

POSTER PRESENTATIONS

P-02; ANTIBODIES TO HPV CAPSIDS IN SEXUAL WORKERS AND CONTROLS IN THE CZECH REPUBLIC

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Background: Although more than 70% of sexually active people are infected during their lifetime with one or more HPV types, the prevalence of anti-HPV antibodies in women without cytological abnormalities does not exceed 40%. The HPV infection is gained early after the onset of sexual life. However, little is known about the anti-HPV antibody profile in populations with various risky behaviors.

Objectives: Comparison of the normal population represented by healthy women with the high risk group of sexual workers can bring important information especially in the current HPV vaccination era.

Materials and Methods: The prevalence of anti-capsid antibodies in group of female sexual workers (no 114) and sex- and age-matched

controls (no 342) was established by direct ELISA using virus-like particles (VLP) derived from HPV-6, -11, -16, -18, -31 and 33 as antigens.

Results: The prevalence of antibodies to all antigens tested was statistically significantly higher in sexual workers than in controls. The differences were utmost pronounced in women till 25 years of age. There was a difference in the rate of seropositive individuals in older women as well but it did not reach significant values for most antigens tested. In HR VLP seropositive women 60.9% of controls and 38.4% of sexual workers possessed antibodies to only one of the four antigens tested (OR=2.51; 95% CI=1.4–4.5, P=0.003). On the contrary, seropositivity against all four HR VLP types was found in 24.7% of sexual workers and 7.8% of controls (OR=3.86; 95% CI=1.7–8.9; P=0.002). This observation was most apparent in the youngest group of women.

Conclusions: Based on these findings it is plausible that the preventive HPV vaccination should occur before the sexual onset or very soon after that. The high prevalence of multiple seropositive sexual workers in the youngest group suggests the fast increase of HPV infections with respect to multiple sexual partners, though frequent use of condoms can be expected.

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