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# **Original Research Article**

# A cross-sectional study of the knowledge, attitude and practice of cervical cancer among the staff nurses working in rural private medical college of Lucknow

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#### ABSTRACT

**Objective:** 1. To study the knowledge about carcinoma cervix and its screening method. 2. To survey the attitude and practice of screening methods among the nurses.

**Materials and Methods:** This cross-sectional study was conducted in T.S. Mishra medical college & hospital, Lucknow in the month of January and February 2021. Total 100 participants from the nursing staff, who wished to participate in our study, were chosen randomly. A self administered, structured and pretested questionnaire based on general characteristic, knowledge, attitude and actual practice of nursing staff was used to gather information related to screening of cervical cancer.

**Result**: In our study 85% participants had knowledge that for screening of carcinoma cervix, pap smear is a type of screening modality and most of them(80%) are agreed upon that chronic vaginal discharge could be a cause of carcinoma cervix and 55% knows that HPV is a risk factor for carcinoma cervix pap smear can detect cervical cancer. About 40% had knowledge that cervical cancer can present as postcoital bleeding and 55% of the respondents were well aware that HPV infection is a risk factor for cervical carcinoma. Only 30% of the participants had screened themselves for cervical cancer in past.

**Conclusion:** Our study shows that the knowledge about carcinoma cervix screening is good among nursing staff but they did not know how to implement this knowledge for screening of patients. Healthcare givers should be trained and promoted so that they can help in community screening and spread of knowledge of this screening facility for prevention of carcinoma cervix in the community.

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# 1. Introduction

In India, carcinoma cervix is the second most common cancer among women of reproductive age group. <sup>1</sup> Each year about 0.5 million women are diagnosed with invasive carcinoma of cervix and they were never screened for carcinoma cervix. In south Asia, India ranks highest in age standardized incidence of carcinoma cervix. <sup>2</sup> Nearly 10% of the all cancer related deaths in India are due to carcinoma cervix. <sup>3</sup> In developed countries, screening with PAP test has significantly reduced mortalility. <sup>4</sup> In our country diagnosis of cervical cancer is usually delayed due to poor knowledge

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of screening facilities. For the prevention of carcinoma cervix, screening is mandatory, as majority of women are asymptomatic and not seeks medical advise.

Awareness about the disease, Screening procedure and preventive measures are important for prevention and control of carcinoma cervix.<sup>5</sup>

Symptoms of carcinoma cervix vary from foul smelling blood stained vaginal discharge to abnormal vaginal bleeding.<sup>6</sup> Risk factors are early sexual activity, multiple sexual partners, multiparity, sexually transmitted diseases, co-infection with HIV, smoking etc.<sup>7</sup> Worldwide, about 99.7% of all carcinoma cervix are due to HPV Infection.<sup>8</sup>

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Despite the availability of methods of screening and prevention majority of the women had not screened <sup>9</sup> The main barrier to screening are unawareness of risk factors, symptoms, screening & preventive methods along with paucity of organized screening facilities in India. <sup>10,11</sup>

In India, because of low levels of awareness, early detection and screening remain a major area of concern. Our nursing staff plays a major role as a facilitator of imparting health care services. The staff nurses can be deputed to spread awareness about cervical cancer and to conduct pap smear screening tests among rural women. <sup>12</sup>

For successful cervical cancer control programmes, nurses with positive attitude should be given sufficient knowledge about cervical cancer and its screening methods.

Keeping all these things in mind, the study was conducted among nursing staff working in the rural medical college, at Amausi Lucknow.

#### 2. Material and Methods

This study was descriptive cross sectional study which has been conducted in T.S. Misra Medical College, Amausi from January 2021 to March 2021. Out of 300 nurses working in the hospital, about 150 were agreed for participation and only 100 profrormas were complete and analyzed.

### 2.1. Inclusion criteria

Nursing staff, who were willing to participate and ready to give consent were included in the study.

## 2.2. Exclusion criteria

Nursing staff who were not agreed to participate in the study.

Out of the nursing staff, volunteers were chosen, given consent forms along with a questionnaire sheet. Data was collected regarding demography, knowledge about carcinoma cervix symptoms, risk factors and attitude and practice towards preventive methods. All the questionnaire sheets were collected and reviewed. The data and the names of all participants were confidential.

## 3. Results

Among all the respondents, most of them 86% were belong to 20 to 30 years of age at the time of first sexual intercourse. About 80% of the participants were married (Table 1).

In this study 95% of the participants knew that cervical cancer is preventable and 85% knew that pap smear can detect cervical cancer. 50% were knew that pap smear is used as screening. About 90% of the participants knew that cervical cancer can present as foul smelling blood mixed

**Table 1:** Demographic profile

Demographic Profile	N=100 (%)
Age(years)	
20-25	30(30%)
26-30	48(48%)
31-35	22(22%)
36-40	2(2%)
Age at first sexual intercourse	
<20 years	4(4%)
20-30 years	86(86%)
30-40 years	10(10%)
Marital status	
Unmarried	20(20%)
Married	80(80%)
Religion	
Muslim	25(25%)
Hindu	65(65%)
Christian	10(10%)

**Table 2:** Knowledge of symptoms for carcinoma cervix

Symptoms of carcinoma cervix	Percentage
Not known	5(5%)
Asymptomatic	15(15%)
Discharge per vagina	80 (80%)
Menstrual irregularities	25 (25%)
Post coital bleeding	40 (40%)
Post menopausal bleeding	25 (25%)
Abdominal pain	30(30%)

Table 3: Knowledge of risk factors for carcinoma cervix

The Risk Factors	Percentage
Early sexual activity	20(20%)
Multiple sexual partner	30(30%)
HPV infection	55(55%)
Smoking	20(20%)
Multi parity	35(35%)

discharge (Table 2). About 55% knew that HPV infection is the risk factor of cervical cancer (Table 3).

The attitude about pap smear screening showed that about 90% of participants thought that pap smear is a procedure of health care workers. About 60% staff nurse stated that they should undergo cervical screening, but only 30% have ever been screened (Table 5).

Regarding practice of pap smear screening, only 30% have undergone screening for cervical cancer. Most of the respondent who were not willing for screening, due to fear of procedure or found themselves not at risk. (Table 5).

# 4. Discussion

In our study, most of the staff were aware of carcinoma cervix and its screening methods in terms of pap smear, they also had the knowledge regarding preventive measures of carcinoma cervix with judicious use of vaccination among

**Table 4:** Knowledge of screening and preventive method for carcinoma cervix

Questions Related To Cervical Cancer Screening	Percentage
Can be detect it earlier by screening	95(95%)
Do u know about pap smear	Yes 85 (80%) No
	15(15%)
Pap smear is used for	
For Screening	50(50%)
Screening and treatment	18(18%)
Don't know	15(15%)
When to Screen	
Age>21years(sexually active)	40(40%)
30-35 years	60(60%)
>35 years	24(24%)
How frequent pap test to be done	
Not known	30(30%)
Yearly	10(10%)
3 yearly	50(50%)
5 yearly	10(10%)
Awareness of HPV vaccine	60(60%)
Knowledge of age of HPV vaccination	30(30%)

Table 5: Attitude and practice towards cervical screening

Questions related to attitude and practice	Agreed (Percentage)
Does Pap smear is taken by health care professional only	85(85%)
Does Screening helps in prevention of cervical cancer	70(70%)
Whether you should undergo cervical cancer screening	60(60%)
Have you screened yourself ever	30(30%)
Does screening is harmless	60(60%)
Reasons for not screened themselves	Respondent - Number (70)
No risk factor	23(33%)
Not had symptoms	11 (16%)
Embarrassment	10(14%)
Fear of procedure	11(16%)
Not advised ever	15(21%)

females.

Most of the study population belongs to younger age group 26-30 yrs consist of 55% which was similar to study conducted by Bhatija GV et al. <sup>13</sup> It was also noticed that 80% respondent were married as compared to 86% participant in study done by Vishwarkarma S et al. <sup>14</sup>

Regarding Knowledge of screening methods 80% respondent were aware that pap smear is a screening method for prevention of carcinoma cervix, which was similar to the study done by Shah V et al. 15 where about 88.4% respondents had knowledge of this. Among study participants 80% staff had a good Knowledge regarding

the symptoms of carcinoma cervix as per their knowledge 80% says foul smelling vaginal discharge is the commonest symptoms of carcinoma cervix which was similar to study done by Khanna D et al 16 had similar response in 81.6%.

Our study population is well aware about the risk factors of carcinoma cervix as they know about HPV infection as a causative agent for progression of carcinoma cervix 55% had this opinion which was comparable to 54% done by Singh E et al <sup>12</sup> very high as compared to study done by Shashank et al <sup>17</sup> where only 23% knows causative association.

In the view of assessment of attitude and practice of study population 85% respondents were agreed that pap smear had to be taken by health care professional only which was similar 80% to study done by Singh E et al. <sup>12</sup> Screening methods are harmless as per 60% of study participants in our study but only 30% of them screened themselves and 60% were agreed that they should undergo cervical screening but had not done yet due to some minor issues

In our study only 30% participants had gone through pap screening which is higher as compared to study done by Rahman H et al <sup>18</sup> showing 16% staff had screened themselves.

Among the reason of not getting pap test about 40% agreed that they are not at risk comparable to 41% in study done by Rahman H et al <sup>18</sup> and 61% by Singh E et al. <sup>12</sup>

#### 5. Conclusion

As a ground worker in health care system nursing staff plays a major role in prevention of carcinoma cervix by spreading the knowledge of screening and awareness of methodology among general population. They can motivate others to participate in this campaign of early detection and treatment of this dreadful disease and improve health status of community and reduce the burden of treatment cost. They can also be part of imparting knowledge of its preventive measures and availability of vaccine and its use.

# 6. Source of Funding

Not applicable.

#### 7. Conflict of Interest

None.

### 8. Ethical Approval

The study was approved by the Institutional Ethics committee.

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