

## Awareness, Attitude and Health Seeking Practices of Nursing Staff for Gynecological Cancers, Working in the Department of Obstetrics and Gynecology, Mahatma Gandhi Institute of Medical Sciences, Sevagram, Maharashtra, India

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### ABSTRACT

**Background:** Nursing staff are aware of screening tests of all Gynecological malignancies.

However, attitude and practices do not match with this. Present study was conducted in 200 Nursing staff working in the department of obstetrics and gynaecology for awareness, attitude and health seeking practices of preventive gynaecology.

**Methods:** A survey was conducted among 200 Nursing staff working in the department of obstetrics and gynaecology, using a questionnaire. This evaluated implementation of screening and preventive measures used by them for self-protection as well as for the women seeking their services. Their attitude regarding HPV vaccine as a preventive measure was also noted.

**Results:** In present study, 160 (80% Nursing staff) were aware of pap smear, 14 (7%) Nursing staff have done pap smear as it was advised. 182 (90.2%) were doing their self breast examination regularly and 25 (12.5%) had done their mammography. 168 (80.4%) had their ultrasound done and 98 (49%) had their P/V done. 128 (64%) were aware of HPV vaccination and 23(10.1%) Nursing staff had given HPV vaccination to their daughters.

**Conclusions:** Proper and effective utilization of available facilities would depend on creating better understanding and change in their attitude.

### Keywords:

Cervical cancer, HPV vaccine, Mammography, Pap smear.

### Introduction

In the last decades, papilloma and herpes viruses got more importance in the development of epithelial dysplasia, neoplasia and cervical cancer. Cervical cancer has the second place in mortality from gynaecology diseases. It occurs with the incidence of 350,000 new cases diagnosed each year [1]. Diagnosis is made by general, gynaecologic, family history, clinical examination including general, Gynecological per speculum examination, bimanual and rectal examination, by taking the smear by Papanicolaou method and histological examination after biopsy. Papanicolaou test is the standard test for cervical cancer screening. Results of several studies have shown that this cytological test reduces the incidence of cervical cancer. Primary prevention involves regular Gynecological examinations and screening [1]. Primary prevention includes introduction of the primary and secondary measures for disease prevention; early detection of the diseases and its treatment.

This reduces the numbers of cases coming in the advanced stages; significant improvement of Gynecological health and reduction of costs of the treatment of advanced stages of disease [2].

These prevention and early detection efforts succeed when patients are well informed regarding disease and have a relationship with their health care providers who follow screening and detection recommendations appropriate in their own lives [3]. Carcinoma breast and carcinoma cervix are leading causes for cancer deaths in India. However, these get detected only in late stages. Preventive measures and early detection of disease will decrease the burden of these cancers [4].

HPV vaccination was introduced for primary prevention of carcinoma cervix after the attribution of High risk HPV as the causative agent. Screening for premalignant lesions using Pap smear and HPV DNA are now recommended as methods for secondary prevention of carcinoma cervix [4].

Vaccinating girls between 9 and 12 years may offer an option to decrease this burden. The use of HPV Vaccine has been approved by the Drug Controller of India. Breast and cervical cancer are the most common causes of cancer mortality among women all over world, but actually they are largely preventable diseases.

Doctors in developing countries regularly see women with advanced, incurable cancers. Health of a rural Indian woman and her access to health facility is compromised because of socio-cultural, economical, and environmental factors [5].

The World Health Organization (WHO) recommends routine screening for cervical cancer. WHO Global Monitoring Framework suggests that every nation monitors cervical cancer screening [6]. Barrier and spermicidal contraceptives decrease the risk of cervical cancer by 50%. Combined oral contraceptives prevent both endometrial and epithelial ovarian cancers. The risk of endometrial cancer in former oral contraceptive users is reduced by about 50% and that of ovarian cancer by about 30% to 60%. Weight control gives strong protection against endometrial cancer. Breast-feeding and tubal sterilization also appear to protect against ovarian cancer [7].

### Objectives

To evaluate Nursing staff working in the department of obstetrics and gynaecology for awareness, attitude and health seeking practices of preventive gynaecology.

### Methods

A survey was conducted among 200 Nursing staff working in the department of obstetrics and gynaecology June 2019, using a questionnaire. This was a cross sectional study conducted after Selecting Nursing staff.

#### Inclusion criteria

Nursing staff working in the department of OBGY above 30 years of age were included.

#### Exclusion criteria

Nursing staff below 30 years of age were excluded as very young nursing staff does not think of investigating themselves.

This evaluated implementation of screening and preventive measures used by them for selfprotection as well as their health seeking practices. This was regarding cancer cervix, ovarian

cancer and breast cancer. Their attitude regarding use of HPV vaccine as a preventive measure was also noticed. Their practice about HPV vaccination was judged by asking whether the Nursing staff have given HPV vaccination to their daughters between 9-13 years or not. Data was collected and analyzed. Statistics was done in percentages.

#### Questionnaire 15

1. Name
2. Age
3. Advice for pap smear to the patients was given routinely or only if it was indicated
  - Own pap smear got done or not
  - Own Ultrasound got done or not
  - Own P/V got done or not
  - Own mammography got done or not
4. Self breast examination doing regularly or not
5. Advice HPV vaccination to the patients
6. HPV vaccination given to daughter or not
7. Reasons for not giving HPV vaccination like- Daughter is less than 9 years of age (Not eligible)
  - Not thought of
  - Costly
  - Not sure of its advantage

#### Results

In present study, 81 (40.18%) Nursing staff were between 41-50 years, 50 (25%) Nursing staff between 31-40 years, 23(11.05%) Nursing staff >60 years.

**Table 1:** Age distribution and relation of knowledge regarding screening to experience of working in years.

Age (In years)	Number of nursing staff	Percentage (%)
<30	0	0
31-40	50	25
41-50	81	40.18
51-60	44	22
>60	23	11.5
Total	200	100

The study was conducted in females only. In present study it was found that level of knowledge decreases as years of experience increase. That means all nursing staff had knowledge regarding

cancer screening but their knowledge decreased with increase in years of experience. Level of knowledge was highest in freshers <1 year experience 32% and least in >8 years experience that is 11%.

**Table 2:** Awareness of cervical cancer screening.

Awareness of cervical cancer	Number of nursing staff	Percentage (%)
Knowledge of availability pap smear	200	100
Pap smear was done only when advised	60	30
Self pap smear got done	81	40.18

In present study, 200 that means all Nursing staff had knowledge regarding availability of pap smear, 60 (30%) of Nursing staff

have done PAP smear only when it was advised. 81(40.18%) have done PAP smear by themselves.

**Table 3:** Awareness of breast cancer screening.

Awareness of breast cancer	Number of nursing staff	Percentage (%)
Self breast examination	162	80.1
Mammography	16	8

In present study, out of 200 Nursing staff, 162 (80.1%) were done their mammography. doing their self breast examination regularly and 16 (8%) had

**Table 4:** Awareness of ovarian cancer.

Awareness of ovarian cancer	Number of nursing staff	Percentage (%)
Got per vaginal examination done	78	38
Ultrasonography	130	65

In present study, out of 200 Nursing staff, 130 (65%) had their ultrasound done and 78 (38%) had their P/V done.

**Table 5:** Awareness of HPV vaccination.

Awareness of HPV vaccination	Number of nursing staff	Percentage (%)
Knowledge of availability of HPV vaccination	176	88
HPV vaccination given to daughters	25	12.5

In present study, out of 200 Nursing staff, 176 (88%) had knowledge regarding availability of HPV vaccination and 25 (12.5%) had given HPV vaccination to their daughters.

**Table 6:** Reasons for not giving HPV vaccination.

Reasons for not giving HPV vaccination	Number of nursing staff	Percentage (%)
Not applicable	104	52
Not thought	30	15
Uncertain of advantage	20	10
Costly	120	60
Not available	24	12

In present study, in 104 (52%) Nursing staff, HPV vaccination was not applicable as either they were unmarried or their daughters were less than 10 years age or they were not having daughters. 30 (15%) staff did not think taking HPV vaccination, 20 (10%) were uncertain of the advantage, 120 (60%) nursing staff felt that it was costly and 24 (12%) said that they thought not available as it is rural area.

## Discussion

**Age distribution** In present study, 81 (40.18%) Nursing staff were between 41-50 years, 50 (25%) were between 31-40 years, 23 (11.5%) were >60 years, 44 (22%) were between 51-60 years. In present study, 200 that means all Nursing staff had knowledge regarding availability of pap smear, 60 (30%) of Nursing staff have done PAP smear only when it was advised. 81 (40.18%) have done PAP smear by themselves.

In present study it was found that level of knowledge decreases as years of experience increase. That means all Nursing staff had knowledge regarding cancer screening but their knowledge decreased with increase in years of experience. Level of knowledge was highest in freshers <1 year experience 32% and least in >8 years experience that is 11%. Izetbegovic S et al reported that HPV related cancers are preventable by vaccination. HPV vaccine decreases the incidence of premalignant lesions by 70 to 90% [1].

Radha K et al reported that Pap smear was done by only 84 (32.8%) out of 256 gynaecologists or their spouses. Routine pap smear was recommended s 84% of government practitioners as well as 60.5% of private practitioner. Radha K et al reported that counselling for HPV vaccine was offered to young women by 37.8% of gynaecologists only. Use of HPV vaccine for their daughters was also quite less (24.1%) [4].

Tripathi N et al reported that awareness about symptoms,

possibility of early detection, available tests, cure of disease was low. Main barrier for screening was, 'don't know' answer by 83.99% women for cancer cervix, 84.93% for cancer breast, and 67.26% for oral cancer. Awareness was significantly associated with age ( $\chi^2=17.77$ ,  $P=0.001$ ), education ( $\chi^2=34.62$ ,  $P=0.000$ ), and income ( $\chi^2=16.72$ ,  $P=0.002$ ); while attitude with age ( $\chi^2=16.27$ ,  $P=0.012$ ) and education ( $\chi^2=25.16$ ,  $P=0.003$ ). Practice was significantly associated with age ( $\chi^2=11.28$ ,  $P=0.023$ ), education ( $\chi^2=32.27$ ,  $P=0.003$ ), and occupation ( $\chi^2=10.69$ ,  $P=0.03$ ).

Awareness, attitude, and practice of women having history of cancer in family or relative was significantly high than women without history [5].

Wang B et al reported that overall, 21% of 51,989 women had a Pap test. The highest proportion was reported among women aged 30-39 years (30.1%, 95% confidence interval, 26.8%-33.4%). In all geographic regions, women in rural areas were less likely than women in urban areas to report having had a pap test. Factors associated with ever having a test were being aged 30-49 years, higher education, being married, and having urban health insurance [6].

The Advisory Committee on Immunization Practices 2011; 2012 recommends routine vaccination against the HPV virus in females and males 11-12 years of age [8].

CDC in 2011 found that only 35% of females between 13-17 years had received the recommended three doses of HPV vaccine [9].

Auersperg N et al reported that 83.0% of women reported guideline-consistent Pap testing within the past 3 years than the Healthy People 2020 target of 93.0%. Pap testing rates are significantly lower among Asians (75.4%), and a small downward trend was observed in the number of women who reported receiving guideline consistent Pap testing over the last

decade [10].

In present study, out of 200 Nursing staff, 162 (80.1%) were doing their self breast examination regularly and 16 (8%) had done their mammography.

In present study, out of 200 Nursing staff, 130 (65%) had their ultrasound done and 78 (38%) had their P/V done.

Claes E et al found that ovarian and uterine cancers are linked to genetic syndromes; mutations in the BRCA tumor suppressor gene increase risk for ovarian cancer.

Mutations associated with Lynch syndrome increase risk for both ovarian and uterine cancers [11]. Finlay E et al found that genetic testing is available for BRCA mutations; but several studies have shown low testing rates, even when a mutation has been previously found within the family [12].

A study in Pennsylvania by Hadley DW reported that although offered free genetic counselling and testing, only 57% of individuals with a positive BRCA1/2 family mutation status participated in testing [13]. Sasieni P et al reported that 51% underwent genetic testing for Lynch syndrome who had positive family mutation status [14].

In present study, in 104 (52%) Nursing staff, HPV vaccination was not applicable as either they were unmarried or their daughters were less than 10 years age or they were not having daughters. 30 (15%) staff did not think taking HPV vaccination, 20 (10%) were uncertain of the advantage, 120 (60%) nursing staff felt that it was costly and 24 (12%) said that they thought not available as it is rural area.

## Conclusion

Nursing staff are well aware that HPV vaccination and regular cervical screening are the most effective ways of preventing cervical cancer. However, this is not reflected in their practice. Present study it was found that Nursing staff tend to ignore the need to undergo screening procedures for early detection of malignancy. Their responses indicate that their efforts towards prevention are less than adequate. It appears that awareness and practice are not directly linked and change of attitude is needed. We also noted that many gynaecologists failed to offer HPV vaccination to clients in their practice. This clearly points towards the need to have an action oriented understanding about several aspects of preventive gynaecology among practicing health care personnel, including Nursing staff.

Proper and effective utilization of available facilities would depend on creating better understanding and change in their attitude. Stepping up and strengthening of preventive health care services is essential to reduce the burden from cervical cancer and other Gynecological cancers.

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## Conflict of interest

None.

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