

P321. The application of community based self-sampling for STD and HPV screenings in Chinese population

C O Leung (HK) [1], M Chung (HK) [2], R Y Ng (HK) [3], R H Leung (HK) [4], F Y Fong (HK) [5]

Context

Substantial evidence linking sexually transmitted diseases (STD) to adverse health outcomes, especially among women with Human Papillomavirus (HPV) and STD co-infection which increases the risk of cervical cancer, necessitates the development of novel programme to curb incidence of infection. Routine screening is essential for STD prevention. Development and availability of self-sampling methods for molecular diagnostics have enabled better access to sexual health services.

Objective

To investigate the feasibility of vaginal specimen collection by self-sampling device (Qvintip, Aprovix) in Chinese population for HR-HPV and STD screenings.

Patients

A total of 327 women attending local health clinic between February and September 2017 were provided with Qvintip and usage instructions for self-sampling vaginal specimen collection. All HR-HPV positive cases (n=30) were matched for age (± 1 year) with 61 HR-HPV negative cases, and subjected to STD screening.

Methods

Self-collected vaginal specimens using Qvintip were subjected to DNA extraction followed by HR-HPV and STD screening with a commercial Real Time qPCR test kit. These samples were subjected to 15 HR-HPV DNA detection and 7 STD pathogens detection (Chlamydia Trachomatis, Neisseria Gonorrhoeae, Ureaplasma Urealyticum, Ureaplasma Parvum, Mycoplasma Genitalium, Mycoplasma Hominis and Trichomonas Vaginalis), aim to validate the self-sampling approach in the community-based HPV/STD screening using CE-IVD marked commercial qPCR kit.

Interventions

HR-HPV and STD DNA detection

Results

Among the tested samples, 69.2% (63/91) participants were positive with at least one STD pathogen. The incidence of STD infection among the HR-HPV positive population, and HR-HPV negative population are 83.3% (25/30) and 62.3% (38/61) respectively.

Conclusions

The results indicated STD infection is common within the screened population, and higher among HR-HPV positive than HR-HPV negative individuals. Self-sampled vaginal specimen can be utilized successfully for both HPV and STD screenings, implying the use of Qvintip in routine STD screening other than urine collection is highly achievable. Furthermore, self-sampling at home is highly acceptable

by women and suitable for remote populations. Due to the high incidence of HPV and STD co-infection, simultaneous screening for both using self-sampled vaginal sample may provide further advantages compared to urine samples.

[1] Neo-Health, Hong Kong, [2] Neo-Health, Hong Kong, [3] Neo-Health, Hong Kong, [4] Neo-Health, Hong Kong, [5] Neo-Health, Hong Kong