Results. Of 448 participants, 168 (37.5%) reported rectal STI screening. One hundred twenty-seven (35.8%) of 355 HIV-negative men, 41 (58.6%) of 70 HIV-positive men, and none of 23 who did not know their HIV status reported screening. Among HIV-negative men, having a healthcare provider who offered HIV testing (adjusted prevalence ratio [aPR]=2.09; 95% confidence interval [CI]: 1.43, 3.04), a syphilis diagnosis (aPR=1.32; 95% CI 1.13, 1.56), use of pre-exposure prophylaxis (aPR=1.57; 95% CI 1.21, 2.04), and condomless anal sex with casual partners in the prior 12 months (aPR=1.74; 95% CI 1.36, 2.22) independently predicted screening for rectal STI in multivariable analysis. HIV-positive men who reported having a provider who always or often discusses conversations about sex were significantly more likely to report screening compared with men who did not have such a provider (aPR=1.48; 95% CI 1.06, 2.06).

Conclusion. Rectal STI screening is not universal in a venue-based sample of sexually-active MSM. Implementing innovative, acceptable, and accessible screening practices and improving provider comfort with talking about sex are paramount to increasing rectal STI screening.

Disclosures. All authors: No reported disclosures.

424. Use of the ResistancePlus+ MG Multiplex PCR Assay to Determine the Prevalence of Mycoplasma genitalium and Macrolide Resistance in a High-Risk US Population

Charles Cartwright, PhD1; Ayla Harris, BS2; Michael Levandoski, PhD2; Amanda Pherson, BS2 and Melinda Nye, PhD; 1SpeediX Pty Ltd., Greensboro, North Carolina; 2Laboratory Corporation of America, Burlington, North Carolina

Session: 50. Sexually Transmitted Infections
Thursday, October 3, 2019: 12:15 PM

Background. Mycoplasma genitalium is a significant agent of sexually transmitted infections (STIs). Core rates have declined as rates of macrolide resistance has become increasingly prevalent. Diagnosis of M. genitalium infection and macrolide resistance detection is possible using nucleic-acid amplification tests (NAAT); use of such assays could improve patient management and antimicrobial stewardship. In this study we used one such assay, ResistancePlus MG (RPMG) to determine the prevalence of M. genitalium infection and macrolide resistance in a cohort of patients attending 3 public sexual health clinics in mid-Atlantic US states.

Methods. De-identified urogenital samples submitted to the LabCorp facility in Burlington, NC for routine Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) NAAT testing from 3 public sexual health clinics were analyzed in the study. All samples had been collected in the Aptima Specimen Collection system and tested with the Aptima Combo 2 CT/NG NAAT. A total of 1,261 samples (770 male, 491 female) from this cohort were successfully tested for M. genitalium and macrolide-resistance mediating mutations (MMRM) using the RPMG multiplex PCR assay.

Results. The prevalence of M. genitalium in this patient cohort was 10.4% (131/1,261), not significantly different to the prevalence of M. genitalium infection in this patient cohort was 10.4% (131/1,261), not significantly different to the prevalence of C. trachomatis (12.0%; P = 0.202) but significantly higher than the prevalence of Neisseria gonorrhoeae (6.7%; P = 0.000). Sixty-five (5%) of the 131 M. genitalium positives were also positive for MRMM and thus azithromycin resistant.

Conclusion. M. genitalium infections were common amongst unselected individuals evaluated for treatable STI in the eastern United States and the rate of macrolide resistance in this population was significant. In addition, the RPMG assay was shown to be a simple and accurate method for simultaneously diagnosing M. genitalium infections and detecting MRM and could be used to inform therapeutic decisions.

426. Prevalence of Human Papilloma Virus, Anal, and Cervical Dysplasia in Transgender Persons: A Systematic Review of the Literature

Olivia T. Van Gerwen, MD, MPH2; Daniel Brady, MD1; Sari Reiner, MA, ScD2 and Christina A. Munzy, MD, MSPH1; 1University of Alabama at Birmingham, Birmingham, Alabama; 2Tulane University, New Orleans, Louisiana; 3Harvard T.H. Chan School of Public Health, Boston, Massachusetts

Session: 50. Sexually Transmitted Infections
Thursday, October 3, 2019: 12:15 PM

Background. Human papilloma virus (HPV) is the most common sexually transmitted infection (STI) in the United States (US) and is associated with the development of cervical and anal dysplasia; however, little is known about the epidemiology of HPV in transgender persons. In view of this gap, the objective of this study was to conduct a systematic review of the literature to evaluate the existing epidemiologic data on HPV infection prevalence as well as anal and cervical dysplasia in transgender persons.

Methods. The PubMed and Scopus databases were queried using the keyword “transgender” in combination with one of the following: PAP, cervical cancer, and genital warts. The search generated 86 articles, when accounting for duplicates across searches. We included original research articles published from January 1969 to March 2019. Excluded were non-English articles, studies that did not have HPV or cytology testing data, and studies that did not have disaggregated transgender data.

Results. In total, 13 articles were included in the review, of which 9 focused on transgender women (TW), 3 on transgender men (TM), and 1 on both TW and TM. HPV DNA testing was performed in 10 studies, with 7 of those offering prevalence data for specific HPV genotypes. Overall, HPV prevalence in TW ranged from 15%-97%, with High Risk HPV (HR-HPV) prevalence ranging from 13%-82.5%. Anal cytology data for TW was presented in 2 studies, both of which cited a 42% prevalence of abnormal cytology. Cervical or vaginal cytology was evaluated in 4 articles, 3 of which involved TM and 1 of which involved TW with neovaginas. Among TM, the prevalence of abnormal cervical cytology ranged from 6%-42%.

Conclusion. Our review highlights the lack of HPV research and the high variability of the existing data about the transgender population. Further study is needed to better understand not only the epidemiology of HPV and resultant dysplastic sequelae, but also to inform the development of transgender sensitive diagnostic methods for this infection. The diverse genital anatomy represented in the transgender community as well as the gender dysphoria these patient’s experience during testing pose myriad diagnostic challenges that will need to be considered in the development of screening and diagnostic practices.

Disclosures. All authors: No reported disclosures.