

Missed opportunities for HIV testing among those tested for sexually transmitted infections: a systematic review and meta-analysis

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Background: Of 37.7 million people living with HIV in 2020, 6.1 million still do not know their HIV status. We synthesise evidence on concurrent HIV testing among people who tested for other sexually transmitted infections (STIs).

Methods: We conducted a systematic review (Prospero: CRD42021231321) using five databases, HIV conferences and clinical trial registries. We included publications between 2010 and May 2021 that reported primary data on concurrent HIV/STI testing. We conducted a random-effects meta-analysis and meta-regression of the pooled proportion for concurrent HIV/STI testing.

Results: We identified 96 eligible studies: the majority (73%) were from high-income countries (HIC), with a third from general populations (36%) and non-heterosexual populations (30%). Among the 96 studies, 18 studies had relevant data for a meta-analysis for the proportion of people tested for HIV among those attending an STI service, 15 studies among those tested for other STIs, 13 studies among those diagnosed with STI and three studies for people with STI symptoms. The pooled proportion of people tested for HIV among those attending an STI service (n=18 studies) was 71.0% [95% confidence intervals: 61.0-80.1, I²=99.9%], people tested for HIV among those who were tested for STIs (n=15) was 61.3% [53.9-68.4, I²=99.9%], people tested for HIV among those who were diagnosed with an STI (n=13) was 35.3% [27.1-43.9, I²=99.9%]. and people tested for HIV among those presenting with STI symptoms (n=3) was 27.1% [20.5-34.3, I²=92.0%]. The meta-regression analysis found that heterogeneity was driven mainly by identity as a sexual minority, the latest year of study, country-income level and region of the world.

Conclusion: Not testing for HIV amongst clients using STI services presents a significant missed opportunity, particularly among those diagnosed with an STI. Stronger integration of HIV and STI services is urgently needed to improve prevention, early diagnosis, and linkage to care services.

Disclosure of interest statement: EPFC and JJO are each supported by an Australian National Health and Medical Research Council (NHMRC) Emerging Leadership Investigator Grant (GNT1172873 and GNT1193955, respectively). CKF is supported by an Australian NHMRC Leadership Investigator Grant (GNT1172900).