
ORIGINAL ARTICLE

Study on awareness about women centric cancer among urban women in India

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ABSTRACT

The two leading causes of premature mortality among females in India are breast and cervical cancer. The incidence and mortality rates are significantly high among Indian females due to late diagnosis. Early detection via awareness and screening can reduce the morbidity and mortality rates. In this study to emphasize on the need of awareness, education and participation in preventing these cancers, we have performed a cross-sectional study to screen 150 females aged between 18-65 years. Participants were asked to fill a questionnaire to assess their knowledge about these cancers. The results depicted that women are familiar with breast cancer but only some have knowledge about cervical cancer. We also found a positive attitude of participants towards the awareness program but lack of knowledge about the breast self-examination. The study establishes the necessity of screening programs focused on breast and cervical cancer awareness to prevent and control these diseases.

Keywords: Awareness; Screening; Breast cancer; Cervical cancer; Early detection; Cancer control

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INTRODUCTION

This study evaluated the awareness and attitude about breast self-examination practice among Indian women. The study establishes the need of screening programs focused on breast and cervical cancer awareness to prevent and control the deadly disease. Cancer incidence has been increasing at a rapid rate globally. The World Health Organization (WHO) in 2015 released a report which stated that out of 56.4 million deaths globally, 70% deaths were linked to non-communicable diseases (NCDs), amongst which 8.8 million deaths (22%) were due to cancer. The number of new cancer cases is predicted to rise by 22 million within the next two decades and 13 million deaths are estimated to occur by 2030 due to cancer [1]. Cancer is now the second leading cause of death, and breast cancer has the highest incidence rate (11.7%) worldwide among all cancers in both sexes [3]. According to GLOBOCAN 2018, India, United States and China contribute to one-third of the global burden of breast cancer. Increasing burden of cancer poses a major public health challenge in India, where 1,62,468 breast cancer cases and 1,43,000 cervical cancer cases are reported per year (as per ICMR Report, 2019). In India these two cancers have the highest incidence rate (14% for breast cancer and 8.4% for cervix cancer) among all cases in both sexes [3], and accounts for 40 to 50% of total cancer burden in women. Among women, cervix (also known as cervical) and breast cancer accounts for the major cause of death. Breast cancer is the most common cancer and has the highest mortality. In India the highest incidence of breast cancer is observed in urban women and the mortality rate is also highest in women for this cancer. As per the recommendations of the American Institute for Cancer Research (AICR) some cancers are preventable by behavioural and lifestyle changes [1]. Research has shown the correlation between breast cancer and smoking [2]. Poor knowledge about the risk factors, preventive features and symptoms of the disease

leads to late detection. Cervical cancer is the second most common cancer in Indian women with highest incidence in rural women and stands second in mortality among women. Unhygienic practices in rural women are the major cause for high incidence of cervical cancer. Knowledge and safe practices regarding cervical cancer is limited in women especially in rural women. Attitude towards the cervical cancer screening is also low in urban women. Although the incidence of cancer is high in developed countries, they have a low rate of mortality due to high levels of awareness, regular screening and early detection. In developing nations, the lack of awareness and screening results, late diagnosis and presentation of the disease to doctors lead to higher mortality[3]. Cancer prevention programmes do exist in developing nations like India, but they have failed to implement it effectively, or logistical and social problems have become barriers in meeting the objectives of the programmes[4]. There is a need to determine the reasons for barriers in screening and early diagnosis especially for women centric cancer. Previous reports have suggested several factors associated with late detection of cancer. Inadequate or lack of knowledge is one major common factor reported across the world in low- and middle-income countries and developing nations. Poor knowledge about breast cancer and self-examination was seen in rural Egyptian women [5]. Negative perceptions or wrong beliefs associated with breast cancer prevention have been observed among university students in Turkey [6] and Jordan [7]. Perceived threats and action cues are reported as major barriers for cervical cancer screening in rural women of Ghana [8]. In India, besides lack of knowledge, fears and misperceptions are reported as barriers to screening [9] which are responsible for late presentation of the disease and high mortality rate. In some findings, women had awareness about breast cancer but the knowledge about symptoms, risk factors and practice of breast self-examination was poor [10, 11]. Low level of awareness was associated with less education and low socio-economic status in some areas of Delhi in India [12]. Geospatial variations across the districts in India have been observed for cervical and breast cancer screening [13]. Thus, reasons for barriers to screening in India vary with region and societies. According to WHO, 30% of cancer deaths are preventable by changing lifestyle patterns and health behaviours. Community outreach and sensitization will aid in promoting the cancer prevention programme. Furthermore, population-based surveys can be of help in identifying the barriers to screening programmes and early diagnosis. Such studies will help to reduce the incidence rate of breast and cervical cancer in India. Screening and HPV vaccination are key tools to avoid new cervical cancer detected every year. Despite the ongoing cancer control program by the Health ministry the cases of cancer specifically breast cancer is on the rise in urban India. Prevention and awareness have been neglected in our health system. Thus, there is an urgent need to address the issues that prevent these women from taking up screening for women centric cancer. Raising general awareness among the public about the severity and magnitude of the women centric cancer and the ways to control the disease is key requirement for the success of the cancer control program. Additionally, such population-based surveys assist in modifying key strategies to be incorporated in the effectiveness of the health policies. This study is an attempt to assess the status of knowledge about women centric cancer and the screening measures and tests among working urban women in India. The collected data is useful for evaluation and planning the ongoing programme.

MATERIAL AND METHODS

Subjects

This cross-sectional study aimed at assessing the level of general knowledge about breast and cervical cancer, early symptoms, screening tests and frequency to perform self-examination among urban women in India. Keeping in view the diversity in India, a random sampling strategy was adopted. Consent was taken from each individual.

Study population

A total of 150 females between the age group 18 to 65 years from different parts of the country participated in the study.

Data Collection

A pretested questionnaire was used to collect the information online. Privacy and confidentiality of the participants was retained.

Statistical analysis

The data was entered in MS excel 2013 version. Data was presented as frequency (%) using descriptive analysis in SPSS software. Chi square test was calculated to determine the association between awareness, self examination practice and selected demographic variables.

RESULTS AND DISCUSSION

Socio demography of participants

A total of 150 women from urban India participated in the present study designed to understand the status of awareness about breast and cervical cancer in women. The mean age of participants was 39 years, with the range of 18 to 65 years as shown in figure 1. Among them 25% women were into higher studies, 55% were working and 20% were housewives. 70% women were married and 30% were unmarried (Figure 2).

Awareness about breast and cervical cancer

Figure 3 depicts the general awareness about breast and cervical cancer and unexpectedly 5% women were not aware about cancer. Surprisingly 10% of the participants did not know that cervical cancer is cancer of the cervix. The source of information was gathered from different mediums and 35.1% had obtained information from family or friends, 28% from the internet 13% from health workers, 10% from newspapers and others acquired the information from television and radio (Figure 4).

Symptoms known other than tumor

24.8% of women were aware of symptoms other than tumor growth. Unexpectedly, 26% were totally unaware of other symptoms while 49.2% had partial knowledge about symptoms (Figure 5).

Knowledge about screening tests and breast self examination (BSE)

Surprisingly, among urban women 25.7% had no idea about screening tests for cervical and breast cancer (Figure 6). 26.6% urban women were unaware about breast self-examination while 73.4% had knowledge about BSE (Figure 7), and out of them only 35% performed BSE (Figure 8). The frequency to perform BSE regularly was found to be less. Only 19.2% perform BSE every 3 months, 15.2% in every 6 months and remaining once a year (Figure 9). Cancer related mortality is high in developing nations due to diagnosis of the disease in the late stage. India is a vast country with varied geography, climate, culture and traditions. Moreover, the literacy and socio-economic status also varies in different states. Although these factors are different in various regions of India, the common factor associated is the lack of knowledge and familiarity with the disease and preventive measures. We included 150 women in this study from different regions of the country. Majority of them are in higher studies and working. Surprisingly 5% were not aware about cancer and 10% participants had no idea about cervical cancer being cancer of the cervix. Breast cancer being the commonest cancer has higher awareness than cervical cancer. Few previous studies in India had reported about the level of awareness for breast cancer which was found to be 67% [14] and 73.8% [15]. Whereas, other studies have reported quite poor knowledge about cervical cancer ranging as low as 3.6% [16] to 55% in urban areas [17, 18]. These studies associated education level and economic strata with the awareness, while our study participants had a sound educational background. Most known symptom was a lump in the breast and 26% were not aware about other symptoms, similar reported in a previous study [19]. Poor awareness level in urban women regarding the women centric cancer is a serious issue which needs to be addressed. In our survey 25.7% women were unaware about screening tests available for breast and cervical cancer. In line with our study, a survey carried out in North Bengal suggested that the majority of the study participants were unaware about the cause, symptoms and preventive measures for cervical cancer [20]. Similarly, a study conducted among women in Puducherry proposed that less than half of the participants were aware about cervical cancer and only one third of them knew about symptoms [21]. Awareness about breast self-examination was fair enough in 74%, but unfortunately 65% women do not perform BSE. Lack of knowledge about BSE and low practice of BSE even after knowledge is a major hindrance in early diagnosis of the disease. Similar findings were also observed by various studies, where even educated women [22] and teachers [19, 23] did not perform BSE in their lifetime. Interventions are required to solve such problems at community level. A study by Shankar et al has shown the outcome of a cancer awareness drive in school teachers in India. They have highlighted the increase in awareness after pre-test and post-test studies conducted during cancer awareness drive [24]. Nearly 75% of our study participants expressed their interest in cancer awareness workshops and hence, lack of awareness and motivation was found to be a major barrier in early detection. Conducting cancer awareness drives in rural as well as urban areas is required in each state in regional languages also. There is a need for health education so as to sensitize the public both in rural and urban areas about different aspects of diseases, particularly cancer. Such initiative will be of great help in the successful execution of the ongoing programmes for cancer prevention and control.

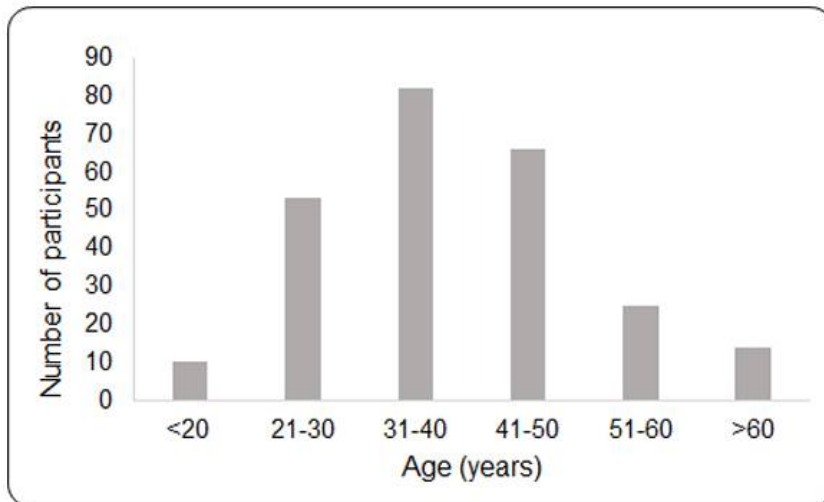


Figure 1. Age of women participants in the study.

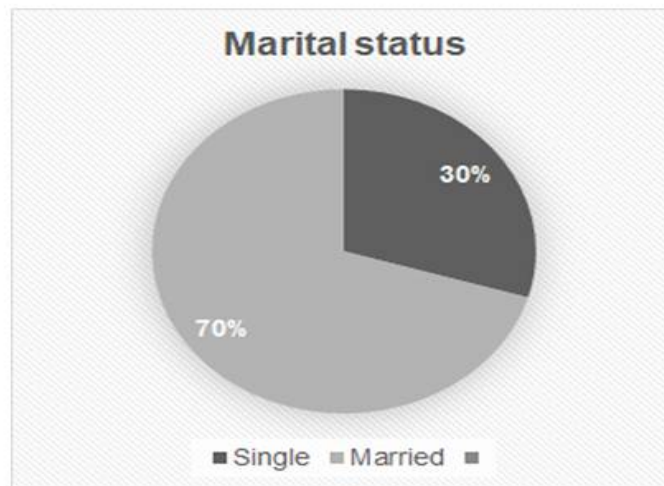


Figure 2. Marital status of women participants.

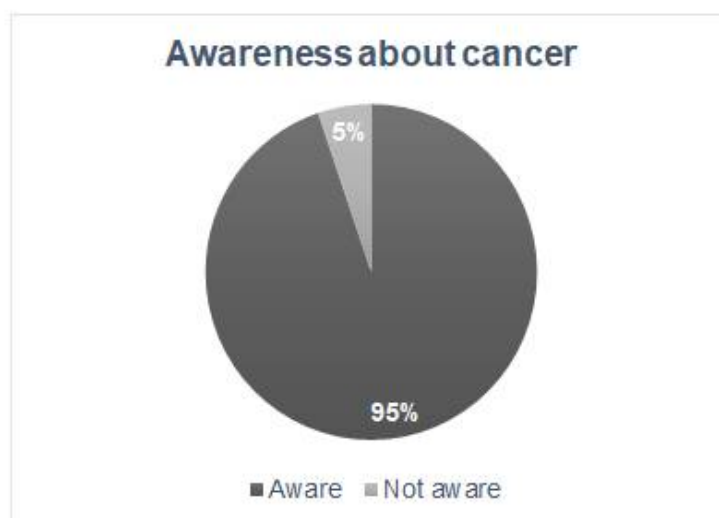


Figure 3. Awareness about cancer in urban women.

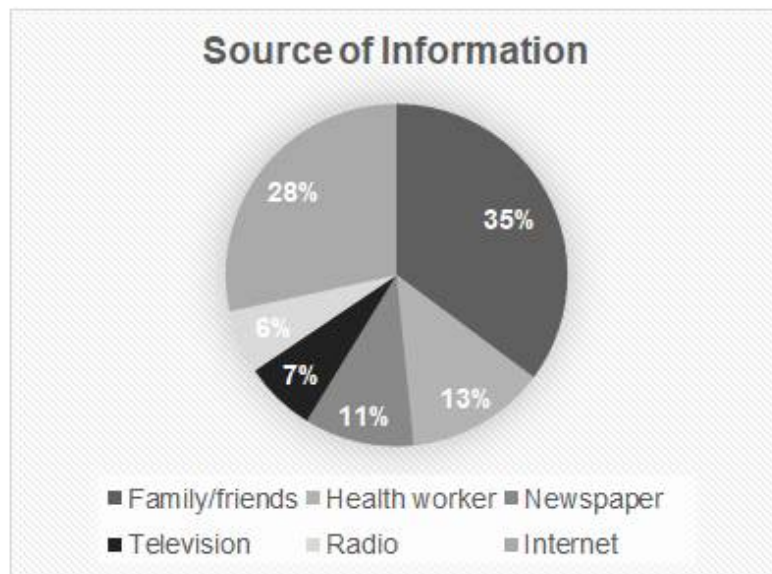


Figure 4. Source of information about breast and cervical cancer.

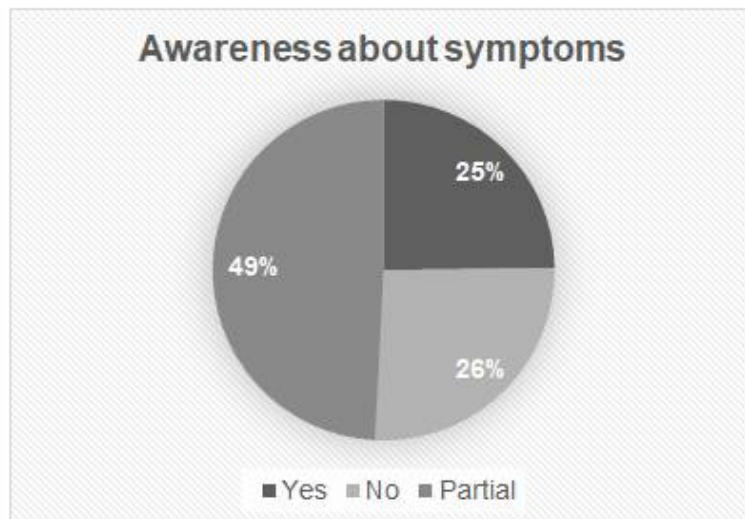


Figure 5. Awareness about symptoms of breast and cervical cancer other than tumor or lump.

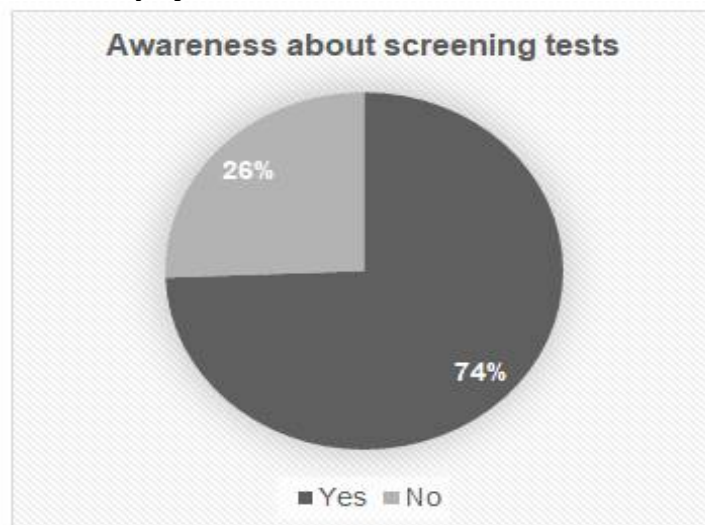


Figure 6. Percentage of participants with knowledge about screening tests.

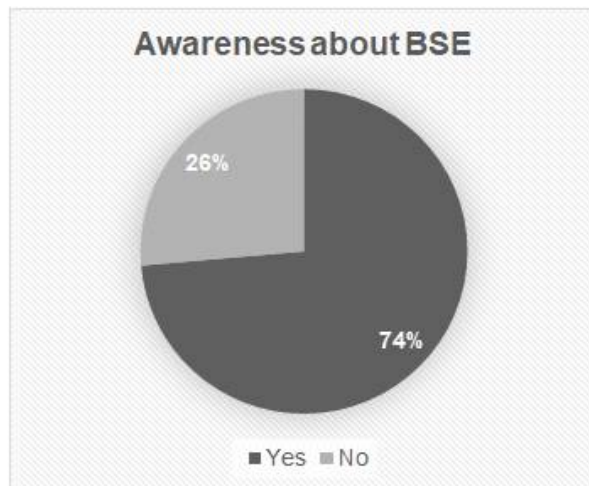


Figure 7. Percentage of participants aware about breast self-examination (BSE).

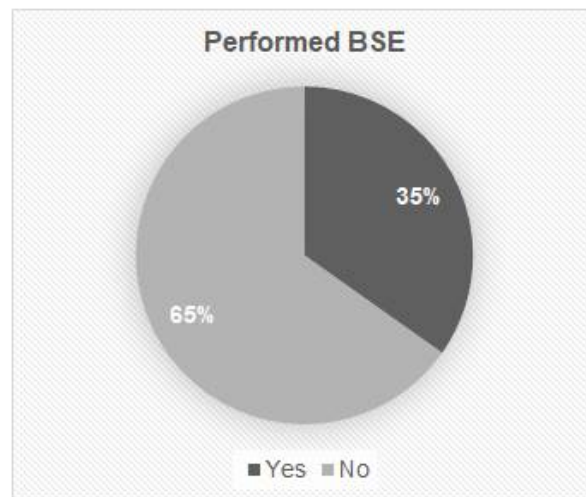


Figure 8. Percentage of participants who performed BSE.

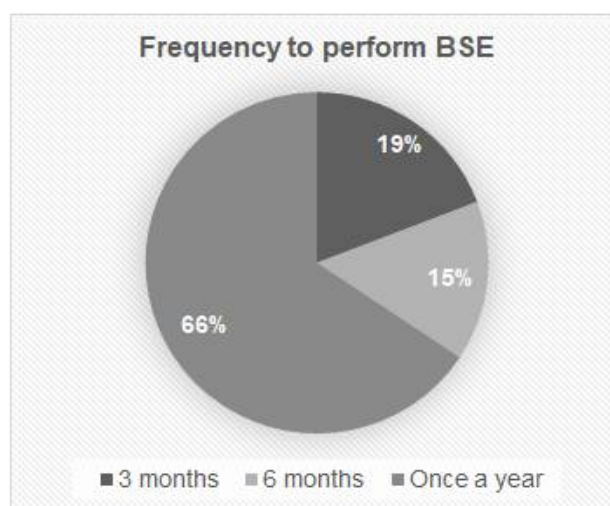


Figure 9. Frequency to perform BSE among participants.

CONCLUSION

Our preliminary study suggests that even urban Indian women lack sufficient knowledge about the signs and symptoms. Additionally, lack of attitude towards breast self-examination and screening interventions is also observed. Further, the positive attitude of respondents for cancer awareness

workshops clearly reflects the willingness and enthusiasm among women to educate themselves and thwart the rising incidence of the disease in India which is a vast country comprising of the second largest population in the world. Such rapid and effective awareness programs in different states and regions will not only create awareness and change in attitude of the female population towards screening programs but will be a boost as prevention strategy to contain both these cancers.

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Compliance with Ethical Standards

Conflicts of Interest: The authors declare no conflict of interest.

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