

**Introduction** Hepatitis B (HBV) infection is a major cause of chronic liver disease, which is a leading cause of death worldwide. Despite differing epidemiology, HBV infection shares routes of transmission with HIV infection. Therefore we explored factors associated with those infections among high-risk populations in Peru.

**Methods** Men who have sex with men (MSM) and transwomen (TW) recruited from two STI clinics completed a behavioural survey on alcohol use and sexual risk-taking in the last 3 months and received HIV testing. An AUDIT score  $\geq 17$  determined the presence of a severe alcohol use disorder. Active hepatitis B infection was determined by detection of HBsAg using EIA UMELISA and HBsAg confirmatory testing (Tecnosuma, Cuba). Self-collected rectal swabs were used to diagnose gonorrhoea/chlamydia by NAAT. Prevalence ratios (PR) were calculated using Poisson regression.

**Results** Among 310 MSM and 89 TW (median age 30 years, IQR: 18–58), 5% (20/399) had active HBV infection. Of the 20 participants with active HBV infection, 50% were HIV co-infected which was significantly more than the HIV prevalence among HBsAg negatives (30%,  $p$ -value = 0.053). Rates of recent condomless anal intercourse were similar by HBV infection status (68% among those with active infection vs. 74% among HBsAg negatives  $p$  = 0.557). Rectal STI prevalence was 40% among participants with active HBV infection vs. 20% among HBsAg negative participants. ( $p$ -value = 0.034). In multivariable regression active HBV infection was associated with severe alcohol use disorders (aPR = 2.54,  $p$ -value = 0.008) and HIV diagnosis (aPR = 2.56,  $p$ -value = 0.009).

**Conclusions** In the context of South America's low carrier rate, the prevalence of active HBV infection among this Peruvian sample is high. Our findings emphasise the importance of revising national HBV screening and vaccination guidelines to include HIV-infected individuals and heavy drinkers since both conditions may accelerate liver disease. Educational campaigns to encourage transmission prevention are also needed since condomless anal intercourse was common in this cohort.

**Disclosure of interest statement** This data for this abstract was obtained from an NIH-funded study (1R01AI099727). Hepatitis tests were donated however the donating company did not contribute to the conception of this study or participate in the analysis/interpretation of the data in this abstract.

#### P11.22 HEPATITIS C INFECTIONS AMONG HIGH-RISK MEN WHO HAVE SEX WITH MEN AND TRANSGENDER WOMEN IN LIMA, PERU

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**Introduction** Disparate findings persist in the literature regarding the sexual transmission of hepatitis C virus (HCV) and the role of HIV/other STIs. Therefore we analysed the epidemiology and risk factors for HCV infection among a non-intravenous drug using, sexually active population in Peru.

**Methods** High-risk men who have sex with men (MSM) and transwomen (TW) recruited from two STI clinics completed a

behavioural survey on substance use and sexual risk taking in the last 3 months. Hepatitis C diagnosis was determined by detection of Anti-HCV antibodies using EIA UMELISA PLUS (Specificity: 99.93% Sensitivity: 100% Tecnosuma, Cuba). In addition to HIV testing, STI screening included rectal gonorrhoea/chlamydia (NAAT) and syphilis (RPR titer  $\geq 1:16$ ). Chi-square tests were used to compare differences in characteristics between HCV-infected and negative individuals.

**Results** Among 310 MSM and 89 TW (median age 30 years, IQR: 18–58), 4% (15/399) were HCV-infected. Recent condomless anal intercourse was reported by 76% of the sample (292/393). Although more condomless anal intercourse was reported among HCV-infected vs. negative individuals (93% vs. 74%) the difference was not significant ( $p$  = 0.107). Illicit substance use for the cohort was low with 13% reporting recent cocaine use, which also was not significantly different among HCV-infected vs. negative individuals (27% vs. 13%,  $p$  = 0.120). HIV positivity was 31% for the sample (124/401) and was associated with HCV infection vs. non-infection (53% vs. 30%,  $p$  = 0.054). When comparing HCV-infected to negative individuals, neither rectal STI diagnosis (27% vs. 20%,  $p$  = 0.55) nor recent syphilis diagnosis (47% vs. 36%,  $p$  = 0.41) were significantly associated.

**Conclusion** The findings for this cohort in Peru did uncover an association between HCV infection and concurrent HIV infection however such associations for sexual risk behaviours and other STI diagnoses were not found. Prospective data documenting HCV seroconversion among a larger sample is needed to better understand the contribution of sexual transmission to HCV infection.

**Disclosure of interest statement** This data for this abstract was obtained from an NIH-funded study (1R01AI099727). Hepatitis tests were donated however the donating company did not contribute to the conception of this study or participate in the analysis/interpretation of the data in this abstract.

#### P11.23 EVALUATION OF HEPATITIS C VIRUS IN THE RECTUM OF HIV-INFECTED MEN WHO HAVE SEX WITH MEN

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**Introduction** An epidemic of Hepatitis C Virus (HCV) infection is occurring in HIV-infected men who have sex with men (MSM). Epidemiological studies suggest that sexual transmission is fueling the epidemic. Blood and semen have been considered as potential mechanisms of transmission, but there are still transmission circumstances that remain unexplained. Nothing is known about the presence of HCV in the rectal fluid of HCV-infected MSM.

**Methods** Written informed consent was obtained from 45 HIV-infected MSM with HCV infection. A moistened swab was inserted atraumatically into the rectum, placed into transport medium, vortexed, and the supernatant analysed for HCV using Ampiprep/COBAS TaqMan HCV test (Roche Diagnostics), lower limit of quantification 43 IU/mL, lower limit of detection 7 IU/mL.

**Results** Successful virological analysis was performed on 43 rectal swabs. HCV was detected in 20 out of 43 (47%) specimens. The HCV viral load (VL) in the rectal fluid ranged from  $<2.92 - 5.52 \log_{10}$  IU/mL. Rectal HCV detection was associated with