Short Communication

Assessment of knowledge and awareness of breast cancer among rural women in Telangana, South India

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ABSTRACT

Breast cancer is the most common type of cancer diagnosed in women globally contributing around 15% of mortality. In India, it is the second most common cancer with the incidence in rural areas being twice than in urban. There is lack of knowledge and awareness of breast cancer especially in rural areas. So this survey was conducted to assess the existing levels of awareness to plan comprehensive health programs, early detection and carrying out treatment campaigns. A cross-sectional survey was carried out among the attendees of patients visiting cervical cancer screening centre in Mahabubnagar, Telangana from May 2020 to June 2020. A total of 60 participants were selected by convenient sampling. Data was collected using a pretested questionnaire. Out of a total of 60 participants, nearly two-third (63.3%) women had some knowledge regarding cancers and less than half were aware of breast cancer (45%). Among those who were aware (27), more than three-fourth did not know about symptoms of breast cancer (77.8%) and had not undergone any breast cancer screening (77.7%). Also, nearly half of the participants among these were unaware of breast cancer (44.4%). It is necessary to increase community participation through social mobilization by engaging the human resources at the grass root level.

Keywords: Breast cancer, Knowledge, Awareness, Rural, South India

INTRODUCTION

Globally, breast cancer is the most common type of cancer diagnosed in women with around 2.1 million new cases getting diagnosed every year. It contributes to around 15% mortality.1 It has been found that breast cancer is not painful and does not cause any discomfort initially. Usually, it gets presented as a painless lump for which detection at earlier stages is very important by launching intensive screening campaigns.2 It accounts for 19% to 34% of all cancer cases among Indian women.3 In India, it is the second most common cancer and its incidence in rural areas is twice that in urban.4 Geographically, there are variations in its incidence with the highest rates being in north-eastern states and metropolitan cities like New Delhi and Mumbai. This variation is mainly due to demographic, reproductive, anthropometric and lifestyle factors.5 In women aged below 50 years, it is known as early-onset breast cancer and is very aggressive with poor prognosis while late-onset breast cancer is caused in women aged 70 years and above.1

As there is a paucity of studies regarding the assessment of awareness and knowledge about breast cancer, so this survey was conducted to assess the existing levels of cancer awareness to plan comprehensive health programs, early detection and carrying out treatment campaigns.

METHODS

A cross-sectional survey was carried out among women residing in Mahabubnagar, Nagarkurnool and Wanaparthy districts of Telangana from May 2020 to June 2020. A total of 60 participants who accompanied the patients attending...
the cervical cancer screening centre in Mahabubnagar were involved in the survey and were selected by convenient sampling. Data was collected using a pretested questionnaire.

RESULTS

Out of the total participants, three-fourth (75%) had an age between 40 years to 50 years. Around three fourth (76.6%) of them were married. Also, more than two-thirds had no formal education (70%).

Out of a total of 60 participants, nearly two-third (63.3%) women had some knowledge regarding cancers and less than half were aware of breast cancer (45%). Among those who were aware (27), more than three-fourths did not know about symptoms of breast cancer (77.8%) and had not undergone any breast cancer screening (77.7%).

Table 1: Sociodemographic details.

| Variables               | Frequency | Percentage (%) |
|-------------------------|-----------|----------------|
| Age categories          |           |                |
| 40-50                   | 45        | 75             |
| 51-60                   | 13        | 21.6           |
| >60                     | 2         | 3.4            |
| Marital status          |           |                |
| Unmarried               | -         | -              |
| Married                 | 46        | 76.6           |
| Widow                   | 12        | 20             |
| Divorced                | 2         | 3.4            |
| Educational status      |           |                |
| No formal education     | 42        | 70             |
| Primary school completed (1-5) | 6 | 10 |
| Middle school completed (6-8) | 3 | 5 |
| High school completed (9-10) | 5 | 8.3 |
| Higher secondary school completed (11-12) | 3 | 5 |
| Degree and above        | 1         | 1.7            |

Also, more than half of the participants among these were unaware of breast cancer (55%). Almost all participants answered that nulliparous women had a higher risk of developing breast cancer but none of them had any idea about family history. Out of 27 participants, 17 did not know about the availability of the nearest health centre for seeking treatment for breast cancer. Nearly one-fourth responded that they would visit district hospital (6) while two each said they would seek care from a private facility and Hyderabad general hospital.

Table 2: Awareness regarding breast cancer among rural women those who had heard of breast cancer (N=27).

| Variable                                            | Frequency | Percentage (%) |
|-----------------------------------------------------|-----------|----------------|
| Do you know any symptoms of breast cancer?          |           |                |
| Don’t know                                          | 21        | 77.8           |
| Painless breast lump                                | 6         | 22.2           |
| Do you know someone who has breast cancer?          |           |                |
| None                                                | 12        | 44.4           |
| Mother                                              | -         | -              |
| Sister                                              | 5         | 18.6           |
| Aunt                                                | 2         | 7.4            |
| Neighbour                                           | 2         | 7.4            |
| Friend                                              | 3         | 11.1           |
| Friend of friends                                   | 1         | 3.7            |
| Relative                                            | 2         | 7.4            |
| Have you undergone any past breast screening?       |           |                |
| Self                                                | 1         | 3.7            |
| Doctor or at facility                               | 5         | 18.6           |
| No                                                  | 21        | 77.7           |

Table 3: Awareness of risk factors for breast cancer among rural women (N=60).

| Variable                                            | Frequency | Percentage (%) |
|-----------------------------------------------------|-----------|----------------|
| Do you know family history of breast cancer is risk of developing breast cancer? |   |                |
| Yes                                                 | 7         | 11.7           |
| No                                                  | 53        | 88.3           |
| Do you know older age is risk of developing breast cancer? |   |                |
| Yes                                                 | 31        | 51.7           |
| No                                                  | 29        | 48.3           |
| Do you know early menstruation is risk of developing breast cancer? |   |                |
| Yes                                                 | 9         | 15             |
| No                                                  | 51        | 85             |

Continued.
| Variable | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Do you know nulliparity is risk of developing breast cancer? | | |
| Yes | 35 | 58.3 |
| No | 25 | 41.7 |
| Do you know obesity is risk of developing breast cancer? | | |
| Yes | 18 | 30 |
| No | 42 | 70 |
| Do you know hormonal level or use of hormonal tablets is risk of developing breast cancer? | | |
| Yes | 4 | 7 |
| No | 56 | 93 |
| Do you know smoking is risk of developing breast cancer? | | |
| Yes | 12 | 20 |
| No | 48 | 80 |
| Do you know unhealthy diet is risk of developing breast cancer? | | |
| Yes | 21 | 35 |
| No | 39 | 65 |

DISCUSSION

Of the total, 38 women had some knowledge regarding cancers and less than half were aware of breast cancer (45%) which is consistent with other community-based studies carried out in different parts of India.6-8,9 Among those who were aware (27), more than three-fourth did not know about symptoms of breast cancer (77.8%) which is higher than other studies carried out in India.7 This might be due to lack of adequate information and perceived social stigma regarding the same and in this way, they put their lives in danger by not getting screened and treated. This study shows that knowledge regarding risk factors was very less among rural women. Almost all participants were aware that nulliparous women were at more risk of having breast cancer which is consistent with a study conducted in Mumbai, India which showed nulliparity increases the chance of having breast cancer by three times.10 However, awareness about the risk factors like family history, smoking, hormonal level and early menstruation was low among the participants and it shows relevance with other studies conducted in India.10 Majority of the participants had not undergone any kind of screening which might be due to a lack of proper knowledge and education regarding examination of breast cancer and this is found to be consistent with other studies.11 In our study, one participant responded that she did self-examination but when asked to demonstrate, she was not up to the mark. Out of the 27 participants, 17 did not know about the availability of the nearest health centre for seeking treatment for breast cancer which is due to emotional barriers rather than health-seeking behaviour among Indian women. This can only be eliminated by regressive awareness campaigns.12

CONCLUSION

The morbidity and mortality due to breast cancer are increasing very rapidly, particularly in rural India. Women who are residing in rural South India have very little knowledge regarding breast cancer. It is necessary to increase community participation through social mobilization by engaging of accredited social health activists (ASHAs), anganwadi workers (AWW) and auxiliary nurse midwives (ANMs) for increasing the awareness and knowledge about the risk factors and importance of early screening of Breast cancer.

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