

Short Communication

A cross sectional study on awareness about cancer screening methods for breast and cervical cancer in women of reproductive age from Jhansi, Uttar Pradesh

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ABSTRACT

Background: Non-communicable diseases (NCDs) are responsible for 63% of all deaths in India of which 9% are due to cancers according to the World Health Organization (WHO) global profile 2018. One in eight men and one in eleven women have a premature risk of dying from cancer before the age of 75. To reduce the morbidity and mortality due to the disease early diagnosis of disease and risk factors by regular screening of asymptomatic people is recommended. Objectives of the study were: to assess the awareness about methods for breast and cervical cancer screening among women of reproductive age, and to assess their readiness to go for screening.

Methods: In a health awareness session on cancer screening among women of reproductive age the participants (104 women) were given a self-designed questionnaire which was administered before the session. The questionnaire covered general awareness about cancer, the symptoms and the methods of screening for breast and cervical cancer. The results were expressed in frequency and percentages.

Results: The mean age of participants was 29.8 years (range 21 years-45 years). 88% felt that early diagnosis would improve outcome. Only 11% had heard of Pap test and only 3 had gotten it done. Around 21% had heard about mammography and only 4% had heard about breast self-examination. 86% and 90% were ready to get themselves screened for cervical cancer and breast cancer respectively, if given the opportunity.

Conclusions: This study highlights both the lack of knowledge and the high acceptance of cancer screening among women. Awareness campaigns at regular intervals backed by immediate access to screening facilities are required to address the problem.

Keywords: Breast cancer, Cervical cancer, Screening, BSE, Mammography, PAP smear test

INTRODUCTION

Non-communicable diseases (NCDs) are responsible for 63% of all deaths in India of which 9% are due to cancers. According to World Health Organization (WHO) global profile 2018).¹ The risk of dying from cancer before the age of 75 years in 12.5% (1 in 8) in men and 8.9% (1 in 11) in women globally.²

According to Globocon 2020 statistics in India 6.78 lakh women were newly diagnosed with cancer and 4.13 lakh women died of cancer.³ Of the newly diagnosed cases 1.78 lakhs (26.3%) had breast cancer and 1.23 lakhs (18.3%) had cervical cancer.³ According to American Society of Clinical Oncology (ASCO) if invasive cancer is located only in the breast the 5-year survival rate is 99% and only 66% women are diagnosed at this stage. If cancer spreads to the regional lymph nodes the 5-year survival drops to 86% and when there is distant metastasis the survival is a dismal 28%.⁴ The 5-year survival rate for cervical cancer

are 92%, 58% and 18% for local, regional and distant metastasis respectively.⁵ The importance of early diagnosis cannot be over emphasized. To reduce the morbidity and mortality due to the disease early diagnosis of disease and risk factors by regular screening of asymptomatic people is recommended.⁶ So, the present study was planned to assess the awareness of women of reproductive age about screening methods for breast and cervical cancer and their readiness to go for screening if facilities are made available.

METHODS

This cross-sectional study was conducted in September 2019. A health education session to increase awareness on cancer screening methods was arranged and to assess the previous knowledge of participants they were requested to fill a self-designed, self-administered questionnaire in Hindi before the session. They were explained the purpose of the study to assess their knowledge about screening methods. Only those who voluntarily participated were enrolled. Out of 121 women who attended the session 104 gave consent and participated. The questions included their sociodemographic details, general awareness about cancer and specifically about screening methods for early diagnosis of breast and cervical cancer. They were assured of confidentiality and written informed consent was taken from those who participated in the study. 104 women participated in the study. Permission from organizers of the health education session and from Institutional Ethical Committee was taken prior to study. Data was entered in excel sheets and results expressed in frequencies and percentages.

RESULTS

The socio demographic profile of the women surveyed are mentioned in the Table 1. In the present study 50% women out of 104 were above 30 years of age, 71% were Hindus, 38% were graduates, 88% were homemakers and 57% had 2 children. Around 12% patients had a cancer patient among family and friends. Out of 41 participants who responded to source of information about cancer, internet was the major source of information (71%) followed by information from doctors (27%), the other sources were TV, newspaper and friends and family.

Table 1: Socio-demographic characteristics of the participants.

Variable and categories	Number	%
Age (years)		
<30	52	50
≥30	52	50
Religion		
Hindu	74	71.15
Sikhs	27	25.96
Muslim	2	0.02
Christian	1	0.01
Education (n=82)		
Intermediate	36	34.62
Graduate	39	37.5
Post graduate	7	6.73
Not answered	22	21.15
Occupation (n=94)		
Home maker	91	87.5
Service	3	2.88
Not answered	11	9.62
Income (n=59)		
a	4	3.84
b	56	53.85
c	3	2.88
d	1	0.01
Not answered	41	39.42
Children		
0	13	12.5
1	29	27.88
2	53	50.96
3	9	8.66
History of cancer in family/friends (n=100)		
Present	12	12
Absent	78	78
Source of information (n=41)		
Internet	29	70
Doctor	11	26.83
Friends and family	7	6.73
TV	8	19.50
Newspaper	5	12.20

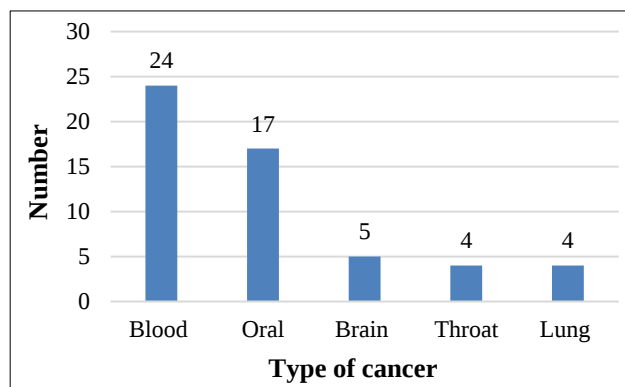


Figure 1: Most common cancer in men.

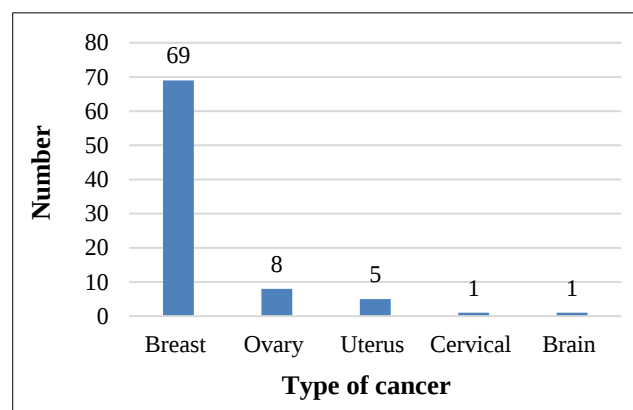


Figure 2: Most common cancer in women.

Table 2: General awareness about cancer.

Questions	Yes	No	Don't know
Is cancer treatable?	68	22	14
Can early diagnosis improve survival?	67	10	27
Does a diagnosis of cancer mean death?	22	68	14
Is cancer preventable?	55	18	31
Are these screening facilities available at government hospital free of cost?	62	10	32

Table 3: Knowledge about screening methods for cancer.

Question	Yes Number (%)	No Number (%)	Don't know/blank Number (%)
Heard of BSE	4 (3.84)	92 (88.46)	8 (7.7)
Want to learn about BSE	62 (59.62)	8 (7.7)	34 (32.68)
Heard about mammography	18 (17.31)	62 (59.62)	24 (23.07)
Want to get mammography done	59 (56.73)	5 (4.8)	40 (38.47)
Heard about PAP smear	9* (8.65)	84 (80.77)	11 (10.58)
Want to get it done	70 (67.31)	11 (10.58)	23 (22.11)

*4 had gotten a pap smear done

Table 2 shows that 68% people felt that cancer was treatable, 67% felt that early diagnosis can improve survival. Only 22% felt that having a cancer meant that the patient will not survive. More than half (55%) the patients felt that cancer is preventable. 62% participants responded that government hospitals had facilities for cancer screening which were free. Figure 1 shows the most common cancer in males according to the knowledge of the participants were blood cancer (24%) followed by oral cancer (17%) and in females the most common cancer was named as breast cancer (69%) followed by ovarian tumour (8%) as shown in Figure 2.

Table 3 shows the awareness of participants about the screening methods. Regarding awareness among participants about screening methods only 4% had heard about Breast self-examination although 60% wanted to learn about it and practice it. Around 17% had heard about mammography and 56% were ready to get it done if facilities were given. Only 8.65% had heard of Pap smear and approximately two third were ready to go for the test.

DISCUSSION

The study highlights the lack of knowledge about screening methods which is a cause for concern as early diagnosis reduces the mortality and morbidity and clearly improves the prognosis. In a study from North-Eastern India a total of 34% of participants were aware of cancer screening. Among those who were aware of cancer screening, only six people had undergone any form of cancer screening.⁷ In contrast to earlier studies the present study shows 4%, 9% and 17% were aware of BSE, PAP smear and mammography respectively as a screening tool breast and cervical cancer. In a community-based mobile cervical cancer-screening program in rural India out of 3,821 registered women, 3,544 (92.8%) accepted screening.⁸ In the present study two third were ready to go

with screening by PAP smear. The study also brings out the readiness of women to go for screening tests which is a positive finding. In another systematic review knowledge, attitude and practice regarding cervical cancer screening among women was seen in 20.31%, 43.64% and 13.22% of women respectively.⁹ A study in over 6000 health care professionals, The knowledge, attitude, and practice toward screening for cervical cancer was 86.20%, 85.47%, and 12.70%, respectively.¹⁰ In a recently published systematic review on observing the practice of screening methods in study participants, 14 out of 15 studies reported that only 27.37% of the women practiced BSE, while practice of CBE and mammography was even lower 16.71% and 7.12% respectively.¹¹ While the knowledge was good, attitude was correct but practice was still poor. In contrast however, a study from coastal Karnataka showed 81.8% women were aware of breast self-examination, 75% were practicing breast self-examination 72% were aware of mammography and 39% had gotten it done.¹² In the present study 60% were ready to learn BSE and 56% wanted to get mammography done.

Media has been mentioned as the major source of information in the participants for information on cancer screening.⁶ In the present study too, internet was the main source of information.

CONCLUSION

The present study focusses specifically on the information about screening methods for prevention. While there may be information about the disease in general population as shown by many studies, the information about what one can do to reduce the impact of the disease by screening is lacking. The awareness about the screening methods to reduce mortality and morbidity needs to be spread not only from social media platforms but from all clinics and hospitals and screening should be offered at subsidized

rates even in private clinics to increase the number of women who can get themselves screened.

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