

## Original Research Article

# Awareness about breast cancer among women aged 15 years and above in urban slums: a cross sectional study

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## ABSTRACT

**Background:** Breast cancer is the second most common cancer overall and is the most common cancer in women worldwide, both in the developed and developing countries. There are about 1.38 million new cases and 458,000 deaths from breast cancer each year. The aims and objectives of the study were to determine the awareness about breast cancer among urban slum women.

**Methods:** A community based cross-sectional study was conducted at urban slum Shahpur Nagar, Hyderabad. The study participants were above 15 years of age and the study was conducted for a period of one month. A total of 200 study participants were enrolled.

**Results:** Only 35% of the study population was aware about the early danger signs and 66% were unaware. Those who were aware in that 46.3% were breast lump is the early warning sign of breast cancer, followed by 28% said breast abscess, 16% pain in breast, 9% painless lump and 1.4% said for nipple discharge. Regarding skin changes nobody was aware about it. Awareness about risk factors for breast cancer was very poor that is only 21% were knowing about the risk factors about breast cancer. Near about 54% said they are aware about breast cancer by clinical examination done by doctor, 35% said by self breast examination and 12% said by mammography.

**Conclusions:** Intensified health education campaigns should be conducted in the community and they be made aware about breast cancer.

**Keywords:** Cancer, Awareness, Risk factors, Mammography

## INTRODUCTION

The global burden of breast cancer is expected to cross 2 million by the year 2030, with growing proportions from developing countries.<sup>1</sup> Breast cancer is the most common female cancer worldwide representing nearly a quarter (23%) of all cancers in women.<sup>2,3</sup> The term “breast cancer” refers to a malignant tumour that has developed from cells in the breast. Breast cancer is second most important cancer among Indian women.<sup>4</sup>

Breast cancer is the second most common cancer overall and is the most common cancer in women worldwide, both in the developed and developing countries. There are about 1.38 million new cases and 458,000 deaths from breast cancer each year.<sup>5</sup> The incidence of breast cancer in India is on rising trend. Over 100,000 new breast cancer patients are estimated to be diagnosed annually in India.<sup>6,7</sup>

The incidence of breast cancer is gradually overtaking cancer of the cervix which was hitherto the major cancer among Indian women. There are more than 5, 40, 000

new cases each year, about 40% of these cases are in developing countries.<sup>8</sup> Breast cancer presents most commonly as a painless lump and in a smaller proportion with other symptoms. Breast cancer is amenable to almost complete cure if it's detected in its early stages. But to seek medical help early in the course of disease, women need to be "breast aware": they must be able to recognize the symptoms of breast cancer through routine practice of screening.<sup>9</sup>

As breast cancer is towards increasing trends so studies are required to find out the awareness about breast cancer among community. If symptoms are identified at the first then prompt treatment can be started. So the present study was conducted with the following objectives.

### **Aims and objectives**

1. To determine the awareness about breast cancer among urban slum women.
2. To impart health education.

## **METHODS**

### **Study design**

It was a community based cross –sectional study

### **Study area**

Urban Slum Shahpur Nagar which is field practice area of Department of Community Medicine at Malla Reddy Institute of Medical Sciences, Hyderabad.

### **Study participants**

#### **Inclusion criteria**

The criteria of selecting the study participants were all females above 15 years of age.

#### **Exclusion criteria**

Exclusion criteria were women who were not willing to participate in the study; women who were known case of breast cancer.

### **Study duration**

The total duration of study was one month. We did present study in November 2014 (from 1<sup>st</sup> November to 30<sup>th</sup> November 2014).

### **Sample size**

200 participants were enrolled for this study in the study period as per eligibility criteria.

## **Methodology**

Data was collected in pre designed and semi structured questionnaire. Information on age, education occupation, awareness about risk factors for breast cancer and preventive modalities, etc.

### **Statistical analysis**

The data was entered and analyzed using Microsoft excel with proportions.

### **Ethical aspects**

Institutional ethics committee permission of MRIMS was obtained. Informed consent was obtained from every subject. At the end of the interview, study participants were given health education regarding breast cancer and self breast examination.

## **RESULTS**

From Table 1, it is observed that majority of the study population were in the age group of 21-30 years (47%) followed by 31-40 years (24%).

**Table 1: Age wise distribution of study participants.**

Age (years)	Percentage (%)
≤20	31 (16)
21-30	93 (47)
31-40	47 (24)
41-50	17 (9)
More than 50	12 (6)
Total	200 (100)

**Table 2: Distribution of study participants as per education.**

Education	Percentage (%)
Illiterate	32 (16)
Primary education	21 (21)
High school	72 (36)
Intermediate	19 (10)
Graduation	48 (24)
Post-Graduation	8 (4)
Total	200 (100)

Illiteracy was found to be 16% were as high school education was seen in 36% of the study population and post graduation was done by 4% of the study population (Table 2).

Near about 85% of the study population were married (Table 3).

**Table 3: Distribution about study subjects according to marital status.**

Marital status	Frequency (%)
Married	170 (85)
Unmarried	30 (15)
widow	0 (0)
Total	200 (100)

**Table 4: Awareness about different aspects of breast cancer.**

	Frequency (%)
<b>Awareness about early signs of breast cancer</b>	
Yes	69 (34.5)
No	131 (65.5)
<b>Mentioned at least one early warning sign / symptom</b>	
Breast lump	32 (46.3)
Painless lump	6 (9)
Pain in breast	11 (16)
Breast abscess	19 (28)
Nipple discharge	1 (1.4)
Skin changes	0 (0)
<b>Awareness about risk factors</b>	
Yes	42 (21)
No	158 (79)

The awareness about early signs of breast among the study population was very poor. Only 35% of the study population was aware about the early danger signs and 66% were unaware. Those who were aware in that 46.3% were breast lump is the early warning sign of breast cancer, followed by 28% said breast abscess, 16% pain in breast, 9% painless lump & 1.4% said for nipple discharge. Regarding skin changes nobody was aware about it. Awareness about risk factors for breast cancer was very poor that is only 21% were knowing about the risk factors about breast cancer (Table 4).

**Table 5: Source of information about breast cancer.**

Source	Frequency (%)
TV	18 (26)
Radio	1 (1.44)
News Paper	9 (13.04)
Friends	10 (14)
Relatives	16 (23)
Doctors	15 (22)
Total	69 (100)

TV was the main source of information for breast cancer (26%), followed by relatives (23%) and doctors (22%) respectively (Table 5).

Near about 54% said they are aware about breast cancer by clinical examination done by doctor, 35% said by self

breast examination and 12% said by mammography (Table 6).

**Table 6: Awareness about early detection methods.**

Early detection methods	Frequency (%)
Clinical examination by a doctor	37 (54)
Self breast examination	24 (35)
Mammography	08 (12)
Total	69 (100)

**Table 7: Awareness about preventive measures.**

Early detection methods	Frequency (%)
Regular check up doctor	45 (65)
Self breast examination	24 (35)
Total	69 (100)

About 65% of study participants said regular check up with doctor will prevent breast cancer and 35% said self breast examination (Table 7).

## DISCUSSION

It was observed that majority of the study population were in the age group of 21-30 years (47%) followed by 31-40 years (24%). In another study the mean age was 39.25 years. The majority 34 (42.5%) were of 31-40 years' age group followed by 22 (27.5%) of 41-50 years. Eighteen (22.5%) participants belonged to 21-30 years' age group, whereas only 6 (7.5%) belonged to 51-60 years' age group.<sup>10</sup> In another study the mean age of study participants was 36.34 years. Majority of the women were in age group of 20-30 years (35.6%).<sup>11</sup>

Illiteracy was found to be 16% were as high school education was seen in 36% of the study population and post graduation was done by 4% of the study population. In another study 42 (52.5%) of our study participants were illiterate, 4 (5%) had primary education, 10 (12.5%) had secondary education, 2 (2.5%) had attended colleges, 16 (20%) were graduates, whereas 6 (7.5%) were post graduates.<sup>10</sup> In one study 45.6% women were studied upto primary school. Only 1.2% women were educated graduate and above, while one third (33.8%) women were illiterate.<sup>11</sup>

Majority of the study population were skilled workers (70%), 15% were unemployed, 5% were professionals. In one study the majority 56 (70%) of our study participants were housewives, 14 (17.5%) were employed in government sector, 6 (7.5%) had private jobs, whereas 4 (5%) were unemployed.<sup>10</sup>

The awareness about early signs of breast among the study population was very poor. Only 35% of the study populations were aware about the early danger signs and 66% were unaware. Those who were aware in that 46.3%

were knowing breast lump is the early warning sign of breast cancer, followed by 28% said breast abscess, 16% pain in breast, 9% painless lump & 1.4% said for nipple discharge. Regarding skin changes nobody was aware about it. Awareness about risk factors for breast cancer was very poor that is only 21% were knowing about the risk factors about breast cancer. In another study the level of knowledge about various risk factors of cancer of breast was like 60% of study participants had a “poor” knowledge, whereas 22.5% had a “good” knowledge and only 17.5% had “very good” knowledge about various risk factors of cancer breast. No participant had an “excellent” knowledge about the risk factors of the cancer breast. Only 6 (7.5%) participants were aware of a maximum of ten risk factors, whereas 4 (5%) participants were not aware of any risk factor involving cancer breast.<sup>10</sup> In another study 93.1% women had no knowledge regarding risk factors of carcinoma breast. Only 3 women mentioned diet as risk factor of breast Carcinoma.<sup>6</sup> women said that increasing age is a risk factor while 3 women said oral contraceptive pills a risk factor for breast carcinoma. No one mentioned family history, genetics, obesity, breastfeeding history or other factors like HRT as a risk factor for development of breast carcinoma.<sup>10</sup>

Thus most women (78.75%) had no knowledge regarding the symptoms of breast cancer. Only 19.36% women enumerated lump in breast as a symptom. While very few mentioned pain, discharge or change in shape of breast as a symptom. Not a single woman enumerated change in position or shape of nipple, skin puckering (dimpling), discharge from nipples as a symptom of breast carcinoma.<sup>11</sup>

Near about 54% said they are aware about breast cancer by clinical examination done by doctor, 35% said by self breast examination and 12% said by mammography. In another study awareness of BSE among women by age and level of education. Most of the women, 217 (69.11%) were not aware of breast self-examination while 97 (30.89%), were aware.<sup>11</sup>

## CONCLUSION

The awareness about breast cancer was poor among the study participants as well as they were not having knowledge about different risk factors for breast cancers. So intensified health education campaigns should be conducted in the community and they be made aware about breast cancer.

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