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Original Research Article

Awareness of cervical cancer among the undergraduate medical students of Churachandpur Medical College, Manipur, India

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ABSTRACT

Background: The incidence of cancer overall is in increasing trends all over the world cervical cancer is the only vaccine preventable cancer. India need robust screening and vaccination program and for this the medical students need to understand and learn about it. This study was done to explore knowledge of cervical cancer among the medical undergraduates so that teaching pedagogy can n be plan based on the previous knowledge of the students which will in turn result in providing better health services to our community.

Methods: The study was a cross-sectional observational study done at Imphal campus of Churachandpur Medical College on all 183 undergraduates medical graduates for duration of 1 month from May 15th, 2024, to June 15th, 2024.

Results: 6 out of 142 students (4%) % of the students have never heard of cancer cervix 10% didn't know that cancer cervix is preventable, 8% didn't know that early detection can be done, 24% did not know about cancer cervix screening, 32% have never heard of pap smear 11% have never heard of HPV vaccine 6% did not know that HPV vaccine can prevent cancer cervix and 35% did not know when is HPV vaccine given.

Conclusions: Our medical students are still lagging, and we have to work on providing and developing educational programs to improve the knowledge and awareness of cancer cervix.

Keywords: Awareness, Cervical cancer, Manipur, Medical students

INTRODUCTION

Cervical cancer is a significant health concern affecting women worldwide. Cervical cancer is the fourth most common cancer in women.¹ The burden of cervical cancer is huge in our country (India). One in every five women in the world suffering from cervical cancer belongs to India.² Every year in India, 96,922 women are diagnosed with cervical cancer and 60,078 die from the disease.³ Age adjusted incidence rate for cervical cancer in Manipur is 6.1 per 1,00,000 population.⁴

It develops in the cells lining the cervix, which is the lower part of the uterus that connects to the vagina. Most cases of cervical cancer are caused by persistent infection with high-risk types of human papillomavirus (HPV), a

sexually transmitted infection. HPV types 16 and 18 causes 70% of cervical cancer and pre-cancer lesions.⁵

In developed countries, cytological screening and prompt treatment of early cervical lesions have led to decrease in incidence and mortality from cervical.^{6,7}

In India, poor literacy, and low level of awareness among Indian women along with lack of facilities of both early detection and screening remains a major area of concern to the health workers.⁸

Healthcare providers play an essential role in imparting knowledge of risk factors and prevention of disease and student doctor are the future pillars of our nation. Awareness about cervical cancer is the basic requirement in the implementation of successful screening program,

which in future help in reducing the incidence of cervical cancer

The aim of the present study was to explore knowledge toward cervical cancer and knowledge, attitude, and practice toward screening of cervical cancer among medical students in Churachandpur medical college, Manipur, India. The objectives of this study were to evaluate the awareness of cervical cancer among medical undergraduates and to study the explore knowledge, attitude, and practice toward screening of cervical cancer.

METHODS

This was a cross-sectional observational study done on all undergraduate’s medical students both phase 1 and phase 2, who are currently studying in Churachandpur Medical College (Imphal Campus) Manipur. And the study was conducted at Churachandpur Medical College, Manipur, which is a newly established rural government medical college located in a rural area of Manipur state for duration of 1 month from May 15th, 2024, to June 15th, 2024. The sample size is 183 students.

Inclusion criteria

Consenting students of phase one and phase two undergraduate medical students studying in Churachandpur Medical college were included.

Exclusion criteria

Students who didn’t give consent for the study, and students who do not response to all the questionnaires were excluded.

Data collection

After informing all the stakeholders, department faculties and students about the project plan, approval was taken from the IEC (institutional ethics committee of JNIMS). Data collection tool in the form of questionnaire was designed and validated

Study was done only after taking Consent from the participating students and the identity anonymity was maintain for all the participating students.

Before the data collection students were given a brief talk about the project and how the result of the project will help the faculties and the college to understand the awareness of cervical cancer and its preventable vaccine among the student community and help the faculties to design classes and awareness base on it. The validated data collection tool in form of validated Questionnaire was administered to the students to determine the level of awareness of cervical cancer and various preventable ways including the vaccines available. The predesigned questionnaire was prepared using various studies related to the topic and

validated. The questionnaire was of two parts-first part was of demographic characteristics while the second part was of epidemiology, ethology, sign and symptoms and treatments and prevention of cervical cancer.

RESULTS

In our study a total of 142 students out of 183 students participated in the study. Out of the 142 students 85 (60%) were female students while 57 (40%) were male students resulting in female male participation ratio of 1.5:1 (Table 1).

Table 1: The ratio of male and female students.

Gender	MBBS students (%)
Female	85 (60)
Male	57 (40)
Grand total	142

In our study the participating students were of age 18 to 29 years of age and the mean age was 21.6 years (Table 2).

Table 2: The average age of the students.

Student age	Grand total
18	3
19	11
20	23
21	41
22	27
23	19
24	9
25	6
26	1
27	1
29	1
Grand total	142

In our study majority of the students 136 (96%) were aware of cancer cervix. While only 6 students (4%) have never heard of cancer cervix. In our study majority of the students 132 (93%) also knew that cancer cervix can be prevented while only 10 (7%) students didn’t know that cancer cervix can be prevented. 130 students (92%) knew that cancer cervix can be detected in early stage while 12 (8%) of the students didn’t know that early detection is possible for cancer cervix. 108 (76%) of the students were aware of the screening while 34 (24%) were not aware of the screening of cervical cancer. 105 (74%) of the students knows about the risk factors of the cancer cervix. (Table 3).

In this study, 97 (68%) have heard about pap smear and 131 (92%) have heard about HPV vaccine and 92 (65%) knows about the vaccination timings and 132 (94%) knew that the HPV vaccine is protective against cancer cervix (Table 3).

Table 3: The response to questionnaire awareness and knowledge of cervical cancer.

Questions	No (%)	Yes (%)
Have you ever heard of cervical cancer?	6 (4)	136 (96)
Is cervical cancer preventable?	10 (7)	132 (93)
Is it possible to detect cervical cancer?	1 (1)	141 (99)
Does early detection of cervical cancer increase survival?	1 (1)	141(99)
Have you heard of screening of cervical cancer?	34 (24)	108 (76)
Do you know the risk factors of cervical cancer?	37 (26)	105 (74)
Have you heard of Pap smear?	45 (32)	97 (68)
Have you heard of HPV vaccine?	11 (8)	131 (92)
Do you know at what age is cervical cancer vaccine given?	50 (35)	92 (65)
Does the HPV vaccine protect against cervical cancer ?	8 (6)	132 (94)

In this study, 116 (82%) of the students thinks that foul smelling most common sign and symptoms of cancer cervix. While 89 (63%) of the students thinks menstrual irregularities as second most common sign of cancer cervix (Table 4).

Table 4: Knowledge regarding signs and symptom of cervical cancer.

Knowledge regarding signs and symptom of cervical cancer	Total no. of students
Foul smelling vaginal discharge	116
Irregular periods	89
Post coital bleed	69
Weight lost	45

About 119 students out of 142 (84%) knows that HPV infection is the risk factor for cervical cancer (Table 5).

Table 5: Knowledge about the risk factors of cervical cancer.

Risk factor of cervical cancer	Total
HPV infection	119
Long term use of OCP	44
Having sex at early age	57
Having multiple sexual partners	83

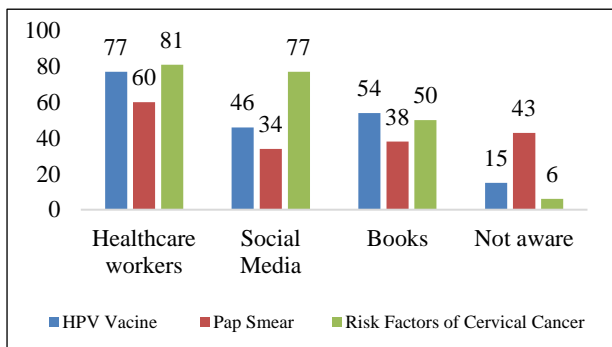


Figure 1: Source of information regarding HPV vaccine, pap smear and risk factors of cervical cancer.

In our study the students knew more about the risk factors, pap smear and HPV vaccine from the healthcare workers.

In the current study majority of the students got the information about the risk factor (54%), pap smear (24%) and HPV vaccine (32%) from the internet (Figure 1).

DISCUSSION

In the present study the participant female to male ratio is 1.5:1 which is much higher than the ratio of 1:0.28 study done by Aga et al. ⁹

The mean age of the participating students in the present study is 21.6 years which much higher than the average age of 18 years in the study done by Manikandan et al. ¹⁰

In the current study 93% of the students knew that cancer cervix is preventable while only 89.6% and 88.6% of the students knew about this in the study done by Pandey et al and Rajiah et al. ^{11,12}

In the current study majority of the students got the information about the risk factor (54%), pap smear (24%) and HPV vaccine (32%) from the internet which is much higher than in study done by Aga et al. ⁹

In the study done by Altamine et al, 33% of the study participants were aware of HPV vaccine and in current study 92% of the students were aware of HPV vaccine and its much higher than earlier reports. ¹³

In our study 94% of the students were having knowledge that HPV vaccine can prevent cancer cervix but only 19% were knowing this fact in the study done by Baloch et al. ¹⁴

The current study was done only phase 1 and 2 medical students of Churachandpur Medical College which included only a small sample size. It represents only a small portion of the medical community so, there is need of large-scale study. This was limitations of this study.

CONCLUSION

Through our study we come to know that lots of our students are not aware of the cancer cervix 24% did not know about cancer cervix screening, 32% have never heard of pap smear and 35% did not know when HPV vaccine is given so, we have to work on providing and developing educational programs to improve the knowledge and awareness of cancer cervix.

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