. We believe that awareness programs should be engaging, encouraging with precedent pedagogic about common pathological conditions, clinical features, risk factors and relieving factors, screening methods to ensure early detection and reduction of mortality caused by breast cancer in females.

Key Words: Breast lump, Breast self-examination, Knowledge, Female Education

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INTRODUCTION

Karachi being a multi-ethnic and multi-linguistic city reflects the knowledge and perception of a conglomeration of Pakistan's population.

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Awareness of breast lump developing into carcinoma among low and intermediate socioeconomic class of Karachi is to be conducted. Unfortunately, our people prefer to avoid talking about diseases publicly due to multifaceted barriers, feminine sensitivity, stigmatization. In the recent years the incidence for cancer has increased quite alarmingly. Mortality and breast cancer morbidity rates are increasing in Pakistan, emphasizing the critical need for screening to prevent illness, detect it early, initiate treatment.¹ The most important cause is unawareness among preponderance female and only seeking professional medical advice in Penultimate, last stages of. Disease. One in every 9 women in Pakistan has a lifetime risk of being diagnosed with breast cancer.^{2,3}

Karachi Cancer Registry, the only population-based cancer registry in Pakistan, reports breast cancer as the most common cancer.^{4,5} The most pragmatic solution to early detection lies in breast cancer education of

women. Breast self-examination is a basic screening method for early detection of breast cancer.⁴ It is noninvasive, no instruments required, free of cost and can easily be performed in the comforts of home. It is an efficient and straightforward approach for examining breast tissue for any possible physical abnormality. It is recommended for women to start practicing breast self-examination as soon as they reach the age of menarche. Keeping all these factors in mind, a study will be conducted to evaluate the awareness of self-examination for breast cancer among the married woman in Karachi. Lack of awareness and low socioeconomic status are major reasons for late presentation if we know the present level of knowledge of our female population towards breast cancer and self-examination, then only we will be able to move toward pragmatic solutions. The currently available data is limited to some sections of the society and related to few aspects of the diseases only.

The goal of this study was to observe the percentage of females in Pakistan who are aware of the initial screening procedures for the early diagnosis of the breast cancer and to analyze the major screening practices in regard to self-breast examination and clinical breast examinations.²

MATERIALS AND METHODS

A cross-sectional study was conducted on a sample size of 400 married females. The sample was taken through non-probability purposive sampling from Jinnah Postgraduate Medical Centre Karachi, Dr. Ruth K. M. Pfau Civil Hospital Karachi, Fauji Foundation Hospital (Somh) Karachi, Darul Sehat Hospital Karachi, within a period of 7 months from March 2022 to October 2022. Informed verbal consent was taken from the females. A pilot study was conducted to assess the validity of the questionnaire. A structured questionnaire was distributed which was filled out. Data was analyzed using SPSS Version 22 with 95%

confidence interval, margin of error was taken as 5%, and P-value of 0.05 was considered significant.

RESULTS

A study was conducted to assess the awareness of self-examination of a lump in the breast among married women of Karachi. The data was collected from four hospitals, Jinnah Postgraduate Medical Centre Karachi, Dr. Ruth K. M. Pfau Civil Hospital Karachi, Fauji Foundation Hospital (Somh) Karachi, and Darul Sehat Hospital Karachi, in Karachi.

When asked if they had ever heard about breast self-examination 55.3% (p=0.000) women said yes, they had heard about self-examination while 44.8% (p=0.000) women said no they had not heard about it. The majority of women 84.0% (p=0.000) were not aware of the steps of breast self-examination while 16.0% (0.000) women were aware about the steps for breast self-examination. When asked if they thought that any small lump in the breast could lead to breast cancer 77.8% (p=0.000) women said yes a lump can lead to breast cancer while 22.3% (p=0.000) women said no. Similarly, 53.0% (p=0.003) women thought that any discharge from the nipple can lead to breast cancer while 47.0% (p=0.003) women disagreed with the statement. When further asked if they thought that any unusual changes in the shape of breast could lead to breast cancer 63.5% (p=0.045) women said yes while 36.5% (p=0.045) women said no. As far as breastfeeding decreasing the risk of having breast cancer, 76.5% (p=0.000) women were not aware of it while 23.5% (p=0.000) women said yes. 88.3% (p=0.005) women were in favor that awareness campaigns for breast cancer should be initiated under government supervision while 11.8% (p=0.005) disagreed. Similarly, when they were asked if they thought that it should be advisable for women to teach their daughters about self-examination of breasts at the age of menarche 30.3% (p=0.000) women were in favor while 69.8% (p=0.000) women were against the idea.

Table No. 1: Questionnaire

S.No	Questions Asked	Yes (%)	No (%)	Mean	CI 95%	P-value	Total (n)
1	Have you ever heard about breast self-examination?	55.3%	44.8%	1.45	1.40-1.50	0.000	400
2	Do you know the steps of breast self-examination?	16.0%	84.0%	1.84	1.80-1.88	0.000	400
3	Do you think that small lump in the breast can lead to breast cancer?	77.8%	22.3%	1.22	1.18-1.26	0.001	400
4	Do you think that discharge from the nipple can lead to breast cancer?	53.0%	47.0%	1.47	1.42-1.52	0.003	400
5	Do you think that unusual changes in the shape of the breast can lead to breast cancer?	63.5%	36.5%	1.37	1.32-1.41	0.045	400
6	Do you believe that awareness campaign for breast cancer should be initiated under government supervision?	88.3%	11.8%	1.12	1.09-1.15	0.005	400

7	Do you think it is advisable for women to teach their daughters about self-examination of breast at menarche?	30.3%	69.8%	1.70	1.65-1.74	0.000	400
8	Do you know that breast feeding decreases the risk of having breast cancer?	23.5%	76.5%	1.77	1.72-1.81	0.000	400

Table No. 2: Percentage Awareness of patients

	Frequency	Percent	Valid Percent	Cumulative Percent
Illiterate	80	20.0	20.0	20.0
Primary pass	51	12.8	12.8	32.8
Middle pass	58	14.5	14.5	47.3
Metric	132	33.0	33.0	80.3
Other	79	19.8	19.8	100.0
Total	400	100.0	100.0	

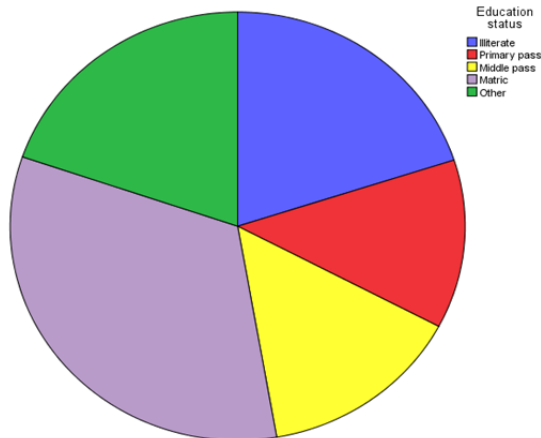


Figure: No. 1: Education Status

DISCUSSION

This study is based on the assessment of awareness about self-examination of lump in the breast among married women of Karachi. It was encouraging to see that about 55.3% (p=0.000) of the women of Karachi knew about breast self-examination, but at the same time it was disappointing to know that only 16%(p=0.000) knew about the steps of Breast self-examination. Compare to a different study about 80 (77.4%) participants in their study has heard about breast self -examination, which was similar to the Egyptian study that reported 63.4% of participants had heard about breast self examination.⁶ Similarly, a study conducted at Debre Berhan University showed that very few women, 28.3%, had performed breast self-examination.⁷

If we focus on enhancing the awareness of Breast self-examination further with proper guidelines towards the steps and findings, it would help in increasing the percentage of the population that practices it and hence aid in the early detection of breast cancer. Breast self-examination (BSE) is a simple and safe method to detect breast abnormalities, making it crucial for all females to be aware of and practice it regularly.

In the present study, the knowledge on the aspect of breast self-examination was found to be significantly lower in the population with lower educational status. We found such similar evidences from multiple Indian studies and researches which show relatively high knowledge on breast self-examination among populations with higher educational attainments like, school teachers and nurses etc.⁸⁻¹² It was surprising for some women to know that there are steps in order to decrease the morbidity of lump and decrease the risk of developing into malignancies in contrast of this study breastfeeding was quite surprising for some of them only ¼ ,23.5% (p=0.000) women knew about it. We believe that along with the risk factors discussion in the awareness campaigns, those factors which improve the condition should also be taught and discussed.

It was good to see that the knowledge score of ¾, 77.8% (p=0.001) women knew that small lumps found in breast can lead to breast cancer. Fair score of 2/4, 53% (p=0.003) of the women knew that discharge from the nipple can be an alarming sign and 63.5% (p=0.045) women thought that changes in the shape of breast can lead to breast cancer. This study shows findings that are consistent with an earlier study which reported multiple frequent warning signs of breast cancer to be nipple discharge, painless breast lump and unusual changes in the skin of the breast¹³.

The open discussion of issues, related to the breast, between women, mothers, daughters, and spouses or even the extended family system is considered as a social taboo.⁴ Due to sociocultural attitudes not being progressive, there is some shyness related to one’s own body, fear of rejection from their partner post diagnosis of breast cancer, discomfort and embarrassment in examining their breasts either by themselves or by a professional. This is why when asked, if they thought it was advisable for women to teach their daughters about self- examination of breast at the age of menarche, about 69.8% (p=0.000) women said No . A Turkish study concluded that nurses as health care professionals could play a key role in educating women about BSE.⁹ Study shows that these personal fears such as the fear of physicians and doctors, fear of the results

as well as the fear of hospitals are some of the main barriers for not practicing screening of breast cancer¹⁴⁻¹⁶.

Our study has noted low levels of information regarding positive effect of breastfeeding on females health among women of Karachi. Similar finding was found in research conducted in Lahore in which participants consider breastfeeding as a most common and false risk factor of lump at a surprising (30%).⁸ Considering the success of awareness campaigns in ensuring women know that breast cancer exists, we believe that awareness campaigns should include breast self-examination and the importance of regular breast self-examination. Among the health-care providers, around 90.3% performed BSE in Sao-Paulo, and in Turkey 28% of the nurses and 32% of physicians did not practise BSE.²⁰ Conscientiousness towards breast cancer should start at an early age especially in high risk groups. Knowledge regarding various warning signs of breast cancer can be life saving for women. Majority of the women, 88.3% (p=0.005) were in favor that different campaigns for the awareness of breast cancer and self-examination should be initiated under the government supervision. Further-more, studies must be conducted that analyze the curriculum and clinical training of medical students in Pakistan to identify what learning experiences have greatest impact.¹⁰ The study conducted in Ardebil revealed that both age and marital status had an impact on individuals' knowledge concerning breast self-examination (BSE).¹⁷

Awareness about breast self-examination should be emphasized. Offering elective courses covering women's health can be beneficial for female. Additionally, providing free breast self-examination (BSE) training courses can effectively raise awareness.¹⁶ Moreover, screening programs should be started to ensure early detection and reduction of mortality caused by breast cancer also in females. Women in hospitals should be taught how to perform a breast self-examination regardless of the reason they are present.³ Understanding and awareness are crucial for early detection and effective treatment of breast cancer. The knowledge and attitudes of healthcare professionals towards breast cancer screening significantly influence patients' utilization of these screening methods.¹⁵

Women taking tamoxifen should undergo an annual gynecologic evaluation if they still have a uterus.¹⁸ It is necessary to establish federal supervise policy guidelines with coherent local government system to increase the adequate dissemination of information about the risk factors, sign-symptoms, importance of Breast self-examination practices and other recommended approaches to control the disease. Govt. Should provide incentive similar to one which are running under the name "Breast Clinic Day" in hospitals working under the umbrella of the PAEC.¹⁹ It

is found that practising BSE among South Asian healthcare providers and paramedic is alarmingly low compare to other Asian nations. Repeated guidance is the solution to all and effective guidelines, monitoring, assessment system should be planned, implemented by International Organizations.

CONCLUSION

This study suggests that women of Karachi have a moderate level of knowledge regarding breast self-examination. We believe that awareness programs should be engaging, encouraging with precedent pedagogic about common pathological conditions, clinical features, risk factors and relieving factors, screening methods to ensure early detection, and reduction of mortality caused by breast cancer in females.

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REFERENCES

1. Farhat S, Anwar Faridi T, Hameed S, Mehmood K, Azzam Khan M. Assessment of Knowledge About Breast Cancer Screening Among Female Faculty of University of Lahore: Assessment of Knowledge About Breast Cancer Screening Among Female Faculty of University of Lahore. *PBMJ* 2022 [cited 2022 Jul. 17]; 5(6):305-12.
2. Khokhar IA, Asif MM, Mashhood M, Zulfiqar M, Ismail M, Asjad A. Breast Cancer Screening Practices Amongst Female Students in Pakistan: Breast cancer screening practices. *Pak Biomed J* 2022 ;7:32-7.
3. Khan H, Raza VF, Choudhry S, Ali R, Yaqub M, Ahmad MN, et al. Do We Need to Increase Community Awareness Regarding Self-Breast and Clinical Breast Examination in Pakistan? *Pak J Med Health Sciences* 2022;16(5):113
4. Hussain I, Majeed A, Masood I, Ashraf W, Imran I, Saeed H, et al. A national survey to assess breast cancer awareness among the female university students of Pakistan. *PLoS One* 2022;17(1): e0262030.
5. Saeed S, Asim M, Sohail MM. Fears and barriers: problems in breast cancer diagnosis and treatment in Pakistan. *BMC Women's Health* 2021;21(1):1-0.

6. Naeem Z, Nadeem M, Kamil M, Ayub A, Nawaz K, Karim S, et al. Impact of breast cancer awareness health campaigns on knowledge of female educationalists of Islamabad and Rawalpindi; an interventional study. *J Shifa Tameer-e-Millat Univ* 2021;4(1):44-9.
7. Ullah Z, Khan MN, Din ZU, Afaq S. Breast Cancer Awareness and Associated Factors Amongst Women in Peshawar, Pakistan: A Cross-Sectional Study. *Breast Cancer: Basic Clin Res* 2021;15: 11782234211025346.
8. Kiani NN, Mehboob T, Tabassam N, Faheem M, Aslam R, Bashir I, et al. Awareness and Knowledge of Self-Assessment Tools for Breast Cancer among Female Students in Lahore, Pakistan. *Pak J Public Health* 2021; 11(1):47-50.
9. Sachdeva S, Mangalesh S, Dudani S. Knowledge, Attitude and Practices of Breast Self-Examination amongst Indian Women: A Pan-India Study. *Asian Pacific J Cancer Care* 2021;6(2):141-7.
10. Qasim S, Tayyab H, Zulqadar K, Masood S, Qasim TB, Zubair Z. Breast Cancer knowledge and perceived barriers to help seeking among pre-clinical and clinical female medical students of King Edward Medical University, Lahore: a cross-sectional study. *BMC Med Education* 2020; 20(1):1-9.
11. Pervez S, Jabbar AA, Haider G, Ashraf S, Qureshi MA, Lateef F, et al. Karachi Cancer Registry (KCR): Age-Standardized Incidence Rate by Age-Group and Gender in a Mega City of Pakistan. *Asian Pac J Cancer Prev* 2020;21(11):3251-3258.
12. Dinigde NG, Demie TG, Diriba AB. Knowledge and practice of breast self-examination among young women in tertiary education in Addis Ababa, Ethiopia. *Breast Cancer: Targets and Therapy* 2020;12:201.
13. Ahmed MS, Sayeed A, Mallick T, Syfuddin HM. Knowledge and practices on breast cancer among Bangladeshi female university students: A Cross-sectional Study. *Asian Pacific J Cancer Care* 2020; 5(1):19-25.
14. Sathian B, Asim M, Ahammed Mekkodathil SJ, Mancha A, Ghosh A. Knowledge regarding breast self-examination among the women in Nepal: a meta-analysis. *Nepal J Epidemiol* 2019; 9(2):761.
15. Heena H, Durrani S, Riaz M, et al. Knowledge, attitudes, and practices related to breast cancer screening among female health care professionals: a cross sectional study. *BMC Women's Health* 2019;19:122.
16. Rahman SA, Al-Marzouki A, Otim M, Khayat NE, Yousef R, Rahman P. Awareness about breast cancer and breast self-examination among female students at the University of Sharjah: a cross-sectional study. *Asian Pacific J Cancer Prevention: APJCP* 2019; 20(6):1901.
17. Ahmed A, Zahid I, Ladiwala ZF, Sheikh R, Memon AS. Breast self-examination awareness and practices in young women in developing countries: A survey of female students in Karachi, Pakistan. *J Education Health Promotion* 2018;7.
18. Akram M, Iqbal M, Daniyal M, Khan AU. Awareness and current knowledge of breast cancer. *Biological Research* 2017;50(1):1-23.
19. Majeed AI, Jadoon M, Riazuddin S, Akram J. Awareness and screening of breast cancer among rural areas of Islamabad capital territory, Pakistan. *Annals of PIMS ISSN* 2016;1815:2287.
20. Doshi D, Reddy BS, Kulkarni S, Karunakar P. Breast self-examination: Knowledge, attitude, and practice among female dental students in Hyderabad city, India. *Ind J Palliative Care* 2012; 18(1):68.