

with it. The main known routes of transmission for HCV are parenteral, intravenous drug abuse, contaminated injection devices and receipt of unscreened blood or blood products. Objective of the study was to determine the prevalence of Hepatitis C among high risk people HIV, Intra Venous Drug users (IDUs) of Eastern Nepal.

Methods The study design was descriptive cross sectional. A total of 300 samples were randomly selected from six different centres of Eastern Nepal during data collection period of one year. Structured questionnaires were used to collect demographic & behavioural data. Venus blood was collected after taking informed consent, pre-test counselling of the study subjects. Rapid Immunochromatography diagnostic kit (HCV-Tridot) was used for detection of against antibody "hepatitis C".

Results Out of total participants 95% were male and mean age was 23 years. Majority of the respondents (39%) were adult of 20–24 yrs age group followed by 27.7% (15–19yrs), 18% (25–29yrs), and 13% (30–40yrs). Socio-economic status, 62% were unemployed, 23.3% labourer, 7% had different kind of business, 1.7% migrant labourer. Around 18% participants were below poverty line.

Conclusion Prevalence of the hepatitis "C" was found to be 49% among risk group people of HIV, IDUs of Eastern Nepal. This is an alarming situation in our community, authorities of this region and country level should take action immediately to control HCV transmission as well as further prevention and treatment for HCV positives.

P3.196 HIGH PREVALENCE OF HEPATITIS B (HBV) COINFECTIONS, AND LOW RATE OF EFFECTIVE HBV-VACCINATION IN MSM WITH KNOWN DATE OF HIV-1 SEROCONVERSION IN GERMANY

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Background Men who have sex with men (MSM) with frequent sexual interactions are assumed to be at higher risk for HBV-infection. Due to partly similar transmission routes, HBV is a frequent coinfection in HIV-positive patients. HIV-coinfection accelerates disease progression of HBV-infection resulting in earlier and more frequent occurrence of liver cirrhosis and hepatocellular carcinoma. Thus, HBV-vaccination for HIV-positive MSM is recommended in Germany.

Methods On basis of the nationwide, multicenter, open, prospective cohort study of HIV 1-seroconverters, we screened all available, yearly collected serum samples of HIV-infected MSM for anti-HBc, anti-HBs, HBs-AG, anti-HCV and Syphilis antibodies. Samples with

signs of acute/chronic HBV-infection were confirmed by PCR. Prevalences were calculated on patient basis (at least one sample tested positively).

Results 5.603 samples of 1.945 MSM were screened. Median age at HIV 1-seroconversion was 33 years. In all screened MSM, prevalences of active acute/chronic HBV were 1.9%, of cleared HBV 28.0%. 4.8% had signs of occult HBV-infection (solely anti-HBc positive). 48.6% were effectively vaccinated against HBV (titre > 10mIU/ml), of those 24.2% already at timepoint of HIV-seroconversion. Prevalences of cleared HBV and of vaccination against HBV differed significantly between age groups (table 1). 50.6% of MSM who ever had a HBV-coinfection had a further coinfection with Syphilis, 13.3% with HCV.

Discussion Despite extensive vaccination campaigns regarding HBV-infections in MSM in Germany, less than half of all screened MSM were vaccinated. Consequentially, we found a high proportion of MSM who ever had a HBV-coinfection. Of special interest was a significant subgroup of patients having signs of occult HBV-infection, a phenomenon known to occur in immune-suppressed patients. High rates of coinfections with Syphilis and HCV in HBV/HIV-coinfected MSM stress the demand for more extensive and tailored campaigns for HBV-vaccination and prevention of STI in general for MSM in Germany, especially for higher age groups.

P3.197 UPTAKE AND CASE DETECTION OF PRENATAL SCREENING OF MATERNAL SYPHILIS, HIV AND HEPATITIS C, IN BRITISH COLUMBIA, CANADA, 2007–2011

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Background In British Columbia (BC), Canada, (pop 4.6 million), prenatal screening for rubella, syphilis, and HIV is routinely recommended while hepatitis C (HCV) screening is based on risk criteria. We determined testing uptake and case detection rates at prenatal screening for these important perinatally transmissible pathogens.

Methods We identified prenatal specimens for women aged 16–45 years between 2007–11 from the BC Public Health Reference Microbiology Laboratory and calculated the proportion of unique women screened for rubella, syphilis, HIV, and HCV per calendar year. Records were linked to laboratory surveillance data, permitting inclusion of prior testing history for HIV and HCV, to determine if detected cases were newly diagnosed at screening (new diagnoses/100,000) or a previously identified case. HIV and HCV prevalence were defined as all new and prior diagnoses among screened women (prevalence/100,000).

Results Of the 233,203 women who underwent one or more prenatal screening in the study period, 96.9% were screened for rubella, 93.3% for syphilis, 93.8% for HIV, and 21.5% for HCV. Over 5 years,

Abstract P3.196 Table 1 Prevalences of acute/chronic HBV-infection, occult HBV-infection, cleared HBV-infection and HBV-vaccination in MSM with known date of HIV 1-seroconversion, by age at HIV 1-seroconversion (for comparisons: Fisher's exact test)

	Acute/chronic HBV: Anti-HBc (+), Anti-HBs (-), HBs-AG (+)	p	occult HBV: Anti-HBc (+), Anti-HBs (-), HBs-AG (-)	p	cleared HBV: Anti-HBc (+), Anti-HBs (+), HBs-AG (-)	p	HBV-vaccination: Anti-HBc (-), Anti-HBs (+), HBs-AG (-)	p
Age groups		.311		.053		< 0.001		< 0.001
< 25 years (n = 256)	0.4%		3.5%		14.1%		62.9%	
25–34 years (n = 843)	2.3%		4.0%		23.0%		51.6%	
35–44 years (n = 595)	2.2%		6.7%		34.6%		43.9%	
45–54 years (n = 163)	1.2%		3.1%		47.2%		33.1%	
≥ 55 years (n = 32)	0%		9.4%		50.0%		21.9%	

syphilis, HIV, and HCV screening increased by 4.4%, 4.3%, and 8.3%, respectively. The overall syphilis diagnosis rate was 15.4/100,000 and decreased over the study period. For HIV, the overall new diagnosis rate and prevalence was 5.1 and 45.9/100,000 respectively; for HCV the corresponding values were 82.8 and 551.5/100,000. The new diagnosis rates for HIV and HCV decreased over the study period while there were no significant changes in prevalence.

Conclusion In BC, prenatal screening for syphilis and HIV is high and improving annually with declining diagnosis rates. Previous research in BC suggests HCV prevalence in pregnant women in BC is underestimated based on risk-based screening. The low HCV screening rates and high prevalence observed in our study corroborates the need to consider broader prenatal HCV screening.

P3.198 SEVERITY OF MATERNAL HIV-1 DISEASE IS ASSOCIATED WITH ADVERSE BIRTH OUTCOMES IN MALAWIAN WOMEN

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Background HIV-infected women have increased risk of adverse birth outcomes, including low birth weight (LBW) and preterm delivery (PTD). We assessed whether severity of maternal HIV-1 disease - characterised by HIV-1 viral load in peripheral blood, HIV-1 viral load in placental blood, and maternal CD4+ T-cell count - was associated with LBW or PTD.

Methods We performed secondary analyses of The Malaria and HIV in Pregnancy prospective cohort, which enrolled HIV-positive, pregnant Malawian women from 2000–2004. Included participants (n=809) were antiretroviral treatment-naïve, normotensive women who delivered a live, singleton infant. Binomial regression models were used to assess unadjusted and adjusted prevalence ratios (PRs) and 95% confidence intervals (CI) of the effect of HIV-1 severity on prevalence of LBW and PTD.

Results The relationships between HIV-1 severity and LBW or PTD differed by malaria status. Among malaria-positive women (n=198), after adjustment for residence, education, primigravidity, and maternal anaemia, we observed no association between severity of HIV-1 disease and LBW or PTD. However among malaria-negative women (n=611), increasing peripheral viral load was significantly associated with LBW (adjusted PR: 1.41 per one-log₁₀ increase, 95% CI: 1.10, 1.82); results were similar for increasing placental viral load and LBW (adjusted PR: 1.23 per one-log₁₀ increase, 95% CI: 1.02, 1.49), and decreasing CD4+ T-cell count and LBW (adjusted PR per 100-cell/μL decrease: 1.12 per 95% CI: 1.04, 1.21). We observed a similar association between placental viral load and PTD (adjusted PR: 1.29 per one-log₁₀ increase, 95% CI: 1.02, 1.64) and CD4+ T-cell count and PTD (adjusted PR per 100-cell/μL decrease: 1.16 per 95% CI: 1.05, 1.28).

Conclusion Although our malaria-positive sample size was small, HIV-1 severity in this group appeared not to be associated with adverse birth outcomes. However in malaria-negative women, maternal HIV-1 disease severity was significantly associated with increased prevalence of LBW and PTD.

P3.199 FACTORS AFFECTING HIV PREVALENCE AMONG CLIENTS OF FEMALE SEX WORKERS IN 16 DISTRICTS OF SOUTHERN INDIA

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Background Clients of female sex workers (FSWs) are considered an important bridging population for HIV. This study aims to assess the impact of Avahan (India AIDS Initiative of Bill & Melinda Gates Foundation), through comparison of HIV prevalence between two surveys (2006–07 and 2009–10) among clients of FSWs across 16 districts in south India (n=7,000 per-round).

Methods Multilevel logistic regression analysis was performed using HIV as outcome, with individual variables at level 1 and district-level programme variables (from the Avahan computerised monitoring system) at level 2. Mean value of the programme indicators for the years 2007 & 2008 were used as district level variables.

Results HIV prevalence declined significantly from round 1 to round 2 (5.5% to 3.4%; p = 0.001). Clients' characteristics such as increased age (25–34 yrs-AOR = 2.22, 95% CI: 1.74.2.85, ≥ 35 yrs-AOR = 2.32, 95% CI: 1.75.3.07), being literate (AOR = 0.69, 95% CI: 0.58, 0.82), being separated/divorced/widowed compared to never married (AOR = 1.52, 95% CI: 1.02.2.26), had sex with 3 FSWs within past 6 months (AOR = 0.61, 95% CI: 0.43.0.87), anal sex with man/hijra in last 6 months (AOR = 1.48, 95% CI: 1.14, 1.91), being circumcised (AOR = 0.73, 95% CI: 0.57, 0.92) and had at least one STI symptom (AOR = 1.21, 95% CI: 1.00.1.46) were associated with being HIV positive. Among the programme variables, greater programme coverage was significantly associated with lower prevalence (AOR = 0.992, 95% CI: 0.985, 0.999).

Conclusions These results demonstrate that there was a decline in HIV prevalence among clients of FSWs over the course of the intervention and the districts with increased Avahan programme coverage had lower HIV prevalence. Further explorative analysis is required to understand the role of programme coverage on the reduction in HIV prevalence among clients in light of similar surveys among FSWs that showed a clearer association of increase in programme coverage between survey rounds and decrease in HIV.

P3.200 EFFECT OF PREGNANCY ON HIV-1 DISEASE PROGRESSION AMONG ANTIRETROVIRAL-NAIVE HIV-1 INFECTED WOMEN

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Background Among HIV-1 infected women who have not initiated full regimen antiretroviral therapy (ART), CD4 counts decline during pregnancy, possibly due to hemodilution. It is unclear if this drop is sustained beyond pregnancy, and if pregnancy results in accelerated HIV-1 disease progression.