009.5 HEPATITIS C INCIDENCE RATE AMONG PEOPLE WHO INJECT DRUG (PWID) IN BRITISH COLUMBIA FROM 2000 TO 2015

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10.1136/sextrans-2019-sti.156

Background Global Health Sector Strategy on Viral Hepatitis aims to reduce new hepatitis C virus (HCV) infections by 80% by 2030. However, countries lack systems to monitor incidence of HCV. We estimated the HCV incidence over time among people who inject drugs (PWID) at population level to provide proof of concept for incidence monitoring.

Methods This study utilized data from the BC Hepatitis Testers Cohort (BC-HTC). Incidence was defined as a positive anti-HCV, RNA, or genotype test following a negative anti-HCV test among PWID, assessed based on a previously validated algorithm using administrative data. Annual incidence rates for HCV primary infection from 2000 to 2015 were estimated using a log-binomial regression model and were stratified by birth cohorts (<1965, 1965–1974, >1974) to observe change in risk over time. Adjusted incidence rates (aIR) were calculated controlling for risk factors.

Results Of the 42,568 participants identified, 4,066 HCV seroconversions occurred over 318,613 person-years (PY) of follow-up. The overall incidence rate was 1.28/100PY. Between 2000 and 2011, the annual aIR decreased steadily from 4.01 to 1.00/100PY. The aIR then rose to 1.49/100PY in 2015. Factors associated with elevated risk of infection include: younger birth cohort (1965–1974: RR:1.9, 95%CI: 1.02,3.6), history of illicit opioid use (RR:2.5, 95%CI: 2.3,2.7), stimulant misuse (RR:1.77, 95%CI: 1.7,1.9), HIV coinfection (RR:3.6, 95%CI: 3.1,4.1), HBV coinfection (RR:1.9, 95%CI: 1.6,2.2), material deprivation (RR:1.5, 95%CI: 1.4,1.7) and social deprivation (RR:1.6, 95%CI: 1.4,1.8).

Conclusion A slight increase in HCV incidence rate since 2011 was mainly driven by the younger birth cohort and introduction of enhanced testing in 2010. People with HIV or HBV coinfection, opioid and stimulant misuse, social and material deprivation are at higher risk of HCV infection. HCV treatment and prevention programs need to address comorbidities and include harm reduction strategies like opioid substitution therapy and access to social services to achieve HCV elimination goals.

Disclosure No significant relationships.

009.6 DEVELOPMENT OF AN INTEGRATED DATA MART FOR SURVEILLANCE OF SEXUALLY TRANSMITTED AND BLOODBORNE INFECTIONS (STIBBI)

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10.1136/sextrans-2019-sti.157

Background Routine surveillance for sexually transmitted and bloodborne infections (STIBBI) are generally based on case reports. Additional data sources are needed to understand STIBBI syndemics, such co-infections, testing patterns, and timing of infections. We developed a STIBBI Data Mart that integrates laboratory and case information to better understand the context of STIBBI.

Methods In British Columbia (BC), Canada, the BC Centre for Disease Control Public Health Laboratory (BC-PHL) performs about 30% of all chlamydia/gonorrhea and >95% of all syphilis, HIV, and hepatitis C (HCV) tests. These data were integrated with case reports of all STIBBI into a STIBBI Data Mart using a probabilistic patient matching algorithm based on first name, last name, date of birth, sex, and provincial health number. Testing episodes were created to account for multiple tests related to the same disease event (e.g. anti-HIV, p24, and Western Blot testing) based on clinical input and testing pattern analysis. Additional algorithms were developed and applied to improve geographic attribution and flag tests performed as part of prenatal care.

Results The STIBBI Data Mart now produces indicators for co-testing and co-infection (e.g. HIV/HCV, HIV/syphilis) and testing patterns (e.g. HCV incidence among repeat testers, time since last negative HIV test for new diagnoses, syphilis screening during pregnancy) that could not previously be reported and which have become standard indicators.

Conclusion Indicators from the STIBBI Data Mart improve understanding of syndemics and better characterize subpopulations for optimal follow-up and care. Work is currently underway to integrate additional data sources that make up the balance of STIBBI tests to allow for monitoring at the population-level.

Disclosure No significant relationships.

O10 – GETTING REAL WITH IMPLEMENTING PREP 2

Tuesday, July 16, 2019 4:15 PM – 5:45 PM

O10.1 HIV PRE-EXPOSURE PROPHYLAXIS (PREP) INDICATIONS AND UPTAKE VARY BY RACE, GENDER, AND INSURANCE IN A LARGE CLINIC NETWORK

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10.1136/sextrans-2019-sti.158

Background Providers face challenges identifying patients to benefit from PrEP, while disparities remain in PrEP access. We examine gaps in identification of PrEP candidates, uptake, and use of PrEP by populations at high HIV risk within a large federally qualified health center with a lesbian/gay/bisexual/transgender/queer (LGBTQ) focus.

Methods An established PrEP:Need ratio was calculated to examine differences in PrEP use across race, age, gender, and insurance. Two new measures were developed to determine gaps in identifying candidates and uptake - Identification:Need and PrEP:Identification. Patients were identified through electronic health records who had a documented indication for PrEP according to CDC guidelines, whether patients had a