person-years). Of 12,675 CT/NG treatment episodes, 3,221 (25.4%) were empiric therapy in asymptomatic contacts, of which 2,076 (64.4%) were later confirmed to be negative for both infections.

Conclusions Antibiotic use and overtreatment are high in a population at elevated risk for antibiotic resistant infections; these results should prompt reexamination of indications for empiric antibiotic treatment, particularly among contacts to bacterial STIs, and the effects of empiric STI treatment on antimicrobial resistance.

014.4 ENTERIC AND SEXUALLY ACQUIRED PATHOGENS IN MEN WHO HAVE SEX WITH MEN WITH CLINICAL PROCTITIS

^{1,2,3}E Chow*, ⁴D Lee, ²S Bond, ^{1,2}C Fairley, ²K Maddaford, ²R Wigan, ²G Fehler, ⁴S Lange, ⁴V De Petra, ²M Bissessor, ^{1,2,3}C Bradshaw, ⁴B Howden, ³J Hocking, ^{4,5}D Williamson, ^{1,2}M Chen. ¹Central Clinical School, Monash University, Melbourne, Australia; ²Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia; ³Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Australia; ⁴Microbiological Diagnostic Unit Public Health Laboratory, Department of Microbiology and Immunology, The University of Melbourne at The Peter Doherty Institute for Infection and Immunity, Melbourne, Australia; ⁵Department of Microbiology, Royal Melbourne Hospital, Melbourne Health, Melbourne, Australia

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Background Rectal infections are common in men who have sex with men (MSM) and may increase HIV risk. This study aimed to identify enteric and sexually acquired rectal pathogens, other than chlamydia and gonorrhoea, associated with symptomatic proctitis in MSM.

Methods Anorectal swab samples were obtained from MSM presenting with rectal symptoms and a clinical diagnosis of proctitis at the Melbourne Sexual Health Centre between January-2017 and March-2019. Samples that tested positive for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* were excluded. As a comparison group, anorectal samples were also obtained from MSM not reporting symptoms of proctitis between November-2018 and February-2019. Samples from both groups were tested for 15 viral, bacterial and protozoal enteric pathogens including *Shigella* spp., *Treponema pallidum*, *Mycoplasma genitalium* and herpes simplex virus (HSV) using PCR.

Results Anorectal samples from 499 men with symptomatic proctitis and 506 asymptomatic men were analysed. Age, HIV status and PrEP use did not differ between men with proctitis and asymptomatic men. Among men with proctitis, 38% were HIV negative and taking HIV PrEP and 16% were HIV-positive. *T. pallidum* was more common in men with proctitis compared to asymptomatic men (3.6% vs 0%, risk difference [RD]=3.6%, 95%CI:2.0–5.2%). Most men with anorectal *T. pallidum* presented with painful anal primary infections. *Shigella* spp. was more common in men with proctitis (2.8% vs 1.0%, RD=1.8%, 95%CI:0.1–3.5%). Most men with *Shigella* did not report diarrhoea. *M. genitalium* was more common in men with proctitis (9.4% vs 5.1%, RD=4.3%, 95%CI:1.1–7.5%). HSV-1 (12.6% vs 2.6%, RD=10.1%; 95%CI:6.8–13.3%) and HSV-2 (8.8% vs 1.6%, RD=7.2%; 95%CI:4.5–10.0%) were more common in men with proctitis.

Conclusion Testing for *Shigella* and *T. pallidum* should be considered in MSM presenting with symptomatic proctitis. These data provide support for *M. genitalium* as a significant cause of proctitis.

014.5 TRAUMA AND CHEMSEX AS COPING AMONG GAY, BISEXUAL AND OTHER MEN WHO HAVE SEX WITH MEN IN SINGAPORE

^{1,2}R Tan*, ²K Phua, ²A Tan, ²D Gan, ³L Ho, ²E Ong, ²M See. ¹Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; ²The Greenhouse Community Services Limited, Singapore, Singapore; ³Care and Counselling, Tan Tock Seng Hospital, Singapore, Singapore

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Background Sexualised substance use, or ‘chemsex’, has been identified as a major risk factor for HIV, as well as other mental health comorbidities among gay, bisexual and other men who have sex with men (GBMSM). While multiple studies have been conducted on the topic, few have explored the role of trauma as a risk factor for chemsex. This qualitative study investigates life histories of trauma, and proposes a biopsychosocial framework to better situate the factors driving chemsex among GBMSM.

Methods We conducted semi-structured in-depth interviews with 33 purposively-sampled GBMSM with a history of sexualised substance use in Singapore. Interview topics included participants’ experiences and life histories of chemsex, substance use, incarceration, trauma, as well as stories of resilience and ongoing recovery from chemsex. Interviews were audio-recorded, transcribed, coded, and analyzed using thematic analysis.

Results Participants described how chemsex was used as a coping mechanism to deal with emotional and situational ‘precipitants’, including dealing with loneliness and a low self-esteem, sexual shame and social anxiety, as well as general stressful situations. Participants also articulated how such precipitants were underpinned by experiences of biopsychosocial trauma, including those relating to HIV-related stigma, racism, sexual violence, death and loss, neglect, as well as internalised homophobia. Finally, participants illustrated how such trauma were in turn reinforced by several ‘preconditions’, including the accessibility of substances, emphasis on sexual capital, and lack of access to mainstream support structures in the gay male community, alongside general sociolegal barriers to accessing care.

Conclusions This study proposes the role of trauma and the preconditions underpinning them in driving chemsex among GBMSM in Singapore. Interventions that provide support for GBMSM recovering from chemsex should provide trauma-informed care to address the complex barriers to long-term recovery.

014.6 SOCIAL CAPITAL AND CHEMSEX INITIATION IN YOUNG GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN

¹R Tan*, ²C O'Hara, ¹W Koh, ³D Le, ³A Tan, ³A Tyler, ³C Tan, ³C Kwok, ³S Banerjee, ¹M Wong. ¹Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; ²Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; ³Action for AIDS Singapore, Singapore, Singapore

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Background Young gay, bisexual, and other men who have sex with men (YMSM) are especially vulnerable to the risks associated with sexualized substance use, or ‘chemsex’.

Methods Results of this study were derived from baseline data of the Pink Carpet Y Cohort Study in Singapore, comprising a sample of 570 HIV-negative YMSM aged 18 to 25 years old. Latent class analysis was employed to identify classes with

similar patterns of sexualized substance use, and multinomial logistic regression was employed to examine associations between class membership and measures of social capital, including age of sexual debut, bonding and bridging social capital, connectedness to the lesbian, gay, bisexual and transgender community, and outness.

Results Latent class analysis revealed three classes of YMSM based on their histories of sexualized substance use, which we labelled as 'alcohol', 'poppers', and 'chemsex'. Participants in the alcohol class (n=348) reported only ever using alcohol and not other substances during sex. Participants in the poppers class (n=140) had mostly ever used poppers (n=136, 97.1%), with some reporting ever using other chemsex-related substances, during sex. Most participants in the chemsex class (n=23) reported using methamphetamine, gamma-hydroxybutyrate/gamma-butyrolactone, and erectile dysfunction drugs during sex. Multivariable analyses revealed that participants who were older (aOR=1.19, p=0.002) and who identified as gay (aOR=2.43, p=0.002) were more likely to be in the poppers class compared to the alcohol class. Participants with a later age of sexual debut were increasingly less likely to be in the poppers (aOR=0.93, p=0.039) and chemsex classes (aOR=0.85, p=0.018), compared to the alcohol class, exhibiting a dose-response relationship.

Conclusions Varying measures of social capital such as an earlier age of exposure to sexual networks may predispose YMSM to greater opportunities for sexualized substance use. Future interventions should target YMSM who become sexually active at an earlier age.

LGBTQ populations – TRANS and BI

015.1 UNMET HEALTH NEEDS AND THEIR ASSOCIATIONS WITH GENDER MINORITY STRESS AMONG CHINESE TRANSGENDER INDIVIDUALS

¹Y Sha*, ²W Dong, ³L Zheng, ²K Muessig, ¹W Tang, ^{1,4}J Tucker. ¹University of North Carolina Project – China, Guangzhou, China; ²Department of Health Behavior, Gillings School of Global Public Health, The University of North Carolina at Chapel Hill, Chapel Hill, USA; ³Guangzhou Women and Children's Hospital, Guangzhou, China; ⁴Division of Infectious Diseases, Department of Medicine, The University of North Carolina at Chapel Hill, Chapel Hill, USA

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Introduction Transgender individuals faced health disparities. Stigma is a fundamental cause of health inequities. Yet, studies on the associations between transgender stigma and Chinese transgender women's health needs are sparse. This study examined the association between gender minority stress and healthcare utilizations in mainland China.

Methods Eligibility criteria for this multicenter cross-sectional study included 18 years or older, assigned male at birth, and currently not identified as men. Healthcare utilizations included transgender women's engagements in gender affirming interventions, HIV and STI testing, and PrEP and PEP use. Multivariate regression was used to measure the associations between gender minority stress and healthcare utilizations.

Results From December 2019 to June 2020, 277 eligible participants were recruited. A small portion of the participants have engaged in gender affirming surgery (9.4%), PrEP use (8.6%), and PEP use (10.5%). Higher levels of discrimination

(aOR 1.53, 95%CI: 1.13–1.97), victimization (aOR 1.30, 95%CI: 1.08–1.57), and non-disclosure of gender identity (aOR 1.16, 95%CI: 1.02–1.33) are associated with higher likelihood of receiving hormone intervention. Discrimination is also associated with higher likelihood of receiving gender affirming surgery (aOR 1.62, 95%CI: 1.11–2.38). Non-disclosure of gender identity is associated with higher likelihood of using PEP (aOR 1.21, 95%CI: 1.05–1.39). Internalized transphobia is associated with lower likelihood of STI testing (aOR 0.91, 95%CI: 0.84–0.98). Rejection is associated with lower likelihoods of PrEP use (aOR 0.85, 95%CI: 0.68–1.08) or willingness to use PrEP (aOR 0.84, 95%CI: 0.74–0.97).

Conclusions Gender minority stress impacted transgender people's healthcare utilizations through different pathways. Transgender related stigma can jeopardize transgender people's engagements in gender affirming medical services and sexual health care services in China. Future research should further investigate the casual relationships and the mediators of such pathways to inform stigma interventions, while future policy is needed to prioritize providing gender-affirming medical supports to Chinese transgender individuals.

015.2 'IT'S BEHAVIORS; IT'S NOT IDENTITY': ATTITUDES RELATED TO HIV RISK AND PRE-EXPOSURE PROPHYLAXIS AMONG TRANSGENDER WOMEN IN THE SOUTHEASTERN US

¹O Van Gerwen*, ²E Austin, ³A Camino, ³V Odom, ¹C Muzny. ¹University of Alabama At Birmingham, Department of Medicine, Division of Infectious Diseases, Birmingham, USA; ²University of Alabama at Birmingham School of Public Health, Birmingham, USA; ³University of Alabama School of Medicine, Birmingham, USA

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Background Transgender women (TGW) are significantly impacted by HIV in the Southeastern U.S., where HIV prevalence is the highest in the nation. Uptake of HIV Pre-Exposure Prophylaxis (PrEP) is low among TGW nationwide. We aimed to explore barriers to PrEP awareness and uptake among TGW in the Southeastern U.S.

Methods HIV-negative TGW ≥18 years old in Alabama participated in virtual focus groups (FGs) exploring barriers and beliefs related to HIV risk and PrEP among TGW in the Southeastern U.S. Participants were recruited via social media, community outreach, and financial incentives to participants for referrals. A trained qualitative researcher coded transcripts after each FG and iteratively amended the FG protocol as new themes emerged.

Results Between July 2020 and December 2020, 17 TGW participated in 4 FGs. Mean participant age was 28.1±8.5 years. Black, non-Hispanic and white, non-Hispanic TGW represented 41% (n=7) and 47% (n=8) of participants, respectively. Fifteen participants had heard of PrEP but only one had ever taken PrEP. Participants identified several barriers to PrEP use, including frustration regarding the conflation of transgender identity and HIV risk, lack of appropriate transgender representation in PrEP advertising, concerns for drug-drug interactions between PrEP and hormone replacement therapy, the perception that PrEP is primarily meant for cisgender men who have sex with men, and limited trans-affirming healthcare resources. Participants expressed that sexual risk behaviors, rather than transgender identity, should be central to healthcare providers' discussion of PrEP with TGW.