

## P326. Neglected HPV infection status in men: A possible underlying cause for persistent high cervical cancer rate among women?

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**Context:** Although the human papillomavirus (HPV) vaccines are readily available, and public awareness of the role HPV in causing cervical cancer has increased, the incidence of cervical cancer remains high in Hong Kong. According to the ICO Information Centre on HPV and Cancer, cervical cancer is the fourth most common gynaecological cancer in the world. Since most of the resources and promotion of vaccination have been targeted towards female, the infection status of the male population has been largely neglected.

**Objective:** This study aims to investigate the prevalence of HPV infection and the distribution of various genotypes among the Hong Kong male population.

**Method:** In a retrospective study, penile swabs were collected from October 2015 to July 2017 for HPV genotyping using PCR detection method.

**Patients:** Penile swabs were taken from 1621 sexually active men (age 34.7±8.6) during routine HPV screening at our clinic. HPV DNA genotyping was performed to identify their HPV infection status.

**Intervention:** HPV DNA genotyping test.

**Main outcome measure:** Infection of low-risk (6, 11, 40/61, 42, 43/44, 54/55, 57/71, 70, 72, 81 and 84/26) and high-risk (16, 18, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66/68b, 73 and 82) HPV genotype.

**Results:** Positive HPV infection was found in 759 (46.8%) men, while 218 (13.4%) were infected with low-risk HPV, 237 (14.6%) with high-risk HPV, and 304 (18.8%) with both low- and high-risk HPV. The most prevalent high-risk HPV genotypes were HPV 66/68b (7.2%), 18 (6.9%), 51 (6.5%), 16 (5.2%), 52 (4.8%) and 59 (4.8%), whereas low-risk genotypes most commonly found among the population were HPV 43/44 (8.5%), 6 (8.2%), 40/61 (6.2%), 84/26 (5.6%), 81 (5.6%) and 11 (4.6%).

**Conclusion:** The high prevalence of HPV infection in men reveals a possible major source of infection for women which has been neglected, leading to the high incidence of cervical cancer. The introduction of male HPV screening program, increase awareness and vaccinations are warranted not only to prevent cervical cancer in the female partners, but also to reduce the risk of genital warts, penile and anal cancers in men. More studies are required to investigate the impact of male HPV infection on cervical cancer.

