



# e-Newsletter

## ISCCP

Member International Federation of Cervical Pathology and Colposcopy

## Newsletter of Indian Society of Colposcopy & Cervical Pathology (Reg.)

[www.isccp.in](http://www.isccp.in)

### From the Editor's Pen

Dear All,

Greetings from ISCCP

This issue is second in row of the academic pursuit of ISCCP conference 2019. It contains another 16 abstracts presented in the Annual conference of ISCCP 2019.

I hope you all have gone through the abstracts in the previous issue. If you have any queries, you can convey your questions to us which will be passed on to the respective authors.

ISCCP members are continuously involved in educational and public awareness activities in the field of cervical cancer prevention. Details of the activities held in the first quarter of the year have been included in this issue.

It is my utmost request to you all to kindly send all the activities which you perform under the banner of ISCCP so that they can be published in the Newsletter as well as updated on the website. Your involvement and encouragement matters a lot to this society.

You can also send your request on any topic which will be dealt in detail as a review article by one of our committee members. I once again request all the ISCCP members to contribute in the Newsletter in the form of review article/original articles/viewpoint/case reports/images.

Chief Editor

**Prof Aruna Nigam**

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### Guidelines for Authors

All members of ISCCP are requested to send manuscripts pertaining to (but not exclusively limited to) to cervical cancer prevention/treatment for publication in the newsletter. The matter should be original and not published/under consideration for publication elsewhere.

This could be in one of following forms:

- 1. Original Article:** Articles from original research (including aim, methods, results and discussion), should not exceed 5-6 typed pages, word limit of 1500 words and not more than 10 references. Tables and Figures could be included as per requirement.
- 2. Review Article:** The article should not exceed 3-4 typed pages, word limit 2500 words with not more than 8 references.
- 3. Case Report:** An interesting case report which has "take home message", word limit 800 words with not more than 3-5 references. Image should be sent separately in JPEG format
- 4. Report of conferences/ CME? awareness/training camps:** up to 300 words with 2-3 images

**References:** References should be recent, relevant, indexed and in Vancouver style. References to literature cited should be numbered consecutively and placed at the end of the manuscript. In the text they should be indicated as superscript. All papers submitted are subject to review process. All accepted papers will be suitably edited before publication.

**Submit to:** Dr Aruna Nigam, [prakasharuna@hotmail.com](mailto:prakasharuna@hotmail.com)

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### Forthcoming Conference

#### ISCCP + IMS Colposcopy Workshops

**Patna on 30<sup>th</sup> June, 2019**  
[drnibhamohan@gmail.com](mailto:drnibhamohan@gmail.com)

**Agra on 28<sup>th</sup> July, 2019**  
[drsavitatyagi@yahoo.in](mailto:drsavitatyagi@yahoo.in)

**Bhopal on 12<sup>th</sup> Oct, 2019**  
[madhurichandra2@gmail.com](mailto:madhurichandra2@gmail.com)

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# ISCCP Activities

Professor Nisha Singh

Department of Obstetrics and Gynaecology, King George's Medical University, Lucknow

## Cansupport – Walk for Life and ISCCP Activity

Cansupport is a known organization supporting cancer survivors. An annual walk was held at Rajpath, Delhi on 3<sup>rd</sup> February, 2019 to create awareness for cancer prevention and boost cancer survivors. ISCCP was proud to get associated as a group – A society dedicated to cervical cancer prevention. About 400 people walked for life which included cancer survivors, volunteers, students and social activists.



A cervical cancer vaccination camp was organized by **Innerwheel District 301 and Sant Parmanand Hospital** on 14<sup>th</sup> February, 2019 with the mission to uproot cervical cancer from our country. Awareness talk was given to the girls and their parents on cervical cancer prevention and vaccination against cervical cancer. After informed consent 250 girls between 9-14 years were vaccinated with their first dose of vaccination.



A **Pre NARCHI DELHI 2019 conference comprehensive workshop on "Vulval disorders"** was conducted on 21<sup>st</sup> February, 2019 in Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi in association with ISCCP & Oncology Committee of AOGD. The course conveners were Dr. Rupali Dewan, Dr. Vijay Zutshi and Dr. Saritha Shamsunder. Co-conveners were Dr. Sujata Das and Dr. Sheeba Marwah. A very informative session on challenging situations of vulva was conducted by experts from all over the country. Case discussions were thoroughly enjoyed by the delegates. The hall was packed with 40 faculties and 67 delegates from all over India.





**Dr Veena Acharya**, organized the awareness program and walk at Birla Auditorium on the occasion of Women's Day on 8<sup>th</sup> March, 2019 in association with ISCCP and Indian Menopause society.



Dr Neha Gupta of **Hamdard Institute of Medical Sciences and Research**, took lecture as a representative of ISCCP on cervical cancer screening methods in School of Unani Medical Education and Research, Jamia Hamdard, Delhi on 20<sup>th</sup> March, 2019



An Awareness talk was given to young female employees of Royal Bank of Scotland at Delhi on 29<sup>th</sup> May 2019 under the aegis of Indian Society of Colposcopy and Cervical pathology. The topics were Cervical cancer prevention and Polycystic ovarian syndrome. About 35 girls attended the program. A very interactive session.



# Free Paper/Poster Abstract Presented in ISCCP 2019, Vishakhapatnam

## Knowledge, Attitude and Practices Among Women in Rural, Semi-Urban and Urban Areas Regarding Cervical Cancer Screening and Vaccination

Priyanka Vemanamandhi, Mohan  
Ananth, Leela Digumarti

Homi Bhabha Cancer Hospital & Research Centre

**Aims and Objectives:** To assess the knowledge, attitude and practices about cervical cancer screening in women among rural, semi urban and urban population.

**Materials & Methods:** All women who attended cervical cancer screening camps were given a set of questionnaires assessing their knowledge, attitude practices regarding cervical cancer screening and vaccination and the data was analysed in three different settings- rural, semi urban and urban areas. The study was conducted among 800 women. Of these, 296 women were from rural background, 236 from semi urban areas and 268 were from urban population.

**Results:** Of the 800 women, 54% in rural, 74.5% in semi urban and 79 % in urban population were unaware about cervical cancer screening. However, majority of these women were willing to undergo screening (85%- urban, 93% - semi urban and 91% in rural group). There was no significant difference between rural (69%), urban (79.4%) and semi-urban (76.7%) when women did not know that cervical cancer prevention vaccine existed.

**Conclusions:** This study emphasizes the need for cervical cancer awareness, screening camps and vaccination to prevent cervical cancer. The KAP gap existed irrespective of whether women belonged to rural, semi urban and urban background.

## A Rare Case of Post Radiotherapy Metachronous Uterine Malignancy in a Patient Of Cervical Cancer

Parmita Tiwari, A C Katakai  
Debabrata Barmon, Dimpy Begum

Dr B Barooah Cancer Institute (BBICI), Guwahati

**Introduction:** CT+RT remains the main mode of treatment in cervical cancer. Development of second malignancies is a rare complication of radiotherapy. Radiotherapy associated metachronous uterine malignancy after cervical cancer is rare but usually presents with aggressive tumor characteristics and poor survival rates.

**Case Report:** A 52-year-old, Postmenopausal lady, Para 3, was diagnosed with carcinoma cervix IIB SCC-NKLC in 2009 for which she received radical Chemotherapy and radiotherapy. EBRT one fraction of haemostatic RT 800cGy followed by 42Gy over 21 fractions was given along with concurrent Cisplatin (50mg) 5 cycles.

ICRT (HDR) 2 fractions each 750 cGy was given. Patient was kept under regular follow up. In July 2018 she presented with complaint of intermittent abdomen pain. Clinically uterus was enlarged 14-16week size. USG shows grossly distended uterus with ill-defined proliferative polypoidal mass 4.5x2.2cm possibly arising from cervix similar findings were found on MRI. Patient was taken for exploratory laparotomy – TAH+BSO was done. Final HPR showed Mucinous Adenocarcinoma in polypoidal growth, tumour invading inner half of cervical stroma and peritoneal fluid cytology positive for malignancy. Patient received adjuvant chemotherapy and is under follow up.

**Conclusion:** Cervical cancer patients treated with radiotherapy are at increased risk of second cancers at sites in close proximity to the cervix. Long-term follow-up and surveillance after cervical cancer treatment is needed for early detection of these metachronous malignancies.

## Comparative Study of Pap Smear and Colposcopy in Perimenopausal Women for Early Detection of Premalignant &/or Malignant Lesions of Cervix

Niranjana Devi

**Background and Objective:** The present study is aimed to compare the effectiveness of the Pap smear, colposcopy and cervical biopsy in selected cases for early detection of premalignant and malignant lesions of the cervix.

**Design and Setting:** This was a prospective, analytical study in which 100 patients of the perimenopausal age group attending the gynecology OPD were enrolled.

**Materials and Methods:** Patients were first subjected to Pap smear followed by colposcopy in the next setting and biopsy if needed. Data was obtained and statistically analyzed.

**Results:** Of the 100 patients, 16 (16%) had positive Pap test, 13(13%) had positive VIA and 20 (20%) had positive VILI and 10(10.75%) showed features of cervical intraepithelial neoplasia (CIN) on colposcopy. Of the total of 48 patients in whom either of the screening tests was positive and had undergone cervical biopsy, one had CIN-3, three had CIN-2, 5 had CIN-1, one had carcinoma in situ CIS and 29 reported normal. In our study, 40 patients were picked up as positive by combination of these tests, of which 7 (7%) had CIN on biopsy.

**Conclusion:** Our study showed that colposcopy had better sensitivity and specificity comparable to Pap smear and can thus be a suitable potential alternative/adjunctive screening. And, use of a combination of tests (Pap+colposcopy) had 100% sensitivity but at cost of low specificity and more false-positive results.



## To Assess the Awareness Regarding Cervical Cancer Screening and Cancer Cervix Amongst Upcoming Doctors (MBBS Students) in Delhi

Manjeera Siva Jyothi, Monika Gupta  
Saritha Shamsunder, Sunita Malik  
VMMC and SJH, New Delhi

**Background:** India accounts to around 1/4<sup>th</sup> of global burden for ca cervix. It is the 2<sup>nd</sup> most common malignancy (3.5%) in women in India only after ca breast (28.6%). The estimated incidence is 570,000 cases and 311,000 deaths in 2018 globally. It ranks as the fourth most frequently diagnosed cancer and the fourth leading cause of cancer death in women. The most important factor is lack of awareness and accessibility of screening.

**Aims and Objectives:** Present study is aimed to get an idea regarding the knowledge present in MBBS students so that strategies regarding cancer control programmes and to create awareness about Ca cervix could be devised.

**Results:** Seventy-eight MBBS students were given a prestructured questionnaire as a pretest. All the proformas were in English in medical terminologies which could be easily understood by all the students. In case of difficulty questions were explained to individuals. Filled proformas were collected before commencing the session. Individual queries were dealt at the end of the session. The same questions were asked after the session as a post test and the percentage of correct answers given in the pre and posttest was evaluated. A total of 78 students have been evaluated. The percentage of female students counselled by medical professionals for vaccination is 38.2%. But the vaccination rate is only 17.6%. The range of correct answers in pretest value is 2-23 with a median of 13. The range of correct answers in post-test is 10-24 with a median of 20. The average percentage increment between them is 66.46%. This showed a significant improvement in the knowledge attained with a P value of <0.0001.

**Conclusions:** This shows such kind of sessions help improving the knowledge of health care workers and bring down the incidence of CA cervix and preinvasive diseases of cervix.

## Awareness About HPV Vaccination Among Educated-Nursing Staff and School Teachers in Urban Population

B Kavya, R I Indira  
Government Maternity Hospital  
S V Medical College, Tirupati

### Objectives

1. To evaluate the awareness of HPV vaccination among the educated women in the urban population.
2. To know the acceptability of HPV vaccination among the educated women in the urban population.

**Methods:** A questionnaire-based study was conducted among 100 women (50-school teachers and 50 staff Nurses). Convenience sampling was applied. Data regarding knowledge about cervical cancer, causative, vaccination and willingness for vaccination was taken and analysed using Microsoft excel and epi info version.

**Results:** Eight (16%) of school teachers did not know about HPV. 89.2% of nursing Staff and 76% of school teachers were aware about the causative and risk factors about HPV. 72% of nursing staff and 54% of school teachers were showing acceptability for vaccinations.

**Conclusions:** The study showed that Knowledge regarding HPV virus was high among nursing staff compared to the school teachers but the Acceptability of vaccination was low in both Nursing staff and school teachers. Continuing Medical Education Program should be started at the hospital level. A national school-based HPV Immunization program should be implemented. Burden of cervical cancer can be reduced by vaccination which can be achieved only by proper education.

## Effectiveness of Colposcopy Workshop in Improving Knowledge and Skill of Colposcopy in Post Graduates Students- A prospective study

T Kanimozhi, P A Chandrasekharan  
Priya Ganesh Kumar  
S V Medical College, Tirupati

**Aims:** To assess the impact of the training program in developing the skills on colposcopy among the Post graduates.

### Objectives

1. To study the improvement in knowledge after the training.
2. To study the improvement in confidence in doing colposcopy (skills).

### Materials & Methods

**Study Setting:** S.V. Medical college, Tirupathi

**Study Subjects:** post graduate students OBG department

**Sampling Method:** convenient sampling of post graduates students who attended a workshop.

Colposcopy hands on training was conducted on December 7<sup>th</sup> and 8<sup>th</sup> at S. V. M. C Tirupathi. Prior to workshop pretest was conducted and post test was conducted after the program using same questionnaire.

**Study Instrument:** For knowledge assessment pre and posttest questionnaire containing 10 MCQS and 8 short answer questionnaire.

Data management and Statistical method: MS Excel Epi info software paired t test

**Results:** The mean pretest score was 22.81 and post test score was 38.54 which is statistically significant ( $p < 0.05$ ). The mean attitude and confidence score using retro pre questionnaire before was 7.05 and after was 18.3 which is statistically significant ( $p < 0.05$ ). The average knowledge score (maximum 50) was 38.9 using retro pre questionnaire which is statistically significant, ( $p < 0.05$ )

**Conclusions:** 76.5% of the participants felt that the program was very useful. Maximum increase in knowledge was in "Different scoring system of CIN lesions" and least was in therapy for CIN lesion. Maximum participants are confident in doing a Colposcopy after the training program. Hence, such hands-on training should be conducted to improve the knowledge and confidence in doing Colposcopy among the postgraduates.

# Exploratory Study on the Utility of Portable Colposcopy as a Screening Tool for Cervical Cancer

P A Chandrasekharan, Sunitha

Kanaka Mahalakshmi

Government Maternity Hospital, Tirupathi

**Aim:** To assess the performance of portable colposcope in low resource settings.

## Objectives

1. To estimate the time and resources required by portable colposcopy in performing cervical cancer screening.
2. To estimate the cost effectiveness of portable colposcopy.
3. To assess the sensitivity of portable colposcopy by correlating with cervical cytology.

## Methodology

**Study Area:** Challavaripalli village, Chittoor district.

**Study Design:** Prospective analytical study.

**Sample:** Women who attended the camp conducted at Challavaripalli.

In this study, a portable colposcope FA2 which costs about Rs.12000 was used. A TV set is attached to it in which colposcopic evaluation was done. 80 women underwent Pap smear followed by portable colposcopy with visual inspection with acetic acid. Colposcopic evaluation was made. Pap smears were sent for cervical cytology. Colposcopic findings were correlated with cervical cytology.

**Results:** Out of 80 women who attended the camp, all of them had normal colposcopic findings. Pap smears of these 80 women were found to have normal cervical cytology. Therefore, the sensitivity of portable colposcopy and Pap smear as screening tools for cervical cancer are similar.

**Conclusions:** Usually, each Pap smear kit costs about Rs.15. It requires histopathology for examination of the smear. About 1 to 2 days are required for reporting as low resource settings are lacking these resources.

In portable colposcopy immediate result can be obtained. It is also cost effective as once purchased, it can be used in any number of women. In this study as both Pap smear and portable colposcopic findings were correlated, portable colposcopy can be used as a screening tool for cervical cancer, because it is cost effective, feasible, portable and time saver.

## Comparison of Effectiveness of Pap Smear vs. Visual Inspection with Acetic Acid in Screening for Pre-Malignant Lesions of Cervix

Vani Isukapalli, Bhargav Ram Manda

Lotus Hospital, Visakhapatnam

**Aims:** VIA as cost effective alternative to pap smear.

**Objectives:** To prove that VIA as good screening in mass camps.

**Materials & Methods:** Around 278 women in various suburban camps in 2-year period were screened by both VIA and pap smears results were analyzed and compared.

**Results:** Out of the 278 cases, Pap test was positive in 39 women, VIA was positive in 70 women and positive cases with biopsy were 48.

### When biopsy was taken as a reference standard,

Pap smear - sensitivity	58.3%
Specificity	95.2%
Positive predictive value	71.7%
Negative predictive value	91.6%
VIA sensitivity	87.5%
Specificity	87.8%
Positive predictive value	60%
Negative predictive value	97.1%

### In high grade pre-cancerous and cancerous lesions, pap smear

• Sensitivity	43.47%
• Specificity	92%
Positive predictive value	83.3%
Negative predictive value	63.8%
VIA - Sensitivity	52.1%
Specificity	68%
Positive predictive value	60%
Negative predictive value	60.7%

**Conclusions:** VIA is a cost effective alternative to pap smear for mass screening.

## Comparison of Cytology and Visual Inspection with Acetic Acid (VIA) for Triage of HPV Positive Women for Detection of Cervical Intraepithelial Neoplasia (CIN)

Harshitha K, Saritha Shamsunder, Sunita Malik

Anoop Kumar Meena, Rashmi Arora

VMMC and Safdarjung Hospital, New Delhi

**Aims:** To compare Cytology and VIA as triaging methods prior to Colposcopy in women detected screen positive by Human Papilloma Virus (HPV) DNA testing for primary screening.

**Objective:** To detect CIN in HPV positive women.

**Methodology:** A cross-sectional study was carried out in pre-menopausal women  $\geq 30$  years coming to gynecology clinic with any complaint and testing positive for HPV DNA for primary screening. A cervical swab sample for HPV was taken during routine gynaecological examination after informed consent and tested for HPV DNA. Women with a positive HPV test were called for colposcopy. Prior to colposcopy, a cytology sample was taken and VIA done. Biopsy was taken if Swede score  $\geq 1$  on colposcopy and sent to histopathology. The sensitivity and specificity of cytology and VIA for detecting  $\geq$  CIN 2 in HPV positive women was compared with the gold standard of histopathology.

**Results:** Among 1200 women screened, 83 were HPV DNA positive. However, 75 patients could be followed up in the given time, out of which 58 women were positive by VIA whereas 18 by cytology. 37 patients had Swede's score  $> 5$  and 28 had  $\geq$  CIN 2 on HPE.

Sensitivity of VIA was 100% and specificity was 33.33% whereas that of cytology was 55.56% and 91.43% respectively.

**Conclusion:** VIA was found to be more sensitive but less specific than cytology for triaging HPV DNA positive women detected on primary screening.

## Feasibility of Self-Sampling for HPV DNA Detection in a Community Based Cervical Cancer Screening Project

**Debilina Roy, Dipanwita Banerjee  
Manisha Vernekar, Ranajit Mandal**  
Chittaranjan National Cancer Hospital, Kolkata

**Background:** Cervical cancer is the second most common cancer in Indian women causing 60000 deaths per year. Introduction of Non-Cytological Screening test like visual inspection on acetic acid (VIA) and Human Papillomavirus (HPV) test has caused a paradigm shift in previous conception of PAP Smear cytology based cervical cancer screening methods. This study aims to evaluate the feasibility and compliance for self-sampling in order to detect HPV DNA in a community-based cervical cancer screening project.

**Materials & Methods:** Maintaining privacy, 30-60 years eligible women were encouraged to do self-sampling of high vaginal swabs in outreach clinics after taking informed consent. The samples were brought back to Chittaranjan National Cancer Institute (CNCI) and were tested by hybrid capture2 (HC2) test for 13 high-risk oncogenic HPV types. HC2 positive women were recalled at a later date and underwent colposcopy, biopsy and treatment by ablative method (if eligible).

**Results:** A total of 9665 women were recruited between May, 2017 and December, 2018 by the Department of Gynaecological Oncology. HPV positive 623(6.4%) cases were recalled, out of which 462 (74.1%) women had colposcopy and biopsy followed by treatment by thermal ablation in appropriate cases. Total 14 cases of cervical intraepithelial neoplasia 2+ cases were detected and treated till date. Four (0.8%) invasive cancer cases were referred to CNCI for further management. All women were comfortable with self-sampling. No cases of sample inadequacy or any other problem were reported.

**Conclusions:** The detection rate of HPV positive and CIN cases were comparable to the rates detected by provider collected samples in previous studies. Therefore, offering the option of self-sampling may increase participation in cervical cancer screening programs.

## Comparison and Correlation of Swede Score and IFCPC Score with Histopathology in VIA Positive Patients

**Aswathy G Nath, Rema P  
Remani Wesley, Suchetha S, Sivaranjith J**  
Regional Cancer Centre, Thiruvananthapuram

**Aims:** To study the correlation between colposcopy and histopathology report in VIA positive patients.

**Objectives:** To correlate the findings of Swede score and IFCPC

score during colposcopy with cervical biopsy report in detecting premalignant lesions of cervix in VIA positive patients.

### Materials & Methods

**Study Design:** Retrospective audit of patients who underwent colposcopy in the department of Gynecologic Oncology, RCC, from June 2018 to December 2018.

**Study Population:** Women who are VIA positive detected by screening programmes in RCC.

**Methodology:** Retrospective audit of VIA positive patients who underwent colposcopy in RCC. Details collected from case sheets and colposcopy charts. Colposcopy scorings and final histopathology (hpr) report were statistically assessed using Spearman's rank correlation test.

**Results:** Out of total 60 females screened average age was 46. Colposcopy was adequate in 95% cases and biopsy taken for all cases. 73.3% females have high grade hpr report (CINII, III, SCC in situ, SCC) and 26.7% females have low grade hpr report (CIN I). Swede score >5 was correlated with only 36.4% of high grade hpr report, while IFCPC score as major lesion was correlated with 70.45% of high grade hpr report. Swede score had a sensitivity of only 36.4%, specificity of 81.3%, PPV 84.2% and NPV 31.7% with final hpr report. IFCPC scoring had a sensitivity of 70.5%, specificity 50%, PPV 79.5%, NPV 38.1% with final hpr report. Measurement of agreement kappa was 11.8% with swede score and 18.6% with IFCPC score. Spearman's rho between hpr and swede score was 0.017 while Spearman's rho between hpr and IFCPC score was 0.19.

**Conclusions:** IFCPC scoring has better correlation and with final histopathology report in detecting premalignant lesion of cervix. IFCPC score has more sensitivity in detecting high grade lesion while swede score was more specific in detecting high grade lesion.

## Familiarizing A Rural Area in Maharashtra with Cervical Cancer Prevention Early Detection and Management

**Aruna Chiwate, Sanjay Hingmire  
Ranjit Thorat** (on the behalf of IARC)

Cervical Cancer Prevention Project Unit at Nargis Dutt Memorial Cancer Hospital, Barshi

**Aim:** This presentation highlights the efforts of the Nargis Dutt Memorial Cancer Hospital (NDMCH) in Barshi to create awareness regarding cervical cancer screening, and management in rural Maharashtra.

**Materials & Methods:** We have a comprehensive cervical cancer prevention project unit set up by the (IARC) and funded by the Bill and Melinda Gates foundation at the NDMCH. This includes fully functioning Cytology/Histology and HPV laboratories. It also includes a very efficient Epidemiology unit. The experience gained has helped us to conduct several collaborative cervical cancer screening programmes at this centre. The first of these was initiated in 1999 in collaboration with TMH Mumbai, and IARC, Lyon France. We screened 79506 women in three different arms, namely, VIA, Cytology and HPV by Hybrid Capture II. We also had a control arm of 24780 women. This was followed by other such screening programs. The Barshi Centre has also conducted courses in training master trainers from India and abroad, in Cervical Cancer Prevention Early Detection and Management. In these courses training in Colposcopy, Cold coagulation and LEEP are imparted.



**Results & conclusion:** All the above mentioned activities have helped us create awareness in the community and in the physicians and gynaecologists in and around Barshi. This has enabled us to introduce an Early Detection Scheme (EDS) wherein our centre offers screening and treatment facilities for cervical cancer prevention. This has been a very successful program.

## Knowledge of Cervical Cancer, HPV Infection and Vaccine in Nursing Students Nursing Staff and Female Hospital Workers in a Tertiary Care Center of North India

Archana Mishra, Ruchi Hooda  
Swati Gupta, Sunita Malik

VMMC and Safdarjung Hospital, New Delhi

**Aims:** Human Papilloma virus is one of the most common and dangerous sexually transmitted disease which affects around 50-80% of women of reproductive age group. HPV is associated with a number of diseases like vaginal warts, anal warts, premalignant and malignant lesions of cervix.

**Objectives:** Present study is undertaken to assess the knowledge of cervical cancer screening, HPV infections, and HPV vaccination in nursing students, nursing staff and female hospital workers.

**Materials & Methods:** A total of 650 of nursing students, nurses and group D female workers were interviewed.

**Results:** Most of the nursing students had adequate knowledge about cervical cancer and screening followed by Staff nurses. Knowledge of HPV infection and vaccine is adequate in 3/4<sup>th</sup> of the nursing students and nursing staff. Female workers had inadequate knowledge of cervical cancer and screening and negligible knowledge HPV infection and vaccine.

**Conclusions:** We concluded that Healthcare employees should be involved in all the cervical cancer awareness programs initiated by hospital. If properly informed Hospital staff could be a useful link for spreading information from health care systems to general public.

## Knowledge, Attitude & Practices of Cervical Cancer Screening in Health Care Providers in a Teaching Hospital

Anvitha Desaraju, Prabha Devi

NRI Medical College Guntur District, Mangalagiri

**Background:** Cervical cancer is the second most common cause of mortality and morbidity among women of reproductive age group in India. Healthcare providers in hospitals (medical and paramedical staff) play an integral role in educating women in the prevention of cervical cancer by screening, adherence early diagnosis and health promotion.

### Objectives

1. To assess the knowledge, attitude and practices of screening (Pap test) and HPV vaccination for carcinoma cervix among female doctors and nurses in a tertiary care hospital
2. Knowledge and awareness in health care providers which can increase screening Practices.

**Materials & Methods:** A cross-sectional observational study at NRI Medical College Teaching hospital setting over 2 months on 50 health care providers, 21 years to 65 years. Predesigned, pretested, validated questionnaire for knowledge of symptoms, screening, risk factors for cervical cancer & knowledge about HPV vaccine was collected. Data was analysed with SPSS16. Chi-square test used.

**Results:** Moderate and good score were more in health persons, practicing screening cancer cervix. Analytical data will be discussed.

**Conclusions:** Knowledge, awareness and education in health care workers about preventive aspects with HPV Vaccination and screening of cervical cancer is needed for identification and treatment of precancerous/cancerous lesion of uterine cervix lead to better prognosis and survival.

## Cervical Carcinoma Presenting as Cervical Fibroid

Dake Mrudula, Jayalakshmi

Maharajas Institute of Medical Sciences  
Vizianagaram, Andhra Pradesh

**Introduction:** Cervical carcinomas are of 2 types-squamous cell carcinoma (80%) and adenocarcinoma (20%). Squamous cell carcinoma usually appears as proliferative or cauliflower like growths, as ulcers or indurated areas or barrel shape enlargement due to cervical stenosis. They are vascular, friable and bleeds on touch. Histologically they are well differentiated(presence keratin pearls or ill differentiated).

**Case:** A 43 year old parous woman came with c/o continuous spotting p/v for 2 months and heavy menstrual bleeding for 1 year. On examination, her vitals were normal.

**On Abdominal Examination:** A mass corresponding to 16 weeks size, Uniformly enlarged, Firm in consistency, upper and lateral borders felt smooth, lower border could not be felt. All quadrants were moving equally with respiration. No visible engorged veins or pulsations.

**On Speculum examination** - A 8\*5 cm mass was seen and no cervical lips could be visualized, mass looked congested, Bleeding on touch was absent, mass was non friable and no foul smell was present.

**On Bimanual examination-** The same mass was felt, Firm in consistency, Lips could not be felt, Uterus enlarged uniformly up to 16 weeks. Mass was mobile with fornices free.

### Investigations

On USG a Large Fibroid of 13\*10\*9 cm is seen in the cervix & body of the uterus.

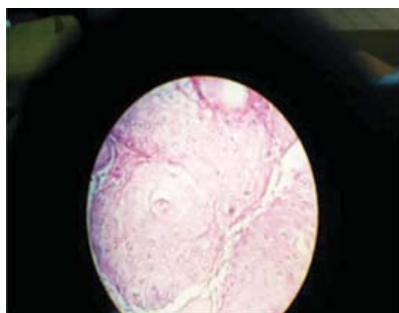
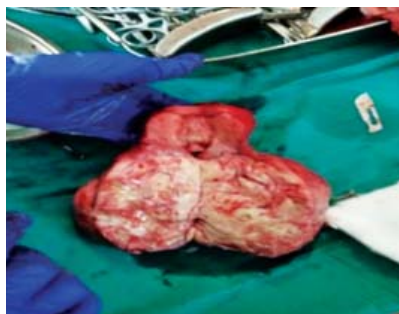
On TVS, the fibroid appears to have a conical at lower end, which may probably represent a fibroid polyp. However, the myometrium around the fibroid is extremely thinned out and could not be made out.

**CT scan** - Large Fibroid of 13\*10\*9 cm is seen in the cervix & body of the uterus.

PAP smear and cervical biopsy were not done as cervical lips could not be seen; endometrial sampling was unsuccessful as os was obliterated by the mass and uterine sound could not be negotiated; biopsy of mass not done as features are pointing towards fibroid.

Total abdominal hysterectomy done in view of cervical fibroid and sample sent for histopathology.

**Histopathology:** Endometrium-late proliferative phase; cervix-showing severely dysplastic changes in the ectocervical lining extensively infiltrating large sheets, nests and clusters of malignant squamous cells, central areas of necrosis and cystic degeneration. Areas of haemorrhage and necrosis noted, suggestive of moderately differentiated infiltrative squamous cell carcinoma of cervix.



**Conclusion:** This case highlights the difficulty and importance of considering carcinoma cervix in the differential diagnosis of cervical mass with abnormal uterine bleeding presenting as fibroid

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## Role of Biomarkers in Early Detection, Diagnosis and Management of Pre-Invasive, Progressive Lesions of Cancer of Cervix and Adjunct to Colposcopy and Cytology

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#### Aims

1. To increase awareness on biomarkers of cancer cervix in preinvasive lesions.
2. To highlight the novel biomarkers in diagnosis and categorising progressive lesions and also on genetic and chromosomal aberrations.

#### Objectives

1. Early diagnosis of preinvasive lesions of ca cervix, management and through a light on screen those naïve for HPV and vaccinate.
2. The proper management of potentially, progressive lesions, even LSIL, CIN I, CIN2, by colposcopy.

**Material & Methods:** Literature collections

Bio-Markers offer a great potential for improving the management of cervical cancer by at every point from cervical cancer detection, diagnosis, targeted therapy, staging. It is particularly very useful in early diagnosis, prevention, predicting the progression of pre invasive lesions LSIL & HSIL. Cervical cancer prevention is at a transition from cytology-based screening programs to HPV based prevention. With primary prevention by vaccines and secondary prevention using a highly sensitive HPV DNA test. Role of molecular biomarkers reflecting, epigenetic change. Hyper-methylation and silencing the tumor suppressing genes and hyperacetylation of histone. The above two are the reversible epigenetic changes. The transcriptional silencing (rna interference), reflected by the small duplex mi-RNA molecule that recruit silencing complex in RNA.

**Conclusion-** Disease specific biomarkers such as p16 ink 4a, HPV e-6/e-7 m-RNA, or novel methylation (markers reflecting the epigenetic changes) assays as secondary marker to identify women precancerous lesion who require colposcopy or treatment.