

medication refill (n=15) with faxed (n=14) or mailed (n=13) prescriptions. Fourteen clinics had staff redeployed to assist the COVID-19 response; 14 clinics reported a reduction in total number of full-time equivalent (FTE) clinical nurses from 74.4 to 45.6 FTE collectively and three clinics reported reduction in FTE clinical doctors, from 20.1 to 17.1 FTE collectively.

Conclusion Australian public sexual health clinics rapidly pivoted service delivery to reduce the risk of COVID-19 transmission in their clinical settings, managed staffing reductions and delays in molecular testing, released staff to support the COVID-19 response, and maintained a focus on urgent and symptomatic STI presentations and those at higher risk of HIV/STI acquisition.

P272 AGE PATTERNS OF ORAL AND ANAL SEXUAL PRACTICES AMONG HETEROSEXUAL MALES AND FEMALES: A CROSS-SECTIONAL SURVEY IN MELBOURNE, AUSTRALIA

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Background Oral and anal sex practices among heterosexuals are not well-studied. We aimed to explore these sexual practices among heterosexuals attending a sexual health clinic.

Methods This cross-sectional survey was conducted at Melbourne Sexual Health Centre between March-April 2019. This survey asked questions on oral sex (fellatio or cunnilingus), anal sex and rimming in the previous 3 months among heterosexuals. Age was categorized by: 18–24; 25–34; and ≥35 years.

Results There were 709 participants (333 males; 376 females) who were eligible and completed the survey, with a median age of 26 (IQR: 23–31) and 35% (n=250) born in Australia. Most participants had had vaginal sex (n=677; 95.5%), with a median of 2 (IQR: 1–3) vaginal sex partners, and half did not use a condom (n=358; 50.1%). 148 (20.8%) participants had had anal sex, with a median of 1 (IQR: 1–1) anal sex partner, with 63.5% (n=94) not using a condom. There were no significant differences in vaginal/anal sex partner number or condom use by gender. Being ≥35 years was associated with higher mean partner number for anal sex (ptrend=0.021) and being 18–24 years with higher mean partner number for vaginal sex (ptrend=0.027). Most participants (n=637, 89.8%) had received oral sex; this proportion did not differ by age group or gender. Females (n=351, 93.4%) were more likely to perform oral sex than males (n=275; 82.6% males) (p<.001). Females were more likely to have received rimming (26.6% females vs 12.6% males; p<.001) and males were more likely to have performed rimming (25.5% males vs 9.3% females; p<.001). Performing but not receiving rimming increased with age (ptrend=0.011).

Conclusion Rimming and anal sex are practiced by one fifth or more of heterosexuals. Younger heterosexuals had higher numbers of vaginal sex partners, while older heterosexuals had higher numbers of anal sex partners and were more likely to perform rimming.

P273 SOCIAL NETWORK DISTRIBUTION OF SYPHILIS SELF-TESTING AMONG MSMS IN CHINA: STUDY PROTOCOL FOR A CLUSTER RANDOMIZED CONTROL TRIAL

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Background Syphilis is a common sexually transmitted infection (STI) among men who have sex with men (MSM). Increasing syphilis testing is important to syphilis control. However, in low- and middle-income countries like China, syphilis testing rates remain low among MSM. We describe a randomized controlled trial protocol to examine the effectiveness of social network distribution approaches of syphilis self-testing among MSM in China.

Methods We will recruit index and alter MSM. Indexes will be eligible if they: are born biologically male; aged 18 years or above; ever had sex with another man; are willing to distribute syphilis testing packages or referral links to their alters; and willing to provide personal contact information for future follow-up. Three hundred MSM will be recruited and randomly assigned in a 1:1:1 ratio into three arms: standard of care (control arm); standard syphilis self-testing (SST) delivery arm; and referral link SST delivery arm. Indexes will distribute SST packages or referral links to encourage alters to receive syphilis testing. All indexes will complete a baseline survey and a 3-month follow-up survey. Syphilis self-test results will be determined by photo verification via a digital platform. The primary outcome is the mean number of alters who returned verified syphilis testing results per index in each arm.

Discussion The trial findings will provide practical implications in strengthening syphilis self-testing distribution and increasing syphilis testing uptake among MSM in China. This study also empowers MSM community in expanding syphilis testing by using their own social network.

P274 LESSONS LEARNED FROM AN EDUCATIONAL INTERVENTION TO IMPROVE HIV TESTING BY GPs IN AMSTERDAM, THE NETHERLANDS

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Background In the Netherlands, general practitioners (GPs) diagnose 79% of STIs and 36% of HIV infections, but

opportunities for earlier HIV diagnosis are being missed in primary care. We assessed changes in GPs' HIV testing behaviour following an educational intervention using competitive feedback, to improve HIV testing in primary care in Amsterdam.

Methods The educational intervention, open for all Amsterdam GPs, was implemented from 2015 to 2020. The mean annual number of HIV tests per GP from 2011–2019 was calculated using data from diagnostic laboratories for primary care, and stratified by 4-digit postal code (PC4). Questionnaires and semi-structured interviews were conducted to identify perceived barriers and facilitators to HIV testing.

Results In total, 229 GPs (42%) participated in the educational intervention. Participation varied per PC4 area (median 27%, IQR 0%–60%). At baseline, the mean annual number of HIV tests per GP was similar for participants versus non-participants (26.8 versus 24.7, respectively). The number of tests per GP declined from 2011 to 2014 from 29.5 to 20.7, and increased thereafter to 27.1 in 2019. Testing was highest in PC4 areas with highest HIV prevalence. Qualitative analyses revealed various barriers to HIV testing, including taboo and stigma, a shrinking epidemic, and financial barriers. The use of competitive feedback was perceived as a motivator to improve testing behaviour. Of 59 GPs that completed the questionnaire, 68% stated the programme provided eye-openers, and 72% declared it improved their HIV testing behaviour.

Conclusion The observed increase in HIV testing coincided with the implementation of our intervention, but there was marked heterogeneity, with testing seemingly associated with local HIV prevalence. Amsterdam is well on its way towards zero new HIV infections, but it will be challenging to keep GPs engaged in proactive testing to prevent late presentations and missed opportunities for HIV diagnosis in primary care.

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PREPPED FOR COVID? EXPLORING THE ASSOCIATION BETWEEN HIV PRE-EXPOSURE PROPHYLAXIS USE AND COVID-19 EXPERIENCE AMONG MSM

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Background Pre-exposure prophylaxis (PrEP) is highly effective at reducing HIV acquisition. Studies are underway to investigate the effectiveness of HIV antiretrovirals, including Tenofovir-based PrEP, for treating and preventing COVID-19. We investigated the association between HIV-PrEP use and COVID-19 among men who have sex with men in the UK.

Methods Participants completed an online survey (23/06/20–14/07/20), including men (cis/transgender), transwomen or gender-diverse people reporting sex with another man (cis/transgender) or non-binary person assigned male at birth. The outcome was COVID-19 experience, defined as reporting a positive test (antigen/antibody) or symptoms of a new continuous cough, high temperature or anosmia following the implementation of UK-wide restrictions ('lockdown' 23/03/20). All participants reporting taking HIV-PrEP since the beginning of the COVID-19 pandemic (12/19) were compared with those who did not. Analysis was performed using logistic regression,

adjusting for sociodemographics (age, ethnicity, education, country) and subsequently for behavioural factors during lockdown (relationship status, chem-sex and number of new partners).

Results Altogether, 1,814 (89.9%) participants reported that they were living without HIV, of whom 253 (14.0%) reported experiencing COVID-19 (positive test or symptoms). Since December 2019, 410 (22.6%) participants reported taking HIV-PrEP, with daily use being lower during lockdown (6.2%) compared with the three months pre-lockdown (14.3%). HIV-PrEP use was positively associated with COVID-19 (crude-OR=1.51, 95%CI=1.13–2.04, p=0.006), including after adjusting for sociodemographics (OR=1.57, 95%CI:1.16–2.11, p=0.005), and after further adjustment for behavioural factors (OR=1.51, 95%CI:1.11–2.06, p<0.01).

Conclusion There is a positive association between HIV-PrEP use and COVID-19, independent of number of new partners. Our findings may reflect behaviours that increase COVID-19 exposure amongst HIV-PrEP users that are not captured in our analysis. People may also perceive that HIV-PrEP offers them protection against COVID-19. However, until robust evidence is available, people taking HIV-PrEP should adhere to COVID-19 prevention advice.

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HOW DO WE MEASURE UNMET NEED WITHIN SEXUAL AND REPRODUCTIVE HEALTH? A SYSTEMATIC REVIEW

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Background Addressing health inequality with sexual and reproductive health requires an understanding of unmet need within a range of populations. This review examined the methods and definitions that have been used to measure unmet need, and the populations most frequently assessed.

Methods Five databases (PubMed, Web of Science, Scopus, CINAHL and HMIC) were searched for studies that described quantitative measurement of unmet need within sexual and/or reproductive health between 2010 to 2020. A narrative synthesis was then undertaken to ascertain themes within the literature.

Results The database search yielded 18539 papers; 145 papers were included after screening.

128 studies assessed unmet reproductive health need, of which 94 were analyses of trends among women living in low/lower-middle income countries; 121 used cross-sectional data, with only seven analyses being longitudinal.

Twelve studies analysed unmet sexual health need, of which nine focused on high and upper-middle income populations. All twelve used cross-sectional analyses.

The remaining five studies examined unmet need for a combination of sexual and reproductive health services, all among populations from upper-middle or high income countries and all being cross-sectional analyses.

138 of the papers were analyses of questionnaire data, five used reviews of medical records, one compared demand before and after an intervention, and one used modelling techniques.

113 studies used the DHS definition of unmet need; no other standardised definition was used among the remaining papers.