## P577 ASSOCIATIONS BETWEEN PENILE-ANAL INTERCOURSE AND ORAL SEX AND VIRAL STIS IN THE UNITED STATES, 2011–2015

<sup>1</sup>Melissa Habel, <sup>2</sup>Jami Leichliter, <sup>3</sup>Patricia Dittus, <sup>4</sup>Ian Spicknall, <sup>1</sup>Sevgi Aral. <sup>1</sup>Centers for Disease Control and Prevention, Atlanta, USA; <sup>2</sup>CDC, Atlanta, USA; <sup>3</sup>CDC, Division of STD Prevention, Atlanta, USA; <sup>4</sup>Centers for Disease Control and Prevention, Division of STD Prevention, Atlanta, USA

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**Background** Anal and oral sex are related to the acquisition and transmission of STIs, and condom use remains low for these behaviors. Thus, we examined associations between these behaviors and STIs using 2011–2015 National Survey of Family Growth data.

Methods We examined associations between male-female penile anal intercourse (PAI) and oral sex with opposite-sex partners only (lifetime) and lifetime self-report of a viral STI (herpes or genital warts) by sex and race/Hispanic origin (White, Hispanic, Black, Other). The response rate was 71.0% and sensitive survey items were asked using audio computer-assisted self-interview. Analyses were restricted to individuals reporting one lifetime sex partner. Bivariate analyses were analyzed in SUDAAN-11.0 using chi-squares.

Results Overall, more women (12.5%, N=11,243) than men (2.1%, N=9,257) reported ever having a viral STI. Self-report of viral STI was slightly more common among White women compared to women of other racial/ethnic groups. Among women, ever engaging in PAI was strongly associated with a viral STI diagnosis (21.8%[SE 1.2] White, 20.7%[SE 2.0] Black, 19.7%[SE 3.2] Other, and 16.9%[SE 1.7] Hispanic, p < 0.0001) as was giving/receiving oral sex (all 11.6%-17.3%). For men, the same associations differed by race/Hispanic origin. PAI was significantly associated with a viral STI in White men (5.7%[SE 0.7], p<0.01), Hispanic men (3.4%[SE 1.0], p<0.05), and men of other racial/ethnic groups (2.7%[SE 1.2], p<0.05). Oral sex was associated with a viral STI in White men and men of other racial/ethnic groups; however, for Black men only giving oral sex was significantly associated with a viral STI (4.1%[SE 1.0], p<0.05).

Conclusion For women, PAI and oral sex were related to having been diagnosed with a viral STI. Self-reported viral STIs were highest in women and Whites which may suggest disparities in health care seeking and access. Further exploration is needed to assess associations between multiple sex partners and condom use during these behaviors.

Disclosure No significant relationships.

# P578 DRIVERS OF SEXUAL HEALTH KNOWLEDGE FOR TWO-SPIRIT, GAY, BI AND/OR NATIVE MEN WHO HAVE SEX WITH MEN (GBMSM)

<sup>1</sup>Harlan Pruden, <sup>2</sup>Travis Salway, <sup>3</sup>Jannie Leung, <sup>3</sup>Theodora Consolacion. <sup>1</sup>BCCDC, Cps/chee Mamuk, Vancouver, Canada; <sup>2</sup>BC Centre for Disease Control, Clinical Prevention Services, Vancouver, Canada; <sup>3</sup>BC Centre for Disease Control, Epidemiologist, Clinical Prevention Services, Vancouver, Canada

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Background Rarely are Two-Spirit and/or Aboriginal (i.e., First Nations, Métis, and Inuit) gay, bi, or men who have sex with men (gbMSM) included in research projects that center their

Methods Associations were examined between SHK, using a combined score of 6 survey questions, and the following explanatory variables: Two-Spirit identity, living in urban settings, income, education and gay peer networks (GPN). Correlations between explanatory variables were examined using unadjusted odds ratios, and univariate and multivariable linear regression estimated associations between each of the explanatory variables and the SHK outcome.

**Results** Using the Lakota expression, Mitakuye Oyasin, "*all my relations*," the drivers studied were interrelated: those living in urban environments had larger GPN; higher educational attainment had more income; and larger social support network had higher levels of educational attainment and larger GPN. Three main factors were positively associated as drivers of SHK: income, education, and size of GPN. Two-Spirit respondents had higher SHK than other Native men in urban settings but not in non-urban settings.

Conclusion To increase SHK with those with lower levels of education or income, or who are not connected to the "gay" community requires new ways of conducting outreach and engagement. Urban Two-Spirit folks are likely connected to HIV prevention technologies, which may differ from those living in rural settings. Further research is needed with a larger sample and additional survey questions specific to experiences of Aboriginal gbMSM.

Disclosure No significant relationships.

## P579 HIGH PREVALENCE AND CORRELATES OF SYPHILIS AND HIV INFECTION AMONG ADOLESCENTS OF THE COMARCA NGÄBE-BUGLÉ, PANAMA

<sup>1</sup>Amanda Gabster<sup>\*</sup>, <sup>1</sup>Juan Pascale, <sup>2</sup>Ben Cislaghi, <sup>1</sup>Alexander Martinez, <sup>1</sup>Alma Ortiz, <sup>1</sup>Jorge Castillo, <sup>3</sup>Mellissa Herrera, <sup>4</sup>Genarino Herrera, <sup>5</sup>César Gantes, <sup>5</sup>Yaremis Quiel, <sup>1</sup>Adan Ríos, <sup>1</sup>Eliris Campbell, <sup>6</sup>Philippe Mayaud. <sup>1</sup>Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama; <sup>2</sup>London School of Hygiene and Tropical Medicine, Department of Global Health and Development, London, UK; <sup>3</sup>Caja de Seguro Social, Laboratorio de Microbiologia, Santiago, Panama; <sup>4</sup>MINSA Capsi, La Mata, Panama; <sup>5</sup>Ministerio de Salud, Región Comarca Ngäbe-buglé, San Felix, Panama; <sup>6</sup>London School of Hygiene and Tropical Medicine, London, UK

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**Background** The Comarca Ngäbe-Buglé (CNB), situated in western Panama, is home to over 200,000 indigenous peoples; the region has the highest levels of multidimensional poverty in the country. The prevalence and correlates of syphilis and HIV have not been previously described among adolescents of CNB.

Methods A cross sectional study, using multistage cluster sampling design with equal probability of selection and random sampling of clusters, among male and female participants aged 14–19 years, was conducted in 10 high schools in CNB from July-November 2018. A questionnaire was self-administered, participants provided blood, as well as urine and self-administered cervical/vaginal swabs for STI testing (data not shown). Serum was tested for HIV using rapid test/viral load

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confirmation; syphilis using TPPA/VDRL confirmation for active syphilis.

Results A total of 316 female adolescents and 384 males participated. A history of sexual activity was reported by 76.0% of females and 78.3% of males; forced sexual intercourse by 29.0%(86/297) of females and 15.1%(55/364) of males; transactional sex (being offered money, food, housing, transport in exchange for sex) by 14.6%(43/295) of females, 12.3%(45/ 365) of males. Of sexually experienced participants, 4.7%(25/ 535) had a confirmed HIV (1 female, 3 males) or active syphilis (3 females, 19 males) test. Correlates of either HIV/syphilis infection include: male gender (AOR=4.4, 95%CI: 1.5-13.1) and having been offered transactional sex (AOR=3.3, 95%CI: 1.3-8.0). Among males only, 4/26 (15.4%) of those who reported same-sex sexual intercourse (MSM) tested positive for syphilis. Correlates of HIV/syphilis among all male participants included transactional sex (AOR=2.7, 95%CI: 1.0-7.9), having been forced to have sex (OR=2.6, 95%CI: 1.0-6.9) and MSM (OR=2.7, 95%CI: 0.9-8.9).

Conclusion There is very high syphilis and HIV prevalence among high-school-going indigenous adolescents of CNB, particularly among males. Transactional sex and forced sex are driving factors. Targeted interventions should include prevention education, testing and treatment, especially for boys reporting homosexual sex.

Disclosure No significant relationships.

#### P580 PREDICTORS OF SEXUALLY TRANSMITTED INFECTION SCREENING AMONG BINGE ALCOHOL USING NATIVE AMERICAN ADULTS

<sup>1</sup>Rachel Chambers, <sup>2</sup>Lauren Tingey, <sup>2</sup>Shea Littlepage, <sup>1</sup>Anna Beach, <sup>1</sup>Laura Melgar, <sup>1</sup>Angie Lee, <sup>1</sup>Anne Rompalo. <sup>1</sup>Johns Hopkins Center for American Indian Health, Baltimore, USA; <sup>2</sup>Johns Hopkins School of Public Health, Baltimore, USA

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Background: Introduction Native American (Native) adults have higher rates of sexually transmitted infections (STIs) than other racial/ethnic groups in the United States. The Centers for Disease Control and Prevention (CDC) recommend annual STI screening for those with new or multiple sex partners. Scarce research has been conducted exploring what factors predict STI screening among high risk Native adults and the extent of compliance with CDC recommendations in this population. This analysis bridges this gap in the literature.

Methods Participants are N=252 Native adults ages 18 to 55 who recently engaged in binge alcohol use and enrolled in a trial evaluating a risk-reduction counseling program. Data were collected at baseline via self-report and assessed participant demographics, substance use, sexual risk behaviors and mental health symptoms. Bivariate analyses followed by final multivariate regression models explored which factors significantly predicted STI screening behavior in the 12 months prior to assessment.

Results Less than half of all participants completed STI screening in the past year (n=96, 38.1%). Among females, using a condom at last sex and having sex with more than one person in the same day was associated with lower odds of STI testing (p=0.03, p=0.02) while having sex with someone with an STI was associated with higher odds of testing (p=0.03). Among males, drug use and having more than 5 drinks in the

same day were associated with higher odds of STI testing (p=0.008, p=0.031).

Conclusion Regular STI screening is a key prevention strategy for reducing transmission of STIs, particularly among high risk Native American adults. Understanding what factors predict compliance with CDC recommendations can help inform programming development for Native adults who engage in binge alcohol use. Results inform intervention efforts for CDC, Indian Health Service and other tribal-serving organizations working to increase STI screening rates in Native communities.

Disclosure No significant relationships.

#### P583 THE ROLE OF PARENTS IN PREDICTING SEXUAL HEALTH AND SUBSTANCE USE RISK AMONG NATIVE AMERICAN YOUTH

<sup>1</sup>Lauren Tingey\*, <sup>2</sup>Rachel Chambers, <sup>3</sup>Shea Littlepage, <sup>2</sup>Anna Beach, <sup>2</sup>Laura Melgar, <sup>2</sup>Angie Lee, <sup>2</sup>Anne Rompalo. <sup>1</sup>Johns Hopkins University, Johns Hopkins Center for American Indian Health, Baltimore, USA; <sup>2</sup>Johns Hopkins Center for American Indian Health, Baltimore, USA; <sup>3</sup>Johns Hopkins School of Public Health, Baltimore, USA

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Background Native American youth suffer marked disparities in sexual health and substance use. High rates of sexually transmitted infections (STIs), unintended pregnancies and substance abuse are driven by early sexual and substance use inito text tiation and limited access to culturally relevant health education. Parents and extended family members are central to youth decision making in Native communities. Despite this inherent strength, few health education programs are designed to be multigenerational and fail to engage parents and family members in intervention delivery.

Methods Data was collected with N=536 Native youth ages 11-19 participating in an evaluation of a comprehensive sexual health program designed for youth together with their parents or other trusted adult family members, called Respect-≥ ing the Circle of Life. Baseline data was analyzed to determine how parental monitoring and parent-youth communication predicted sexual and substance use risk prior B to intervention implementation. Bivariate and multivariate logistic regression models examined the role of parents in pre-Ы dicting substance use initiation, sexual initiation (vaginal/anal/ <u>0</u> oral), condom use at last sex, as well as intention to have sex and condom use intention.

Results Final multivariate models indicate parental monitoring tect significantly predicted: initiation of cigarettes (p=0.02), initiasignificantly predicted: initiation of cigarettes (p=0.02), initiation of marijuana (p=0.001), initiation of vaginal sex (p=0.03), initiation of oral sex (p=0.04), intention to have **g** sex in the next 6 months (p=0.000) and intention to use a les condom in the next 6 months (p=0.002).

Conclusion Our findings underscore the powerful role of parents and family in Native American sexual and substance use decision making. Results show Native families can help delay youth's initiation of sex and substances and protect them from the consequences of sexual risk taking. Programs aiming to promote the sexual health of Native youth should incorporate parents and other families in lesson delivery and skill development to maximize impact. Disclosure No significant relationships.