Background

Increasing levels of HIV testing in men who have sex with men (MSM) remain key to reducing transmission. However, levels of ever and repeat HIV testing in UK MSM do not meet current testing recommendations with 28% never testing and only 55% testing annually (1, 2). Particularly poorly adhered to is the recommendation to test 3 monthly for men at higher risk of HIV through recent condomless or untested sexual contact (CAI) with partners of known or serodifferent HIV status, and/or drug use during sex (chemsex) with only 27% of those at ‘higher risk’ of HIV testing even 6 monthly (1).

HIV self-testing (HIVST) may increase testing rates by removing structural and social barriers to testing (3). We report on the frequency of previous HIV testing and associated factors at baseline in MSM who opted to enroll in a large HIV self-testing RCT (SELPHI).

Methods

SELPHI is an internet based, open-label, randomised controlled trial, which aims to assess effectiveness of free HIVST kits on HIV diagnosis rates. Criteria for enrolment were aged ≥16 years old, male, including trans men, ever had anal intercourse (AI) with a man, living in England or Wales, not known to be HIV positive and provided consent to link to national HIV surveillance databases (4). Participants were randomly allocated 3:2 at enrolment to a free HIVST versus no free HIVST (Randomisation A).

Data collected via an online survey included socio-demographics (gender, sexual identity, education, age, ethnicity, UK birth), sexual behaviour, HIV/STI testing history, pre-exposure prophylaxis (PrEP) use.

Results

10,112 men were recruited to the trial including 81 (0.8%) trans men. Median age was 33 years (IQR 26-44). Most were of white ethnicity (95.9%) with only 1.6% of black ethnicity and 4.3% of Asian ethnicity. The men were highly educated with 47.1% having a university education. In the previous 3 months, 89% reported AI and 72% reported CAI with ≥1 male partner (Table1).

Sociodemographic characteristics were similar in men at higher risk of HIV (defined as ≥2 CAI partners in the previous 3 months) to the overall sample. However PrEP use varied with 3.8% currently using PrEP in all participants compared to 7.8% men at higher risk of HIV infection who were currently using PrEP.

Overall, 17%, 33%, 54%, and 72% had tested for HIV in the last 3 months, 6 months, 12 months, and 2 years respectively. 13% had tested >2 years ago and 15% had never tested. In men higher risk of HIV: 12% had never tested and almost half (47%) had tested ≥6 months previously (Table 2, Figure 2).

Figure 2: Time since previous HIV test in all men and men at high risk of HIV infection

In multivariate logistic regression of selected sociodemographic factors in men at higher risk of HIV, region of residence and education level were most strongly associated with a higher likelihood of having a recent HIV test (Table 3).

Conclusions

MSM recruited to the SELPHI HIVST RCT were not testing in line with current UK recommendations. Overall, almost half had never tested or last tested >12 months previously. In men at higher risk of recent HIV, less than half had tested in previous 6 months and a tenth had never tested. This may be due to low perceived risk of HIV infection, structural barriers (e.g. clinics difficult to access because of time constraints or capacity issues or distance) and individual psycho-social issues including perceived stigma.

Associations with lower levels of ever and repeat testing in this study suggest that targeting efforts and expanding testing opportunities in younger men and in those with lower levels of education or who live further from testing centres may improve access and uptake of HIV testing. Online promotion of free HIVST may be key to addressing many of these barriers. However we recruited low levels of BME and trans men who are key MSM groups at risk of HIV infection.

Further work is required to ensure that HIVST service provision can be adapted and targeted more effectively to meet the needs of these key populations.