

**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  $\geq 25$ ; 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 gonorrhoea infections and investigated risk factors associated with infection in TGW in São Paulo, a part of a national survey.

TransOudara is a cross-sectional study which included TGW  $\geq 18$  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.

403 TGW participated; 52.1% were aged 18–33 years; mean 34.4 (SD  $\pm 9.6$ ); 57.6% had  $\geq 12$  years of formal education; 70% identified as black/mixed race; 25.8% declared sex work as main source of income and 48.1% that their monthly income was below or equal to the Brazilian minimum wage. Prevalence of chlamydia and gonorrhoea was, respectively, 10.2% (41/403) and 8.2% (33/403); coinfection was 2.4% (10/403). Most TGW testing positive had anal infections: 90.2% for chlamydia and 66.7%, gonorrhoea. Prevalence of chlamydia or gonorrhoea was slightly higher among individuals living with HIV (18% vs 15% among HIV-negative individuals, OR 1.21; 95% CI 0.67 – 2.19). After adjusting for schooling, sex work as main source of income, and monthly income, young age remained a risk factor for a chlamydia (aOR 2.78; 95% CI 1.34 – 5.74) and gonorrhoea (aOR 2.21; 95% CI 1.02 – 4.79) diagnosis.

Chlamydia and gonorrhoea prevalence is high among Brazilian TGW, especially amongst the young. Comprehensive care and prevention programs, including sexual education and screening policies directed at TGW are urgently needed to reduce STI burden and to interrupt STI/HIV transmission.

#### 015.6 'IF THEY ASK, I WILL TELL THEM': ATTITUDES TOWARDS ACCESSING SEXUAL HEALTHCARE AMONG HETEROSEXUAL-IDENTIFYING MSM IN ENGLAND

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**Background** STI/HIV testing is lower among heterosexual-identifying men who have sex with men (heterosexual-MSM) than bisexual or gay men. We aimed to understand attitudes towards sexual healthcare among heterosexual-MSM in England, to improve service design and uptake among this overlooked population.

**Methods** Semi-structured individual interviews were conducted with 15 heterosexual-MSM in England in January–March 2020. Participants ranged in age from 22–69 years. All but one reported current or previous relationships with women. Data were analysed using an inductive thematic analysis.

**Results** Frequency of STI/HIV testing varied widely between participants, reflecting how some men felt they lacked sufficient or accurate information about testing guidelines and options, including the possibility of home-sampling/testing. Among men with female partners, concern for the health and wellbeing of these partners was a motivator for testing. However, privacy and discretion were important factors in the use of home-sampling/testing kits for men living with female partners or family; their ability to use these services was limited when their privacy needs were not accommodated. Their heterosexual identity meant some felt services intended for gay and bisexual men were not appropriate for them. If asked by sexual health clinicians, most heterosexual-MSM interviewed reported feeling comfortable disclosing the sex they have with men, describing the impersonal nature of consultations and perceptions of non-judgement and discretion as facilitators for disclosure. However, this comfort with disclosure did not

always extend to GPs, due to fears their behaviour would be exposed to others.

**Conclusion** For the heterosexual-MSM in this study, privacy and discretion were of utmost importance. These must be guaranteed by sexual healthcare services, whether in-clinic or home-sampling/testing, to appeal to MSM regardless of their personal circumstances. Trust in clinician confidentiality and non-judgement facilitate disclosure. Further work is needed to identify ways for sexual health services to appeal to, and reach, this population.

## Female reproductive health for STIs and HIV

### 016.1 HIGH BURDEN OF REPRODUCTIVE TRACT INFECTIONS AND POOR SEXUAL AND REPRODUCTIVE HEALTH IN PREGNANCY AND POSTPARTUM IN PAPUA NEW GUINEA

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There is a pressing need for detailed knowledge of the range of pathogens, extent of co-infection and clinical impact of reproductive tract infections (RTIs) among pregnant women. We present prevalence and correlates of RTIs (*Mycoplasma genitalium*, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, *Treponema pallidum* subspecies *pallidum*, bacterial vaginosis and vulvovaginal candidiasis) in a longitudinal study of women in pregnancy and postpartum in Papua New Guinea (PNG).

699 pregnant women were recruited at their first antenatal clinic visit and followed up at childbirth, one, six and twelve months postpartum. Self-collected vaginal swabs were tested for *M.genitalium* using real-time PlexPCR<sup>®</sup> (SpeeDx) which provides results for five point mutations associated with macrolide resistance. Urine samples or vaginal swabs were tested for *C.trachomatis*, *N.gonorrhoea* and *T.vaginalis* using GeneXpert. A vaginal smear was examined for BV and VVC. Routine antenatal services tested for syphilis using Alere Determine<sup>TM</sup> Syphilis.

Most pregnant women (74.1%) had at least one RTI, with a curable current sexually-transmitted infection (STI) detected in 37.7%. We found *M. genitalium*, an emerging pathogen in PNG, in 12.5% of pregnant women, decreasing to 6.1% at six months postpartum, with no evidence of macrolide resistance. Prevalence of other curable STIs (*C. trachomatis*, *N. gonorrhoeae* and *T. vaginalis*) were all high in pregnancy