P842 HEALTHCARE ENGAGEMENT AND HPV VACCINATION AMONG GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN (GBMSM): A CIRN STUDY

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10.1136/sextrans-2019-sti.887

Background Canada was one of the first countries to offer publicly funded programs providing HPV vaccine free of charge to gbMSM. In 2015–2016, the provinces of British Columbia (BC), Ontario (ON), and Quebec (QC) implemented programs for gbMSM aged 9–26 years. We sought to explore where men received the HPV vaccine and the influence of healthcare engagement on vaccination.

Methods Engage is a sexual health study among gbMSM aged 16+ in the largest urban centres in each province: Vancouver, BC; Toronto, ON; and Montreal, QC. Men are recruited via respondent driven sampling (RDS). We compared proportions (non-RDS adjusted) to questionnaire responses on healthcare engagement among vaccinated (1+ doses) versus unvaccinated in the subset of men aged ≤26 years old at enrolment.

Results From 01/2017 to 31/12/2018, 477 men aged ≤26 enrolled (144 Vancouver, 84 Toronto, 249 Montreal). Their median age was 24 years (IQR 22–25). In Vancouver, Toronto and Montreal, respectively, 48.6%, 44.1%, 44.2% had initiated HPV vaccination with 58.6%, 56.8% and 48.2% of vaccinated men having received all 3 doses. Popular venues for vaccination included a: sexual health clinic (50.7%), medical clinic not specializing in sexual health (14.8%), community health centre (10.6%), and doctor's office (7.4%). Compared to unvaccinated men, more vaccinated men had a family doctor (65.9% vs 52.3%, $p=0.0047$), had a different provider/clinic for sexual health care or had a HIV care provider (66.8% vs 51.8%, $p=0.0022$), had a STI/HIV test in the past year (90.8% vs 68.6%, $p<0.0001$), and were diagnosed with a STI in the past year (39.6% vs 20.0%, $p<0.0001$).

Conclusion Compared to unvaccinated men, vaccinated men were more engaged in healthcare. It is unknown whether men requested the vaccine or providers offered it. Nevertheless, our findings suggest opportunistic HPV vaccination when men receive other services, particularly those related to sexual health.

Disclosure No significant relationships.

P843 THE TRANSMISSION OF HPV IN THE SEXUAL NETWORKS OF SWINGERS, A MULTILEVEL NETWORK APPROACH

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10.1136/sextrans-2019-sti.888

Background Swingers, i.e. heterosexual couples who, as a couple, have sex with others within the swingers' subculture, are a subpopulation at risk for Sexually Transmitted Infections (STI). Human papillomavirus (HPV) has proven to be highly prevalent in female swingers (unpublished data). The aim of this study is to assess how the different HPV genotypes are distributed within the sexual networks of swingers and whether certain HPV genotypes cluster.

Methods We build a sexual network of swingers based on the network data given by 115 swingers who participated in our prospective cohort network study on swingers between April 2011 and March 2012. The vaginal samples of all female swingers in the network and known in our STI clinic were tested for HPV. HPV genotypes were identified by the highly sensitive SPF₁₀-LiPA₂₅ method detecting 25 different genital HPV genotypes. The multilevel transmission network consisted of the one-mode sexual network of the swingers and the two-mode network of swingers and the HPV genotypes. Distribution and clustering of HPV genotypes in the sexual network was assessed using multilevel network analysis.

Results The sexual network contained 1231 individual swingers of whom 556 female swingers. The sexual network consists of 38 separate components. Of 103 female swingers known in our STI clinic and tested for HPV, 96 (93%) were positive for at least one of the 25 HPV genotypes. All 25 HPV genotypes were present, but not equally distributed throughout the network. Some genotypes clustered together in specific components of the sexual network.

Conclusion All assessed genotypes of HPV were prevalent in the sexual networks of swingers. Despite the incomplete data in our study, multilevel network analysis turns out to be useful for studying transmission networks. Clustering of highly prevalent HPV could be used as a marker for sexual behaviour, potential STI risk and transmission in swingers.

Disclosure No significant relationships.

P844 THE BURDEN OF HPV AND HSV-RELATED ANOGENITAL DISEASES IN A SOUTHEASTERN US URBAN HIV CLINIC

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10.1136/sextrans-2019-sti.889

Background Although HPV- and HSV-related conditions (HPVCs, HSVCs) have increased in PLWH, incidence, racial, and gender disparities of the conditions are unclear. We