Aim: To determine prevalence of cervical abnormalities on pap smears in “at risk” pregnant women.

Methods: Following ethical and hospital regulatory approvals, we prospectively recruited “at risk” women who had never had a pap smear, attending antenatal clinic at King Edward VIII Hospital. The “at risk” women were defined as all HIV infected women (as it is part of clinical management), as well as HIV uninfected women above the age of 30 years (as is part of the national screening protocol). This was part of routine clinical care, but for purposes of the study, informed consent was obtained. A Papanicolaou test was done in a routine manner using Aylesbury spatula.

Results: We enrolled 405 patients, two thirds of whom were HIV positive (67.2% n=272 and 32.8% or n=133 were negative). All demographic parameters known to be risk factors for cervical cancer were comparable between the groups. The majority of patients (62.7%) had normal Pap smear results (61.4% amongst HIV infected versus 65% amongst uninfected). HIV infected women were no more at increased risk of cervical smear abnormalities than HIV uninfected women, (Odds Ratio [OR] for HGSIL was 1.27, 95% Confidence Interval [CI] 0.63 – 19.56, p=0.134). However, when categorized according to different age groups, women who were HIV positive and >/= 30 years had higher rates of both LSIL and HSIL (OR for LGSIL 2.17, 95% CI=1.2 – 3.93, p=0.006, and for HGSIL OR=5.63, 95% CI=1.07 – 39.33, p=0.017).

Conclusion: HIV infection renders women of younger age at same risk as older women not infected with HIV.