## **Cervical Cancer Screening**

Cervical cancer is the fourth most common cancer in women in the world and second commonest cancer in less developed countries. It is estimated that 528, 000 cases are reported ever year with 80% reported in underdeveloped countries. It is one of the few cancers which have a well defined, approachable and early detectable pre cancerous stage which takes 10 - 15 years to transform into invasive disease. Exposure to HPV infection especially 16 & 18 along with risk factors of early age in first intercourse, multiple sexual partners, and smoking and low socio economic status all make women more vulnerable to cervical cancer.<sup>2</sup> According to recent PDHS survey, women in Pakistan marry at a median age of 19.5 years and 8% of teenage pregnancy happen.<sup>3</sup> Extra marital sex is prevalent although not talked about much. In Pakistan incidence of cervical cancer is reported to be 3.6% of all cancers with screening coverage of 1.9%.4

Effective screening program of Pap smear has resulted in decline of incidence and mortality in the developed world. The standard practice is to screen women using cytology every 3 years starting from 21 – 65 years.<sup>5</sup> In contrast, this program is a failure in the developing countries because of lack of laboratory infrastructure, trained cytologist, cost and follow up visit requirement especially in rural areas. The menace of disease is visible when it is already spreaded adding the threat to human life and burden to health care system.

The visual inspection of cervix with acetic acid (VIA) has been advocated as an alternative screening method to Pap smear in developing countries. It comprises of application of 5% acetic acid to the cervix and visualization of acetowhite area. It is simple, cheap, and easy to perform, does not require lab infrastructure and can be learnt easily. WHO guideline<sup>6</sup> suggests VIA as recommended screening method in developing countries. VIA has been evaluated in large number of clinical trials in India, Bangladesh and Africa in terms of sensitivity, specificity, positive & negative predictive value in detecting CIN and has been found a

reliable screening test.<sup>7-10</sup> HPV DNA testing is now the recommended screening test according to recent AS-CO guideline.<sup>11</sup> Screening in developing countries has been addressed in this guideline for the very first time and VIA has been suggested for basic settings.

Effective treatment approaches in the form of Cryotherapy, LEEP/LETTZ and cold knife conization are present for cervical premalignancy. Screen and treat approach at single visit is now recommended by WHO in low and middle income countries.<sup>6</sup>

More than 2 million women worldwide have cervical cancer. Despite evidence that cervical cancer has declined in certain regions of the world and that survival in women with this cancer has improved, far too many women die from this cancer every year in developing countries due to lack of effective screening programmes. Primary prevention in the form of HPV vaccine was introduced 10 years ago but it is still not widely used in resource poor countries due to its cost. 12 Interventions that do not require massive capital investment are available and need to be explored in low-resource settings, where access to early detection of cervical cancer is generally limited. It is hoped that decision makers are enlightened about possible alternative strategy in the form of visual inspection of acetic acid for cervical cancer screening that could improve the lives of women by early detection, destigmatize this disease in community, and ensure that they remain on the health-care agenda. A three prong strategy including sexual health education, screening and HPV vaccination should be global health priority to reduce burden of this highly preventable cancer.

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