

Knowledge, Attitude and Practices of Breast Self Examination (BSE) in Women of Karachi

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ABSTRACT

Objective: To assess the knowledge, attitude and practices of breast self examination (BSE) in women attending gynecological units of major public sector hospitals of Karachi.

Study Design: Cross sectional survey.

Patients and Methods: All women of age between 20-50 years of either marital status attending Gynae OPD of Civil Hospital and Jinnah Postgraduate Medical Center, Karachi from May 2010 to December 2010 were included in the study. A verbal consent of each participant was obtained before collecting the data. The data was collected through a structured questionnaire have information on socio economic data, knowledge about Breast Self Examination, symptoms, risk factors and preventive methods regarding breast cancer, attitude of the respondent and practices regarding Breast Self Examination.

Results: Out of 412 respondents, majority belongs to 30-39 years age group (43.7%). Knowledge about breast self examination was found in only 22.8% respondents. Knowledge about symptoms, risk factors and preventive measures regarding Breast cancer were 25.3%, 28.7% and 26.0% respectively. However majority of the women 98.9% who have the knowledge were practice the Breast Self Examination monthly or fortnightly. The attitude regarding Breast Self Examination was very encouraging as 97.3% of the respondents promised not only to adopt it in future but also recommend it to their relatives and other friends.

Conclusion: The knowledge about Breast Self Examination was very low in the respondent which is the easier way of early detection of different breast diseases specially, breast cancer. However those who know it are doing it well. The attitude of the respondents was very encouraging. Awareness programme should be developed to promote it for early detection of Breast cancer.

Key words: Breast, cancer, breast self examination.

INTRODUCTION

Cancer remains one of the leading causes of morbidity and mortality worldwide.¹ Among major sites of the cancers, breast cancer is the most common in women in U.S and probably world wide as it is responsible for 21% of new cases world wide.² In 2008, 1.38 million women were diagnosed for breast cancer and 0.46 million died form it.³ Out of 411,000 breast cancer deaths reported around the world in 2002, 54% were occurred in low-middle income countries.⁶ By 2010; majority incidence of new cases of breast cancer was diagnosed in women of developing countries which were estimated approximately 1.5 million.⁵ Similarly it is estimated that the new mortality from breast cancer will increase by over 100% in the developing countries by 2020.⁴

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The incidence of breast cancer is highest in Pakistan among all Asian countries and almost 83% of all such cases are in 3rd stage of disease.⁷ In two Karachi based studies conducted in 1995-1997 and 2002, it was reported the highest incidence of breast cancer for population.⁸⁻⁹

It is estimated that about 50% of cancers are curable if they are detected early and treated appropriately. Thus screening has a major role in early diagnosis.¹⁰ In this context, Breast Self examination (BSE) is a useful method for detecting breast cancer at interval of periodic clinical examination.¹¹ BSE is relatively safe, low cost offers monthly assessment and does not require overcoming barriers associated with access to medical care system.¹²

Thus the rationale of this research is to determine the knowledge, attitude and practices of Breast Self Examination in women. It will also helpful in developing the strategies for awareness of prevention as well as early detection plan for breast cancer.

OBJECTIVE

To assess the knowledge, attitude and practice pattern regarding Breast Self Examination in women of Karachi.

PATIENTS AND METHODS

The study was conducted from May 2010 to November 2010 at gynecology OPD's of Jinnah Post graduate Medical Center (JPMC) and Civil Hospital, Karachi. Over all 412 women were interviewed. All women were between the age of 20-50 years regardless of marital status willing to participate in the study were enrolled. The women who already had carcinoma of breast or any other disease of breast were excluded. A verbal consent of each individual was taken before interview after explaining the objectives of the study. A pre structured proforma was used to collect the demographic data (marital status, education, literacy rate, family income etc), the data for knowledge about Breast self examination, breast cancer, symptoms and preventive measures for breast cancer, attitude and practices patterns regarding breast self examination of the respondent. The collected data were then analyzed through computer with the help of SPSS version 16. The quantitative data like age was analyzed for mean+ S.D., where as the qualitative data regarding knowledge, attitude and practicing pattern were analyzed for frequencies and percentages. Chi-square test was applied to assess the significance of the data.

RESULTS

Over all data was collected from 412 respondents. Out of which 243 respondents (59.0%) were from Civil Hospital Karachi and 169 respondents (41.0%) were from Jinnah postgraduate Medical center, Karachi. Majority 311 (75.5%) of the respondents were between the age of 30-49 years followed by 76 (18.4%) belongs to age group 15-29 years. Out of 412 respondents, 337(81.8%) were married. Majority were literate belongs middle income group and belongs to Karachi. (Table 1)

Majority of the respondents were literate, middle income socio Economic group, urdu speaking and habitants of Karachi. Majority of the respondents (71.1%) have adequate knowledge that females was suffering more with breast cancer as compared to male ($P<0.003$). Over all knowledge of respondent about symptoms of breast cancer was just 25.3%. Only few respondents 47 (11.5%) did not know anything about symptoms of breast cancer. Majority of the respondents were of the opinion that these symptoms were not developed in cancer as this is a silent killer disease. Only one symptom i.e. lump that can be felt was a known symptom by 69.2% of the respondents ($P<0.001$). The knowledge about breast self examination was very low among the respondents as only 22.8% knew about it. (Table 2)

Regarding risk factors of the cancer development, the knowledge was also very low. Out of 412 respondents, 112(27.2%) did not know about any risk factor. Family history was the major known risk factor as 40.0% respondents indicated it due to some of family member affected with this disease, followed by personal history (35.4%), being women (30.6%) and late pregnancy or no pregnancy (25.2%).

Knowledge about over all preventive measures for breast cancer, majority 74.0% did not know much about it. However the most common known preventive method was consideration of breast feeding instead of formula milk. (293 i.e. 71.1%) followed by children at early age (181 i.e. 43.9%) and physical activity (141 i.e. 34.2%). The rest of the preventive methods have very little response.

According to the responses of the participants, out of 412, only 94 women have the knowledge regarding breast self examination. However out of these 94 women, 93 (98.9%) practicing it. The most common method was manual examination which was used by 87 (92.6%) respondents. In reply to a question that how often you examine your breast your self, 39 (41.1%) doing it monthly and only 2 i.e.2.1% are doing it weekly. Out of 94 who examine their breast 4 indicated the feeling of abnormalities.

Out of 412 respondents, majority (401 i.e. 97.3%) made promise to adopt Breast Self Examination in their life in future. They also promised to recommend it to their friends and other relatives.

According to the cross tabulation of the data, age of the patients did not play any significant role in determining the knowledge attitude and practice pattern of breast self examination. However marital status i.e. married plays a significance role in determining the knowledge of breast self examination as compare to unmarried ($P=0.03$). Educational status plays a significant role in all aspects, except how often they examine their breast and knowledge about mammography. ($P<0.001$).

DISCUSSION

In Pakistan, majority breast cancers presented at an advanced stage. The breast cancer diagnosis in Pakistan can be improved through practical interventions that are realistic and cost effective. Breast Self Examination is one of the effective measure for early detection of breast cancer plan.¹³

A study conducted in Lahore in 2009 showed lack of awareness regarding breast cancer and its screening practices. In that study, 189 patients were surveyed, out of which 84% had heard of breast cancer, 35% were aware of at least one risk factor, 65% knew at least one major sign and symptom and 85% believed that early detection of breast cancer improved survival

Table 1: Socio- demographic data of the respondents

Demographic variables	Civil Hospital Karachi No=243(59.0%)	Jinnah Postgraduate Medical Center, Karachi No=169(41.0%)	Total (%) No=412(100.0%)
Age group			
i) <30 Years	72 (29.6%)	4(2.4%)	76 (18.4%)
ii) 30-49 years	158(65.0%)	153 (90.5%)	311 (75.5%)
iii) 50 and above	13 (5.4%)	12 (7.1%)	25(6.1%)
Marital Status			
i) married	191 (78.6%)	146 (86.4%)	337 (81.8%)
ii) unmarried	46 (18.9%)	14 (8.3%)	60 (14.6%)
iii) widow/divorced	6 (2.5%)	9(5.3%)	15(3.6%)
Educational status			
i) illiterate	45 (18.5%)	34 (20.1%)	79 (19.2%)
ii) less than Matric	53 (21.8%)	59 (34.9%)	112 (27.2%)
iii) Martic and above	145 (59.7%)	76 (49.0%)	221 (53.6%)
Income level			
i) Up to Rs.7000 (Low income group)	30 (12.4%)	46 (27.2%)	76 (18.5%)
ii) 7001-20000 (Middle income group)	204 (83.9%)	123 (72.8%)	327 (79.4%)
iii) 20001 and above (High income group)	9 (3.7%)	---	9 (2.1%)
Ethnicity			
i) Muhajir	186 (76.5%)	121 (71.7%)	307 (74.5%)
ii) Sindhi	17 (7.0%)	22 (13.0%)	39 (9.5%)
iii) Baluchi	7 (2.9%)	5 (2.9%)	12 (2.9%)
iv) Pushto	8 (3.3%)	3 (1.8%)	11 (2.7%)
v) Panjabi	12(5.0%)	5 (2.9%)	17 (4.1%)
vi) others	13 (5.3%)	13 (7.7%)	26 (6.3%)
Residence			
i) Karachi	238 (97.9%)	163 (96.4%)	401 (97.3%)
ii) Outside Karachi	5 (2.1%)	6 (3.6%)	11 (2.7%)

Table 2 : Knowledge of the respondent regarding Self Examination of Breast

	Knowledge assessment N=412
Do you know that females are suffering more with Breast cancer?	293 (71.1%)
Knowledge about Symptoms	
i) Breast become worming	21 (5.1%)
ii) Flat or inverted nipple	77 (18.7%)
iii) Breast Often itching	35 (8.5%)
iv) Swollen or increase in size	114 (27.7%)
v) Breast become red or blotchy	63 (15.3%)
vi) Discharging from nipple	135 (32.8%)
vii) Persistent tenderness of breast	147 (35.7%)
viii) Pain in the nipple	145 (35.2%)
ix) A lump that can be felt	285 (69.2%)
x) Skin around the breast is dimpled and looks like an orange peel	19 (4.6%)
Do you know Self Examination of Breast?	94 (22.8%)
Do you know about mammography?	15 (3.6%)
Knowledge about risk factors	
i) Being a women	126 (30.6%)
ii) Early onset of menses (before 12 years of age)	56 (13.6%)
iii) Family history	165 (40.0%)
iv) Diet contain excess saturated fats	85 (20.6%)
v) Late pregnancy or no pregnancy	104 (25.2%)
vi) Personnel history	146 (35.4%)
vii) Late menopause after the age of 55 years	65 (15.8%)
viii) Use of oral contraceptive	24 (5.8%)
Knowledge about preventive measures/early detection methods	
i) Physical activities	141 (34.2%)
ii) Be aware of family history	82 (19.9%)
iii) Avoid hormone replacement therapy	25 (6.1%)
iv) Check your breast every month	60 (14.6%)
v) Try to keep a low fat diet	67 (16.3%)
vi) Don't forget mammography once in a year	7 (1.7%)
vii) Have children at early age	181 (43.9%)
viii) Consider breast feeding instead of formula milk	293 (71.1%)

Table 3 : Practice Pattern and Attitude of the respondent about Self Examination of Breast N=94

Practice Pattern Have you ever examine your breast yourself?	93 (98.9%)
What methods do you use? i) manually ii) palpation	87 (92.6%) 6 (6.4%)
How often do you examine your breast yourself? i) Every week ii) Every 2 nd week iii) Monthly iv) Occasionally v) Rare	2 (2.2%) 2(2.2%) 39 (41.9%) 16 (17.2%) 34 (36.6%)
Do you ever feel abnormalities?	4(4.3%)
What was that abnormalities? i) Lumps	4(100.0%)
Do you ever go for mammography?	2(0.5%)
Attitude (N=412) Do you adopt Self Breast Examination in future? Do you recommend Self Examination of Breast to your friends/ relatives?	401 (97.3%) 401 (97.3%)

chances. Out of these 189 women, 101 women who were >40 years of age practiced breast self examination.¹⁴ According to our study, most of the women (71.1%) had adequate knowledge that females are suffering more from breast cancer than males. 25.3% females were aware of the symptoms of breast cancer. Whereas, 69.2% believed that lump was the only symptom of breast cancer.

In another research in Yemen on knowledge and practices of BSE, out of 425 females only 58.6% knew about BSE and only 17.4% performed it. Majority (55.9%) mentioned lack of knowledge about technique of BSE as a barrier for not performing it.¹⁵ Similar results were obtained from a research which concluded that women still have lack of knowledge about breast cancer, cancer detection, and risk factors. Further more females fail to practice BSE according to current guidelines.¹⁶ Our study results show much low knowledge about BSE. According to our study results, out of the 412 cases, only 94 (22.8%) respondents knew about it. However out of these, 93 (98.9%) practiced BSE. Out of these 41.1% did it fortnightly or monthly.

As observed by another research, which related the level of knowledge of primary prophylaxis with the level of education. Out of 300 females surveyed, 50% knew what is mammography.¹⁷ Our research showed that, education plays a vital role in all aspects except the frequency of breast examination and knowledge of mammography ($p < 0.001$). It was also seen that the age of patients did not play any significant role in detecting the knowledge, attitude and practice of BSE. However, marital status plays a significant in detecting the knowledge of BSE as compared to unmarried ($p < 0.03$).

A Karachi based study showed that women had very limited knowledge of breast self examination. The knowledge about the risk factors also came out to be very low, where 27.2% respondents did not know about any risk factors. Family history (40.0%) was consider as a major risk factor, followed by personal history (35.4), being women (30.6) and early or no pregnancy (25.2%). Majority of respondents (74.0) had no idea about preventive measures, however most of them (71%) considered breast feeding and some (43.9%) thought that children at early age will lower the chances of breast cancer.

There is a possibility that because of demographic changes and lack of knowledge about early detection and treatment in the developing world, there will be continuous increase in the incidence of mortality of breast cancer.¹⁸ Hence to raise awareness, more focused health educational interventions are needed.¹⁹ An example of which is the Royal college of Nursing of United Kingdom, which is actively encouraging all nurses to promote breast awareness along with clear guidelines for doing so.²⁰

There is a need to expand low cost alternatives for earlier detection and treatment of breast cancer in the developing countries. Basic interventions focus on education awareness building and health of women and expanding capacities at primary and community health care. Education to improve breast health awareness, BSE and clinical breast examination are relatively inexpensive and can be incorporated into existing primary health infrastructures. Focusing on providing these interventions in locations where these do not currently exists could drastically improve survival.²¹

CONCLUSION

Our study showed that the surveyed women were aware of the lethal disease of breast cancer but had little education regarding its early detection and preventive measures. It also pointed out towards the lack of interest on the part of health care providers in creating awareness about BSE practice and its useful outcomes. The knowledge about breast self examination was very low in the respondents which is the easier way of detecting cancer at early stage. However those who knew it were doing regularly. The attitude of the respondent was very encouraging. Awareness programme should be developed to promote it for early diagnosis and treatment of breast cancer.

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