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KNOWLEDGE, ATTITUDE, AND PRACTICE ABOUT THE SCREENING OF CERVICAL CANCER AMONG WOMEN IN A RURAL AREA OF SHIMLA, NORTH INDIA

KEY WORDS:

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ABSTRACT

Objective: To assess the knowledge, attitude, and practice about the screening of cervical cancer among women in a rural area of Shimla, North India.

Materials and Methods: A cross-sectional study was conducted in the month of November 2021 to evaluate the knowledge, attitude, and practice about the screening of cervical cancer among the women visiting the outpatient department at Community Health Center Mashobra, Shimla. Appropriate tests for statistical analysis were used.

Results: 310 women were willing to participate in the study. The mean age of women in the study was 41.27 ± 3.21 years. Most of the participants had completed 10 years of education (190, 61%). The majority of study participants were married (91.6%, 284). 166 study participants (53.5%) were married at the age of ≤20 years. Only 160 women (51.6%) had heard of cervical cancer. The participants had a mean knowledge score of 2.21 ± 0.46. It was significantly higher in working women and students.

The most common symptom known to women in this study was foul-smelling vaginal discharge (72, 23.2%), followed by post-coital bleeding (68, 21.9). The most well-known risk factor was the history of sexually transmitted diseases (30, 9.6%), followed by multiple sexual partners (15, 4.8%). Only 76 women (24.5%) ever heard of cervical cancer screening, and 69 women (22.2%) ever heard of Pap smear. Only 23 women (7.4%) were aware of cervical cancer vaccination. 278(90%) women were in favor of women not bearing 5 or more children to increase family strength. 209 women (67.4%) were willing to be screened for cervical cancer if offered a free cervical cancer screening.

CONCLUSION: We need to raise awareness among women regarding risk factors, vaccination, screening of cervical cancer and overcome barriers to having a Pap test such as fear and embarrassment.

INTRODUCTION

In the modern era, there is a rising epidemic of non-communicable diseases, with cancer being the second leading cause of death globally. Approximately 10 million deaths worldwide in 2020 were attributed to cancer.[1] Cervical cancer is the second most common cancer among women in India and the second most common cancer among females between 15 and 44 years of age.[2]

Most cases of cervical cancer are found to be associated with carcinogenic human papillomavirus (HPV) infection. About 5.0% of females in are estimated to harbor cervical HPV-16/18 infection at a given time, and 83.2% of invasive cervical cancers are attributed to HPVs 16 or 18.[2] The other factors influencing the occurrence of cervical cancer include early menarche, the interval between menarche and first sexual intercourse, high parity early age at marriage, promiscuous sexual habits, reproductive factors such as genital hygiene, history of sexually-transmitted infections, & smoking.

The peak incidence of HPV infection in females occurs after initiation of sexual activity in their twenties. Early invasive cervical cancer usually occurs after ten years of persistent HPV infection. Women may remain asymptomatic for many years after acquiring HPV infection, providing a window to detect the pathological changes by various screening methods, e.g., Pap smear. So, it is possible to decrease morbidity and mortality associated with cervical carcinoma by early detection and treatment at preinvasive stages.

The objective of this study was to assess the knowledge of women about the symptoms, risk factors, attitudes, and practices of women toward cervical cancer screening.

MATERIALS AND METHODS

A cross-sectional study was conducted at the Community Health Center, Mashobra, Shimla, the capital of Himachal Pradesh, a small state in North India. This study was conducted during the month of November 2021 to evaluate the knowledge, attitude, and practice about the screening of cervical cancer among 390 women visiting the outpatient department at Community Health Center Mashobra, Shimla.

Exclusion criteria: Women who were not willing to participate in the study and females under 21 years of age. Women with a diagnosis or having a history of cervical cancer in the past were also excluded from the study.

Purposive sampling was used. The questionnaire, designed by the authors, was initially developed in English and later on translated to Hindi, a language understandable by the participants. After obtaining written informed consent, the questionnaire was administered for the data collection, which was voluntarily filled out by the women attending the outpatient department at CHC Mashobra. It was used to assess the knowledge of cervical cancer with respect to the symptoms, risk factors, screening methods, and vaccination. The attitude towards cervical cancer patients and screening tests were also assessed.

The patients were assured regarding the confidentiality and secrecy of the information provided by them. The *variables* in this study were knowledge, attitude, and practice of females regarding the screening of cervical cancer. The females in this study were also educated and counseled regarding cervical screening and warning symptoms of cervical cancer at the end of the interview.

The participants' response to each question related to their knowledge about cervical cancer was allocated a score of 1 for every correct answer. The cumulative scores ranging from 0 to 12 were calculated for every woman about cervical cancer knowledge. The collected data were analyzed with regard to the information given by the patients according to the set questionnaire items at the end of 1 month study period. Appropriate tests for statistical analysis were used.

RESULTS

A total of 390 women were approached for this study, and 310 females out of 390 females were willing to participate in the study. The mean age of women who participated in the study was 41.27 ± 3.21 years (ranging from 21 years to 70 years).

Most of the participants had completed 10 years of education (190, 61%), 19% (60 women) had 12 years of education, 10% (30 women) had 15 years of education, 7% (20 women) had 5 years of education, and only 10 women (3%) were illiterate. Homemakers comprised 66.5% (206 women), working women 26.5% (82), and students 7% (22) of the study participants. The majority of study participants were married (91.6%, 284). One hundred sixty-six study participants (53.5%) were married at the age of ≤20 years. Five women (1.6%) reported a family history of cervical cancer. Out of a total of 310 participants, only 160 women (51.6%) had ever heard of cervical cancer. The women in this study had a mean knowledge score of 2.21 ± 0.46. The knowledge score was significantly higher in working women and students.

Table 1 Knowledge About Symptoms, Risk Factors & Screening Of Ca Cervix

Knowledge about symptoms	***n***	**%**
Intermenstrual bleeding	54	17.4
Foul-smelling vaginal discharge	72	23.2
Postmenopausal bleeding	34	10.9
Post-coital bleeding	68	21.9
Knowledge about risk factors		
HPV infection	8	2.6
Multiple sexual partners	15	4.8
Coitus at an early age	12	3.9
History of Sexually transmitted disease	30	9.6
Multiple pregnancies (>5)	12	3.9
Knowledge about cervical cancer screening		
Heard of cervical cancer screening	76	24.5
Ever heard of the Pap smear test	69	22.2
Vaccine available for cervical cancer	23	7.4

The most common symptom known to women in this study was foul-smelling vaginal discharge (72, 23.2%). The most well-known risk factor was a history of sexually transmitted diseases (30, 9.6%). Only 76 women (24.5%) ever heard of cervical cancer screening, and 69 women (22.2%) ever heard of Pap smear, but the fact that Pap smear is a tool for cervical cancer screening was not known to all. Only 23 women (7.4%) were aware of cervical cancer vaccination.

Table 2 Attitude Towards Cervical Cancer

Attitude	***n***	**%**
Intermenstrual bleed should not be considered normal	213	68.7
A woman should delay childbearing till 21 years of age	104	33.5
Women should not bear five or more children	278	89.7
Women should be examined by a gynecologist at least once in 3 years	189	60.9
You would not maintain distance from a lady suffering from ca cervix	164	52.9
If you were offered a free PAP test would you would be willing to be screened	209	67.4

According to 213 (69%) women, intermenstrual bleeding should not be considered normal. 104 (33.5%) women said that a woman should delay her first child till the age of 21 years. 278(90%) women were in favor of women not bearing five or more children to increase family strength. 189 women (61%) realized the importance of gynecological examination at least every three years. 164 (52.9%) women would not keep a distance from a neighborhood female suffering from cervical cancer. 209 women (67.4%) were willing to be screened for cervical cancer if offered a free cervical cancer screening.

DISCUSSION

Due to lack of access to diagnosis and treatment, late-stage presentation of cancer is common, particularly in low- and middle-income countries. Since over eighty percent of cervical cancer cases occur in developing countries, including India, increasing importance has been given to controlling cervical cancer. Cancer cervix is preventable, and one of the key aspects in prevention is early detection of the premalignant lesions by screening.[3] But it is worrying about finding a low level of awareness about cancer cervix and Pap smear screening among the rural population.

In our study, out of a total of 310 participants, only 160 women (51.6%) had ever heard of cervical cancer. Women scored very poorly on the knowledge score, and it was quite alarming as sufficient knowledge is an important determinant of positive attitude and practice. In spite of introducing the National Cancer Control Programme in India, the low knowledge level among the study participants could probably be because the primary health care facilities are often overburdened and under-resourced.[4]

Treatment initiated at an early stage of cervical cancer is more cost-effective, and can help in reducing the overall morbidity and mortality associated with cervical cancer. Without creating adequate awareness, understanding of risk factors, vaccination, and routine cervical cancer screening, we may not be able to create behavior change in the general population. In this study, 67.4% of women were willing to be screened for cervical cancer if offered a free cervical cancer screening.

To really have an impact, we need to create awareness among women in rural areas through peripheral health workers, including ASHA workers, for self-care and encourage the development of a positive attitude towards cervical cancer screening & vaccination.

CONCLUSION

Cervical cancer is completely preventable. In our study participants, there was inadequate knowledge about cervical cancer screening & risk factors, particularly in those with low education levels. However, women in this study had an overall positive attitude towards cervical screening services, and they were receptive to the information provided about cervical cancer. We need to raise awareness among women regarding risk factors, vaccination, screening and overcome barriers to having PAP tests such as fear and embarrassment.

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