

Awareness and Acceptance of Screening Methods of Cervical Cancer in Gynaecological Patients

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Abstract

Aims and Objectives: To assess the awareness and acceptance of screening methods of cervical cancer.

Materials and Methods: A cross sectional study was conducted among 500 gynaecological patients of the age group of 20-50 years at Bebe Nanaki Mother and Child Care Centre, Government Medical College, Amritsar. Data were collected using a predesigned questionnaire which included specific sections to test the participant's knowledge and practices related to cervical cancer and its screening.

Results: The mean age of the participants was 35.06 years. A total of 60 (12.0%) participants had knowledge of cervical cancer while only 35(7.0%) participants had underwent Pap test previously. The study also showed strong association between the participants knowledge of cervical cancer with the educational status ($p=0.01$), socioeconomic status($p=0.01$)and the living area, whether rural or urban ($p=0.01$).

Conclusion: Poor knowledge about cervical cancer in women of reproductive age group highlights the need for education, communication strategies and screening programmes to reduce the phobia and improve the level of awareness among women on cervical cancer.

Keywords: Cervical cancer, Screening, Knowledge, Awareness, Acceptance, India.

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Introduction

Cancer cervix is a potentially preventable disease and is the second most common cancer among women after breast cancer worldwide. In contrast to developed countries, cancer cervix is a major public health problem in developing countries like India. India alone accounts for one –quarter of the worldwide burden of cervical cancers. [1, 2] Approximately 311000 women died from this disease in 2018 worldwide, of which 60078 died in India. About 25% of global m

ortality due to cervical cancer occurs in India. [3,4,5]. The high burden of cervical cancer in developing countries, like India, is due both to a high prevalence of HPV infection and the lack of effective cervical cancer screening programmes. In cases where effective screening programmes are available, poor knowledge and negative health-seeking behavior of the population have led to poor utilization of such services. [6] Although there has been an increase in centers

providing screening over the recent years, it's still not commensurate with the number of patients availing themselves, of their use. This leads to patients presenting with advanced disease thereby increasing both the morbidity and mortality and putting undue strain on available health facilities and resources. [7]

Cervical cancer is the second most common cancers among women worldwide after breast cancer. It is the only cancer in which early diagnosis of precancerous lesions can be done by a very simple and sensitive test that is, paps test. Knowledge of the women about cervical cancer risk factors and awareness about its screening are the key factors that may decrease the mortality and morbidity caused by cancer cervix. Most of the cases of cervical cancer in India are diagnosed very late, because of lack of awareness about risk factors and screening methods, resulting in fatal outcome.

Materials & Methods

This prospective clinical study was carried out in the Department of Obstetrics and Gynaecology in Amritsar Medical College from Jan 2020 to August 2021, after taking approval from the Institutional Ethical Committee. The study selected 500 women randomly among the patients attending the Gynaecology OPD who met the inclusion criteria.

Inclusion criteria included women in the age group 20-50 years old females with/without complaint of vaginal discharge, abnormal uterine bleeding and postcoital spotting.

Postmenopausal females, pregnant women and women with history of cervical neoplasia and post treatment/ post radiotherapy were excluded from the study.

After taking informed consent of enrolled patients, detailed history was taken. Awareness about Cancer cervix, its risk factors were asked as per performa. Knowledge about Pap test and acceptance were noted. Counseling about screening of Cancer cervix by Pap/LBC was done. Those who accepted screening were tested by Pap/LBC test. Patients were subjected to per speculum examination after evacuating bladder. Per speculum findings were noted. Pap smear was taken at squamocolumnar junction with Ayer's spatula rotated in clockwise direction for 360° and was spread on glass slides. Smear sample was fixed in 95% ethanol and 5% ether or liquid base cytology sample was collected by using a brush like device rather than a spatula. Head of the device was broken off into a vial of preservative fluid. Sample was transported to pathology laboratory where sample was processed by BD Surepath, LBC machine. Cases with abnormal cytological finding were subjected to wedge biopsy. Wedge biopsy was taken from the most suspected area on the transformation zone of the cervix. Biopsy sample was fixed in 10% formalin solution and sent to pathology laboratory where it was routinely processed and stained in haematoxyl in and eosin stain. The reporting of PAP smears was done according to Bethesda 2014 classification. Data was collected and statistically analyzed to assess the awareness of cancer cervix, its risk factors, screening methods and the awareness and the prevalence of cervical cancer in the gynaecological population.

Results

The results of our study have been described below. Direct biopsy was taken in 2 patients bypassing Pap smear as they had frank growth on per speculum examination.

Table 1: Respondant's Sociodemographic Characters (n=500):

Variables		Frequency(percentage)
Age(years)	≤30	170(34%)
	31-40	254(50.80%)
	41-50	76(15.20%)
Area	Rural	229(45.8%)
	Urban	271(54.20%)
Religion	Sikh	301(60.20%)
	Hindu	191(38.20%)
	Christian	3(0.6%)
	Muslim	5(1.0%)
Socioeconomic status	Lower	260(52%)
	Upper lower	148(29.60%)
	Lower middle	74(14.80%)
	Upper middle	18(3.60%)
Occupation	Homemakers	407(81.40%)
	Working	93(18.60%)
Education	Uneducated	82(16.40%)
	Upto primary	244(48.80%)
	Middle And Higher Secondary	126(25.20%)
	Higher Education	48(9.60%)

Table 2: Respondant's Awareness and Acceptance About Cervical Cancer and its Risk Factors

Variables	Frequency	Percentage
Knowledge of Cervical Cancer	Yes	60(12%)
	No	440(88%)
Knowledge about risk factors	Yes	33(6.60%)
	No	467(93.4%)
Awareness of diagnosis by screening methods	Yes	28(5.6%)
	No	472(94.4%)
Had underwent Pap test previously	Yes	35(7%)
	No	465(93%)
Acceptance For Screening Test for Cervical Cancer	Yes	479(95.8%)
	No	21(4.20%)
Willingness for undergoing periodic screening	Yes	407(81.4%)
	Not sure	93(18.6%)

The study found that adequate knowledge and positive attitude were associated with three sociodemographic characteristics: socioeconomic status, level of education and area whether rural or urban (p value <0.05). Women with less education were less likely to have enough information regarding cervical cancer, its mode of transmission, and the availability of screening tests. This demonstrates that

the low level of education of the underprivileged and lack of opportunity for pursuing knowledge ultimately leads to poor health-seeking behavior.

Discussion

Progress in the understanding of cervical cancer has helped recognize its preventable nature. It is well established that HPV vaccination and adequate

screening can reduce the burden of the disease to a great extent. For effective screening and prophylaxis, it is of utmost importance to understand the knowledge, perceptions, and beliefs of the population especially that of the healthcare staff as they constitute an important source of propagation of health-related information. Many studies conducted in the developing countries have shed light on the level of understanding and knowledge of the population, which could provide useful information to the healthcare systems to develop appropriate educational strategies. In the present study an attempt was made to evaluate the knowledge and awareness of cervical cancer and the attitude towards the vaccination and awareness programs among the females.

In our study, vast majority of the population (88%) had no knowledge about cervical cancer. Out of the 12 % women who had knowledge about cervical cancer, majority of the women (65%) gained this knowledge through health professionals. Only 6.6% women had heard about the risk factors of cervical cancer while only 2.8% women had knowledge about precancerous stage and that if detected early, cervical cancer is totally preventable and curable. 5.6% women were aware of diagnosis of cervical cancer by screening methods. 93% women had never undergone pap smear testing for cervical cancer while only 1.25% women had heard about HPV vaccination. Majority of the women (95.8%) accepted the screening test for cervical cancer while 81.4% women were willing for undergoing periodic screening of pap smear.

In some other studies done on cervical cancer screening, Narayana et al [8] conducted a study in which 74.6% women were aware of cervical cancer and the major source of knowledge was media in 41.7% cases. 62.8% women had knowledge about the risk factors of cervical cancer while 76.9% women were aware about the diagnosis by screening

test. 74.7% women had heard of HPV vaccination and 13.4% women had previously undergone pap smear testing earlier. Majority of the women (62.5%) had a positive attitude on acceptance of cervical cancer screening methods. In another study by Shreshtha et al [9], it was observed that 58.1% women had good knowledge about cervical cancer and the major source of information was TV in 26.6% cases. A large proportion of the women (66.4%) accepted cervical cancer screening methods. In a study by Minhas S et al [10], 28% of the women had knowledge about cervical cancer and social media was the source of knowledge in 10% women. Only 3% of the women knew about the screening of cervical cancer and only 1% had heard about HPV vaccination. Majority (89%) of the women were willing for cervical cancer screening programme.

The study found association between sociodemographic characteristics with adequate knowledge of cervical cancer and its risk factors, positive attitude and acceptance of screening tests and regular practice toward cervical cancer. We found that adequate knowledge and positive attitude were associated with three sociodemographic characteristics: socioeconomic status, level of education and area whether rural or urban (p value < 0.05). Women with less education were less likely to have enough information regarding cervical cancer, its mode of transmission, and the availability of screening tests. This demonstrates that the low level of education of the underprivileged and lack of opportunity for pursuing knowledge ultimately leads to poor health-seeking behavior. These findings are parallel to the other studies conducted on cervical cancer screening by Narayana G et al [8], Shreshtha et al [9], Minhas S et al [10] and Kumar H et al. [5] In this study no correlation was associated with area of residence with the acceptance of screening test. [11]

The study provides insights into the Awareness and acceptance of women about cervical cancer screening and attributable demographic characteristics. This data is useful to design educational program on cervical cancer screening and prevention to bring awareness in women. Although our study has various advantages, there are various limitations also. The sample size was small and larger studies should be undertaken for better evaluation. The responses were based on recall and not validated by the respondent's medical records. This may lead to recall bias. Also, it was conducted only in one center, and therefore, the results cannot be generalized to the gynaecological patients at other institutions in the country.

The findings of the current and already reported studies demonstrate that continuing medical education programs at the community level should be initiated as soon as possible, along with seminars that emphasize the significance of knowledge regarding cervical cancer, its prevention, and its vaccination. If females are provided with appropriate information regarding cervical cancer and its prevention, they can educate the rest of the population, and therefore, raise the health-seeking attitude among females in the country. Furthermore, more emphasis should be placed on the role of media and health care professionals. Proper education provided by health care professionals about cervical cancer is essential to decrease the mortality and morbidity rate associated with cervical cancer.

Conclusion

Cervical cancer is a major public health problem especially in the developing countries. The Key to reduce the burden of cervical cancer is early detection with timely treatment. Repeated campaigns through mass media and personal house visits by the health workers to disseminate knowledge on various aspects of cervical cancer and screening, and efforts at

various levels of health system directed at prevention and control of cervical cancer can improve the cervical cancer screening uptake by the community. There is a need to uplift such cervical cancer screening services so that more women can access them irrespective of where they reside. Planned communication aiming eligible women, complete availability of screening services in public health facilities may increase the acceptance of screening. There is a need for more educational programs to channel identified knowledge slits and scale up of regular practice of cervical cancer screening in women.

Compliance with Ethical Standards:

- All procedures performed in the study involving human participant were in accordance with the ethical standard of the institutional and/or National Research Committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.
- This article does not contain any studies with animals performed by any of the authors.
- Informed consent were obtained from all individual participants included in the study.

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