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

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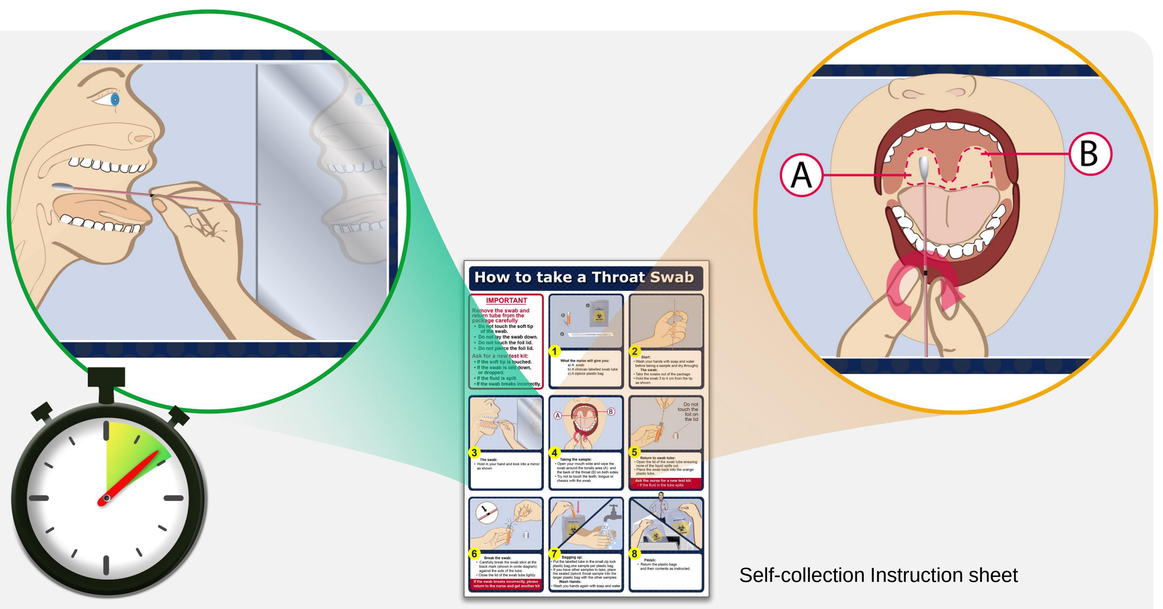
Background:

- 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.
- There have been no standardised guidelines on sampling time for self-collecting oropharyngeal swabs for gonorrhoea and chlamydia testing.

Aim:

- The aim of this study was to examine the reported time spent on self-taking an oropharyngeal swab for STI testing.



Self-collection Instruction sheet

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 to record the method used.
- 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).

Figure 1. Violin plots and box plots of the sampling time for self-collecting oropharyngeal swabs, stratified by three different counting methods.

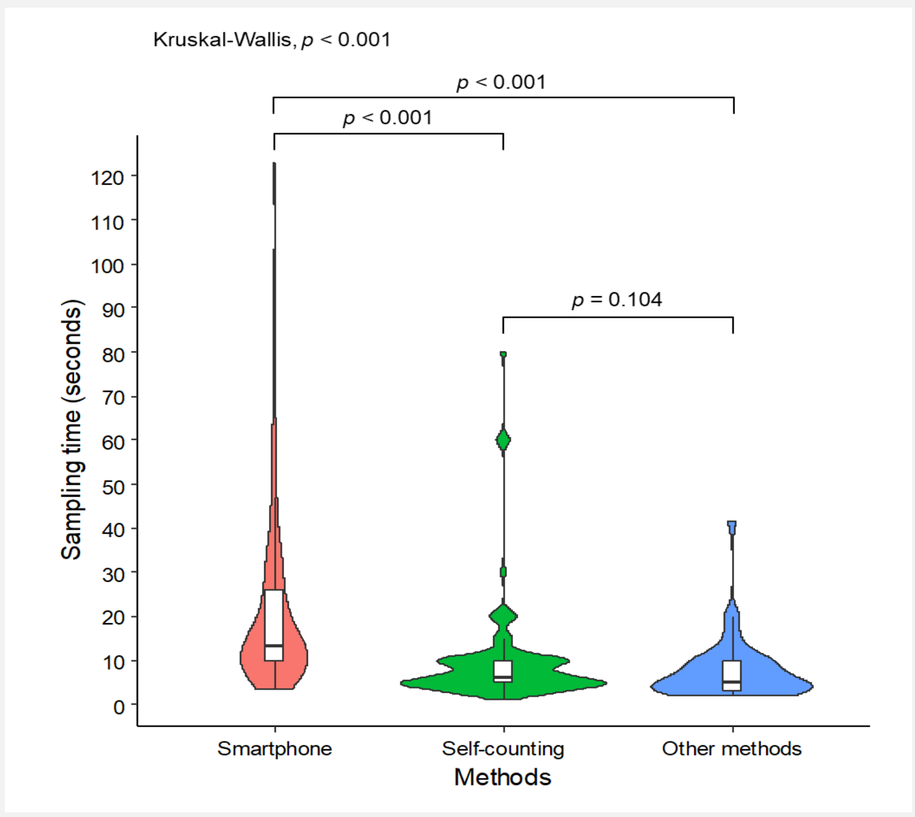


Table 1. Sampling time for taking self-taking oropharyngeal swab, stratified by oropharyngeal gonorrhoea and chlamydia positivity

Test Positivity	Sampling time, median (IQR) (s)	P-value[A]
Oropharyngeal gonorrhoea		0.570
Positive	10 (5-15)	
Negative	8 (5-12)	
Oropharyngeal chlamydia		0.457
Positive	7 (3-10)	
Negative	8 (5-13)	

[A]*P*-value was calculated using the Mann-Whitney *U*-test.

Conclusions:

- 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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Publication:

Chow EPF, Fairley CK, Maddaford K, Schmidt T, Buchanan A, Tieosapjaroen W, Tataro G, Phillips TR. Sampling time for self-taking an oropharyngeal swab for gonorrhoea and chlamydia testing. ***Sexual Health***. 2022; DOI: 10.1071/SH22034

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