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Let's Take A "Selfie": Self-Collected Samples for STIs

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Self-collected vaginal samples; urine; "Selfie"; College STI Testing; chlamydia; gonorrhea

The use of self-collected samples for the diagnosis of sexually transmitted infections (STIs) has been around for a long time and predates by many years the popular use of the word "selfie" to describe the practice of taking a picture of oneself.^{1–5} Both examples might be called a "selfie" since the person is in charge of producing a product, but the potential benefits are different. The picture is often intended for posting on social media. Benefits from self-collecting one's own specimen are more practical. The privacy associated with self-collection, compared to provider collected specimens, may be highly valued. Additionally, convenience may be important. Self-collection can be time-saving, since a provider appointment is not always necessary, and in some cases it may be done at home and the specimen mailed to a laboratory. Five commercial companies have Federal Drug Administration (FDA) clearance for self-collected vaginal swabs for women and urine for men when nucleic acid amplification tests (NAATs) are performed. The Centers for Disease Control and Prevention (CDC) recommend vaginal swabs, either self- or clinician-collected, for screening women and urine for screening men for chlamydia (CT) and gonorrhea (NG).⁶ Many investigators have reported that self-collected urogenital specimens were acceptable to men and women and provided accurate results.^{7–11}

While urine has been well accepted for screening men, the adoption of vaginal swabs has been slower. In this journal, Habel *et al.* report the acceptability and uptake of self-collected urogenital samples among university students who were offered the option of participating in an innovative "selfie" program.¹² They used the term "self-testing," but "self-collection" is more appropriate. Self-testing suggests the patients performed the tests themselves, which may be possible in the future. Semantics aside, allowing university students to self-collect samples for testing for CT and NG was acceptable, efficient, and effective.¹² The authors did not report which assay was used, but it probably was a NAAT, as recommended by the CDC.

The reported overall increase in uptake of any testing in 2015, compared to a 2013 baseline, was 28.5% for males and 13.7% for females.¹² For women opting for the "selfie," the specimen changed from a clinician-collected cervical swab to the self-collected vaginal swab. The urine specimen offered to men opting for the "selfie" did not change. What did change for these students was the dispensing of the requirement for an appointment with a

clinician. They found 31.0% of males and 18.9% of females opted for the “selfie.” Less than one-fourth of those opting for the “selfie” completed a survey, and 96.3% of these were “very” or “somewhat satisfied” with the “selfie” program. Interestingly, females were more likely to test positive for CT/GC when they selected the self-collected specimen (12.4%, compared to 4.8% for those with clinician collected specimens, $p < .01$). No significant difference in positivity by testing option was observed for males (12.9% vs 12.4%). Clinician testing for 2015, compared to 2013, declined 11.3% for males and 1.8% for females.

It is interesting to note that a higher percentage of males were in favor of the “selfie” than females. The reasons are not apparent. Perhaps females were more used to seeing clinicians for reproductive health issues. Convenience may have contributed to the male choices. While the student response to the “selfie” program was modest, the results presented are encouraging in that more people got tested. Continued assessment of the option program may show greater selection of the “selfie” as more students learn of the benefits.

Increasing the options for getting tested for STIs is expected to increase testing of those at risk. Innovative programs are being developed, implemented and evaluated. While home-collection of urogenital samples with mail transport to a testing site has not yet been cleared by the FDA,¹³ many such programs have been implemented and evaluated and found acceptable to participants.^{14–19} Self-collected vaginal swabs appear to be cost-effective.^{20–21} Pharmacy collection and testing for STIs has also been reported to be acceptable by females.²² “Selfie” specimens for STI testing might soon achieve the same popularity as “selfie” photos.

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