

Knowledge and Attitude towards Cervical Cancer and its Prevention among Women in Urban Area of Himachal Pradesh

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Abstract: Cervical cancer is the fourth most frequent cancer in women worldwide and India cost one - third of the worldwide disease burden. Cervical cancer is preventable if detected in pre - cancerous stages and Pap smear and HPV vaccination are two available methods for early diagnosis and prevention of cervical cancer. The knowledge of cervical cancer and its prevention is low in developing countries and hence, this study was conducted in the urban region of Himachal Pradesh to assess the knowledge and attitude of women towards cervical cancer and its prevention. The result show low level of knowledge of cervical cancer and its prevention in women attending the hospital.

Keywords: Cervical cancer, knowledge, attitude, prevention, Pap smear, HPV vaccine

1. Introduction

Cervical cancer (CC) is one of the important gynecological cancers which continue to be the significant global health problem worldwide affecting middle - aged women. ^[1]It is the fourth most frequent cancer in women worldwide, with 604 000 new cases and 342 000 deaths in 2020. ^[2]Cervical cancer, a preventable and treatable disease, is still a leading cause of mortality among women in developing countries. Global disparities for this disease are unmatched. Almost 84% of all new cases and 88% of mortality occur in resource - limited countries; a figure that is two to four times higher as compared with high - resource countries. ^[3] As per GLOBOCAN 2020 statistics, 1, 23, 907 new cases were diagnosed and 77, 348 lost their lives in India alone. ^[4]

Statistical data of cervical cancer deaths skewed toward developing countries in which India constitutes one - third of the disease burden on a global scale. ^[5, 6] Sexually transmitted human papillomavirus (HPV) 16, 18 are the key etiological agents for cervical cancer infecting young females with an age - standardized incidence rate of 21.99 (per 100, 000) in India. ^[7] The low median age of marriage, lack of routine screening in the vulnerable female population, inadequate knowledge of cervical cancer, and its prevention pooled together spiked the risk and incidence rates especially in transitioning economies. ^[8, 9]

In 2020, WHO launched the global Cervical Cancer Elimination Initiative to accelerate the elimination of cervical cancer, aiming to reduce incidence below a threshold of 4 cases per 100000 women - years in every country and thus narrow international disparities associated

with this disease. The 90–70–90 target set by the initiative to be achieved by 2030 requires 90% of girls to be vaccinated by age 15 years, 70% of women to be screened with a high - performance test at least two times by age 45 years, and 90% of women identified with cervical precancer or cancer to be treated. The WHO elimination strategy has emphasized the need for continuous and improved surveillance and monitoring for cervical cancer as a fundamental step forward for action that will enable program managers to identify gaps and take specific actions. ^[10] Cervical cancer is a preventable disease, and both screening with Pap tests and vaccination against the human papillomavirus (HPV) are important strategies for its prevention. When detected early through regular Pap smears, the five - year survival rate for cervical cancer can be as high as 92%. ^[11] The HPV vaccine has been shown to be highly effective in preventing the types of HPV that are most commonly associated with cervical cancer by up to 90%. ^[12]

There is paucity of studies about awareness of cervical cancer and its prevention in northern India and thus, we conducted this study in an urban hospital of Shimla, Himachal Pradesh to assess the knowledge and attitude of women attending the hospital towards cervical cancer and its prevention.

Aims and Objectives

To assess the knowledge and attitude of women towards cervical cancer and its prevention in an urban hospital

2. Materials and Methods

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A cross sectional study was conducted in northern India in a Zonal Hospital in Shimla, Himachal Pradesh from 1st January 2023 to 30th April 2023 to assess the knowledge and attitude of women towards cervical cancer and its prevention. A total of 250 women were enrolled in the study after informed consent. A preformed questionnaire in Hindi and English was handed over to the women to be filled. The questionnaire contained open and close ended questions about cervical cancer signs and symptoms and methods of prevention.

The questionnaire had three parts - The first part contained demographic characters including age, parity, socioeconomic class and education. The second part contained questions about knowledge and attitude towards cervical cancer signs and symptoms and the third parts contained questions about preventive methods.

Inclusion criteria: 1. Sexually active women > 21years of age 2. Women who gave informed consent for the study

Exclusion criteria: 2. Women < 21yrs of age 2. Women who did not give informed consent.

3. Results

The age group ranged from 21 to 59 years of age with an average age of 43.4years. The parity ranged from

nulliparous to previous 5 live births. Majority women were educated up to high school (83.2%) and 78.4% were homemakers. Majority of women (51.6%) belonged to upper middle class according to BG Prasad socioeconomic scale, 2022.

Table 1: Demographic characteristics of women in the study

Characteristics	Groups	No. of Women	Percentage (%)
Age (years)	21 - 30	52	20.8
	31 - 40	63	25.2
	41 - 50	91	36.4
	51 - 59	44	17.6
Parity	Nulliparous	32	12.8
	P1	54	21.6
	P2	87	34.8
	P3	46	18.4
	P4	22	8.8
	P5	9	3.6
Education	Middle school	87	34.8
	High school	121	48.4
	>High School	42	16.8
Profession	Home maker	196	78.4
	Professional	54	21.6
Socioeconomic Class	Upper	41	16.4
	Upper Middle	129	51.6
	Middle	35	14
	Lower Middle	28	11.2
	Lower	17	6.8

Table 2: Knowledge about signs and symptoms of cervical cancer

Question asked	Women who answered correct (n)	Percentage
Is cervical cancer a problem in India?	168	67.2
Is abnormal menstrual bleeding like intermenstrual bleeding, post coital bleeding a symptom of cervical cancer?	143	57.2
Is foul smelling vaginal discharge a symptom of cervical cancer	97	38.8
Is infection a risk of cervical cancer?	78	31.2
Is early marriage or early age of sexual activity a risk of cervical cancer	76	30.4

Table 3: Knowledge about cervical cancer prevention

Questions asked	Women who answered correctly (n)	Percentage
Is cervical cancer preventable?	132	52.8
Do you know any test for early diagnosis of cervical cancer?	148	59.2
Have you ever had a Pap smear?	89	35.6
Is testing available in Himachal Pradesh?	119	47.6
Is testing free of cost?	109	43.6
Should testing be done even after menopause?	67	26.8
Do you know of any vaccine for prevention of cervical cancer?	69	27.6
Do you know the age group of vaccination?	43	17.2
Is the vaccine available in India?	54	21.6
Is the vaccine a part of NIP free of cost?	58	23.2
Is the vaccine 100% effective?	32	12.8

Table 2 and 3 demonstrate the response of women towards the questionnaire regarding knowledge and attitude towards cervical cancer and prevention of cervical cancer.

67.2% women were aware of cervical cancer. About 60% women were aware of one or the other symptom of cervical cancer. 31.2% and 30.4% were aware that infection and early marriage/sexual activity respectively are risk factors of cervical cancer.

52.8% women were aware that cervical cancer is preventable. 148 women (59.2%) were aware of Pap smear but only 35.6% women had ever undergone a Pap smear. 183 women (73.2%) were not aware that testing should be continued even after menopause till 65 years of age.

Only 27.6% women were aware of HPV vaccination and of all only 17.2% were aware that vaccination should be administered to girls above 9 years of age. 21.6% women were aware that the vaccine is available in India but only 12.8% were aware that the vaccine is not 100% effective.

4. Discussion

Cervical cancer is one of the very few cancers that can be eliminated. With effective screening, vaccination, and concerted efforts, many developed countries have been successful in bringing down cervical cancer rates drastically. ^[13] A national family health survey conducted in 2015 to

2016 estimated lifetime cervical cancer screening prevalence in India to be as low as 29.8%. Screening rates varied among different geographic region from 10.0% in the Northeast Region to 45.2% in the Western Region. [14] However, the data published in WHO—Cervical Cancer Country Profiles estimates that fewer than one in ten women have been screened in India in past 5 years, averaging the screening rates to be less than 2%. [15]

Our study showed alarmingly low rates of knowledge and attitude of cervical cancer and its prevention in women attending our OPD. This may partly be due to over - burden of health facilities and under - resourced facility. [16] Majority of the population is rural and access to health facilities is also limited. Pap smear is a simple procedure and can be performed at all health levels but very few health care workers are trained in Pap smear and VIA. Various myths like possibility of pain and infection during Pap smear also prevent females from accessing the facilities. Many women believe that Pap smear conducted once in a lifetime is sufficient.

Very few women (27.6%) were aware of HPV vaccine in our study. HPV vaccine is not available in the NIP and the vaccine available is costly and not easily available. One strategy to improve vaccination rate is to include the vaccine in NIP and another possible technique is to increase the advertisement for the same to increase awareness.

5. Conclusion

Cervical cancer is a preventable disease and even though the knowledge of cervical cancer, its risk factors and its prevention were low in women in our study, women were perceptive to various methods and majority were willing for Pap smear after understanding all risks and benefits. There is a need to increase awareness of the same in rural areas by means of ASHA worker, Community Health Officers, staff nurses and medical officers at all levels and by actively training the health workers about Pap smear so that all levels of health care are strengthened against cervical cancer. HPV vaccine should be included in the NIP and till then awareness can be increased by advertisements and lectures in pre - adolescent and adolescent age group about healthy sexual habits and HPV vaccine.

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