# Knowledge, Attitude and Practice about Cervical Cancer & Screening among Female Staff of Medical Institute in Karnataka

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#### **Abstract**

Context: In India incidence and mortality due to cervical cancer is increasing every year and by 2025 it is expected to have 203,757 new cases and 115,171 deaths. Regular screening by Pap smear can reduce the cervical cancer incidence and mortality by 80%. *Aims:* To assess the level of knowledge of Cervical Cancer & Screening among Female Staff and to know their attitude and practice towards cervical cancer & prevention in a tertiary institute in Karnataka. Settings and Design: Descriptive cross sectional study was carried out for duration of 3 months from June 2014 to August 2014. Methods and Material: Female staff associated with the institute (Doctors, Technicians, Nursing and office staff) formed the study population. After taking consent from the participants, questionnaires designed based on study objectives were provided and were requested to fill up to the best of their knowledge. Results: Respondents were divided into three groups. Doctors constituted group A (N-40), Staff Nurse and Lab technicians were 60 in number grouped as B and office staff (group C) were 10 in number. The observations were tabulated. Conclusions: Respondents though had adequate knowledge about screening tests never underwent Pap smear or any other screening tests. Most of the respondents failed to answer the correct schedule of Pap smear and thought screening should begin after 50 yrs or only when symptoms appear. This needs to be addressed, continued medical education or in house clinical lectures to update the recent changes in screening program should be conducted.

**Keywords:** Cervical Cancer; Awareness; Screening Test; Pap Smear.

#### Introduction

In India, one of the most common causes of death is cancer accounting for nearly 6% of all deaths. Cervical cancer is responsible for highest mortality in both urban and rural women. In the absence of all other diseases, a 30 year old Indian women has 0.7% risk of dying from cervical carcinoma, which is slightly higher than the risk of dying from perinatal complications. In India incidence and mortality due to cervical cancer is increasing every year and by 2025 it is expected to have 203,757 new cases and 115,171 deaths [1]. Regular screening by Pap smear can reduce the cervical cancer incidence and mortality by 80%. A randomized controlled trial has shown that even a single lifetime screening test significantly decrease the incidence of advanced cervical cancer [2]. In India till date there are no suitable, large scale, cost effective; population based screening programs to detect prevalence of HPV infection and preinvasive stages of carcinoma cervix. Hence, there is a need to introduce hospital or institution based screening programs. For a successful hospital based screening programme, Staff nurses and Physicians should be aware of cervical cancer and screening tests available for prevention and should encourage all female patients to undergo screening test. Hence this study was conducted to assess the level of knowledge of Cervical Cancer & Screening among Female Staff and to know their attitude and practice towards cervical cancer & prevention in a tertiary institute in Karnataka.

### Material and Methods

This descriptive cross sectional study was carried

out for duration of 3 months from June 2014 to August 2014 in a tertiary medical institute in Karnataka. Female staff associated with the institute (Doctors, Technicians, Nursing and office staff) formed the study population. After taking consent from the participants, questionnaires designed based on study objectives which included risk factors, symptoms, diagnosis and prevention of cervical cancer, were provided and were requested to fill up to the best of their knowledge. A briefing was given to the participants about the objective of this study and assured confidentiality in collection of personal data. Data collected was analysed and tabulated.

Permission to conduct the study was obtained from the Ethical committee of the Institute/University.

#### Results

Respondants were divided into three groups. Doctors constituted group A (N-40), Staff Nurse and Lab technicians were 60 in number grouped as B and office staff (group C) were 10 in number. The age of the respondents ranged from 20 to 55 years and > 90% of the participants were married. Results are tabulated in Table 1 & 2.

Table 1: Assessment of Knowledge about different aspects of cervical carcinoma

Knowledge Tested	Group A Number (%)	Group B Number (%)	Group C Number (%)
Risk Factors			
Early age at intercourse	40 (100%)	25 (42%)	03 (30%)
Multiple sex partners	40 (100%)	30 (50%)	05 (50%)
Multiparity	35 (87%)	28 (46%)	01 (10%)
Smoking	30 (75%)	05 (8.3%)	01 (10%)
Symptoms			
Vaginal Discharge	40 (100%)	30 (50%)	01 (10%)
PV Bleeding	40 (100%)	25 (42%)	01 (10%)
Pain abdomen	35 (87%)	25 (42%)	01 (10%)
Screening tests	35 (87%)	28 (46%)	02 (20%)
PAP smears	35 (87%)	05 (8.3%)	00 (00%)
VIA	30 (75%)	05 (8.3%)	00 (00%)
VILI	30 (75%)	05 (8.3%)	00 (00%)
When to begin screening tests			
Within one year post marriage	18 (45%)	05 (8.3%)	00 (00%)
After 30 years	18 (45%)	05 (8.3%)	00 (00%)
After 50 years	30 (75%)	25 (42%)	05 (50%)
Only when symptoms appear	40 (100%)	50 (83%)	05 (50%)
HPV Vaccine	30 (75%)	05 (8.3%)	00 (00%)
a Cervix is preventable and curable	35 (87%)	25 (42%)	05 (50%)

Table 2: Attitude & Practice about cervical cancer & prevention

Attitude & Practice	Group A Number (%)	Group B Number (%)	Group C Number (%)
Past H/o any symptoms of cervical cancer			
Vaginal Discharge	10 (25%)	25 (42%)	02 (20%)
PV Bleeding	06 (15%)	10 (17%)	00
Pain Abdomen	06 (15%)	10 (17%)	02 (20%)
Past H/o screening test	02 (05%)	03 (05%)	00
Reason for not visiting doctor/ screening test			
Not Aware	00	20 (33%)	06 (60%)
Aware but hesitate to visit a doctor	20 (50%)	25 (42%)	01 (10%)
Family members not supportive	00	05 (8.3%)	01 (10%)
Not Affordable	00	10 (17%)	01 (10%)
No time	15 (37%)	10 (17%)	00
Not necessary	15 (15%)	30 (50%)	04 (40%)
Willingness to undergo PAP if available locally	35 (87%)	40 (67%)	05 (50%)

#### Discussion

The incidence and mortality of cervical cancer remains high in India even after sixty five years of introduction of the Pap smear (cervical cytology) which is an effective means of identifying preinvasive lesions of carcinoma cervix. This can be attributed to multiple factors like lack of well organised screening programme, ignorance of people regarding the disease and time constraints of the doctors [3]. This study was conducted to know the level of knowledge of doctors, staff nurse and office staff and their attitude and practice towards cervical cancer & prevention in a tertiary institute in Karnataka. In the present study it was observed that all doctors had adequate knowledge about causes, risk factors, screening tests and HPV vaccine, however a few doctors were not aware that screening tests are required even in the absence of symptoms. It was found that inspite of adequate knowledge, uptake of screening test was low among doctors. Only 5% of doctors had undergone Pap smear previously. After this study around 75% of the doctors were willing to undergo Pap smear in future. In a similar study conducted by Amtullah Zareen [4] 99% of the doctors had good knowledge about cervical screening and only 27 doctors had undergone previous screening. He also observed in his study that nearly 77% of all subjects were willing to have future screening provided facility was easily accessible.

This study revealed 40 to 50% of the staff nurses were aware of the risk factors and the two most common symptoms of the cervical cancer. Dhodapkar SB [5] and colleagues have reported that Young age at first intercourse and multiple sex partners were correctly responded by 13% and 48% of participants respectively, as risk factors for cervical cancer. In a study done by Goyal A et al [6] in Surat, India 61.5% and 44% knew multiple sexual partners and intercourse at early age as risk factors .

Nearly 42% of the respondents thought cervical carcinoma is preventable and curable, 46% of them were aware of screening test, however, only 5% of the staff nurses knew about various screening tests available like Pap smear, Visual inspection of vagina with lugols iodine or acetic acid. It was also observed that >80% of the nurses were under the opinion that screening should be done after 50 years or only when symptoms appear. Previous history of vaginal discharge and vaginal bleeding was present in 25 and 10 respondents respectively. 90 to 95% of them never had a screening test, common reasons stated for not being tested were lack of awareness, thought it's not necessary or hesitation to visit doctor. Previous

studies have reported that only 4% to 12% of study population had got Pap smear done on them [5,7,8]. However, after this study 67% had consented to undergo Pap smear if available locally.

Several studies in the literature have reported a low level of knowledge on HPV and cervical cancer among children, parents, teachers, community leaders and even health service providers of four developing countries (India, Peru, Uganda and Vietnam) [9].

The majority of the nurses had inadequate knowledge of transmission of HPV, causes, risk factors, symptoms, treatment and prevention of cervical cancer in a study conducted by Urasa M & Darj E. They also noted that most (116/137) of the respondents had never had a Pap smear, the most common reason (54.7%) was not knowing where to go for the test, followed by seeing no reason for the test (13.1%) [10]. In a study by Ali SF<sup>11</sup> thirty seven percent knew Pap smear as a screening test and only 37 out of 400 respondents were aware of the HPV vaccine. Jain SM [12] in his study observed that 58.6% were aware of Pap smear test but only 3% had ever undergone a Pap smear examination and 62.1% were interested to get their Pap done. In our study 75% of doctors and 8.3% of staff nurse had knowledge of HPV vaccine and 87% of doctors and 67% of nurses were willing to undergo Pap smear.

Participants in the group C were less in number and we observed that their knowledge was poor and there is need to educate them as they also indirectly form a link between patients and doctors.

## Conclusion

Respondents though had adequate knowledge about screening tests never underwent Pap smear or any other screening tests. Most of the respondents failed to answer the correct schedule of Pap smear and thought screening should begin after 50 yrs or only when symptoms appear. This needs to be addressed, continued medical education or in house clinical lectures to update the recent changes in screening program should be conducted. Though the participants from nonmedical staff were few, none of them seemed to be having adequate knowledge. They also need orientation program as they are also a part of hospital team. Finally, as the saying goes "Change begins with me", all health care professionals and workers should be self encouraged to undergo screening test at least once and should also educate others to participate in screening programme.

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