

Sampling time for self-taking an oropharyngeal swab for gonorrhoea and chlamydia testing

Maddaford K¹, Chow EPF^{1,2,3}, Fairley CK^{1,2}, Schmidt T¹, Buchanan A¹,
Tieosapjaroen W^{1,2}, Tataro G¹, Phillips T^{1,2}

¹Melbourne Sexual Health Centre, Alfred Health, Melbourne, Victoria, Australia,

²Central Clinical School, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Victoria, Australia, ³Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Victoria, Australia

Background: Self-taking oropharyngeal swabs for sexually transmitted infections such as gonorrhoea and chlamydia has become more common during the COVID-19 pandemic to minimise the risk of SARS-CoV-2 to healthcare workers.

However, there have been no standardised guidelines on sampling time for self-collecting oropharyngeal swabs for gonorrhoea and chlamydia testing. The aim of this study was to examine the reported time spent on self-taking an oropharyngeal swab for STI testing.

Methods: Between November 2021 and January 2022, clients who attended Melbourne Sexual Health Centre and were tested for oropharyngeal gonorrhoea and chlamydia were invited to participate in the study. Participants were asked to record the time they spent on self-taking the oropharyngeal swab and also to record the method used (i.e. using a smartphone, self-counting or other methods). All oropharyngeal swabs were tested by nucleic acid amplification test.

Results: There were 215 participants recruited in the study. The sampling time ranged from 1s to 123s, with a median of 8s (IQR=5-12). Self-counting method was the most used (53.3%, $n=113$), followed by smartphone (26.9%, $n=57$) and other methods (19.8%, $n=42$), such as guessing or swabbing until it caused a gag reflex. There was a significant difference in sampling time across the three methods ($p<0.0001$) the median time was 13s (IQR=10-26) for smartphone, 6s (IQR=5-10) for self-counting and 5s (IQR=3-10) for other methods. The median sampling time did not differ between oropharyngeal gonorrhoea positivity ($p=0.057$) and oropharyngeal chlamydia positivity ($p=0.457$).

Conclusion: Our findings suggest that most individuals spent 8s on sampling the oropharynx. Self-counting or guessing may not be accurate and the use of a smartphone to count may not be practical. Recommending the number of rotations at the tonsils and posterior pharyngeal wall may be easier and more practical for self-taking oropharyngeal swabs.

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