HIV SELF-TESTING DOUBLES THE FREQUENCY OF HIV TESTING AMONG HIGHER-RISK GAY AND BISEXUAL MEN: A RANDOMISED CONTROLLED TRIAL (FORTH)

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Background: Frequent testing of individuals at higher-risk of HIV is central to current prevention strategies. We conducted the first randomised trial to determine if access to HIV self-testing would increase testing frequency in higher-risk gay and bisexual men (GBM).

Methods: In this randomised controlled trial, HIV-negative higher-risk GBM reporting condomless anal intercourse or >5 male sexual partners in the past three months were recruited at three clinical and two community-based sites in Australia. Enrolled participants were randomly assigned (1:1) via computer-generated randomisation codes to have access to free HIV self-testing (intervention) or not (standard-care). Participants completed 3-monthly online questionnaires. The primary outcome was the number of HIV tests over 12 months, analysed by intention-to-treat. The study was designed to evaluate the primary outcome overall and in two strata: recent (last HIV test ≤2 years ago) and non-recent (>2 years ago or never tested) testers.

Results: Between Dec-2013, and Nov-2014, 182 men were randomised to self-testing and 180 to standard-care. The intention-to-treat analysis included men who completed any follow-up questionnaire: 178 (98%) in self-testing; and 165 (92%) in standard-care. The mean number of HIV tests over 12 months in the self-testing and standard-care arms was 4.1 and 1.9 per-person overall (rate ratio [RR]:2.13, 95% CI: 1.87-2.44,p<0.001), 4.2 and 2.1 among recent testers (RR:2.00, 1.75-2.30,p<0.001), and 3.2 and 0.7 among non-recent testers (RR:4.84, 2.84-8.25,p<0.001), respectively. There was no statistical difference between the two arms in the mean number of facility-based HIV tests (1.6 vs 1.9, RR:0.86, 0.74-1.01) and any STI test (2.0 vs 2.2, RR:0.93, 0.80-1.07).

Conclusion: HIV self-testing in higher-risk GBM increased HIV testing frequency more than two-fold overall, and nearly five-fold among non-recent testers, without reducing facility-based HIV/STI testing frequency. HIV self-testing should be made

more widely available to achieve public health goals of increasing testing frequency and early diagnoses.

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