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THE UPTAKE OF NON-OCCUPATIONAL HIV POSTEXPOSURE PROPHYLAXIS AMONG MSM: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background MSM are disproportionately affected by HIV, a joint strategy of behavioral interventions and chemoprophylaxis, e.g. HIV post-exposure prophylaxis (PEP), is promising to reduce HIV infection. Worldwide PEP is recommended, and it has been prescribed to MSM over the past decade in many countries since 1990s. In order to better understand the role PEP played in HIV prevention among MSM, we reviewed literature to describe the global utilization of PEP. Methods We searched the following databases for publications in English through 19 May 2018: Pubmed, Scoups, Embase, the Cochrane Library and Web of Science. Eligible articles reported the following data on nPEP among MSM: reasons for and/or the uptake of nPEP, adherence to treatment guidelines, and HIV seroconversion among MSM prescribed PEP. Results

Fifty-six studies were included Medical records showed nPEP prescriptions increased significantly among MSM, who accounted for the majority of nPEP users in most settings, ranging from 57% to 88.1%. Twenty-eight studies reported on the uptake of PEP among MSM, with an overall pooled proportion of 8.1% (95% CI 5.6% to 10.5%). One-fifth of MSM nPEP users obtained repeated prescription. With regard to reasons for nPEP use, unprotected receptive anal intercourse was more frequent than unprotected insertive anal intercourse (35-65.8% vs 20-28.8%). The pooled full completion (28-day course) was 91.6% (95%CI: 89.9-93.2%), with 100% adherence to the regimen ranging from 52% to 85%. Ten studies reported 498 HIV seroconversions among 18908 MSM, which resulted in a post use HIV incidence of 0.97 to 7.2 per 100 person-years. but there is no clear linkage between nPEP use and HIV seroconversions.

Conclusion Our review demonstrated that PEP is underutilized as a HIV prevention strategy. Efforts are needed to raise awareness and knowledge of nPEP and engage MSM in this chemoprophylaxis. Efforts are also needed to reinforce completion and adherence among nPEP users.

Disclosure No significant relationships.

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FACTORS INFLUENCING GAY AND QUEER MEN'S ACCEPTABILITY OF INTEGRATING SUBSTANCE USE CARE WITHIN SEXUAL HEALTHCARE SETTINGS

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Background Just as sexual health services do not always attend to the substance-related needs of individuals, substance use care tends to neglect sexuality and sexual health. The objective of this study was to identify factors influencing the acceptability of integrating substance use care within sexual health services for young gay, bisexual and other men who have sex with men (gbMSM) – a population that experiences disproportionate drug- and sexual-related harms.

Methods We draw on data from in-depth, semi-structured interviews conducted with 50 young gbMSM (18–30) who use substances during sex in Vancouver, BC.

Results Participants reported infrequently receiving substance use-related care when accessing sexual health services resulting in many having unmet needs surrounding their use of substances during sex. More so, a majority felt unable to initiate discussions about substances with a sexual health provider. Participants described several features of clinical interactions that they felt would enhance their comfort and ability to discuss their substance use, including: (i) the provision of convenient spaces where they could discuss their sexual health and substance use concurrently; (ii) the knowledge that discussions about substance use would be non-judgemental and include a harm reduction approach; and (iii) be offered by knowledgeable, resourceful professionals familiar with the sexualized use of substances among gbMSM (i.e., chemsex; other sub-cultures where substance use occurs). Finally, participants emphasized that mental health interplays with sexual health and substance use and, therefore, represents a key co-occurring health condition that they wanted to feature within discussions about their sexual health and substance use.

Conclusion Findings indicate that young gbMSM who use substances would both benefit from and desire opportunities to discuss substance use within sexual health care settings. Future efforts to more fulsomely integrate the provision of substance use and mental health care for young gbMSM in sexual health care settings are needed.

Disclosure No significant relationships.

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POSITIVITY OF SYPHILIS, RECTAL GONORRHEA AND RECTAL CHLAMYDIA AMONG MSM PREP USERS IN BALTIMORE CITY, MARYLAND

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Background Bacterial STIs such as syphilis, rectal gonorrhea (GC) and chlamydia (CT) are strongly associated with increased risk of HIV acquisition, and are a marker of ongoing sexual risk behavior among HIV pre-exposure prophylaxis (PrEP) users. STI positivity among men who have sex with men (MSM) PrEP-users in settings where PrEP has been implemented is understudied. Our objective was to determine syphilis and rectal GC/CT positivity among MSM PrEP-users

enrolled in a large PrEP demonstration project in Baltimore City, Maryland.

Methods The demonstration project was a collaboration between a city health department, an academic evaluation partner, six clinical sites and one CBO. STI results at PrEP initiation and routine 6- and 12-month PrEP-care visits were collected among MSM receiving PrEP at participating clinical sites between September 30, 2015-March 31, 2018. Syphilis and rectal GC/CT positivity was calculated among those screened at each visit.

Results During the study period, 290 MSM initiated PrEP, of whom 46.9%(136) were Black/African-American, and 51.4% (149) aged 25–34 years. At PrEP initiation, 79.2%(230) and 56.1%(165) were screened for syphilis and rectal GC/CT, respectively; the proportion screened at 6- and 12-month PrEP-care visits was slightly lower. Overall, including PrEP initiation and care visits, 11.6%(30/258) were ever syphilis positive, 17.9%(35/196) ever rectal GC positive, and 22.5%(44/196) ever rectal CT positive. Specifically, at PrEP initiation, 7.8%(18/230) were syphilis positive; 11.1%(18/162) rectal GC positive, and 11.7% (19/162) rectal CT positive. Positivity at 6- and 12-month PrEP-care visits was similar to positivity at PrEP initiation.

Conclusion Despite CDC recommendations for biannual STI screening among PrEP-users, the proportion of MSM PrEP-users screened was suboptimal. The overall and ongoing positivity of syphilis and rectal GC/CT suggest that a substantial proportion of MSM PrEP-users may be engaging in ongoing sexual risk behaviors. Strategies are needed to encourage providers to screen PrEP-users more frequently for STIs and promote safer sexual practices.

Disclosure No significant relationships.

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SEROADAPTIVE BEHAVIORS INFLUENCED BY PARTNER-LEVEL AND ENVIRONMENTAL-LEVEL FACTORS AMONG IPREX PARTICIPANTS

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Background Seroadaptive behaviors to decrease risk of HIV acquisition and transmission is based on the knowledge of one's own serostatus and that of one's sexual partners. Partner-level and environmental-level attributes may affect seroadaptation practices. We characterized seroadaptive behaviors among iPrEX participants.

Methods Men who have sex with men (MSM) and transgender women (TGW) were recruited from eleven study sites in the US, Peru, Brazil, Ecuador, Thailand and South Africa. Partnership-level data were collected at the screening visit for the 3 most recent sexual partners. Participants who reported knowing their partner was HIV-negative or did not have receptive anal intercourse were considered to be practicing seroadaptive behaviors.

Results Of the 2,095 iPrEX participants, 1,271 (61%) reported seroadaptive behaviors with all partners, 544 (26%) with some partners and 280 (13%) did not practice seroadaptation with any partners. Participants in steady relationships (aOR=1.45; p=0.005), who felt closer to their partner (aOR=1.08; p=0.013) and from US (aOR=3.33; p<0.001) or Andes region study sites (aOR=1.84; p<0.001) were more

likely to engage in seroadaptive behaviors. TGW were less likely to practice seroadaptive behaviors (aOR=0.44; p<0.001). STI history at screening did not differ between participants reporting seroadaptive behaviors and those who did not (20% vs 25%; p=0.317).

Conclusion Seroadaptive behaviors were more commonly observed among iPrEX participants with partners they felt closer and more committed to. Seroadaptive behaviors were also more common among participants from study sites in North and South America compared to Africa and Asia. These geographic differences may reflect greater access to HIV testing in these areas, thereby facilitating awareness of HIV status and enabling engagement in seroadaptation practices. TGW have fewer options than MSM to be classified as practicing seroadaptive behaviors since most engage in receptive sexual positioning. Our findings suggest that seroadaptive practices are influenced by the level of commitment to and emotional intimacy with partners.

Disclosure No significant relationships.

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DEMOGRAPHIC, HEALTHCARE, AND PSYCHOSOCIAL FACTORS RELATED TO STI DIAGNOSIS IN A SAMPLE OF YOUNG MSM: THE P18 COHORT STUDY

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Background Understanding the relationships between demographic, healthcare-related and psychosocial factors with STI vulnerability will provide information that can guide development of STI prevention efforts tailored to the lived realities of YMSM.

Methods Between 2009–2011, n=600 YMSM were enrolled at age 18 in a prospective cohort study examining psychosocial and physical health during semi-annual visits conducted over a 36-month period. Reports of recent STIs were collected by self-report and a composite outcome variable was created: self-report of any STI (CT, GC, and/or syphilis) in the prior 90 days (hereafter called STI diagnoses). Bivariate analysis was conducted to examine relationships between STI diagnoses and 3 domains of covariates: demographic factors, psychosocial factors, and healthcare system related factors. Generalized estimating equations (GEE) with link logit was used to model factors from each domain associated with STI diagnoses.

Results Over the course of the study period, these 597 participants contributed a total of 2,765 visits and self-reported n=205 STI diagnoses (composite variable detailed above). Increased age was associated with increased likelihood of STI diagnoses (aOR=1.22 per year, 95% CI 1.04–1.43) after adjustment for SES, race, #insertive/receptive anal intercourse acts, type of healthcare obtained (private clinic, public clinic, VA), and insurance status. Black/African YMSM were more likely to self-report an STI (aOR=2.90, 95% CI 1.50–5.61), compared to White (non-hispanic) peers (adjusted for age, SES, #sex acts, clinic type, and insurance). Participants receiving healthcare at public clinics (aOR= 1.89, 95% CI 1.30–2.77) and VA facilities (aOR= 4.13 95% CI 2.24–7.60) were more likely to report STI diagnoses than those attending private clinics (adjusted for age, race, SES, #sex acts, insurance).