wjpmr, 2025, 11(4), 364-368

SJIF Impact Factor: 6.842

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Research Article

ISSN 2455-3301

WJPMR

AWARENESS OF CERVICAL CANCER AMONG FEMALE MEDICAL STUDENTS

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Article Received on 20/02/2025 **Article Revised on 10/03/2025** **Article Accepted on 30/03/2025**

ABSTRACT

Background: Cervical cancer is one of the most common cancers affecting women worldwide, with a significant burden in low- and middle-income countries. It is primarily caused by persistent infection with high-risk human papillomavirus (HPV) types. Early detection through screening (Pap smear, HPV testing) and prevention via HPV vaccination can significantly reduce the incidence and mortality rates. **Methodology:** A cross-sectional study was conducted among 115 Female Medical students (undergraduates, interns, postgraduates) in Konaseema Institute of Medical sciences and research foundation, Amalapuram. The study data was collected through Google forms using a pre-designed semi-structured questionnaire. **Results:** It indicates that while most students were aware of Cervical cancer and HPV as the primary responsible virus for causing cervical cancer. Awareness of Multiple Sexual Partners as a risk factor is significant. knowledge about Pap smear test as screening test is also significant among responders. They were also aware of abnormal vaginal bleeding as a symptom. Several factors, including educational background, sources of health information, and perceived risks, were identified as influencing awareness levels. **Conclusion:** Recognition of cervical cancer, risk factors and symptoms were high among female study participants. They were aware about multiple sexual partners as a risk factor for Cervical cancer, they have good knowledge on regular Pap smear as a test to diagnose. Increasing availability of HPV vaccination, cervical screening and diagnostic services can really translate high awareness into actual benefits.

INTRODUCTION

Cervical cancer is a significant global health issue affecting women, yet it is one of the most preventable and treatable forms of cancer when detected early. It occurs in the cells of the cervix, the lower part of the uterus that connects to the vagina. The primary cause of cervical cancer is persistent infection with high-risk types of the human papillomavirus (HPV), a common sexually transmitted infection.

Raising awareness about cervical cancer is crucial to reducing its impact. Education on risk factors, prevention methods, and the importance of regular screenings, such as Pap smears and HPV tests, can save lives. Vaccination against HPV is another effective measure to prevent the disease.

By promoting awareness, women can make informed decisions about their health, leading to early detection and timely treatment. Governments, healthcare providers, and communities play a vital role in advocating for cervical cancer prevention through accessible healthcare services, public health campaigns, and support systems for those affected.

METHODOLOGY

STUDY DESIGN: Cross - sectional study.

STUDY POPULATION: All female medical students (undergraduates, interns, postgraduates).

STUDY PERIOD: October 2024 - March 2025.

SAMPLE TECHNIQUES: Convenient sampling.

INCLUSION CRITERIA: All female medical students (undergraduates, interns, postgraduates).

EXCLUSION CRITERIA: Consultants in medicine, Male medical Students and nonmedical students.

ETHICAL CONSIDERATION: Informed consent was taken.

DATA COLLECTION: Data collection was done using pretested and pre structured questionnaire. Google forms were sent to all women and asked to be filled.

DATA ANALYSIS AND INTERPRETATION: Data was entered using Microsoft Excel 2016 spreadsheet. Summarization and analysis of data were carried out by using IBM SPSS Software version 21(licensed). Descriptive Statistics: Frequency, percentage. Inferential Statistics: Chi - square test.

RESULTS

The questionnaire was administered to all female medical students (undergraduates, interns, postgraduates). Questionnaire consists of 15 questions covering all possible fields to obtain the maximum benefit from the study.

Table 1: A total of 115 subjects were taken as a sample size out of which 15-20 yrs constitute 10.4%, 21-25 yrs constitute 71.3%, 26-30 yrs constitute 11.3% and 31 -35 yrs constitute 7%.

	Frequency	Percent
15-20yrs	12	10.4
21-25yrs	82	71.3
26-30yrs	13	11.3
31-35yrs	8	7.0
Total	115	100.0

Table 2: A total of 115 subjects were taken as a sample size out of which 1st year - 4th year students constitute 22.6%, House surgeons constitute 60%, Postgraduates constitute 17.4%.

	Frequency	Percent
1styear-4th year	26	22.6
House surgeons	69	60.0
Post Graduates	20	17.4
Total	115	100.0

Table 3: A total of 115 subjects were taken as a sample size out of which 87% were aware of HPV as the primary responsible virus for causing cervical cancer.

	Frequency	Percent
HIV	6	5.2
Hepatitis B	8	7.0
HPV	100	87.0
Influenza virus	1	.9
Total	115	100.0

Table 4: A total of 115 subjects were taken as a sample size out of which 82.6% responders were aware of Multiple Sexual Partners, 10.4% think radiation as a risk factor for cervical cancer.

	Frequency	Percent
Radiation	12	10.4
Regular exercises	6	5.2
Multiple sexual partners	95	82.6
None of the above	2	1.7
Total	115	100.0

Table 5: A total of 115 subjects were taken as a sample size out of which 60.9% responders were aware that screening test for cervical cancer should be started from 21 years of age, whereas 22.6% think that it should start from 16 years.

	Frequency	Percent
16years old	26	22.6
21years old	70	60.9
30years old	16	13.9
40years old	3	2.6
Total	115	100.0

Table 6: A total of 115 subjects were taken as a sample size out of which 75.7% students were aware of abnormal vaginal bleeding as a symptom of cervical cancer, whereas 13% students think painful urination as a symptom.

	Frequency	Percent
Painful urination	15	13.0
Constant Headaches	7	6.1
Abnormal vaginal bleeding	87	75.7
Abdominal pain	6	5.2
Total	115	100.0

Table 7: A total of 115 subjects were taken as a sample size out of which 93.9% think cervical cancer can be present without any symptoms in early stage, 6.1% as not so.

	Frequency	Percent
Yes	108	93.9
No	7	6.1
Total	115	100.0

Table 8: A total of 115 subjects were taken as a sample size out of which 85.2% were aware of PAP smear as screening test,10.4% think blood test as a screening option.

	Frequency	Percent
Blood Test	12	10.4
Pap-smear	98	85.2
MRI scan	4	3.5
Chest x-ray	1	.9
Total	115	100.0

Table 9: A total of 115 subjects were taken as a sample size out of which 60.9% responders think screening should be done once every 3 years,22.6% responders think it should be done every year.

	Frequency	Percent
Every year	26	22.6
Every 3 years	70	60.9
Every 5 years	11	9.6
only once in a life time	8	7.0
Total	115	100.0

Table 10: A total of 115 subjects were taken as a sample size out of which 81.7% think radiation and chemotherapy as a treatment option for cervical cancer,9.6% were not aware of treatment.

	Frequency	Percent
Radiation and chemotheraphy	94	81.7
Antibiotics	7	6.1
No treatment	11	9.6
None of the above	3	2.6
Total	115	100.0

Table 11: A total of 115 subjects were taken as a sample size out of which 81.7% think cervical cancer is treated through HPV vaccination and regular screening, 10.4% responders think it can't be cured as it is hereditary.

	Frequency	Percent
Yes, through HPV vaccination and regular screening	94	81.7
No, Its inevitable if you are sexually active	7	6.1
No, because its heridetary	12	10.4
Yes, but only by taking medication	2	1.7
Total	115	100.0

Table 12: A total of 115 subjects were taken as a sample size out of which 87.8% think cervical cancer is presentable, where as 8.7% as not preventable.

	Frequency	Percent
yes	101	87.8
no	10	8.7
Not sure	4	3.5
Total	115	100.0

Table 13: A total of 115 subjects were taken as a sample size out of which 35.7% from health care workers, 29.6% from Institutions, 28.7% from social media,6.1% from friends and family gain knowledge about cervical cancer.

	Frequency	Percent
Social Media	33	28.7
Health care providers	41	35.7
Friends and family	7	6.1
Institutions	34	29.6
Total	115	100.0

Table 14: A total of 115 subjects were taken as a sample size out of which 89.6% responders were aware of HPV Vaccine whereas 6.1% doesn't know.

	Frequency	Percent
Yes	103	89.6
No	7	6.1
Not sure	5	4.3
Total	115	100.0

Table 15: A total of 115 subjects were taken as a sample size out of which 93.9% think cervical cancer awareness is important for women health whereas 2.6% not so.

	Frequency	Percent
Yes	108	93.9
No	3	2.6
Not sure	4	3.5
Total	115	100.0

Showing association between age and awareness of cervical cancer risk factors among the responders

		Which of the following is a risk factor for cervical cancer			
		Radiation	Regular exercises	Multiple sexual partners	None of the above
		Count	Count	Count	Count
Age	15-20yrs	5	1	5	1

	21-25yrs	4	3	75	0
	26-30yr	2	0	11	0
	31-35yrs	1	2	4	1

Pearson Chi-Square Tests		
		Which of the following is a risk factor for cervical cancer
Age	Chi-square	35.495
	df	9
	Sig.	.000[*,b,c]

The Chi-Square statistic is significant at 0.05 level.

Showing association between age and awareness of cervical cancer symptoms among the responders

		Which of the following could be a symptom of cervical cancer			
		Painful urination	Constant Headaches	Abnormal vaginal bleeding	Abdominal pain
		Count	Count	Count	Count
Age	15-20yrs	6	2	3	1
	21-25yrs	6	4	68	4
	26-30yr	1	0	12	0
	31-35yrs	2	1	4	1

Pearson Chi-Square Tests		
		Which of the following could be a symptom of cervical cancer
Age	Chi-square	27.073
	df	9
	Sig.	.001[*,b,c]

The Chi-Square statistic is significant at 0.05 level.

Showing association between age and awareness of screening test for cervical cancer among the responders

		What is the main screening test used to detect cervical cancer			
		Blood Test	Pap-smear	MRI scan	Chest x-ray
		Count	Count	Count	Count
Age	15-20yrs	5	6	1	0
	21-25yrs	7	73	2	0
	26-30yr	0	13	0	0
	31-35yrs	0	6	1	1

Pearson Chi-Square Tests		
		What is the main screening test used to detect cervical cancer
Age	Chi-square	32.776
	df	9
	Sig.	.000[*,b,c]

The Chi-Square statistic is significant at 0.05 level.

DISCUSSION

In present study, Table 3 shows majority of female medical students were aware of HPV as the cause of cervical cancer i.e., 87% and Table 4 shows majority were aware of Multiple Sexual Partners as a risk factor i.e., 82.6%.

A study conducted by A Nag Chaudhary showed that out of all responders 41% were aware of Multiple Sexual Partners as a risk factor. In my current study also results were similar i.e., 82.6% were aware of it.

A study conducted by Nutan Narayan showed that out of all responders 72% were aware of abnormal vaginal bleeding as a symptom. In my current study also results were similar i.e., 75.7% responders were aware of these symptoms.

A study conducted by Eleta Singh showed that out of all the responders 74% were aware of PAP smear test as a screening test for cervical cancer. In my current study also results were similar i.e., 85.2% responders were aware of PAP smear.

A study conducted by Samir Ayub showed that out of all the responders 61% were aware of HPV. In my current study also results were similar i.e., 87% responders were aware of it.

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