

Optimising healthcare for men who have sex with men: A role for general practitioners



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Background

General practitioners (GPs) are well placed to identify patients who are at risk of human immunodeficiency virus (HIV) infection, including men who have sex with men (MSM). Hence, GPs play a vital role in facilitating MSM with HIV to gain early access to HIV treatment, which will also help to reduce HIV transmission rate.

Objectives

This article provides a summary of current management issues when providing primary care for MSM, such as HIV testing and treatment, biomedical HIV prevention strategies, and current trends in other sexually transmissible infections (STIs).

Discussion

In order for MSM to receive optimal care in general practice, questions about sexual history need to be a routine part of clinical care. Those individuals who are found to be at risk of HIV infection should be offered regular HIV testing and access to risk-reduction strategies such as pre- and post-exposure prophylaxis. Patients who are diagnosed with HIV should be offered early access to HIV treatment, and regular screening for STIs and hepatitis C.

Men who have sex with men (MSM) may not identify as 'gay' and may not request human immunodeficiency virus (HIV) testing. General practitioners (GPs) play a key role in identifying patients who are MSM, and actively offer them HIV testing. In this article, we will discuss some of the approaches to sexual history taking, current HIV testing technologies and treatments, recent developments in biomedical HIV prevention, and new trends in other sexually transmissible infections (STIs) that affect MSM.

HIV epidemiology trends in Australia, highlighting the problem in MSM

The number and rate of notifications for HIV infection in Australia in the past 10 years has been relatively stable at about 1000 a year and 4.2–4.9 per 100,000 population.¹ This is relatively low by international comparison. Sexual contact between men accounts for about 70% of these new cases,¹ making MSM a priority group for HIV prevention and treatment.

Current HIV testing guidelines

Australian STI and HIV testing guidelines^{2,3} recommend that any MSM should be offered an HIV test at least once per year and up to four times per year for those MSM at higher risk.⁴ More than one quarter of new HIV diagnoses in Australia in 2014 were made late, more than four years after the time of infection.¹ People who are diagnosed late have significantly poorer long-term health outcomes, compared with those who are diagnosed early, and onward transmission of HIV is more likely during the time that people are not on treatment.⁵ It is thought that many of these late diagnoses occur in men who do not identify as gay, because these men are less likely to ask for HIV testing or be offered an HIV test by their doctor.⁶ This highlights the need for doctors to consider HIV as a possible diagnosis when a patient presents with symptoms that could be due to HIV seroconversion,

which are non-specific, or when they present with opportunistic infections some years after they acquire HIV. GPs are well placed to determine which patients should be offered HIV testing by routinely taking a sexual history. Practical tips for taking a sexual history include the following:

- Routinely take a sexual history along with other components of the patient's medical history. This indicates to the patient that you are open to discussing sexual health issues – many patients may fear that you are not.
- Keep in mind that the married man sitting in your consulting room may have other sexual partners and that these partners may be male. Ask men if they have sexual partners other than their regular partner.
- Use gender-neutral questions when asking about sexual partners, before clarifying the gender of these partners.
- Ask: 'Do you have sex with men, women or both?', rather than asking if the patient is 'gay' or 'homosexual'. The latter is a sexual identity, which is less relevant to HIV risk than the patient's sexual practices.

Further tips on how to incorporate a sexual history into routine consultations and how to remove some of the associated discomfort on the part of the patient and the doctor can be found in the Australian STI management guidelines.⁷

Current HIV testing technologies

Most commercial pathology providers now use fourth generation HIV antigen/antibody combination enzyme-linked immunosorbent assay (ELISA) to screen for HIV infections. These tests will usually be reactive within a few weeks of infection⁷ and are essentially 100% sensitive by six weeks (termed the 'window period'). In some situations, where clients are taking antiretroviral therapy for prevention (discussed below), this window period may be longer.⁸ A reactive result on an ELISA test will be confirmed in the state reference laboratory with an HIV western blot. Western blot results may be 'positive', 'negative' or 'indeterminate'. It is useful for clinicians to discuss indeterminate results with a virologist in the state reference laboratory to help decide on the optimal timing of repeat testing and to clarify what advice to give to the patient.

In December 2012, the Therapeutic Goods Administration (TGA) licenced the first HIV point-of-care test in Australia, also known as the HIV rapid test. This screening test, performed on a finger-prick blood sample, provides a 'reactive' versus 'non-reactive' result within 20–30 minutes. Results can be delivered to the patient during the same appointment, making these tests useful for patients whose HIV anxiety has prevented them from testing. Rapid tests are also useful for outreach services that aim to test populations that are difficult to reach with standard clinical services. In routine testing of MSM, rapid tests are only 85% sensitive⁹ compared with fourth generation ELISA tests. The lower sensitivity of rapid tests is mainly due to missed diagnoses shortly after HIV infection; hence, patients with possible recent exposure to HIV should be offered a parallel fourth generation

ELISA test in addition to the rapid test.⁹ A reactive rapid test result is not sufficient to give a diagnosis of HIV and requires further serological testing; false positive rapid test results can occur.

When to start HIV treatment

As of August 2015, the Australian antiretroviral guidelines,¹⁰ based on the US Department of Health and Human Services guidelines, recommend that all people living with HIV should be advised to consider starting antiretroviral therapy, irrespective of their CD4 count. This advice is based on the knowledge that early initiation of treatment substantially reduces the risk of long-term morbidity and mortality, as recently demonstrated by the START¹¹ and TEMPRANO¹² trials. Early initiation also reduces onward transmission of HIV to sexual partners (see below). Successful antiretroviral treatment is dependent on a fully informed patient decision to start and then a commitment to lifelong uninterrupted daily medication.

Over the past twenty years, HIV treatments have evolved from regimens consisting of 10–20 pills three times per day to now four choices of once-daily, single-tablet combination treatments. Most patients have no or minimal adverse effects on these newer treatments, and their long-term prognosis is likely to be excellent.¹³

In Australia, HIV treatment can only be prescribed by clinicians who are accredited section 100 prescribers (see 'Clinical resources' below for details on how to become accredited).

HIV prevention strategies

Condoms

The consistent and correct use of condoms remains an effective method of preventing HIV infection. According to the Gay community periodic survey,¹⁴ in 2014, almost half of men in Melbourne with male casual sexual partners reported always using condoms in the six months preceding the survey. But 32% of HIV-negative men with male casual sexual partners reported at least some anal intercourse without condoms with those partners. This illustrates the fact that condoms are not always an acceptable or practical method of HIV prevention for some MSM, and for these men, alternative methods need to be considered.

Treatment as prevention

Antiretroviral treatment greatly reduces the risk of onward transmission of HIV to sexual partners. This is well established in heterosexual partnerships and now several studies suggest the same is true for MSM partnerships. These trials include the European PARTNER study¹⁵ and the Australian–Thai–Brazilian Opposites Attract study.¹⁶ MSM who are living with HIV and on treatment with a consistently undetectable viral load are very unlikely to transmit HIV to a sexual partner.

Post-exposure prophylaxis (PEP)

PEP is the use of antiretroviral treatment in a person who does not have HIV for 28 days after an HIV exposure. Animal studies

suggest PEP must be initiated within 72 hours of exposure, but preferably as soon as possible.¹⁷ There are no prospective randomised controlled trials in humans to demonstrate the effectiveness of PEP in any setting and, for obvious ethical reasons, it is highly unlikely that such a trial would ever be conducted. Furthermore, there is no direct evidence of the effectiveness of PEP in reducing sexual transmission of HIV in MSM. Indirect evidence is provided by studies assessing the effectiveness of PEP in reducing the risk of HIV from occupational exposure and from mother-to-child exposure.^{18,19}

PEP is not licenced by the TGA, but can be obtained from sexual health clinics, most emergency departments and most general practices that cater to MSM.

Pre-exposure prophylaxis (PrEP)

PrEP is the use of antiretroviral treatment in a person who does not have HIV who is at ongoing risk of HIV infection. The most-studied PrEP regimen consists of once-daily tenofovir/emtricitabine. Several recent large trials have convincingly demonstrated the effectiveness of PrEP in reducing HIV transmission in MSM; these include the iPrEx²⁰ and UK PROUD studies.²¹ Risk reductions of up to 92% have been reported when patients are optimally adherent.

The use of tenofovir/emtricitabine for PrEP is not licenced by the TGA, but this was under consideration at the time of writing. PrEP demonstration projects exist in most Australian states, and the Australasian Society for HIV Medicine (ASHM) has produced national guidelines for the provision of PrEP (see 'Clinical resources' below).

While PrEP is a very effective HIV prevention strategy, unlike condoms it provides no protection against other STIs, except perhaps hepatitis B.²²

The return of syphilis and gonorrhoea

The number of diagnoses of infectious syphilis has risen dramatically in the past decade. In Victoria, it has increased from 84 cases in 2004 to 660 cases in 2013, the vast majority being diagnosed in MSM.²³ This increase among MSM is replicated across Australia and is indeed an international phenomenon.²⁴ Data from sexual health services show that MSM who are living with HIV are four times more likely to have infectious syphilis than MSM who do not have HIV.¹ Accordingly, it is recommended that MSM living with HIV are tested for syphilis up to four times per year.²

Similarly, the rate of gonorrhoea diagnoses has more than tripled since 2008^{1,25} and, again, these diagnoses are made mainly in MSM. Some, but certainly not all, of this increase may be attributable to improved gonorrhoea testing technologies.

The rise of lymphogranuloma venereum (LGV) and *Mycoplasma genitalium* infection

LGV is an infection caused by lymphotropic invasive strains of *Chlamydia trachomatis* (serovars L1–L3). It is generally a rare

condition in Australia, but an increase has been observed in MSM, particularly in those living with HIV.⁷ LGV may manifest as genital ulceration, inguinal lymphadenopathy and/or proctitis. When MSM present with such symptoms, it is important to take a detailed sexual history and take samples to test for *C. trachomatis*. The clinician must alert the pathology provider to test for LGV if the samples test positive for chlamydia. This is important as the treatment course for LGV is longer than that for non-LGV chlamydia.⁷

M. genitalium is a recently identified organism that is a cause for urethritis and is an important differential diagnosis in cases of non-gonococcal, non-chlamydial urethritis. *M. genitalium* infection is diagnosed by a nucleic acid amplification test (NAAT) of a first-pass urine sample, but this test is not yet widely available. Optimal treatment is still unclear as *M. genitalium* has a tendency to become resistant to antibiotics.⁷

Hepatitis C as a sexually transmissible infection among MSM

Hepatitis C transmission has historically occurred primarily through percutaneous exposure to blood; hence, people who inject drugs have been at greatest risk. In recent years, it has come to light that among men living with HIV, hepatitis C can also be an STI. Other risk factors for hepatitis C transmission in this population are thought to include sexual practices that result in mucosal trauma, and concomitant ulcerative STIs such as syphilis and herpes simplex virus (HSV).^{26,27} Hence, healthcare providers are advised to consider testing for hepatitis C in HIV-positive MSM, even in the absence of a history of intravenous drug use.

Key points

- Be open to the possibility that your male patient may be at risk of HIV, syphilis and other STIs. Routine sexual history taking will help reduce the proportion of late HIV diagnoses and the associated poor outcomes and high risk of onward transmission.
- HIV treatment should be considered as soon as possible after diagnosis. It is now highly effective, well tolerated and greatly reduces the risk of onward transmission; it allows people with HIV to lead largely normal lives with near-normal life expectancy.
- MSM living with HIV should be tested regularly for STIs and hepatitis C.
- A patient who has had a potential HIV exposure should be referred urgently for consideration of PEP and perhaps also PrEP.

Clinical resources

- STIGMA 2014: Australian sexually transmitted infection and HIV testing guidelines 2014 for asymptomatic men who have sex with men, http://stipu.nsw.gov.au/wp-content/uploads/STIGMA_Testing_Guidelines_Final_v5.pdf
- STI testing tool, http://stipu.nsw.gov.au/wp-content/uploads/147045_GP_STI_Testing_Tool_2012.pdf

- Australian STI management guidelines for use in primary care, www.sti.guidelines.org.au
- Information on 'section 100' HIV prescriber courses, www.ashm.org.au/hiv/prescriber-programs
- General practitioners and HIV, http://crmpub.ashm.org.au/product/General%20Practitioners%20and%20HIV%202015_E4E738AE35E9E41180F5C4346BAD26D0/PBB_GPsHIV_2015.pdf
- National Australian PEP guidelines, www.ashm.org.au/pep-guidelines
- National Australian PrEP guidelines, arv.ashm.org.au/images/Australian_National_PrEP_Guidelines.PDF

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