Knowledge, attitude and practices of women towards breast cancer in the field practice area of urban health training centre, Aurangabad, Maharashtra

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INTRODUCTION

In India cancer prevalence is estimated around 2.5 million, with over 0.8 million new cases and 0.5 million deaths occurring each year. The common sites for cancer in India are oral cavity, lungs, esophagus and stomach in males and cervix, breast and oral cavity among females. Breast cancer, the most common cancer causing the largest burden of cancer deaths in women worldwide accounts for 19-34% of all cancer cases among women in India. According to National Cancer Registries and Regional Cancer Centers, it is the commonest cancer amongst women in Delhi, Mumbai, Ahmedabad, Kolkata and Trivandrum. In all other cancer registries, it is listed as the second most common cancer among women. According to GLOBOCAN 2012, almost 1.67 million women were diagnosed with breast cancer in 2012 globally. In India around 145,000 new cases of breast cancer are diagnosed each year, with a mortality rate of 1 in 1000 cases.

ABSTRACT

Background: Breast cancer accounts for 19-34% of all cancer cases among women in India. There is a high mortality as patients usually present at an advanced stage because of lack of awareness and nonexistent breast cancer screening programs. So the aim of study is to know knowledge, attitude and practices (KAP) of women towards breast cancer in the field practice area of urban health training centre (UHTC).

Methods: A cross sectional study included 140 women of age ≥15 years residing in field practice area from October 2016 to January 2017. From four wards in the field practice area, equal samples were drawn from each ward. Data was collected using questionnaires designed to elicit socio-demographic information and knowledge, attitude and practices of these women towards breast cancer. Data analysis was done by Open Epi.

Results: Out of 140 women interviewed, 78.57% mentioned at least one of the symptoms of breast cancer but only 37.86% identified painless lump as a symptom. Only 46.43% mentioned any one of the risk factors. More educated and younger age women were more knowledgeable about risk factors. 44.29% participants were aware of early detection measures but very few were actually practicing SBE, CBE. CBE was most common tool identified for detection.

Conclusions: Women do have KAP deficits of breast cancer. So community oriented awareness generation programs to educate women about breast cancer, to promote early detection of breast cancer and to bring about the desirable behavioural change among women is needed.

Keywords: Breast cancer, Knowledge, Attitude, Practices, Urban health training centre

INTRODUCTION

In India cancer prevalence is estimated around 2.5 million, with over 0.8 million new cases and 0.5 million deaths occurring each year. The common sites for cancer in India are oral cavity, lungs, esophagus and stomach in males and cervix, breast and oral cavity among females. Breast cancer, the most common cancer causing the largest burden of cancer deaths in women worldwide accounts for 19-34% of all cancer cases among women in India. According to National Cancer Registries and Regional Cancer Centers, it is the commonest cancer amongst women in Delhi, Mumbai, Ahmedabad, Kolkata and Trivandrum. In all other cancer registries, it is listed as the second most common cancer among women. According to GLOBOCAN 2012, almost 1.67 million women were diagnosed with breast cancer in 2012 globally. In India around 145,000 new cases of breast cancer are diagnosed each year, with a mortality rate of 1 in 1000 cases.
Most of the patients seek medical advice when the disease is fairly advanced. Over 70% of the cases report for diagnostic and treatment services in advanced stages of the disease, resulting in poor survival and high mortality rates. This is attributed to lack of awareness and non-existent breast cancer screening programs in India. As there is no exact etiological agent for breast cancer, also as breast cancer is a topic that is not freely discussed in India because of cultural taboo, there is an urgent need for information and education on awareness of breast cancer and its early detection measures to bring about the desirable behavioural change among women.

Very few studies have been done on community-dwelling women who constitute the majority of at risk women both for the disease and late presentation. The present study is, thus, designed to know the knowledge, attitude, and practices of women towards breast cancer in an urban health training centre field practice area.

METHODS

Out of the total 163 women contacted for the present cross-sectional study, 140 women were included excluding the 23 non-respondents. Participants, females of age more than 15 years who reside in the field practice area for more than 6 months, were randomly selected from the field practice area from one prominent landmark. The study duration is from October 2016 to January 2017. The Institutional Research and Ethics Committee approved the study protocol and written informed consent was obtained from study participants prior to inclusion.

After reaching the household, investigator told about the purpose of study to the family and enquired about eligible study participants in the family. Confidentiality about the information obtained was assured. The questionnaire included questions on Socio-demographic information relating to age, educational status, place of residence and marital status; knowledge of the risk factors of breast cancer, common symptoms and signs of breast cancer and early diagnostic procedures and treatment available for the disease; as well as attitude towards breast lesions and practices of breast self-examination (BSE) and clinical breast examination (CBE). The questionnaire was pre-tested in field practice area. After the survey, IEC activity was conducted in the UHTC for the women to make them aware about breast cancer and to impart education on correct attitude, practices towards breast cancer. Data analysis was done using the Open Epi. Chi-square test was used to assess relationship between knowledge and socio-demographic variables. Variables considered for the analysis of knowledge included age, education and marital status. The differences were considered to be statistically significant at p value less than 0.05.

RESULTS

A total of 163 women were contacted for the study. 23 women refused (12.5%) to participate. Out of 140 women who participated in study, nearly one third were in age group 25-34 years, the range being 15 to 70 years. Thirty five percent of participants were illiterate. Majority (82.14%) of the study participants were married. More than half of population (60%) belonged to upper–lower socio-economic status (Table 1).

Table 1: Distribution of respondents according to socio-demographic characteristics.

| Variable                  | Number | Percentage (%) |
|---------------------------|--------|----------------|
| Age distribution (years)  |        |                |
| 15-24                     | 30     | 21.44          |
| 25-34                     | 42     | 30             |
| 35-44                     | 15     | 10.71          |
| 45-54                     | 29     | 20.71          |
| 55-64                     | 19     | 13.57          |
| 65+                       | 5      | 3.57           |
| Marital status            |        |                |
| Married                   | 115    | 82.14          |
| Unmarried                 | 5      | 3.57           |
| Widow                     | 18     | 12.86          |
| Separated                 | 2      | 1.43           |
| Education                 |        |                |
| Illiterate                | 49     | 35             |
| Primary                   | 14     | 10             |
| Secondary                 | 32     | 22.85          |
| High                      | 34     | 24.29          |
| Intermediate              | 9      | 6.43           |
| Graduate                  | 2      | 1.43           |
| Socioeconomic status*     |        |                |
| Lower                     | 10     | 7.14           |
| Upper lower               | 84     | 60             |
| Lower middle              | 30     | 21.43          |
| Upper middle and above    | 16     | 11.43          |

*As per Kuppuswami socioeconomic status scale.

Out of 140 women interviewed, 110 (78.57%) mentioned at least one of the signs/symptoms of breast cancer. Though (over 70%) were aware that lump in breast is an early symptom, but less than half (37.86%) knew that painless lump is a symptom of breast cancer. 47 (33.57%) of them mentioned painful lump as a symptom. However very few (<5%) women recognized redness of skin, nipple changes as signs of breast cancer. No women could recognize all the symptoms (Figure 1).
Only 65 (46.43%) mentioned any one of the risk factors of breast cancer. Nearly 56 (40%) mentioned advancing age as a risk factor followed by 54 (38.57%) women who believed that taking oral contraceptive cause breast cancer irrespective of the duration of intake. 50 (35.71%) women believed that breast feeding protects against breast cancer, surprisingly five women thought breast feeding is a risk factor. Other factors mentioned were positive family history, obesity. Interestingly, 20% believed that trauma to breast leads to breast cancer (Table 2).

Table 2: Distribution of women according to knowledge on different aspects of breast cancer.

| Knowledge on factor                          | Number (%) N=140 |
|---------------------------------------------|------------------|
| Knowledge on Risk factor/ protective factor |                  |
| 1. Mentioned at least one risk factor       |                  |
| Advancing age                              | 65 (46.43)       |
| Early menarche/late menopause              | 56 (40)          |
| Positive family history                     | 28 (20)          |
| Nulliparity                                 | 45 (32.14)       |
| Smoking                                     | 17 (12.14)       |
| OCP intake                                  | 36 (25.71)       |
| Obesity                                     | 54 (38.57)       |
| Trauma to breast                            | 19 (13.57)       |
| Breast feeding                              | 28 (20)          |
| 2. Not aware of any risk factors            | 75 (53.58)       |
| 3. Mentioned breast feeding as protective factor | 50 (35.71) |
| Knowledge on early detection methods        |                  |
| 1) Mentioned at least one early detection method | 62 (44.29) |
| SBE                                         | 34 (24.29)       |
| CBE                                         | 57 (40.71)       |
| Mammography                                 | 3 (2.14)         |
| biopsy                                      | 39 (27.86)       |
| USG                                         | 44 (31.6)        |
| 2) Not aware of any early detection method  | 78 (55.71)       |
| Knowledge on treatment                      |                  |
| Surgery                                     | 103 (73.6)       |
| Others (chemo/radiotherapy)                 | 39 (27.85)       |

Table 3: Distribution of women according to knowledge of risk factors of breast cancer and different socio-demographic characteristics.

| Variable          | Knowledge on breast cancer | x² | P-value |
|-------------------|---------------------------|----|---------|
|                   | Present | Absent |    |          |
| Age               |         |        |    |          |
| 15-24             | 16 (53.33%) | 14 (46.66%) | 18.1 | 0.003 |
| 25-34             | 27 (64.29%) | 15 (35.71%) |      |        |
| 35-44             | 9 (0.6%) | 6 (0.4%) |      |        |
| 45-54             | 7 (24.14%) | 22 (75.86%) |      |        |
| 55-64             | 5 (26.32%) | 14 (73.68%) |      |        |
| 65+               | 1 (0.2%) | 4 (0.8%) |      |        |
| Marital status    |         |        |    |          |
| Married           | 57 (49.57%) | 58 (50.43%) | 2.54 | 0.110 |
| Others            | 8 (0.32%) | 17 (0.68%) |      |        |
| Education         |         |        |    |          |
| illiterate        | 13 (26.53%) | 36 (73.47%) | 12 df=1 | 0.0005 |

Significant association was observed between age of participant and their knowledge about risk factors of breast cancer stating that younger the age, more is the knowledge about risk factors. Again the significant association was noted between education of study subject.
and knowledge about risk factors of breast cancer reflecting more the literate subject, higher is the chance of her being more knowledgeable about risk factors (Table 3).

![Figure 1: Distribution of women according to knowledge on symptoms of breast cancer.](image)

62 (44.29%) participants mentioned at least one of the method for early detection of breast cancer like SBE, CBE, mammography. 44 (21.6%) thought ultrasonography as a diagnostic modality. 57 (40.71%) said that it could only be detected by a CBE, while 39 (27.86%) thought biopsy as a modality. 34 (24.29%) were aware of breast self-examination. Mammography option was answered by only 3 women. Also 103 (73.6%) women answered surgery as a treatment of breast cancer, while 39 (27.85%) said either chemotherapy, radiotherapy as a way for treatment which is included in others (Table 2).

Table 4: Attitude and practices towards breast cancer

| Parameter                                      | No. | Percentage (%) |
|------------------------------------------------|-----|----------------|
| **Attitude towards breast cancer**             |     |                |
| 1. Mentioned breast cancer as a serious disease| 95  | 67.86          |
| 2. Mentioned breast cancer as curable           | 50  | 35.71          |
| 3. Mentioned allopathic doctor as place of effective treatment | 109 | 77.86          |
| **Practices for prevention of breast cancer**   |     |                |
| 1. Do you perform SBE                          | 17  | 12.14          |
| 2. Have you undergone CBE                      | 8   | 5.71           |
| 3. Have you done mammography                   | 1   | 0.71           |

Out of 140, ninety five (67.86%) women considered breast cancer as a serious disease while 50 (35.71%) consider it to be curable. Most of them 109 (77.86%) women said they would approach allopathic doctor, 22 (16%) answered other pathies while surprisingly 9 (6.14%) said traditional healers for their treatment. Only 17 (12.14%) were practicing self-breast examination. 8 women have undergone clinical breast examination when they experienced some pain in breast and only one of them have undergone mammography (Table 4).

**DISCUSSION**

Till now there is no established national screening program for breast cancer in the country. In the present study we found that though 78.57% women mentioned at least one of the symptoms, but none knew all the cardinal symptoms of breast cancer. In this study very few women correctly identified early warning signs of breast cancer; especially sign such as a painless lump by less than half participants (37.86%) which is similar to results of Okobia et al. Fewer participants (<5%) were able to respond correctly to questions on non-lump symptoms of breast cancer such as redness of skin, nipple changes which is similar to results of studies done in South India by Sharma PK et al. Only 46.43% mentioned any one of the risk factors of breast cancer 35.71% women believed that breast feeding protects against breast cancer, surprisingly five women thought breast feeding is a risk factor. Those who were aware more educated which is similar to the findings of Somdatta et al. Also significant association was seen between age and knowledge, the results of which are similar to Dey et al. Knowledge and awareness of early detection measures of breast cancer such as breast self-examination (BSE) is also low. The findings show that few of the participants (24.29%) knew about BSE as an early detection measure which is similar to the findings of Kelechi Elizabeth Oladimeji et al, and hardly very few women practice it, similar to findings of Somdatta et al. Out of 44.29% who mentioned at least one of the method of early detection, 40.71% said CBE as a most common tool for detection of breast cancer as similar to Somdatta et al.

**CONCLUSION**

This study has shown that women of this UHTC field practice area have poor knowledge about breast cancer be it about warning signs, risk factors, early detection procedures and treatment. Also the attitude and practices towards prevention of breast cancer are lagging. Therefore it is important to create awareness and educate the community and to remove the misconceptions associated with ignorance through community based educational awareness campaign. Early warning signs, significance of a painless lump need to be emphasized. BSE along with CBE and mammography is a reliable screening tool. Also the fact that most of the breast lumps are found by women themselves and early diagnosis of breast cancer is related to frequency of BSE, routine training in BSE is a must. Educating health care workers to educate the community can also be taken into consideration. Also the health education on breast cancer should be imparted in schools and colleges. We also have to keep in mind only campaigns will not be enough, information need to be disseminated in a form which is appealing to the community. We recommend the establishment of policy guidelines that will enhance adequate and urgent dissemination of information about breast cancer to all women.
Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee at GMCH, Aurangabad

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Cite this article as: Paunikar AP, Khadilkar HA, Doibale MK, Kuril BM. Knowledge, attitude and practices of women towards breast cancer in the field practice area of urban health training centre, Aurangabad, Maharashtra. Int J Community Med Public Health 2017;4:3659-63.