

P450 PREP USE, STD ACQUISITION AND SEXUAL RISK BEHAVIOR

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Background Some studies have shown an association between HIV pre-exposure prophylaxis (PrEP) use, STD acquisition and increased sexual risk behaviors (e.g. condomless sex). The objective was to determine the association between PrEP use, STD infection (i.e. syphilis, gonorrhoea, chlamydia) and sexual risk behaviors (i.e. condomless sex, sex partner concurrency) in one mid-Atlantic city with an established epidemic of HIV.

Methods Data came from the Understanding Sexual Health in Networks Study (USHINE), an ongoing longitudinal cohort study of MSM between the ages of 18–45. Participants completed an egocentric sexual network survey. Summary statistics, chi-squared tests, and t-tests were used for hypothesis testing.

Results 173 men completed the sexual network survey. 52 (30.1%) men were HIV uninfected and 52 (30.1%) men reported PrEP use. PrEP users (vs non-users) were less likely to be positive for syphilis (10.6% vs 26.8%, $p=0.03$), but no more likely to be positive for gonorrhoea (15.4% vs 8.0%, $p=0.25$) or chlamydia (17.3% vs 16.0%, $p=0.86$). PrEP users (vs non-users) were more likely to report condomless sex (88.5% vs 69.2%, $p=0.02$) and sex partner concurrency (57.7% vs 32.7%, $p=0.01$).

Conclusion PrEP users were less likely to be infected with syphilis and no more likely than non-PrEP users to be gonorrhoea and chlamydia infected. PrEP users were more likely to report sexual risk behaviors including condomless sex and sex partner concurrency compared to non-PrEP users. The increased sexual risk behaviors among PrEP users is concerning and emphasizes the importance of prevention messaging for PrEP users.

Disclosure No significant relationships.

P452 A NURSE-LED HIV PRE-EXPOSURE PROPHYLAXIS PROGRAM AT COOL AID COMMUNITY HEALTH CENTRE FOR MEN WHO HAVE SEX WITH MEN

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Background Gay, bisexual and MSM continue to comprise the greatest number of new HIV diagnosis in BC (BCCDC, 2016). The complexity of the HIV epidemic among MSM has highlighted the need for broader approaches to HIV prevention. Publicly funded access to PrEP in BC began in 2018. The low barrier MSM STI testing clinic at Cool Aid CHC demonstrates that PrEP can be implemented successfully through a nurse-led program.

Methods Description of model of care/intervention: This novel CHC based Men's STI Testing Clinic is staffed by STI certified practice nurses and run in partnership with AIDS

Vancouver Island (AVI). It is advertised through MSM social media sites by the AVI Men's Wellness Coordinator. At the initial visit, clients complete a HIRI-MSM index, a sexual/medical history, required screening and participate in PrEP counseling and education. Physicians review the results and sign the PrEP prescription. Clients without primary care are accepted as patients at the clinic.

Results Effectiveness: Our innovative non-judgemental, nurse-led model has removed barriers to sexual health screening and enrolled 124 MSM in the PrEP program. Initial PrEP screening showed an STI incidence of 19% and a previous syphilis diagnosis in 15% of those screened. After PrEP initiation STI incidence increased by 7%, highlighting the need for continued safer sex education. There have been no HIV infections amongst PrEP recipients. 20% have discontinued PrEP after approval. 56% of those enrolled felt unable to access PrEP through their physician. 44% of PrEP clients are now linked to primary care at Cool Aid CHC, demonstrating that PrEP can be a tool to prevent HIV transmission in MSM, while engaging patients in primary care and regular STI screening.

Conclusion and next steps: This innovative program increased access to PrEP for MSM, increased STI testing/treatment, helped to prevent HIV transmission and linked clients to primary care.

Disclosure No significant relationships.

P453 INCIDENCE AND PREDICTORS OF URETHRAL AND RECTAL CHLAMYDIA AND GONORRHEA AMONG MEN WHO HAVE SEX WITH MEN TAKING PREP IN KENYA

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Background We measured the incidence and associated factors of urethral and rectal *C. trachomatis* (CT) and *N. gonorrhoeae* (NG) among a Kenyan cohort of MSM taking PrEP.

Methods Enrolled MSM underwent audio computer assisted self-interview for behaviour and socio-demographics, with medical examination every 6 months. CT and NG were diagnosed by polymerase chain reaction assay in urine and rectal swabs at baseline, 6- and 12- months. We identified factors associated with incident urethral infection using multivariable Cox regression and report adjusted hazard ratios (aHR).

Results October 2017 - January 2018, 158 participants were enrolled and initiated PrEP. Follow-up was 99% (month 6) and 93% (month 12). At baseline, 10.4% had urethral CT/NG (either or both infections), and 3.3% had rectal CT/NG, with total 11.4% prevalence CT/NG. At 6 months, CT/NG was 7.7% (urethral) and 0% (rectal), and 10.2% (urethral) and 0% (rectal) at 12 months. There were 22 incident infections (19 CT, 2 NG, 1 CT and NG) during 152 person-years (py) follow-up, with no re-infections (13.9 cases/100 py; 95% CI: 9.2–21.1). Risk decreased 12% per one year increase in age (aHR=0.88, $p=0.012$) and was 73% lower for men reporting last sex partner being female (aHR=0.37, $p=0.019$). For each one unit increase in social support, men had 3%

increased CT and/or NG risk (aHR=1.03, $p<0.001$), and men reporting having sex in exchange for money at screening were 2.35 times more likely to be infected ($p=0.072$). Number of sex partners, sexual positioning, condom use, lubricant use, and self-reported PrEP adherence were not associated with infection.

Conclusion The incidence of urethral CT/NG infection was high in our cohort of MSM taking PrEP, despite risk reduction counselling and repeated testing and treatment, supporting need for ongoing etiologic testing and more effective risk reduction intervention. Additional analyses will examine risk compensation.

Disclosure No significant relationships.

P454 EMERGENCY DEPARTMENT (ED)-BASED HIV PRE-EXPOSURE PROPHYLAXIS (PREP) REFERRAL PROGRAM – USING EDS AS A PORTAL FOR PREP SERVICES

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Background U.S. Emergency Departments (EDs) serve many patients at high risk for HIV and could serve as a portal of entry for pre-exposure prophylaxis (PrEP). We conducted a pilot study to determine feasibility and acceptability of PrEP referral from the ED.

Methods From late December 2018 to March 2019, a pilot PrEP referral program was integrated into an established HIV/HCV screening program in an urban U.S. ED with HIV seroprevalence of 6%. Patients were deemed PrEP referral eligible if they had recent STI-related visit (<2 months) and tested HIV negative, or a negative HIV test during the current ED visit. The PrEP referral program was implemented by HIV/HCV program staff and trained volunteers. Patients were approached by convenience sampling based on staff availability. HIV risk and interest in PrEP referral was assessed through an electronic survey based on CDC PrEP guidelines. Patients expressing interest in PrEP were referred to PrEP peer navigators from the adult infectious disease specialty clinic and pediatric clinic. Referrals, scheduled and completed appointments, and PrEP initiation were collected.

Results In this ongoing program, 290 ED patients were screened, 162 approached and 89 (55%) took the survey. 68 (42%) were categorized as high-risk and eligible for PrEP referral. Of these 68 patients, 36 (53%) accepted PrEP referral, 15 (22%) were successfully contacted by phone with additional 21 (31%) pending for follow-up calls, six (9%) were scheduled for appointments, and two (3%) completed an appointment.

Conclusion Our preliminary findings demonstrate a high interest for PrEP referral and comparable PrEP care cascade outcomes in high-risk ED patients indicating that implementation of an ED-based PrEP referral program is feasible and acceptable and could serve as an important portal for PrEP care. Barriers along the PrEP care continuum to better engage and retain patients should be addressed as a future direction.

Disclosure No significant relationships.

P455 AWARENESS, KNOWLEDGE AND WILLINGNESS TO USE HIV PREP AMONG MSM AND TG PEOPLE IN BALI, INDONESIA

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Background World Health Organisation in 2014 has recommended Pre-Exposure Prophylaxis (PrEP) as HIV prevention tool for men who have sex with men (MSM) along with other prevention strategies. Before PrEP implementation is introduced in Indonesia, it is vitally important to have an evidence base about the awareness, knowledge and acceptability among MSM and transgender people and the differences in knowledge and PrEP acceptability based on sexual risk factors of MSM and transgender people.

Methods A cross-sectional study was conducted between July and November 2017 in an MSM clinic in Denpasar, Bali, Indonesia. The key outcomes were exploring the awareness, knowledge and willingness to use PrEP among MSM and transgender people in Bali, Indonesia and determining demographic and sexual risk factors associated with knowledge and willingness to use PrEP.

Results A total of 164 participants were recruited into the study but only 124 participants were eligible and included in the analysis. Of these, 69 out of 124 (55.6%) participants had never heard about PrEP. Among those 55 (44.4%) participants who had heard about PrEP, education and occupation were the only factors associated with PrEP knowledge. Men with the University education showed higher knowledge scores (29.2) and were more likely to use PrEP compared with men with lower education levels. 73 out of 124 participants (58.9%) were willing to take PrEP in the future and education was the only factor associated with PrEP willingness.

Conclusion This is the first study to report data on awareness, knowledge and willingness to use PrEP in Bali and is only the second such study conducted in Indonesia. Consistent with similar studies in other countries, this study found limited knowledge of PrEP among MSM and transgender participants. As PrEP is not yet publicly available in Indonesia, it is crucially important to prepare the community by education and disseminating accurate information.

Disclosure No significant relationships.

P457 A SINGLE DOSE OF BEHAVIOUR CHANGE: THE IMPACT OF TESTING ON BEHAVIOUR AND CHLAMYDIA TRANSMISSION

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Background The aim was to explore short-term effects of chlamydia testing on sexual behaviour also taking into account psychological characteristics, and to estimate the impact on chlamydia transmission of interventions aimed at sustaining or enhancing testing effects.