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

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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

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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.

Conclusion Nuanced messaging from healthcare providers and media is necessary to properly educate and engage TGW in HIV prevention strategies such as PrEP. A one-size-fits-all approach is inappropriate given the diversity among TGW regarding sexual behaviors and HIV risk factors. Discussions between TGW and healthcare providers should focus on individual HIV risk and patient concerns when determining whether or not PrEP is appropriate.

015.3 HETEROGENEITY AMONG AMERICAN MEN WHO HAVE SEX WITH MEN AND WOMEN: NATIONAL SURVEY OF FAMILY GROWTH (NSFG) 2011–2019

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Background Nearly 6% of American men report having had sex with another male since puberty. However, as men age, their sexual repertoires likely change. Recent sexual behaviors may be more important with respect to risk for bacterial STDs. We investigated recent sexual behaviors and STD/HIV testing among US men who report having had sex with both men and women in their lifetime (MSMW).

Methods MSMW aged 15–44 years who participated in the National Survey of Family Growth during 2011–2019 were included. MSMW were further classified based on gender of recent (past 12 months) sex partners: (1) both men and women, (2) only men and (3) only women. Weighted percentages and corresponding 95% confidence intervals (CI) of behaviors were estimated.

Results Among all MSMW (n=801), 23% (95% CI: 20–27) reported recent sex with both men and women, 21% (95% CI: 17–24) with only men and 56% (95% CI: 51–61) with only women. Among MSMW who recently had sex with both men and women, half (52%, 95% CI: 41–62) identified as bisexual and almost half (46%, 95% CI: 36–56) had 4+ sex partners in the past year, higher than MSMW who recently had sex with only men (29%, 95% CI: 20–38) or only women (6%, 95% CI: 4–9). Compared to MSMW who recently had sex with both men and women, MSMW who recently had sex with men only were more likely to have had a recent HIV test (57%, 95% CI: 49–68 versus 30%, 95% CI: 21–39) and a recent STD test (55%, 95% CI: 46–64 versus 45%, 95% CI: 35–55).

Conclusion MSMW are a heterogeneous group with respect to recent sexual behaviors and may have different sexual health needs. The collection of sexual history at clinical visits is critical to ensuring culturally competent sexual health care for this population.

015.4 GEOGRAPHIC VARIATION IN HIV TESTING AMONG TRANSGENDER AND NON-BINARY ADULTS IN THE UNITED STATES

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Background Transgender and non-binary (TNB) populations are disproportionately impacted by HIV in the United States (US), and prior studies show that approximately half of TNB adults meet CDC recommendations for HIV testing at least annually. In addition, few local health departments or HIV surveillance systems report data for TNB identities. Thus, we aimed to estimate the county-level prevalence of HIV testing among TNB adults living in the US.

Methods We applied a Bayesian hierarchical spatial small area estimation model to data from the 2015 US Transgender Survey, a nationwide internet-based survey of TNB adults, to estimate county-level prevalence of ever testing and testing for HIV in the last year overall and by gender, race/ethnicity, and age.

Results Our analysis included 26,100 TNB participants with valid zip codes who resided in 1,688 counties (54% of all 3,141 counties that cover 92% of the US population). The median county-level proportion of TNB adults who ever tested for HIV was 45% (range 9–80%) and who tested for HIV in the last year was 17% (range 4–44%). Within most counties, testing was highest among transgender women, Black respondents, and people age ≥25; it was lowest among non-binary and young adults age <25. Patterns in HIV testing among White, Hispanic/Latinx, and Asian/Pacific Islander TNB people varied significantly across geographies. Notably, the proportion of TNB people who tested for HIV in the last year was very low—below 25%—in 28 of the 50 counties in the US where the majority of HIV diagnoses occur.

Conclusions We observed significant variation across US counties in the proportion of TNB adults who have tested for HIV. Ever and recent HIV testing was below recommended levels in the majority of counties. HIV testing by gender and race/ethnicity also varied geographically, suggesting that HIV testing strategies may need to be tailored to local settings.

015.5 PREVALENCE AND RISK FACTORS FOR CHLAMYDIA AND GONORRHEA AMONG TRANSGENDER WOMEN IN 2019–20 IN SÃO PAULO, BRAZIL

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Transgender women (TGW) in Brazil are disproportionately affected by HIV, but knowledge about others STIs is scarce. We estimated the prevalence of chlamydia and gonorrhea infections and investigated risk factors associated with infection in TGW in São Paulo, a part of a national survey.

TransOdara is a cross-sectional study which included TGW ≥ 18 years, recruited at CRT DST/AIDS in São Paulo, Brazil, from December 2019–October 2020. Participants were recruited from an ongoing cohort study, originally assembled using RDS. A structured interview collecting socio-demographic and behavioral information was followed by triple-anatomical site STI testing and an HIV test. Risk factors were assessed using multivariable logistic regression. The study was supported by Brazilian MOH and PAHO.