PRE-EXPOSURE PROPHYLAXIS (PREP) AND STI RATES

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- Pre-exposure prophylaxis (PrEP) is the use of antiretroviral drugs by HIV-negative individuals to prevent HIV infection
- PrEP is licensed by the TGA but not funded under the PBS.
- Patients seeking PrEP can do so by importing generics from overseas (about \$1,300/year), purchasing off-label (about \$13,500/year), or enrolling in clinical trials such as EPIC NSW (endinghiv.org.au/nsw/stay-safe/epic)
- HIV PrEP is recommended for MSM at high sexual risk
- High risk MSM have high pre-existing baseline and incident rates of bacterial STIs.
- Both stable and increased rates of condomless anal sex have been reported.
- Increased engagement with care for PrEP users increases STI testing opportunities allowing for early STI detection and prevention counselling.

PrEP with Tenofovir/Emtricitabine is an exciting pharmacologic addition to traditional HIV prevention methods. Multiple clinical trials 1.2.3 have demonstrated its efficacy as a targeted prevention therapy for high risk individuals, such as men who have sex with men [MSM], female sex workers (FSM), transgender women and HIV serodiscordant couples. PrEP efficacy has varied from 44% to 75% reduction in incident HIV cases, and is primarily dependent upon good adherence, with 90-99% reduction in HIV transmission risk observed in these subjects.

By virtue of the shared transmission pathway for HIV and STIs, people with high risk sexual behaviour who are selected for PrEP would be expected to have high rates of STIs. Indeed, almost all PrEP studies have demonstrated high baseline and incidence STI rates. The recent "real-world" Demo project⁴ (US) which followed 557 patients over 2 years reported 26.4% of subjects tested positive at baseline for chlamydia, gonorrhoea or early syphilis. The overall incident rate for any STI over the study duration was 90 per 100 person-years, but there was no longitudinal increase in STI incidence.

Similarly, the PROUD study³ (UK) studying immediate versus deferred PrEP in high risk MSM showed no change in STI incidence once corrected for more frequent STI testing in the immediate arm (due to clinic attendances for PreP monitoring or prescriptions).

DOES TAKING PREP INCREASE CONDOMLESS ANAL SEX AND THEREFORE STI RATES?

This behavioural change was not observed in the key randomised controlled trials such as iPrEx¹, but has been an inconsistent finding in implementation studies. The Demo project showed a modest fall in mean number of sexual partners in prior 3 months from 10.9 to 9.3 and stable rates of self-reported condomless receptive anal sex, albeit at high levels (65.5% to 65.6%). However, in the major geographic subgroup (San Francisco) the mean number of condomless receptive sex episodes increased from 8.4 to 11.

A recent meta-analysis⁵ of STI rates in MSM on PrEP versus not on PrEP reported that those on PrEP had an incidence rate ratio of 25.3 for gonorrhoea, 11.2 for chlamydia and 44.6 for syphilis, in comparison to those not on PrEP. Although the comparator arms were heterogeneous and unmatched, the high STI risk in these subjects underlines the need for vigilant and frequent screening.

It is likely a testing bias is present, as more frequent (typically 3 monthly) asymptomatic STI testing is incorporated into routine PrEP follow up which may not be occurring otherwise. This may lead to more STI diagnoses, but also offers an avenue for earlier identification, treatment and partner notification, and constitutes a crucial backbone of PrEP service delivery as it is rolled out.



References

¹Grant RM, Lama JR, Anderson PL, McMahan V, Liu AY, Vargas L, et al. Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. N Engl J Med. 2010;363(27):2587.

²Baeten JM, Donnell D, Ndase P, Mugo NR, Campbell JD, Wangisi J et al. Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. N Engl J Med. 2012;367(5):399.

³McCormack S, Dunn DT, Desai M, Dolling DI, Gafos M, Gilson R, et al. Pre-exposure prophylaxis to prevent the acquisition of HIV-1 infection (PROUD): effectiveness results from the pilot phase of a pragmatic open-label randomised trial. Lancet 2016; 387:53–60.

⁴Liu AY, Cohen SE, Vittinghoff E, Anderson PL, Doblecki-Lewis S, Bacon O, et al. Preexposure prophylaxis for HIV infection integrated with municipal-and community-based sexual health services. JAMA Intern Med 2016; 176:75–84.

⁵Kojima N, Daveya DJ, Klausnera JD. Pre-exposure prophylaxis for HIV infection and new sexually transmitted infections among men who have sex with men. AIDS 2016;30:2251–2252

POST-EXPOSURE PROPHYLAXIS FOR HIV 2016 GUIDELINES AVAILABLE NOW

A review of the Australian National Guidelines on post-exposure prophylaxis (PEP) after exposure to HIV is complete. The review was conducted in light of updates to international guidelines and developments in the use of pre-exposure prophylaxis (PrEP) by HIV negative people to prevent HIV acquisition.

The review identified best practice and information on: treatment as prevention for condomless anal sex; the interface between PEP and PrEP; which drugs to use in PEP; the experiences of those presenting for PEP; and other clinical management issues, such as children presenting following a risk event, as well as gender identity and history.

The 2016 guidelines are AVAILABLE NOW via www.ashm.org.au/pep-guidelines.

For further information, visit www.pep.guidelines.org.au or contact ASHM Project Officer Elisabeth Wilkinson on +612 8204 0732 or Elisabeth.Wilkinson@ashm.org.au.

Feedback and ongoing correspondence can also be directed to PEPquidelines@ashm.org.au

SHIGELLA OUTBREAK

Reported notifications of shigellosis in July had already surpassed total 2015 notifications. Several cases have already resulted in hospitalisation and there is concern that the outbreak could worsen as people with mild symptoms may not see their doctor, and so remain infectious for longer, spreading the infection further.

Shigella is a bacteria that causes a bowel infection. Symptoms include diarrhoea, fever and nausea. Symptoms appear any time between 12 hours and four days after exposure and generally lasts between four and seven days. Shigella can develop antibiotic resistance.

Areas of Sydney that have seen particular rises in cases of shigella include parts of the inner city as well as western and northern Sydney.

NSW Health Medical Epidemiologist Dr Christine Selvey says "The most effective way of reducing the risk of contracting shigellosis is to wash hands thoroughly after any sexual activity, after touching equipment like used condoms and sex toys, after going to the toilet, and before handling food."

Mr Parkhill, CEO of ACON, says gay men should also avoid sex while they have symptoms and for at least seven days after the symptoms clear.

TIPS FOR TALKING TO PATIENTS ABOUT SEXUAL HEALTH

Talking to your patients about sex may be awkward, but it is very important.

Sexuality is an important part of a person's well-being, and if a patient feels comfortable talking to you about such a personal topic, they are more likely to open up about other sensitive issues like domestic violence, mental health or alcohol and drug use.

Here are some tips for talking to patients about sexual health:

• Ask permission first:

Sex is a very personal topic and diving straight in may make your patient feel uncomfortable. You could lead with a question like "Do you mind if I ask you some questions about your sex life?"

Practice being non-judgemental:

A perceived judgement of a patient's sexual practices is likely to make them feel uncomfortable.

Avoid questions using labels:

For example rather than "Are you gay?" you could ask "Do you have sex with men, women or both?" Rather than "Are you married?" ask "When was the last time you had sex with your partner", then "When was the last time you had sex with anyone else?"

• Speak generally rather than personally:

"Australian guidelines recommend that gay men should have an STI test every 3-6 months", or "Lots of gay men choose to have open relationships".

• Offer options where possible:

This empowers the patient, making them feel more comfortable with a sexual health check.

Options include self-collecting swabs or choosing between swabs and a urine sample.

SUBSCRIBE

We extend an invitation to GPs, practice nurses and relevant clinicians to receive this free twice-yearly newsletter and updates on sexual health. To subscribe please email your name, job title and workplace to: solomon.wong@sswahs.nsw.gov.au

SEXUAL HEALTH SERVICES



Sydney Sexual Health Centre

www.sshc.org.au Sydney Hospital Macquarie Street, Sydney \$\infty\$9382 7440

Short Street Centre

St George Hospital Short Street, Kogarah

9113 2742

SouthZone Sexual Health Centre

430 The Kingsway, Caringbah

9113 2742

The Albion Centre

www.thealbioncentre.org.au 150 Albion Street, Surry Hills

9332 9600

Clinic 180

180 Victoria Street, Kings Cross





RPA Sexual Health

www.slhd.nsw.gov.au/communityhealth/sexualhealth.html

16 Marsden Street, Camperdown





Clinic 16

www.clinic16.com.au

20 Herbert Street, St Leonards









STIs in Gay Men Action Group

This newsletter is an initiative of the STIs in Gay Men Action group (STIGMA). It is written for general practitioners, practice nurses and relevant clinicians in inner Sydney.

Partners include:

South Eastern Sydney Local Health District, Sydney Local Health District, Northern Sydney Local Health District, Ministry of Health, ASHM, Central and Eastern Sydney Primary Health Network, Centre for Social Research in Health, The Kirby Institute, Australian Federation of AIDS Organisations (AFAO), Positive Life NSW and ACON.