

(gonorrhoea, chlamydia, syphilis). Using inverse probability of treatment weighted (IPTW) regression to account for pre-incarceration poverty, psychopathology, drug use, and STI risk, we estimated risk ratios (RRs) and 95% confidence intervals (CIs) for associations between incarceration and outcomes and assessed differences by city.

**Results** Approximately 14% had been incarcerated in the past six months. Controlling for site, incarceration predicted multiple partnerships (RR: 1.20, 95% CI: 1.06–1.36) and incident STI (RR: 1.08, 95% CI: 1.00–1.16). Associations with multiple partnerships and STI differed by city (joint test of interaction,  $p$  value <0.05). Incarceration was most strongly associated with multiple partnerships (RR: 1.69, 95% CI: 1.38–2.04) and STI (RR: 1.31, 95% CI: 1.04–1.64) in Washington DC. In other cities, STI RRs ranged from 0.95 to 1.08 and were not significant at the 0.05 level. Incarceration was associated with multiple partnerships in New York (RR: 1.25, 95% CI: 1.01–1.55) and Boston (RR: 1.31, 95% CI: 1.08–1.58), while RRs ranged from 0.87 to 1.08 and were not significant in other cities.

**Conclusion** Recent incarceration impacts STI risk among BMSM in Washington DC and the northeastern United States.

**Disclosure** No significant relationships.

P574

#### RECTAL AND PHARYNGEAL *M. GENITALIUM* AMONG MEN WHO HAVE SEX WITH MEN (MSM): RESULTS FROM A LONGITUDINAL COHORT STUDY

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**Background** Little is known about the natural history of rectal and pharyngeal *Mycoplasma genitalium* (MG).

**Methods** From March 2016 to December 2018, we enrolled 140 high-risk MSM in a 12-month cohort study. Eligibility criteria included: age  $\geq 18$  years, report of receptive anal intercourse, and  $\geq 1$  of the following in  $\leq 12$  months: (1) gonorrhoea, chlamydia or syphilis; (2) methamphetamine or popper use, or (3)  $\geq 2$  sex partners in  $\leq 2$  months or  $\geq 5$  in  $\leq 12$  months. Each week, men collected pharyngeal and rectal swabs and completed an electronic sex diary. We tested swabs for MG (Aptima, Hologic, Inc.) at study completion. Infection was defined as  $\geq 2$  consecutive positive tests; clearance was  $\geq 2$  consecutively negative tests. We calculated person-weeks-at-risk to estimate incidence and used Kaplan Meier curves to estimate duration of infection. We censored subjects who had a positive swab in the final study week, received doxycycline or azithromycin and obtained clearance in the following 3 weeks, or were lost-to-follow-up. None received moxifloxacin.

**Results** At week 1, the prevalence of rectal and pharyngeal MG was 8% (4/48) and 2% (1/48), respectively. Among 48 men with results from 3,579 specimens, 12 (25%) had  $\geq 1$  rectal, and 5 (10%) had  $\geq 1$  pharyngeal MG infection. In 1,504 person-weeks-at-risk, rectal MG incidence was 38 (95%

CI: 19–68) infections per 100 person-years. In 1,715 person-weeks-at-risk, pharyngeal MG incidence was 15 (95%CI: 5–35) per 100 person-years. Forty percent (6/15) of rectal and 50% (3/6) of pharyngeal infections were censored. Rectal and pharyngeal infections had estimated median durations of 30 (95%CI: 6 – undefined) and 16 (95%CI: 3 – undefined) weeks, respectively. Blips, single positive tests that did not meet criteria for infection, occurred in 8 (17%) men with 17 rectal and 4 (8%) men with 10 pharyngeal MG-positive tests.

**Conclusion** xtragenital, MG, including pharyngeal infection, is common and persistent among high-risk MSM.

**Disclosure** No significant relationships.

P575

#### PREVALENCE AND RISK FACTORS OF ANAL HUMAN PAPILLOMAVIRUS (HPV) INFECTIONS AMONG MSM IN BALI, INDONESIA

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**Background** It is estimated that the prevalence of anal HPV infection is 15%, 60% and 95% among heterosexual men, MSM who are HIV negative and HIV positive MSM, respectively. Such high prevalence of anal HPV infection among MSM is related to 44 times higher incidence of anal cancer. We conducted a study to measure the prevalence and determine risk factors associated with anal HPV among MSM in Bali, Indonesia using a GeneXpert® platform.

**Methods** Between July 2017 and July 2018, 253 MSM were recruited in 2 MSM clinics in Bali, Indonesia. Sociodemographic and sexual behavioral characteristics were collected anonymously via self-completed questionnaire using tablet. The anal swab specimen was then collected, and HPV was tested using GeneXpert®.

**Results** 174/242 (71.9%) participants have positive results for any types of anal HPV, of which 95 (54.60%) were among persons aged 20–29. The prevalence of high-risk HPV types (HPV 16 and HPV 18–45) was 109/242 (45%), while the low-risk HPV was 155/242 (64%). Age, relationship status, employment status, condom use, and sex position were factors associated with increased risks of contracting HPV, particularly high-risk HPV types. Young age between 20–29 accounted 5.05-fold (1.14–22.32, 95%CI) risks acquiring HPV type 16 compared to other age group. Those who were open to a relationship have 6 times (0.68–52.75, 95%CI) higher risks of anal HPV 16 as opposed to those who were married. MSM who were employee increased almost 5 times (0.65–38.43, 95% CI) risks of anal types of HPV 16.

**Conclusion** As the first study ever reported about the prevalence and risk factors of anal HPV infections among MSM in Indonesia, this study showed similar results and findings with other studies from other countries. Vaccination program can be considered to reduce the preponderant burden of anal HPV among MSM in Bali.

**Disclosure** No significant relationships.