A study led by Queen Mary University of London has compared the performance and acceptability of a urine test and four different vaginal self-sampling collection devices to detect high risk Human Papilloma Virus (HPV).

The trial recruited women referred to the Royal London Hospital colposcopy clinic because of a positive cervical screening result. Those who joined the study were asked to provide a urine sample and to take two vaginal self-samples, using either a dry flocked swab and dacron swab, or a HerSwab and Qvintip device.

Of 600 vaginal sample pairs suitable for analysis, 505 were accompanied by a urine sample. All samples were tested at Queen Mary's Wolfson Institute of Preventive Medicine, with HPV determined using the Becton Dickinson Onclarity test.

All methods except HerSwab gave similar HPV positivity rates, but the highest sensitivity for abnormal cancer precursor lesions was seen with either the dry flocked swab or the dacron swab.

Cellularity of the collected sample was highly variable for Herswab, but not for the other devices. Survey results evaluating the women's experiences with sampling showed that there were no clear user preferences between devices, but that they found urine easy to collect and were more confident they had taken the sample correctly.

Corresponding author Professor Jack Cuzick from Queen Mary University of London said: "Uptake of cervical screening has been declining in the UK in recent years, and self-sampling is an attractive alternative to clinician collected samples, initially in non-attenders but potentially for all women as the primary option.

"Cost and simplicity of use are important factors, and in low- and middle-income countries self-sampling may prove to be the only practical cost-effective option. High performance and acceptability of self-sampling is essential if this is to become the first option. Understanding preferences for a urine rather than a vaginal sample is important, and perhaps a choice should be offered."


Provided by Queen Mary, University of London