

CI=0.35–0.49) were less likely, but NH white (aPR=1.20; 95%CI:1.14–1.25) were more likely, than NH black to have a race-ethnicity concordant partner. Finally, men who were not U.S. natives (aPR=0.84; 95%CI:0.81–0.87) were less likely to have a race-ethnicity concordant partner than U.S. natives.

**Conclusion** Given STI disparities, high concordance means lower STI exposure for NH white women but higher exposure for NH black women. Continually monitoring concordance may be important for understanding STI prevalence.

## Miscellaneous

### 019.1 EFFECT OF A WEB DRAMA VIDEO SERIES ON HIV/STI TESTING AMONG GAY MEN IN SINGAPORE: A PRAGMATIC, RANDOMIZED CONTROLLED TRIAL

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**Background** While HIV/STI testing rates among Gay, bisexual and other men who have sex with men (GBMSM) are increasing worldwide, they remain suboptimal in a variety of settings.

**Methods** The study is a pragmatic, randomized controlled trial design to evaluate a popular web drama video series developed by a community-based organization in Singapore for GBMSM. A total of 300 HIV-negative, GBMSM men in Singapore aged 18 to 29 years old were recruited and block-randomized into the intervention (n=150) and control arms (n=150). Primary outcomes included changes in self-reported intention to test for, actual testing for, and regularity of testing for HIV, Syphilis, Chlamydia and Gonorrhoea, while secondary outcomes include changes in a variety of other knowledge-based and psychosocial measures at the end of the study period.

**Results** Overall, 125 out of 150 participants (83.3%) in the intervention arm completed the proof of completion survey, compared to 133 out of 150 participants (88.7%) in the control arm (Chi-square test, p=0.715). We found statistically significant differences in self-reporting as a regular (at least yearly) tester for HIV (Chi-square test, p=0.016), as well as chlamydia and gonorrhoea (Chi-square test, p=0.009), indicating that the intervention had positively impacted these outcomes compared to the control condition. We also found statistically significant differences in participants' intentions to test for HIV (Chi-square test, p=0.009), syphilis (Chi-square test, p=0.014), as well as chlamydia and gonorrhoea (Chi-square test, p=0.008) in the next three months, indicating that the intervention was effective in positively impacting intention for HIV and other STI testing among participants.

**Conclusions** There are benefits for promoting intentions to test especially in tandem with interventions that address structural barriers to testing. This intervention has potential to reach GBMSM without access to conventional HIV/STI prevention messaging, and who do not frequent physical venues where such messaging targets.

### 019.2 LIMITED HIV PRE-EXPOSURE PROPHYLAXIS UPTAKE AMONG CHINESE MEN WHO HAVE SEX WITH MEN—QUALITATIVE ANALYSIS AND POTENTIAL FOR AN APP

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**Background** In China, few gay, bisexual and other men who have sex with men (GBMSM) use HIV pre-exposure prophylaxis (PrEP), and little is known about their views of PrEP and barriers to uptake. We aimed to understand Chinese GBMSM's limited use of PrEP and assess the potential of a new PrEP education app to address barriers.

**Methods** We developed and tested a theory-informed, gay-friendly PrEP education app among GBMSM in Guangdong, China. In Phase I qualitative interviews were conducted to understand perceived barriers and facilitators toward PrEP uptake; each participant tested the app for 5 minutes and completed the System Usability Scale (SUS). Phase II included a 4-week pilot study of the app with baseline and follow-up surveys (not presented here) and qualitative exit interviews.

**Results** 41 participants completed qualitative interviews (Phase I=31, Phase II=11). GBMSM (mean age=27, SD=7.6) described numerous barriers to starting PrEP including limited access to PrEP care (e.g., few providers, high copays, medical mistrust), misinformation and low awareness about PrEP (e.g., severe side effects, ineffective), no official PrEP endorsement from providers or policymakers, and a thriving unregulated underground PrEP market. Facilitators of using PrEP included fear of HIV, seeking sexual pleasure, and freedom from stigma. 77.4% (24/31) rated the app 'above-average' usability on SUS. Aspects of the app enhanced usability included convenient access to gay-friendly PrEP information, a streamlined user-interface, inclusive contents addressing physical and mental health, and an asynchronous chat feature to send questions to study staff.

**Conclusion** We found major barriers to PrEP uptake among Chinese GBMSM including unaffordable prices, lack of GBMSM-friendly PrEP campaigns, and insufficient provision of PrEP care. Mobile health may be feasible for increasing PrEP awareness and engaging GBMSM in the health system in China. Other barriers point to the need also for health systems-level interventions to expand PrEP uptake.

### 019.3 TRENDS IN DISCUSSION OF PRE-EXPOSURE PROPHYLAXIS FOR HIV ON REDDIT, 2014–2019

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**Background** Data from social media forums offer a window into real-time discussions and emerging issues, often from individuals who might not otherwise be represented in

research settings. Pre-exposure prophylaxis (PrEP) for HIV prevention among individuals without HIV has become a key preventive measure for ending the HIV epidemic. In the United States, gay, bisexual, and other men who have sex with men (GBMSM) constitute the majority of new HIV diagnoses. To provide insight on topics of most concern to GBMSM regarding PrEP, we examined user-generated posts on the Reddit subreddit r/askgaybros.

**Methods** We collected Reddit posts from Pushshift.io's and Reddit's application program interfaces that contained 'PrEP' and/or 'Truvada' (case insensitive) posted between November 1, 2012 and December 31, 2019 on the r/askgaybros subreddit which produced the most mentions of Truvada. We developed a codebook based on themes identified in a subset of posts and thematically coded all posts based on the primary purpose expressed in post titles and body. All data are descriptive.

**Results** We identified 1,163 PrEP-related posts in total. There was a 23.3 fold increase in posts per year from 2014 (first year of posts) to 2019. The proportion of posters self-identifying as not on PrEP (26.8%) and on PrEP (30.3%) were similar. Incidental mentions of PrEP (54.5%), access challenges (19.1%), information seeking (17.5%), and cultural effects (16.3%) were the most common themes. 19.2% of posts involved assessment of risk following a sexual encounter. The topics mentioned least frequently, each with <5.5% of posts, focused on active promotion of PrEP use, stigma, and usage questions.

**Discussion** Reddit is a useful way of documenting user-initiated interest in discussion of PrEP. The frequent incidental mention of PrEP reflects the normalization and perceived importance of PrEP. Reddit may be less useful for gaining insight into issues like usage and side effects.

019.4

#### HOW CAN WE ENHANCE THE IMPLEMENTATION OF PREP? DEVELOPING EVIDENCE-BASED AND THEORY-INFORMED RECOMMENDATIONS FROM SCOTLAND'S NATIONAL PREP PROGRAMME

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**Background** Widely accessible, acceptable, equitable, HIV pre-exposure prophylaxis (PrEP) services are central to HIV transmission elimination. Multi-stakeholder collaboration, activism and government support enabled Scotland to implement a publicly-funded national PrEP programme delivered through sexual health services from 2017. Although innovations in PrEP implementation occur, they are rarely analysed or consolidated. We address this gap in Scotland by: 1) examining diverse perspectives on barriers and facilitators to the key steps of PrEP implementation (i.e., awareness, access, uptake, initiation, adherence and retention in care) and 2) using implementation science theories to systematically specify transferable ways to improve these steps.

**Method** Semi-structured interviews and focus groups (2018–2019) with geographically and demographically diverse sexual health clinic patients seeking/using/declining or stopping PrEP (n=39), sexual healthcare professionals (n= 54), community-based organisation (CBO) service users (n=9) and staff (n=15). Thematic analysis identifying barriers and facilitators to implementing PrEP was complemented by analyses using the Behaviour Change Wheel to specify detailed recommendations for enhancing PrEP implementation.

**Results** Barriers and Facilitators to the key steps ranged from: macrosocial (political will, competitive dynamics in the service ecology, structural racism); mesosocial (effective monitoring systems and reporting); to microsocial (staff skills and self-efficacy, low HIV literacy).

Enhancing implementation across the key steps included: incentivising organisations to share expertise (funding mechanisms, equitable partnership work); targeted culturally sensitive, normalising and awareness-raising interventions; co-production of nationally co-ordinated training and patient resources (e.g. for managing side-effects, adherence support, improving cultural competencies); guidance for correct use of event-based PrEP; supporting PrEP provision in diverse settings to reach underserved communities.

**Conclusion** Systematic analysis of what had and had not worked, and why has enabled development of wide-ranging but specific recommendations for policy-makers, clinicians, CBOs and individuals to optimise PrEP awareness, access, uptake, initiation, adherence and retention in care. These recommendations could be used to improve all PrEP services.

019.5

#### INTEGRATING CARE FOR TRANS PEOPLE: THE TRANSCLINIC, A COLLABORATION BETWEEN TRANS UNITED EUROPE AND THE PUBLIC HEALTH SERVICE OF AMSTERDAM

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**Background/Purpose** Although public health based STI/HIV services are without costs available to key populations in the Netherlands, a gap in reaching some specific key communities is present, such as transgender people of the black, indigenous and people of color (BIPOC) community, especially those who have limited access to healthcare (due to homelessness, refugee-status, or sex workers). Additionally, these communities struggle to gain access to hormone replacement therapy (HRT). Combining STI/HIV services with reliable HRT can better engage these communities to public health services.

**Approach** In 2021, community-led transgender organisation Trans United Europe (TUE) started a collaboration with the sexual health department of the Public Health Service (PHS) of Amsterdam. TUE is organised by and for the transgender BIPOC community, and advocates for better transgender rights and healthcare policies. In 2017, TUE developed a transgender social center, operated by transgender sex workers, including a Transclinic to provide HRT. Limitations at the Transclinic were the lack of laboratory testing possibilities and limited support from health care professionals. By uniting the