



STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING SCREENING AND PREVENTION OF CERVICAL CANCER WITH PAP SMEAR AND HPV VACCINATION AMONG HEALTHCARE PROFESSIONALS AT LOK NAYAK HOSPITAL DELHI

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ABSTRACT

Background: Cervical cancer is the fourth most common cancer worldwide occurring most commonly in developing countries like India. HPV virus is the most commonly known causative factor. Health care professionals, as key stakeholders in healthcare delivery, have a critical role in promoting cervical cancer screening and vaccination among women. These two strategies form the crux of reducing the burden of disease in the country. **Objective:** This study aims to assess this group's knowledge, attitudes, and practices to identify areas that need improvement and intervention. **Methods:** The research employed a cross-sectional survey design and collected data from a sample of 538 healthcare professionals working in a tertiary healthcare setting in Delhi. A structured questionnaire with 35 items was used to gather information on participants' knowledge about cervical cancer, awareness of HPV vaccination, attitudes towards screening and vaccination, and their own practices in recommending and receiving these interventions. The data was filled in google form and analysed in with SPSS 25 software. An odds ratio with a 95% confidence interval and p-value <0.05 were used to declare statistical significance. **Results:** Among the 538 respondents, 94.6% were aware of cervical cancer, 65.1% were aware that PAP smear detects cervical cancer, and 58.8% knew that HPV causes cervical cancer. 32.7% of the respondents/their relatives had undergone screening for cervical cancer. Only 28.8% were vaccinated. 92.4% were willing for cervical cancer screening and 90.4% were willing to get vaccinated and recommended vaccination for their family members. **Conclusion:** This study provides valuable insights into health professionals' knowledge, attitudes, and practices regarding cervical cancer screening and prevention through HPV vaccination. This study highlights the need for ongoing education and training programs to improve the same. The findings inform the design of tailored educational programs, healthcare policies, and interventions to enhance healthcare providers' engagement in cervical cancer prevention and reduce the global burden of this disease.

KEYWORDS: PAP Smear, HPV Vaccine, Screening, Cervical Cancer.

INTRODUCTION

Ranking as the fourth most common cancer in women worldwide, cervical cancer's tragic grip tightens,

particularly in India, where it accounts for a quarter of the global burden. Despite being largely preventable, this

disease continues to inflict immense pain and loss, demanding immediate and effective interventions.

GLOBALCON data 2020 estimated 604,000 new cases and 342,000 deaths worldwide in 2020.^[1] Together, China and India bear the brunt of over one-third of the world's cervical cancer cases, with China experiencing the highest number and India's most estimated fatalities.^[2]

Cervical cancer is by far the most common HPV-related disease. About 99.7% of cervical cancer cases are caused by persistent genital high-risk human papillomavirus (HPV) infection.^[3] Most HPV infections clear spontaneously, but persistent infection with the oncogenic or high-risk types may cause cancer of the oropharynx and anogenital regions. Engaging in sexual activity with multiple partners, initiating sexual intercourse at a young age, early childbirth, multiparity, prolonged use of oral contraceptive pills, smoking, poor hygiene, and a genetic predisposition are all factors that contribute to increased risk of acquiring HPV infection.^[4]

Preventing cervical cancer involves a dual approach: vaccination against the human papillomavirus (HPV) and organised population-based screening along with treatment.^[5]

Screening of cervical cancer can be done via VIA/VILI in a low-resource setting, use of a PAP smear, liquid-based cytology, or by co-testing with HPV DNA detection. It can further be confirmed by colposcopy and biopsy. Screening procedures can easily detect the precursor lesions at early stage and treatment can cure the early stage of disease.^[6]

In India, where routine screening of asymptomatic women for cervical cancer is not yet widely implemented, a new hope emerges in the form of HPV vaccination. Both Cervarix and Gardasil, the two prominent HPV vaccines, demonstrate similar efficacy in combating persistent infections caused by the high-risk HPV strains 16 and 18.^[7] To offer optimal protection, HPV vaccination ideally starts between 9 and 12 years old. However, catch up can be given until the age of 26. The vaccine is not recommended for use in pregnancy, however lactating women can receive vaccination. Quadrivalent vaccine can be used in males as well.^[8]

While each intervention alone can significantly decrease mortality rates, a holistic strategy that includes health education, vaccination before initiation of sexual activity, screening for precancerous lesions in women, and timely treatment before progression to invasive disease proves to be the most efficient and cost-effective method for disease control.^[5]

While health workers hold the vital role of educating and guiding their communities in cervical cancer prevention, research reveals a concerning gap in their own

knowledge about the disease. Studies consistently paint a picture of inadequate understanding among healthcare professionals, including female practitioners who act as role models, regarding critical aspects like early diagnosis, prevention methods, and screening protocols. The low screening rates across populations further underscore the urgency of addressing this knowledge gap within the healthcare workforce.^{[9][10][11]}

MATERIALS AND METHODS

Study design, setting and study population

This cross sectional study was conducted in a tertiary hospital in Delhi, India conducted over a period of 6 months from January 2023 to June 2023. A random sample of 538 health providers in the hospital were chosen for this study. Participants above the age of 18 and willing to provide consent to participate in this study were included.

Data Collection

Opting for an online survey provided numerous advantages over traditional paper-based methods. It eliminated the need for physical copies, ensuring a streamlined and eco-friendly approach. Participants also benefited from enhanced privacy, as responses were submitted electronically without revealing personal details. Additionally, data compilation became remarkably easier, streamlining the analysis process.

The survey itself, hosted on Google Forms, was conveniently segmented into clear sections. These covered participants' socio-demographic background, knowledge regarding HPV infection and vaccines, attitude and their practice towards cervical cancer screening and HPV vaccination. Informed consent was obtained prior to data collection, and participants were encouraged to share the survey with other co-workers. The study design assured complete confidentiality, emphasizing that all information would be solely used for the study's purposes.

The survey was created with the help of a Google Form. A Google Limited Liability Company (LLC) tool allows users to provide information via a personalized survey or quiz. The collected data was automatically integrated into a dynamic Google excel sheet linked to the survey form. It was ensured that all registered participants completed the questionnaire.

Variables and Measures

The questionnaire/survey instrument consisted of thirty-six questions/statements on demographic characteristics and information pertaining to the cervical cancer preventive methods. The socio-demographic variables embrace Age, Sex, Profession, Educational Qualification, professional Experience, marital status, number of children, and family history of cervical cancer. The demographics were followed by the questions/statements related to the knowledge on Cervical Cancer, preventive methods of cervical cancer and knowledge on HPV

vaccination. For data collection through this survey on a 3 point Likert scale, the respondents recorded their response on the scale of Yes/ No/'I don't know'. The survey had one question to know reason of not being screened for cervical cancer with responses including lack of awareness, don't know the availability, not willing for screening and one question aimed at exploring the plausible reasons reported for not administering HPV vaccine and the respondents were instructed to record their choices from pre-determined 6 choices/reasons (Lack of awareness/High cost/Fear of side effects/ Doubt on efficacy/Lack of interest/Do not know the importance of the administration of HPV vaccine).

Sample size

At 95% confidence level and taking minimum knowledge regarding cervical cancer in health care professional as 75.5% (Chellapandian P et al.)^[10], and with a relative error of 5%, the minimum sample size estimated was 512 using the formula

$$n = Z_{\alpha/2}^2 p q / L^2,$$

Where n = sample size

$Z_{\alpha} = 1.96$ value of the standard normal variate corresponding to level of significance alpha 5%

p minimum knowledge regarding cervical cancer in health care professional = 75%

$$=0.75$$

$$q = 1 - p = 1 - 0.75 = 0.25$$

$$L = \text{Relative error} = 0.75 \times 5\%$$

$$n = 1.96 \times 1.96 \times 0.75 \times 0.25 / (0.75 \times 5\%)^2$$

So taking 5% non-response rate total 539 subjects was included in the study.

Statistical analysis

The collected data was entered in Microsoft Excel, analysed and statistically evaluated using SPSS-25 version. Normality of each variable was assessed by using the Kolmogorov-Smirnov test and Shapiro-Wilk test. Quantitative data was expressed by mean, standard deviation or median with interquartile range and depends on normal distribution, difference between means of two group was tested by unpaired t test or Mann Whitney U test. Qualitative data was expressed in percentage and difference between the proportions was tested by Chi square test or Fisher's exact test. 'P' value less than 0.05 was considered statistically significant.

RESULTS

Table 1: Sociodemographic characteristics of health care providers.

Age group	No.	%
<30 years	373	69.2
>30 years	166	30.8
GENDER		
Female	293	54.4
Male	246	45.6
Educational qualification		
Bsc nursing	1	0.2
diploma	136	25.2
GNM	1	.2
PG	166	30.8
UG	235	43.6
Professional Experience		
<2 years	254	47.1
2-5 years	137	25.4
5-10 years	80	14.8
more than 10 years	68	12.6
Profession		
Medical Consultant	143	26.5
Dental Consultant	51	9.4
Medical Resident	75	13.9
Dental Resident	44	8.1
Nurse	144	26.7
Pharmacist	37	6.8
Lab technician	45	8.3
Marital status		
married	212	39.3
unmarried	327	60.7
No of children		
>3	5	0.9
none	333	61.8
not applicable	27	5.0

one	84	15.6
three	10	1.9
two	80	14.8
Family history of cervical cancer		
Don't Know	28	5.2
No	499	92.5
Yes	12	2.2

Out of 538 participants in this study (n=538), 293 were female(54.4%) and 246 were male(45.6%). 47.1% had professional experience of less than 2 years. 26.5% were consultants, 9.4% were dental consultants, 13.9% were

medical residents, 8.1% were dental residents, 26.7% were nursing staff, 6.8% were pharmacist and 8.3% were lab technicians. Apart from this 60.7% were married and 39.3% were unmarried.

Knowledge

Table 2: Knowledge regarding cervical cancer in study subjects.

Have you heard about cervical cancer	No.	%
No	29	5.4
Yes	510	94.6
Can screening prevent cervical cancer		
don't know	155	28.8
No	53	9.8
Yes	331	61.4
Is cervical cancer associated with infection		
don't know	158	29.3
no	49	9.1
yes	332	61.6
Does cervical cancer lead to mortality		
don't know	130	24.1
No	21	3.9
Yes	388	72.0

The results suggest a relatively high awareness of cervical cancer among the surveyed individuals, with 94.6% indicating they have heard about it. Regarding the understanding of screening, 61.4% believe screening can prevent cervical cancer, while a notable percentage (28.8%) is unsure. Regarding the association with infection, 61.6% correctly identify cervical cancer's link

to infection, though 29.3% express uncertainty. A significant majority (72.0%) recognizes that cervical cancer can lead to mortality. The findings highlight a need for targeted education and awareness campaigns, particularly on the preventive role of screening and the infectious nature of cervical cancer.

Table 3: Knowledge regarding PAP smear in cervical cancer in study subjects.

Do you know about PAP smear	No.	%
no	188	34.9
yes	351	65.1
Is it possible to detect cervical cancer with PAP smear before symptoms appear?		
Don't know	181	33.6
No	34	6.3
Yes	324	60.1
Can cervical cancer be prevented by vaccination?		
don't know	187	34.7
No	26	4.8
Yes	326	60.5
Is early detection of cervical cancer good for treatment outcome?		
don't know	127	23.6
no	13	2.4
yes	399	74.0

A significantly less portion of the surveyed individuals (65.1%) are aware of PAP smear, a key cervical cancer screening method. Regarding the understanding of PAP smear's capability to detect cervical cancer before symptoms appear, 60.1% correctly acknowledge its pre-symptomatic detection potential, while 33.6% are uncertain. Regarding prevention through vaccination, 60.5% recognize the preventive role of vaccination, and 34.7% are unsure. Notably, a substantial majority (74.0%) correctly understands that early detection of

cervical cancer positively impacts treatment outcomes. The findings emphasize the importance of continuing education and awareness campaigns to enhance knowledge, particularly on preventive measures and early detection benefits.

The findings highlight a need for targeted education and awareness campaigns, particularly on the preventive role of screening and the infectious nature of cervical cancer.

Table 4: Knowledge regarding HPV vaccine in study subjects.

Have you heard about HPV	No.	%
Don't know	28	5.2
No	34	6.3
Yes	477	88.5
Does HPV cause cervical cancer?		
Don't know	145	26.9
no	77	14.3
yes	317	58.8
Recommended age group for vaccination of HPV		
>26 years	57	10.6
11-15 years	254	47.1
15-25 years	228	42.3
Can HPV vaccine be given to sexually active women?		
Don't know	158	29.3
no	61	11.3
yes	320	59.4
Can HPV vaccine be given to women who are already having HPV infection?		
Dont know	199	36.9
No	131	24.3
Yes	209	38.8
Can HPV vaccine be given to boys?		
Don't know	198	36.7
No	81	15.0
Yes	260	48.2
Can HPV vaccine be given to pregnant women?		
Don't know	215	39.9
No	245	45.5
yes	79	14.7
Do HPV-vaccinated women require screening for cervical cancer?		
Don't know	168	31.2
No	105	19.5
Yes	266	49.4
Is HPV vaccine available in India?		
Don't know	94	17.4
No	24	4.5
Yes	421	78.1

The results reveal that a majority of respondents (88.5%) have heard about HPV. Concerning the association between HPV and cervical cancer, 58.8% correctly acknowledge the connection, while 26.9% express uncertainty. Regarding the recommended age group for HPV vaccination, 47.1% identify the age range of 11-15 years, emphasizing the importance of early vaccination. A significant number (59.4%) correctly understand that

the HPV vaccine can be given to sexually active women, and 38.8% are aware that it can be administered to those already having HPV infection. Regarding HPV vaccine administration to boys, 48.2% correctly believe it is possible. However, there is some uncertainty about HPV vaccine administration during pregnancy (39.9% unsure). Additionally, 49.4% recognize that HPV-vaccinated women still require screening for cervical cancer.

Importantly, a substantial majority (78.1%) is aware that the HPV vaccine is available in India.

Attitude and practice regarding cervical cancer in study subjects

Table 5 : Attitude and practice regarding cervical cancer in study subjects.

Would you recommend cervical cancer screening to your friends and family?	No.	%
No	41	7.6
Yes	498	92.4
How frequently would you recommend screening with PAP smear		
2 yearly	125	23.2
3 yearly	247	45.8
5 yearly	167	31.0
Willingness to receive HPV vaccination and recommendation		
No	52	9.6
Yes	487	90.4
Do you trust the preventive efficacy of HPV vaccine?		
1	3	.6
2	27	5.0
3	134	24.9
4	208	38.6
5	167	31.0
I have responsibility to ensure that my patients are fully vaccinated		
agree	199	36.9
disagree	12	2.2
neutral	120	22.3
strongly agree	205	38.0
strongly disagree	3	.6
have you or your family members ever been screened for cervical cancer		
Don't know	38	7.1
No	363	67.3
Yes	138	25.6
If no why?		
do not know the availability	167	31.0
lack of awareness	183	34.0
not willing for screening	33	6.1
have you or your family members been vaccinated for HPV?		
Don't know	31	5.8
No	384	71.2
Yes	124	23.0

The results indicate a high willingness to recommend cervical cancer screening, with 92.4% expressing the intention to recommend it to friends and family. Regarding the frequency of recommending screening with PAP smear, respondents suggest varying intervals, with 45.8% opting for screening every 3 years, 31.0% every 5 years, and 23.2% every 2 years.

A significant majority (90.4%) expresses willingness to receive HPV vaccination and recommend it. Respondents generally trust the preventive efficacy of the HPV vaccine, with the highest percentage (38.6%) rating it as a 4 on a scale of 1 to 5.

Concerning responsibility for vaccination, 38.0% strongly agree that they have a responsibility to ensure that their patients are fully vaccinated.

Notably, a considerable portion of respondents (67.3%) or their family members have not been screened for cervical cancer. Reasons include lack of awareness (34.0%), not knowing the availability (31.0%), and some expressing unwillingness for screening (6.1%).

Additionally, a significant majority (71.2%) or their family members have not been vaccinated for HPV, with reasons for non-vaccination including lack of knowledge about the availability (5.8%). The findings highlight the importance of raising awareness about cervical cancer screening and HPV vaccination to encourage participation and ensure comprehensive preventive measures.

Table 6: Practices regarding screening and prevention of cervical cancer in study subjects.

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Age group	No	Yes	P value	Odds ratio
<30 years	290	83	<0.01	-
>30 years	111 (27.7%)	55 (39.9%)		1.73 (1.15-2.59)
Gender				
Female	216	77	0.69	0.92 (0.62-1.36)
Male	185 (46.1%)	61 (44.2%)		
Educational qualification				
Paramedical	120	18	<0.001	
UG/PG	281 (70.1%)	120 (87.0%)		2.84 (1.66-4.88)
Professional Experience				
<2 years	199	55	0.04	-
>2 years	202 (50.4%)	83 (60.1%)		1.48 (1.01-2.20)
Marital status				
married	147 (36.7%)	65 (47.1%)	0.03	
unmarried	254 (63.3%)	73 (52.9%)		0.65 (0.44-0.96)
Family history of cervical cancer				
No	376 (93.8%)	115 (83.3%)	<0.001	
Yes	25 (6.2%)	23 (16.7%)		3.01 (1.64-5.50)
Have you heard about cervical cancer				
No	28 (7%)	1 (0.7%)	<0.01	
Yes	373 (93%)	137 (9.3%)		10.28 (1.3876.31)
Can screening prevent cervical cancer				
No	192	16	<0.001	
Yes	209 (52.1%)	122 (88.4%)		7.0 (4.01-12.22)
Do you know about PAP smear				
No	180	9	<0.001	
Yes	221 (55.1%)	130 (94.2%)		13.23 (6.31-27.7)
Can cervical cancer be prevented by vaccination?				
No	198	15	<0.001	
Yes	203 (50.6%)	123 (89.1%)		7.99 (4.52-14.15)
Have you heard about HPV?				
No	59	2	<0.001	
Yes	342 (85.3%)	135 (97.8%)		7.76 (2.39-25.18)
Is cervical cancer associated with infection?				
No	195 (48.6%)	12 (8.7%)	<0.001	
Yes	206 (51.4%)	126 (91.3%)		9.93 (5.32-18.54)
Is early detection of cervical cancer good for treatment outcome?				
No	130	10	<0.001	
Yes	271 (67.6%)	128 (92.8%)		6.14 (3.12-12.08)
Age group	Have you or your family members been vaccinated for HPV?	Have you or your family members been vaccinated for HPV?	P value	Odds ratio
	No	Yes		
<30 years	298	75	0.02	-
>30 years	117 (28.2%)	49 (39.5%)		1.66 (1.09-2.52)
Gender				
Female	221 (53.3%)	72 (58.1%)	0.34	
Male	194 (46.7%)	52 (41.9%)		0.82 (0.54-1.23)
Educational qualification				
Paramedical	115 (27.7%)	23 (18.5%)	0.04	-
UG/PG	300 (72.3%)	101 (81.5%)		1.68 (1.02-2.77)
Professional Experience				
<2 years	203	51	0.15	
>2 years	212 (51.1%)	73 (58.9%)		1.37 (0.91-2.05)
Marital status				
married	151	61	0.01	
unmarried	264 (63.6%)	63 (50.8%)		0.59 (0.39-0.88)

Family history of cervical cancer				
No	390	101	<0.001	3.55 (1.93-6.51)
Yes	25(6%)	23 (18.5%)		
Have you heard about cervical cancer				
No	28	1	<0.01	8.89 (1.19-66.08)
Yes	387 (93.3%)	123 (99.2%)		
Can screening prevent cervical cancer				
No	190	18	<0.001	4.97 (2.91-8.49)
Yes	225 (54.2%)	106 (85.5%)		
Do you know about PAP smear				
No	177	11	<0.001	7.64 (3.99-14.61)
Yes	238 (57.3%)	113 (91.1%)		
Can cervical cancer be prevented by vaccination?				
No	198	15	<0.001	6.63 (3.73-11.76)
Yes	217 (52.3%)	109 (87.9%)		
Have you heard about HPV?				
No	59	2	<0.001	6.68 (2.05-21.71)
Yes	356 (85.8%)	121 (97.6%)		
Is cervical cancer associated with infection?				
No	193	14	<0.001	6.83 (3.79-12.30)
Yes	222 (53.5%)	110 (88.7%)		
Is early detection of cervical cancer good for treatment outcome?				
No	132 (31.8%)	8	<0.001	-
Yes	283 (68.2%)	116 (93.5%)		

DISCUSSION

This study provides insight into knowledge, attitude and practice of cervical cancer screening and prevention by HPV vaccination amongst health care providers in a tertiary hospital in Delhi, India. Healthcare workers play a significant role in reaching a wider community with information regarding cervical cancer screening and HPV vaccination.

In current study it was found that a higher proportion, 94.6%, of the population knew about cervical cancer, similar to a study by Pandey D et al. with 89.2% knew about cervical cancer, compared to a study conducted by Shah V et al., where only 64% of staff nurses knew about cervical cancer.^{[12][13]}

In the present study, 61.4% believe screening can prevent cervical cancer. Similarly in a study by Singh E et al., 78% believed that screening can detect precancerous and cancerous lesions.

61.6% correctly identify cervical cancer's link to infection.^[14]

A study by Chauhan et al. and a study by Goyal et al. showed only 45% and 52.5% were aware of PAP smear.^{[15][16]} A similar finding is seen in our study, where only 65.1% of healthcare providers are aware of PAP smear and cervical cancer screening. However, in a study by Vishwakarma et al., and Chellapandian P et al, 82% and 83.3% knew about PAP smear.^{[17][10]}

The present study indicate a high willingness to recommend cervical cancer screening, with 92.4%

expressing the intention to recommend it to friends and family. Only 45.8% correctly identified the recommended screening interval of every 3 years. This gap between willingness and informed action aligns with studies by Singh E et al. and Vishwakarma S et al., where just 7.5% and 12% of nurses, respectively, in a rural tertiary hospital opted for the recommended screening schedule.^[14,17]

The present study highlights a significant gap between awareness and action. While over two-thirds (67.3%) of respondents reported no prior screening for themselves or family members, the most frequent reasons cited were lack of knowledge, uncertainty about availability, and hesitation. This aligns with findings from Singh E. et al., where common barriers included low perceived risk, absence of symptoms, embarrassment, and fear of results.^[14] Furthermore, a study by Chauhan M et.al, study identified concerning low screening rates of screening among healthcare workers themselves (only 2%) and their family members (24%).^[15] In a study by Chellapandian P et al., only 29.2% had undergone a PAP smear.^[10] The significant knowledge gaps and misconceptions surrounding cervical cancer screening highlight the need for a robust screening program in India. This could involve integrating cervical cancer screening into routine healthcare visits for women at appropriate ages.

In this study only 60.5% recognized the preventive role of vaccination. A similarly low percentage was also noted in a study by Canon et.al, Pandey et.al and Singh et.al.^{[18][12,14]}

As high as 40% were unsure regarding vaccination in pregnancy. Only 48.2% were aware that vaccination can be given to boys, similar to a study done by Chellapandian et.al.^[10]

The present study reveals a significant underutilization of HPV vaccination (71.2% not vaccinated). Lack of awareness, affordability concerns, disinterest, fear of side effects, and underappreciation of the vaccine's benefits were the most commonly reported reasons for non-vaccination. This aligns with concerning low vaccination rates among healthcare professionals in other studies: only 7% in a study by Chauhan M et al. and 24% and 26.73% in studies by Chellapandian P et al. and Hoblidar et al., respectively.^{[15][10,19]}

A significant knowledge gap exists regarding HPV vaccination, hindering its uptake. Early detection through screening dramatically reduces deaths from cervical cancer. It is far easier and less expensive to treat than dealing with advanced stages.

Public awareness campaigns emphasizing the importance of vaccination for all children and cervical cancer screening for women are crucial. Widespread HPV vaccination has the potential to reduce the future burden of cervical cancer in India significantly. In developing countries like India, prioritizing and promoting preventive measures like HPV vaccination and cervical cancer screening can significantly reduce the burden of advanced disease. Currently, the government doesn't offer free HPV vaccines, which substantially limits accessibility.

Making HPV vaccines more affordable and accessible, along with raising awareness about both vaccination and screening, is crucial for successful implementation in India. Regular surveys and targeted interventions promoting vaccination (both annually and opportunistically during health checkups) can foster positive attitudes towards vaccination and screening among healthcare professionals and the general public.

CONCLUSION

This study highlights a lack of awareness regarding cervical cancer screening and HPV vaccination among Healthcare professionals. The knowledge gap could negatively impact the detection rate and prevention of cervical cancer. Therefore it is very crucial to provide education and regular training to all health care staff regarding cervical cancer, its risk factors, symptoms, signs and preventive measures. Screening for cervical cancer and HPV vaccination has to be incorporated into the general health care system. Regular screening and awareness. Campaigns is to held with healthcare camps in rural and urban areas to improve detection and early treatment. Vaccination camps has to be held for adolescents for prevention of cervical cancer.

LIMITATIONS: The study was aimed at analysing the awareness of cervical cancer screening and HPV vaccination among health care professionals in a tertiary care centre catering to the urban population. Hence, these results cannot be generalized to the whole population.

ETHICAL ISSUES: Nil.

CONFLICT OF INTEREST: None to declare.

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