

P783 FACTORS ASSOCIATED WITH SYPHILIS TESTING IN TRANSGENDER WOMEN IN CENTRAL-WEST BRAZIL

¹Megmar Aparecida Carneiro, ²Paulie Marcelly Dos Santos Carvalho, ³Karlla Caetano, ⁴Brunna De Oliveira, ⁵Lara Da Cunha, ⁶Mariana De Oliveira, ¹Bruno E Silva, ¹Ana Livia Sousa, ⁶Sheila Teles*. ¹Universidade Federal de Goiás, Instituto de Patologia Tropical e Saúde Pública, Goiânia, Brazil; ²Universidade Federal de Goiás, Faculdade de Enfermagem, Goiânia, Brazil; ³Universidade Federal de Goiás, Faculty of Nursing, Goiânia, Brazil; ⁴Universidade Federal de Goiás, Institute of Pathology and Public Health, Goiânia, Brazil; ⁵Universidade Estadual de Goiás, Itumbiara, Brazil; ⁶Universidade Federal de Goiás, Goiânia, Brazil

10.1136/sextrans-2019-sti.839

Background Syphilis, one of the oldest diseases caused by the spirochete *T. pallidum*, has been a major public health problem worldwide. Globally, social inequalities contribute to elevated sexually transmitted infections (STIs) rates among transgender women. High syphilis prevalence has been documented among transgender women in Latin America. **Objectives:** The aim of this study was to estimate the prevalence of syphilis and to analyze the potential predictors for this infection in transgender women in Goiânia, Central-West Brazil.

Methods A cross-sectional study was conducted in 180 transgender women (TGW) in Goiânia-GO, from April 2018 to December 2018. TGW were recruited using respondent-driven sampling (RDS) as a method to obtain a more robust and diverse sample of a hard-to-reach populations, which tends to be particularly sparse and marginalized. After obtaining the consent term, participants were interviewed using a structured form containing questions about sociodemographic characteristics and risk factors for *T. pallidum* infection. Blood samples were collected and tested for syphilis (anti-*T. pallidum*) by rapid test.

Results A total of 180 TGW participated in the study. Of the 180 samples tested by the rapid test for syphilis, 61.7.0% (CI 95%: 54.4–68.4%) were positive. In multiple regression analysis, previous STIs (OR aj: 6.2, $p \leq 0.001$), age (≤ 13 years) of sexual initiation (OR aj: 3.6; $p = 0.009$), number of partners (≥ 15) in the last seven days (OR aj: 5.3, $p \geq 0.0001$) were predictors of syphilis infection.

Conclusion The results of the present study show a high prevalence of syphilis infection in transgender women, with the development of prevention and control strategies, including counseling and testing, as well as the provision of treatment for STIs in the setting street and temporary and/or permanent shelters.

Disclosure No significant relationships.

P784 PREVALENCE OF STIS AND HIV IN TRANSGENDER WOMEN AND MEN: A SYSTEMATIC REVIEW

¹Olivia Van Gerwen*, ¹Christina Muzny, ²Erika Austin, ³Karen Musgrove, ¹Aditi Jani. ¹University of Alabama at Birmingham, Division of Infectious Diseases, Birmingham, USA; ²University of Alabama School of Public Health, Department of Biostatistics, Birmingham, USA; ³Magic City Wellness Center/BAO, Birmingham, USA

10.1136/sextrans-2019-sti.840

Background The transgender (TG) population is under-researched. Despite reportedly high rates of HIV and sexually transmitted infections (STIs) among TGs, prevalence of these in TGs has not been systematically reviewed. Our primary objective was to perform a systematic review of the literature for studies reporting laboratory test proven prevalence data of

HIV and other STIs among male-to-female (MTF) and female-to-male (FTM) TGs. Given the sexual risk factors traditionally associated with MTFs (e.g. commercial sex work), we hypothesized that HIV/STI prevalence would be higher among MTFs compared to FTMs.

Methods A systematic review of the literature on original English-language research involving HIV and/or STI laboratory testing in TG populations within the last 50 years was performed.

Results Of 32 eligible studies, most focused on MTFs, with only 10 (31%) including data on FTMs. MTFs were exclusively investigated in 22 (69%) of studies. The majority of studies including MTFs were focused on sex workers, with 7 (22%) exclusively evaluated sex workers. HIV data was reported in 31 (97%) of studies. Syphilis data was presented in 18 (56%) studies. Regarding gonorrhea and chlamydia, 15 (47%) studies presented testing data, but only 7 reported urogenital and extragenital results. No studies evaluated trichomoniasis. In MTFs, prevalence of HIV, syphilis, gonorrhea, and chlamydia ranged from 0%–70.3%, 1.4%–50.4%, 0%–29.4%, and 2.7%–24.7%, respectively. In FTMs, prevalence of HIV, syphilis, gonorrhea, and chlamydia ranged from 0%–8.3%, 0%–4.2%, 0%–10.5%, and 0–11.1%, respectively.

Conclusion Literature involving STIs in TG people focuses on the MTF community and HIV. Testing patterns for bacterial STIs are variable, especially for gonorrhea and chlamydia. Per current literature, STIs appear to be more prevalent in MTFs compared to FTMs. Data for STIs in FTMs is limited. These gaps present opportunities for further study involving the epidemiology of STIs in the FTM population and the relevance of extragenital bacterial and parasitic STIs in all TGs.

Disclosure No significant relationships.

P785 SYPHILIS AMONG MSM/TW IN THE AMERICAS: A SYSTEMATIC REVIEW AND META-ANALYSIS (1980–2017)

¹Ken Kitayama, ²Eddy Segura, ³Jordan Lake, ⁴Amaya Perez-Brumer, ⁵Catherine Oldenburg, ¹Paria Pourjavaheri, ⁶Robinson Cabello, ⁷Jesse Clark*. ¹David Geffen School of Medicine at UCLA, Los Angeles, USA; ²Universidad Peruana de Ciencias Aplicadas, Lima, Peru; ³McGovern Medical School, Internal Medicine, Division of Infectious Diseases, Houston, USA; ⁴Columbia Mailman School of Public Health, New York, USA; ⁵University of California, San Francisco, USA; ⁶Asociacion Civil Via Libre, Lima, Peru; ⁷UCLA Geffen School of Medicine, Medicine/Infectious Diseases, Los Angeles, USA

10.1136/sextrans-2019-sti.841

Background Although syphilis remains a central public health problem, disease estimates for men who have sex with men (MSM) and transwomen (TW) in the Americas are incomplete. The purpose of this study was to compare the syphilis epidemics of North America (NA) and Latin America/Caribbean (LAC).

Methods We conducted a systematic review of ten databases for studies of syphilis in MSM/TW in the Americas between 1980–2017. Regional and country-specific prevalences were calculated from 2000–17 using 3 analytic frameworks: 1) All MSM/TW; 2) MSM/TW with versus without HIV; and 3) MSM and TW separately. Pooled prevalence estimates were calculated utilizing random effects meta-analysis.

Results 167 studies (NA=84, LAC=83) representing 368,587 subjects were included. Almost no data was available from LAC prior to 2000 and only 8% of studies from either region reported stage of infection (Primary, Secondary, Latent). For

syphilis diagnosis, 42% of studies used RPR, 24% used VDRL, and 18% used FTA-Abs. From 2000–2017, syphilis prevalence among MSM/TW in NA was 6.6% (95% CI: 5.7–7.4%) and 13.3% (95% CI: 11.7–14.9%) in LAC. For TW alone, prevalence was 7.1% (95% CI: 2.3–11.9%) in NA and 31.7% (95% CI: 19.1–44.4%) in LAC. Among MSM/TW with HIV in NA, prevalence was 10.5% (95% CI: 7.4–13.3%) versus 4.0% (95% CI: 1.8–6.1%) in those without HIV. In LAC, syphilis was diagnosed in 15.1% (95% CI: 0–30.3%) of MSM/TW with HIV and 12.9% (95% CI: 9.5–16.2%) without HIV.

Conclusion From 2000–2017, the burden of syphilis in MSM/TW was greater in LAC than NA. Prevalence estimates were higher in certain subgroups, including TW in LAC and MSM/TW with HIV in NA, though these data were limited. Our results suggest a need for additional data on syphilis epidemiology with stratification by key subgroups, classification by stage of disease, and uniform diagnostic criteria to target public health strategies in the Americas.

Disclosure No significant relationships.

P787 TRICHOMONAS VAGINALIS POSITIVITY RATES BY HIV STATUS AMONG WOMEN IN A CLINICAL STUDY

¹Stephanie Taylor*, ²Grace Daniel, ³Edith Torres-Chavolla, ³Charles Cooper, ³Salma Kodosi, ²Barbara Van Der Pol. ¹Louisiana State University, Department of Health Sciences, New Orleans, USA; ²University of Alabama at Birmingham, Medicine/Infectious Diseases, Birmingham, USA Minor Outlying Islands; ³Becton Dickinson, Sparks, USA

10.1136/sextrans-2019-sti.842

Background Numerous studies have shown that *Trichomonas vaginalis* (TV) infection is related to risk of HIV infection, but fewer studies have compared positivity rates based on HIV status. Further, the majority of studies that have looked at this topic have either been performed outside the US, or in HIV specialized care settings. We performed a secondary analysis of data collected for evaluation of a molecular diagnostic assay for Sexually Transmitted Infections (STI) diagnostics.

Methods Study data from patients with evaluable results obtained using a BD MAX CTGCTV study for detection of *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (GC) and TV were reviewed for HIV status. These women were recruited from 11 sites in the US that included STID clinics; Family Planning clinics, including Planned Parenthood clinics; OB/GYN clinics and other clinic types. No HIV care specialty clinics participated in recruiting patients into this study. CT, GC and TV results based on HIV were compared status using χ^2 with $\alpha=0.05$.

Results HIV status data from 2339 women were available. Among HIV negative women the positivity rates for CT, GC, and TV were 6.2%, 1.9%, and 10.3% respectively. Among HIV positive women the positivity rates for CT and TV were 2.1% and 27.1% respectively. No GC coinfection was detected among HIV positive women. For TV, the positivity rate among women with HIV [27.1% (13/48)] was significantly higher than that of among HIV (-) women [10.3% (236/2291)] ($p<0.001$).

Conclusion While women engaged in HIV specialty care may be tested for STIs routinely, as services are being pushed to more primary care settings, it is important for clinicians to be aware of the importance of STI screening among HIV (+) women, particularly for TV.

Disclosure No significant relationships.

P788 COMPARISON OF VAGINAL SPECULUM AND NON-SPECULUM SPECIMENS IN THE DIAGNOSIS OF TRICHOMONAS VAGINALIS

¹Orikomaba Obunge, ¹Ibinabo Oboro*, ²Nneka Onyejebu, ¹Mary Alex-Wele. ¹University of Port Harcourt Teaching Hospital, Medical Microbiology and Parasitology, Port Harcourt, Nigeria; ²National Institute of Medical Research, Lagos, Nigeria

10.1136/sextrans-2019-sti.843

Background Trichomoniasis is the most prevalent non-viral sexually transmitted infection worldwide. In Nigeria, prevalence ranges from 5% to 15%. Apart from being a key biologic indicator of sexual activity, it's been associated with the transmission of Human Immunodeficiency virus. The use of vaginal speculum is traditionally required for specimen collection. The limited application of this step in various primary health care facilities in resource-poor settings due to difficulties with sterilization of speculae among others, has grossly reduced the offer of testing for Trichomoniasis. Self-collected vaginal swab could be an acceptable alternative specimen for diagnosis of trichomoniasis in low income settings. We compared the yield of *Trichomonas vaginalis* from speculum and non-speculum based specimens.

Methods 500 women between 18–45 years presenting with abnormal vaginal discharge in two health care facilities in Rivers State, Nigeria, were enrolled. Three specimens were collected from each woman; two non-speculum based/non-invasive and the third, speculum based. Microscopists were trained and the procedure standardized. Wet mount microscopy was performed on all specimens within thirty minutes of collection. Three Microscopists examined each specimen independently. All infected patients were managed according to existing guidelines. Ethical approval was obtained and data analyzed using SPSS version 20.

Results Median age of participants was 31 years. Of the 500 women, 53 were infected giving an overall prevalence of 10.6%. Using the speculum-based specimens, 90.5% (48) of infected women were detected while 83.0% (44) and 30.1% (16) were detected using the self-collected swab and first void urine respectively. Interestingly, first void urine was able to detect five (5) more cases that were not detected by the speculum-based method.

Conclusion In low income settings, use of self-collected swabs in combination with first void urine is likely to increase detection rate of *Trichomonas vaginalis* when compared with the use of vaginal speculum only.

Disclosure No significant relationships.

P789 BACTERIAL VAGINOSIS MARKERS DETECTED BY BD MAX™ VAGINAL PANEL IN RELATION TO ABSENCE AND PRESENCE OF TRICHOMONAS VAGINALIS

¹Marie-Helene Tremblay*, ²Salma Kodosi, ²Charles Cooper, ³Jack Sobel. ¹BD Life Sciences, Research and Development, Quebec, Canada; ²BD Life Sciences, Medical Affairs, Sparks, USA; ³Wayne State University, School of Medicine, Detroit, USA

10.1136/sextrans-2019-sti.844

Background The three most frequent causes of vaginitis are bacterial vaginosis (BV), vulvovaginal candidiasis (VVC) and Trichomoniasis (TV). Within women presenting with symptoms of vaginitis, the concomitant detection of two or more pathogens is common; however, little is known about the biology of pathogen interactions during co-infections. Using a NAAT