

**Can HPV DNA self-sampling be an acceptable and reliable option for cervical cancer
screening in female sex workers?**

Wong ELY, Cheung AWL, Huang NF, Chor JSY

ABSTRACT

Background:

The causal relation between human papillomavirus (HPV) and cervical cancer has enabled HPV self-sampling to be envisaged as a possible screening method.

Objectives:

To explore the acceptability and reliability of HPV DNA self-sampling as an alternative option for cervical screening among female sex workers.

Methods:

Sixty-eight female sex workers carried out self-sampling for HPV testing, gave a clinician-obtained sample for HPV testing and a Pap smear. After the two samplings, the participants were questioned on the acceptability of the tests.

Results:

Most participants (65.6%) preferred to adopt HPV DNA self-sampling in the future, in particular, those without previous experience of Pap smears marginally significantly preferred self-sampling (86.7%, $p = .055$). The overall crude agreement in HPV detection rates between HPV DNA self-sampling and clinician sampling was 85.3% (58/68) with a kappa of 0.69 (95% confidence

interval, 0.51–0.87). The sensitivity and specificity of self-collected samples were 66.7% and 66.1%, and the positive and negative predicted values were 24.0% and 92.5%, respectively. The prevalence of HPV was slightly higher in self-collected samples (39.7%, 27/68) than in clinician-collected samples (36.8%, 25/68). The participants expressed positive attitudes toward self-sampling, but were less confident in their skills of self-sampling compared with clinicians (70.6% versus 91.2%).

Conclusions:

The clinical findings showed that self-sampling could be incorporated into current cervical cancer screening approaches.

Implications for practice:

Self-sampling could potentially increase the response rate/compliance to cervical cancer screening and thus reduce the morbidity and mortality from cervical cancer. Further research and education on self-sampling will be required for women of diverse backgrounds in Hong Kong, China.