



Gay Men's Attitudes and Perceptions Regarding Rapid HIV Home Testing



Question

What are gay men's attitudes and perceptions regarding rapid HIV home testing?

Key Take-Home Messages

Rapid HIV home testing could be an effective risk reduction and HIV prevention tool (1).

- A majority of gay men are interested in accessing home testing (2-7).
- Gay men and other men who have sex with men (MSM) cite reasons of convenience, accessibility, rapidity of results, and increased privacy, discretion, confidentiality and anonymity to underscore their interest in accessing rapid HIV home testing (3;5).
- Main concerns raised about the availability of rapid HIV home testing are: lack of professional support immediately at hand in the event of a positive test result (3), perceived uncertainty about its accuracy (7), incongruence with a sexual situation (8), and associated costs (8).
- Factors associated with potential use of rapid HIV home testing include: high-risk sexual behaviour(s) and frequent need of testing (2;5;7), desire not to see a doctor for HIV testing (2), residence in small towns and rural areas and the desire of confidentiality (4;5), and being black (7).

The Issue and Why It's Important

A biomedical strategy that has received limited attention is the possible use of rapid HIV home test kits to ascertain one's own HIV status and potentially the HIV status of sexual partners (1). In 2012 the Food and Drug Administration (FDA) approved the OraQuick In-Home HIV Test, the first rapid oral swab home-use HIV test kit that does not require sending a sample to a laboratory for analysis. The kit provides a test result in 20-40 minutes and people can test themselves in their own homes.

EVIDENCE INTO ACTION

The OHTN Rapid Response Service offers HIV/AIDS programs and services in Ontario quick access to research evidence to help inform decision making, service delivery and advocacy. In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a brief fact sheet summarizing the current evidence and its implications for policy and practice.

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The kit, which tests a sample of saliva, is approved for sale in stores and online to anyone aged 17 or older in the US (9). Currently there are no HIV test kits licensed for home use in Canada.

Advocates have touted the need for home testing as a way to increase access to HIV testing, prompt earlier testing, and increase personal HIV status awareness and autonomy (10;11), as well as a potential tool for partner screening to reduce sexual risk (1;8;12). At the same time there are concerns about the accuracy and reliability of home test kits (3;7) as well as the lack of professional support immediately available in the event of a positive test result (3).

In urban areas of the US where African American MSM have HIV-prevalence rates comparable to those of sub-Saharan Africa (13), home HIV testing could be particularly useful (14;15). Prior studies have shown that even among MSM who intentionally engage in unprotected anal sex when risk of HIV infection is present (16;17) and who prioritize sexual pleasure and intimacy over protection against infection (18;19), there is concern about, and wish to avoid, HIV infection (1;19;20).

What We Found

We reviewed studies that examined attitudes of gay men and other MSM regarding rapid HIV home testing.

Awareness of the existence of home testing

Rapid HIV home testing is not readily available worldwide and has only been approved in limited jurisdictions (e.g. USA since 2012) (9). Although not authorized for sale in France, self-tests are available for purchase on the Internet. In a French study of 5908 non-HIV positive respondents recruited online, 70% answered that they were unaware of the availability of self-tests online (5).

Many participants in a New York City-based study knew about the existence of rapid HIV home test kits, and some had even been tested for HIV with OraQuick in clinical settings (8).

Interest in home testing

Studies show that a substantial proportion (and in some cases, the large majority) of gay men surveyed are interested in accessing home testing (2-7). In the French study 87% declared being interested in accessing the test once they were made aware of it (5). When informed that the manufacturer of the test was seeking licensing for over-the-counter sale, most felt enthusiastic about the possibility of easy access to the test (8).

In a US study, three-quarters of men who intended to have an HIV test in the next year were interested in home testing as compared to half of men who did not intend to have a test in the next year (6). Among MSM never tested for HIV, 47% of those unlikely to test for HIV, 77% of those somewhat likely, and 86% very likely to test for HIV would likely use an over-the-counter rapid HIV test if available (6). Another US-based online study concluded that men were very likely (62%) or likely (20%) to accept a home test (7).

Similarly, the majority of Australian study participants supported the introduction of rapid tests for home use and viewed them as a positive additional tool for HIV testing (3). Most men felt that they would be likely to use rapid tests if they were available for self-testing in Australia. Men felt they would be useful as an additional HIV testing tool and would most likely use them in the interim between having blood tests done, rather than as a replacement for blood testing at clinic and other health care facilities (3). Some men thought rapid home tests would be useful to use with regular partners, particularly if and when they decided to begin having unprotected anal intercourse in their relationship. A number of men also reported that they would be likely to use them with casual partners, either before sex, following a risky sexual episode, or in the event they met someone and had casual sex (3). Another Australian study also showed that gay men have a high degree of interest in home HIV self-testing, with two-thirds of non-HIV-positive men stating that they would test more often if they could test themselves at home, regardless of previous testing history (2).

A US study that assessed whether at-risk HIV-uninfected MSM who never or rarely use condoms and have multiple partners would use a rapid, HIV home tests to screen potential sexual partners, found that participants liked having access to home testing for use with partners and found it easy to use (1). Although about one-fifth of the partners refused to use the test and left the place of the encounter, most partners were receptive to using home testing prior to sex (1). In another study by the same author, participants were asked if they would consider using a rapid home test to screen sexual partners. Approximately one-half of the participants considered use of a home test to be most appropriate with new partners (i.e., online hookups and one-night stands), while the other half mostly considered it appropriate for partners with whom they had ongoing sexual relationships (8).

If rapid oral HIV testing were available for home testing in Australia, 104 of 166 men (63%) indicated they would likely test themselves for HIV while 20% indicated they would be unlikely to test at home and 17% were unsure.

Of the 26 men who had never been tested for HIV and reported on their likelihood of home-based testing, 22 (85%) indicated they would be 'very likely' or 'likely' to test themselves for HIV at home if tests were available. Furthermore, 100 of 165 men (61%) reporting on the frequency of home-based testing indicated they would test more frequently if home HIV testing was available while 18% indicated they would not test more frequently and 22% were unsure (4).

Perceived advantages of home testing

Men in the studies under review felt that there would be a number of advantages to rapid HIV tests available for home use. MSM interested in accessing home testing cited reasons of convenience, accessibility, rapidity of results, and increased privacy, discretion, confidentiality and anonymity (3;5).

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Immediacy of results was cited as an advantage in terms of reducing stress and anxiety and eliminating wait times to see a clinician and obtain results (3). Home testing was also perceived as less resource intensive thereby reducing demands on health services (3).

A number of men felt that the option to test oneself in the privacy of their own home would be particularly beneficial for young, married, or rural and more remote-based MSM who do not have access to, or are not comfortable attending sexual health services or their local doctor. They also felt they may be of benefit to men who are concerned about seeing someone they know at a sexual health facility or who have a fear of testing and are put off by long wait times when attending health services and receiving test results (3).

Perceived disadvantages of home testing

The main concerns men raised about the availability of rapid tests for home use were that users would not have professional support immediately at hand in the event they tested positive for HIV and that rapid HIV tests did not test for other STIs (3).

A number of men also felt that they and others may be inclined to question the accuracy and reliability of the test given its simplicity and the use of saliva rather than blood (3;7). In one US-based study about one-fifth of the total study population was not willing to take a free home test. The most common reason specified for not being willing to take such a test was uncertainty about its accuracy (7).

Another common objection was that taking the test would kill the mood for sex or be incongruent with a sexual situation. Being under the influence of alcohol or drugs may affect the likelihood of using rapid HIV home tests, the efficiency with which it is used, or the possibility of waiting 20 minutes to read the results (8). Some also expressed concerns about possible cost of home testing (8).

Factors associated with interest in home testing

Independent variables associated with interest in accessing the self-test in the US studies included: never having done the standard HIV test, having had unprotected anal intercourse with a casual partner in the last 12 months, living one's sex-life with men in secrecy, having taken the standard HIV test over a year ago, often or systematically trying to make a date to see sex partners again, being younger, living in a town of less than 100,000 inhabitants, living with a woman and/or children or with one's parents, having had more than one casual partner in the last 12 months, being employed and not having university-level education (5).

Similar reasons were given by Australian study participants. Men reported they would likely test themselves at home because: it would give them confidentiality, privacy and discretion; immediacy of results; it was easy, painless, safe and reliable; and there was no wait time to see a doctor or receive test results (4). The main reasons men reported they would be unlikely to test at home were because they would: prefer a health professional to administer the test; be concerned about the reliability of the test; and concern about receiving an HIV-positive result at home without professional support (4).

In both previously-tested and never tested men, reporting that home testing would increase the frequency of testing was associated with factors relating to testing convenience and a desire to avoid doctors' consultations when testing. In previously-tested men, reporting unprotected anal intercourse in the previous six months was also independently associated with interest in home testing (2).

Although gay men in general could benefit from the availability of rapid HIV home testing, it may be of particular benefit to: men who need to test frequently because of high-risk sexual behaviour and find the inconvenience of many clinic visits the greatest barrier to more frequent testing. Attending private clinics or general practitioners for testing, the cost of consultations, and time lost from the workplace, could also be barriers (2).

Men who indicated a desire not to see a doctor for HIV testing were approximately four times more likely to report that home testing would increase testing frequency. This may be related mostly to increased convenience, or alternatively, because of a desire not to engage in a discussion with a doctor about risky sex (2).

The majority of men felt that the availability of rapid tests would not change their current protected anal intercourse practices, that is, they would not use rapid tests to practise sero-sorting (selecting partners with the same HIV serostatus as themselves) or have unprotected anal intercourse (3).

In a US study with actual home testing kits, lack of partner resistance to taking the test was seen as a good sign; when partners resisted, participants often interpreted it as a warning not to have sex with that person (1).

There were very few adverse experiences. Out of the approximately 124 occasions in which participants invited their partners to use home testing, seven led to verbally aggressive situations. Two participants reported two aggressive situations each, none of which resulted in violence towards the participant (1).

No unprotected anal intercourse occurred in any of the cases in which a participant found that a prospective partner was HIV-infected (1).

Participants were three times more likely to report that using home testing made them reduce their risk, be more cautious, practise safer sex, or think more about whom to have sex with rather than be more likely to have unprotected anal intercourse.(1).

Results show that use of home testing results in prevention of HIV exposure. The high yield of positive results (about 10 % of tested individuals were found to be infected) and the high proportion of partners (60%) who were previously unaware of their infection show that home testing may be an effective and cost-efficient strategy for HIV detection (1).

Beyond actual use, the availability of home testing and intention to use it may result in initiation of a discussion of HIV-related concerns and more honest disclosure of HIV-positive status from individuals aware of their infection (1).

Some study participants speculated that it would be easier to test with one-night stands than with steady partners, and pondered where and when to raise the issue. A few men felt that meeting someone online provided a perfect scenario to discuss rapid home testing. Yet others felt that a public place would not provide sufficient privacy and that a home environment would be the more conducive to discussing home testing.

Some participants felt that forewarning was required before a face-to-face encounter if one were to ask a potential sexual partner to use the rapid home test. Interestingly, a few participants thought that the rapid home test could be used after having sex (8).

Non-Hispanic black men had increased odds of being willing to take the home HIV test compared to non-Hispanic white men (7). Engaging in unprotected anal sex with a male partner in the past 12 months was associated with an increased willingness to test (7). Men who had been recommended an HIV test in the past 12 months by their health care provider were less likely to take a home HIV test than men who were not recommended a test, likely because they took a conventional test (7).

Factors That May Impact Local Applicability

All studies reviewed in this rapid response summary have been conducted in high income countries that share many similarities with Canadian settings (United States, Australia, and France) in terms of the HIV epidemic among MSM. All included studies, with the exception of Carballo-Diequez, et al (1;8), were conducted where rapid HIV home testing was not available and study participants reported their attitudes and perceptions in hypothetical situations. The United States is currently the only country included in this review where home HIV tests have been approved and are available. Attitudes and perceptions may change after gay men and MSM receive access to rapid home HIV testing, therefore these hypothetical attitudes should be interpreted with caution as they may not be generalizable.

What We Did

We searched Medline, Embase, PsychInfo, Sociological Abstracts, Social Sciences Abstracts, International Bibliography of the Social Sciences (IBSS), Social Sciences Citation Index, ASSIA: Applied Social Sciences Index and Abstracts using a combination of text terms ((Gay) OR (men who have sex) OR (MSM)) AND (home testing).

We also reviewed references in the studies found. All searches were limited to articles published since 2007 in English.