

Human immunodeficiency virus prevention and testing strategies among men who have sex with men in the UK: the PANTHEON research programme including the SELPHI RCT

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Plain language summary

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Background

In 2014, new human immunodeficiency virus diagnoses among gay men in the United Kingdom were increasing year on year. New ways of testing for human immunodeficiency virus, such as self-testing (whereby a person can do the test themselves without a health worker there and then read the result within 15 minutes) had been developed, but it was not known whether offering self-testing would increase the number of new human immunodeficiency virus diagnoses in gay men.

Methods

We did an internet trial to see whether giving gay men a free human immunodeficiency virus self-testing kit would increase the number diagnosed with human immunodeficiency virus compared to not being given a free human immunodeficiency virus self-testing kit. We also looked at whether regular provision of human immunodeficiency virus self-testing kits every 3 months over a 2-year period would allow a more prompt diagnosis among those who got a new human immunodeficiency virus infection. Finally, we looked at value for money of providing free human immunodeficiency virus self-testing and other interventions including pre-exposure prophylaxis and early human immunodeficiency virus treatment (at the point of diagnosis), to prevent human immunodeficiency virus infection.

Results

The ease and privacy of human immunodeficiency virus self-testing meant that it was an acceptable way of testing for men who have sex with men. Over 10,000 men who have sex with men and *trans* people took part in the trial but there was no difference after 3 months in the number of gay men who were newly diagnosed with human immunodeficiency virus who had been provided with a free self-test kit compared to the group that had not.

We found that a combination of human immunodeficiency virus-prevention interventions including an increase in human immunodeficiency virus testing, pre-exposure prophylaxis, early human immunodeficiency virus treatment at the point of diagnosis, and a reduction in the levels of condom-less sex each played an important role in decreasing human immunodeficiency virus incidence among men who have sex with men.

Conclusions

Human immunodeficiency virus self-testing was acceptable to men who have sex with men. Although human immunodeficiency virus self-testing increased how often men who have sex with men tested, it did not increase human immunodeficiency virus diagnosis.

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