Cervical cancer is the second most common cancer affecting women worldwide. In developing countries, it is a leading cause of death among middle-aged women, Cervical dysplasia, a premalignant lesion that can progress to cervical cancer, is caused primarily by sexually transmitted infection by Human Papilloma Virus (HPV). WHO recommends Pap smear cytology, Colposcopy and HPV detection as primary screening tools for cervical cancer.

**Abstract**

Cervical cancer is the second most common cancer affecting women worldwide. In developing countries, it is a leading cause of death among middle-aged women, Cervical dysplasia, a premalignant lesion that can progress to cervical cancer, is caused primarily by sexually transmitted infection by Human Papilloma Virus (HPV). WHO recommends Pap smear cytology, Colposcopy and HPV detection as primary screening tools for cervical cancer.

**Aims:**

To correlate the findings of Pap smear cytology and colposcopic directed tissue biopsy with HPV detection by immunohistochemistry and PCR in a sample of symptomatic Iraqi patients.

**Materials & Methods:**

The study population included 118 patients who were referred to the Iraqi National Cancer Research Center complaining of different gynecological signs and symptoms during the period from December 2011 to December 2012. The age of those women ranged between 18-60 years with a median of 37 years. All women were interviewed and subjected to detailed history, clinical examination, cervical cytology (Pap smear). Colposcopic
examination and HPV detection by PCR (Polimerase Chain Reaction) method and immunohistochemistry were carried out for those who revealed abnormal Pap smear results.

Results:
Cytological diagnosis of these patients reveal that there were 55 cases (46.6%) of cervicitis, 30 cases (25.4%) of LSIL (Koilocyte), 23 cases (19.4%) of LSIL (CIN-1), three cases (2.5%) of HSIL (CIN-11), three cases (2.5%) of ASCUS, three cases (2.5%) of AGUS and one case of squamous cell carcinoma.

Abstract
Only 53 patients were referred for colposcopic directed biopsies from the total group studied (TGS) included in this study samples (44.9%). HPV detection using immunohistochemistry revealed positive results in (26) cases in out of (53) biopsies (49%). The peak frequency of positive HPV findings was seen at the age group (30-39) years and in those patients who had four children. The most common complaint was abnormal vaginal discharge (61%); ten of those patients showed positive HPV findings (18.8%). The most common gross finding by visual inspection was cervical erosion (46.6%) where HPV + immunohistochemistry was observed in 12 cases (22.6%). The most frequent method of contraceptive used was oral contra captive pills (88 patients - 74.5%) in whom positive HPV results were seen in 18 cases (33.9%).

In conclusion, there was a good concordance between Pap smear cytology results and the findings of the colposcopic directed tissue biopsies specifically in diagnosing CIN lesions. HPV detection using the immunohistochemical technique was superior to the PCR technique. It is mandatory to promote nationwide community educational programs to raise the awareness of women to the benefits of screening for CIN.