

CANCER SCREENING AWARENESS AMONG NURSING STAFF IN GOVERNMENT MEDICAL COLLEGE: A PROSPECTIVE STUDY

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ABSTRACT

BACKGROUND

Cervical and breast cancers are the common malignancies among female population in India. Though there are approved screening methods available to prevent and detect these cancers at an early stage, there is a lack of awareness about cancer screening among general public as well as the health care professionals. This study is aimed to identify the knowledge, attitude and practice (KAP) among the nursing staff regarding cancer screening in these two diseases.

METHOD

A cross-sectional interview based survey was conducted among 303 female nursing staff working in a government medical college hospital from November 2015 to December 2015. Ethical committee approval was taken. Verbal informed consent was sought from the study subjects. Nursing staff who gave consent to participate in the study were enrolled. There were no specific inclusion or exclusion criteria for the study subjects. A structured pretested questionnaire regarding knowledge, attitude and practice (KAP) was used to collect the data. The questions were open-ended. Recall and recognition type of questions were used. The data was entered into MS Excel worksheet and analysed using descriptive statistics.

RESULTS

Total of 303 nurses included in the study. The age ranged from 21 to 64 years. Median age is 38 years. Only 24.4% (74/303) of Nurses were aware of cancer screening and many of them were aware of Pap smear (55.1%, 167/303) and mammogram (66.3%, 201/303) as investigational tools in diagnosing cancer. Only 17 out of 303 (5.6%) nurses had Pap smear test done with an average of 1.23% Pap smear per individual. Mammogram screening was done in 13% (15/115) of the eligible nurses with an average of 1.2% mammogram per individual. The most common reason for not undergoing screening as expressed was they did not feel the need to be screened unless they were symptomatic (55%), they are too young for screening (14.8%), shyness (11.1%), fear (11.1%) and lack of time (7.4%). However, 90% of them were willing to undergo screening if conducted by the institute. The limitation of this study is small number of subjects; this may not represent the view of nursing staff in general. Large multi-institutional studies have to be undertaken to assess KAP among the nursing staff regarding cancer screening.

CONCLUSION

This data suggests that levels of knowledge and practice of cancer screening are very poor among nursing staff working in government medical college hospital. Cancer screening program should also include health care professionals in addition to general population.

KEYWORDS

Cancer Screening, Nurses, Cervical Cancer, Breast Cancer.

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INTRODUCTION: Cervical cancer is the most common cancer seen in women with an estimate of 468,000 new cases annually, and 80% of them are seen in developing and undeveloped countries.⁽¹⁾ India accounts for one-fifth of the world burden of cervical cancer.⁽²⁾ Every year more than one lakh new cases are detected and account for 20% of all female deaths in India.^(3,4) Majority of them present to the

clinic with advanced stage, where chance of cure is reduced.⁽⁵⁾

Among all malignant tumours, cervical cancer can be most effectively controlled by organised screening programs.⁽⁶⁾ Hence, the key to reducing cervical cancer morbidity and mortality is early detection and treatment of precancerous lesions. Similarly, Breast Cancer is also one of the common cancers seen among urban women and less common in rural women.⁽⁷⁾ Breast cancer is on the rise in India with 100,000 new cases annually and about 30,000 women dying from breast cancer.⁽⁸⁾ Early detection of breast cancer through screening is the only means to reduce the burden of morbidity and mortality.⁽⁹⁾ By creating awareness and providing knowledge, to general public and health care

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professionals, regarding available screening methods these two cancers can be prevented, detected and treated early.

To have a successful cancer control program, nursing staff must be aware of facts about cervical and breast cancer and screening tests themselves. Nursing staff play an important role in this regard. Lack of knowledge about cancer screening among nurses can pose substantial barriers to cervical control program in India and other developing countries. Hence, the study is undertaken to assess the knowledge, attitude and practice (KAP) among the nursing staff regarding cancer screening about these two diseases.

MATERIAL AND METHODS: A cross-sectional interview based survey was conducted among 303 female nursing staff working in a government medical college hospital from November 2015 to December 2015. Ethical committee approval was taken. Verbal informed consent was sought from the study subjects. Nursing staff who gave consent to participate in the study were enrolled. There were no specific inclusion or exclusion criteria for the study subjects. A structured pretested questionnaire regarding knowledge, attitude and practice (KAP) was used to collect the data. The questions were open-ended. Recall and recognition type of questions were used. Recall questions allow the questioner to check their understanding usually by going back to something mentioned earlier. They can also be open, closed or probing questions and often have a specific factual answer. This requires the respondent to recall some information from memory, a fact. Whereas recognition type of questions involves testing memory and perception that do not require depth of perception. Questions were short, clear, and understandable to the nursing staff. The questionnaire was pretested initially on a small group of randomly selected staff nurses and subsequent modifications were made before the final study was undertaken. The data was entered into MS Excel worksheet and analysed using descriptive statistics.

RESULTS: Total of 303 nurses included in the study. The age ranged from 21 to 64 years. Median age is 38 years. Nurses who were aware of cancer screening were 24.4% (74/303). However, many of them were aware of Pap smear (55.1%, 167/303) and mammogram (66.3%, 201/303) as investigational tools in diagnosing cancer. The utilisation of Pap smear among nurses was 5.6% (17/303) with an average of 1.23% Pap smear per individual. The utilisation of mammogram among the eligible nurses was 13% (15/115) with an average of 1.2% mammogram per individual (Table 1). The most common reason for not undergoing screening was that nurses did not feel the need to be screened unless they were symptomatic (55%). The other reasons given were they are too young for screening (14.8%), shyness (11.1%), fear (11.1%) and lack of time (7.4%). However, 90% of them were willing to undergo screening if conducted by the institute.

Questions	Numbers (%)
Do you know about cancer screening?	
Yes	74/303 (24.4%)
No	229/303 (75.6%)
Do you know about pap smear?	
Yes	167/303 (55.1%)
No	136/300 (44.9%)
Have you undergone PAP smear test?	
Yes	17/303 (5.6%)
No	286/303 (94.4%)
How many times have you undergone PAP test?	
Once	12/17
Twice	5/17
>=Thrice	0
Do you know about mammogram?	
Yes	201/303 (66.3%)
No	102/303 (33.7%)
Have you undergone mammogram?	
Yes	15/115 (13%)
No	100/115 (87%)
How many times have you undergone mammogram test?	
Once	11/15
Twice	4/15
>=Thrice	0/3
Reason for not undergoing screening?	
I did not feel the need to be screened	167/303 (55%)
Young for cancer screening	46/303 (14.8%)
Shyness	34/303 (11.1%)
Fear of bad result	34/303 (11.1%)
Lack of time	22/303 (7.4%)
Table 1: Questionnaire Format and Response	

DISCUSSION: With the rising incidence of cancer in India and disproportionately higher mortality, it is important to create awareness among health workers regarding cancer screening. Cervical and breast cancers are the common cancers in Indian females.^(1,7) It is well established that both these cancers if detected early can reduce the morbidity and mortality from this disease.^(6,9) Development of cervical cancer from pre-invasive lesions can be prevented by appropriate screening.⁽⁶⁾ An assessment of existing levels of cancer awareness is a prerequisite for planning comprehensive cancer detection/prevention program.⁽¹⁰⁾

This study showed only 25% of nurses are aware of cancer screening and more than 50% of them knew Pap smear and mammogram as a tool to diagnose cancer but not as cancer screening methods. The utilisation of Pap smear and mammogram was very low (5.6% and 13%). Similarly Yaren A et al reported that 72% nursing staff were aware of Pap smear and only 16.6% of them underwent a

Pap smear test. However, in this study nurses were aware of breast cancer screening. In this study by Yaren et al, 125 out of 160 nurses participated. The risk factors and symptoms of breast cancer was generally well known, except for early menarche (23.2%) and late menopause (28.8%). For cervical cancer, the correct risk factors mostly indicated by the nurses were early age at first sexual intercourse (56%), smoking (76%), and multiple sexual partners (71.2%). As for screening methods, it was believed that Breast self-examination was a beneficial method to identify the early breast changes (84.8%) and Mammogram was able to detect the cancer without a palpable mass (57.6%). Little was known about the fact that women should begin cervical cancer screening approximately 3 years after the onset of sexual intercourse (23.2%) and if repeated pap smear tests were normal, it could be done every 2-3 years. Most of the nurses considered that mammogram decreases the mortality in breast cancer (65.6%) and also believed that Pap smear test decreases the mortality in cervical cancer (75.2%).

Despite high level of knowledge of breast cancer risk factors, symptoms and screening methods, inadequate knowledge of cervical cancer screening methods were found among nurses.⁽¹¹⁾ More disappointing low level of Pap smear test was reported from developing countries by Shekhar et al, 7% in Indian nurses and 5.5% by Udigwe et al among Nigerian nursing staff.^(12,13) All these reports showed very low levels of undergoing screening test. In the study done by Shekhar et al the results are similar to what we have shown in our study. In the study by Shekhar et al 77% respondents knew that Pap smear is used for detection of cervical cancer, but less than half knew that Pap smear can detect even precancerous lesions of cervix. Only 23.4% knew human papilloma virus infection as a risk factor.

Only 26.7% of the respondents were judged as having adequate knowledge based on scores allotted for questions evaluating knowledge about cervical cancer and screening. Only 17 (7%) of the staff nurses had themselves been screened by Pap smear, while 85% had never taken a Pap smear of a patient. Adequate knowledge of cervical cancer and screening, higher parity and age >30 years were significantly associated with self-screening for cervical cancer. Most nurses held a view that Pap test is a doctor's procedure, and nearly 90% of nurses had never referred a patient for Pap testing. The most common reasons given by nurses for not undergoing screening were they did not feel the need to be screened unless they were symptomatic (55%), they are too young for screening (14.8%), shyness (11.1%), fear (11.1%) and lack of time (7.4%). However, 90% of them were willing to undergo screening if conducted by the institute. This study highlights the lack of knowledge about cancer screening among nursing staff. Hence, measures have to be taken to educate them about cancer screening program.

The limitation of this study is small number of subjects; this may not represent the view of nursing staff in general. Large multi-institutional studies have to be undertaken to assess KAP among the nursing staff regarding cancer

screening. To have a successful cancer control program, nursing staff must be fully aware of cancer screening tests.

Furthermore, negative attitude towards and inaccurate knowledge of cancer screening methods among health care providers, especially among nurses can pose substantial barriers to cancer control program.

CONCLUSION: Data from this study suggest that levels of knowledge and practice of cancer screening are very poor among nursing staff working in government medical college hospital. Cancer screening program should also include health care professionals in addition to general population.

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