

**Disclosure of interest statement** No potential conflicts of interest.

**P09.29 HIGH PREVALENCE OF NEISSERIA GONORRHOEAE AMONG EMERGENCY DEPARTMENT "SUPER-USERS" IN A LARGE URBAN MEDICAL CENTRE**

<sup>1</sup>HEL Reno\*, <sup>2</sup>A Dretler, <sup>3</sup>B Cooper, <sup>3,4</sup>A Trolard, <sup>1,5</sup>SY Liang, <sup>5</sup>R O'Neil, <sup>1</sup>BP Stoner. <sup>1</sup>Division of Infectious Disease, Washington University School of Medicine; <sup>2</sup>Department of Internal Medicine, Washington University School of Medicine; <sup>3</sup>Institute for Public Health, Washington University School of Medicine; <sup>4</sup>George Warren Brown School of Social Work and Public Health, Washington University; <sup>5</sup>Division of Emergency Medicine, Washington University School of Medicine

10.1136/sextrans-2015-052270.413

**Introduction** Sexually Transmitted Infections (STIs) remain prevalent in urban populations and are often diagnosed in emergency departments (ED). However, the burden of STI-care on urban EDs is not well characterised.

**Methods** We conducted a retrospective study of patients seeking acute care for STI-related complaints at a large urban academic ED in the Midwestern US from July, 2012 to June, 2014. All ED patients evaluated for *Neisseria gonorrhoeae* (GC) and *Chlamydia trachomatis* (Ct) infection by nucleic acid amplification testing were examined for demographic characteristics, testing rates, and STI prevalence.

**Results** Approximately 183,000 ED patient visits occurred during the study period. Of these, 6,518 visits (3.6%) resulted in STI testing for 5,431 patients. For tested patients, 77% were female, 83% African-American, and median age was 26.3 (IQR 22.1–34.5). Overall prevalence was 6.8% for GC and 11.8% for Ct among patients tested. Among patients positive for GC, Ct, or both, 55.04–74.5% were female and 60.5–72.2% were ≤24 years. A total of 758 patients (14%) were tested more than once in the ED during the study period and defined as "super-users". These super-users made up 28% of the total visits during the study period. Super-users were more likely to be female, African American and older adolescents (age 20–24) ( $p < 0.001$ ). Super-users were more likely than non-super-users to have a positive test for GC ( $p < 0.001$ ) and Ct ( $p < 0.001$ ), and had GC prevalence more than twice that of non-super-users (13.1% vs 5.7%,  $p < 0.001$ ).

**Conclusion** Our study revealed a significant burden of STI-related diagnoses, especially GC, in the urban ED setting. ED super-users were more likely to have a positive test than those tested patients only once, and may represent a higher risk population. Additional research is needed to understand the unique patient population presenting to urban EDs for STI care and inform tailored intervention strategies.

**Disclosure of interest** All authors report no disclosures.

**P09.30 TEMPORAL DISTRIBUTION OF SYPHILIS SEROLOGICAL TESTS (VDRL) DEMAND AND POSITIVITY IN A REFERENCE MUNICIPAL CENTRAL LABORATORY: IS THERE INCREASE AFTER CARNIVAL?**

PM Badran, CB Fernandes, RJ Salciarini, MCU Barreto, RQ Varella, JC Rosa, Mrl Passos\*. STD Department, Fluminense Federal University, Niterói, Brazil

10.1136/sextrans-2015-052270.414

**Introduction** Despite the advancement of medicine and the absence of penicillin resistance, syphilis/congenital syphilis remains as a serious public health problem, especially in Brazil.

**Objective** To evaluate possible seasonality relation existence between temporal distribution of demand and positivity of VDRL tests at Miguelote Viana Public Health Central Laboratory (MVPHCL).

**Methods** This is a temporal series analytical cross-sectional study. Data of demand, VDRL tests positivity and worked days were collected in database related to the period 2006–2010 and analysed statistically through temporal series and hypothesis testing on tendency and seasonality. MVPHCL is reference to public health units of Niterói-Rio de Janeiro. This is an innovative research, since similar articles have not been found.

**Results** From January 2006 to December 2010, 22,943 VDRL tests were registered; on 2006: 22.85% (5,235); 2007: 20.16% (4,622); 2008: 20.15% (4,620); 2009: 19.27% (4,415), 2010: 17.57% (4,024). Worked days by month, in annual average, were 19.5 in 2006; 19.8 in 2007; 19.6 in 2008; 19.7 in 2009 and 19.3 in 2010. Monthly average of worked days was 21.2 in January, 17.2 in February, 21.6 in March 17 in April 16 in May, 18.4 in June, 21.8 in July 22, in August, 20.2 in September, 20.4 in October, 17.2 in November and 18.6 in December. Positivity annual average was in 2006: 19.83; 2007: 20.25; 2008: 21.58; 2009: 18; 2010: 18.25. Monthly positivity was 6.67% in January, 5.88% in February, 5.57% in March, 4.65% in April, 5.51% in May, 4.39% in June, 4.13% in July, 5.30% in August, 4.35% in September, 5.90% in October, 5.05% in November 5.30% in December. Carnival National Holiday occurred: February 28th, 20th, 05th, 24th, 16th from 2006 to 2010, respectively.

**Conclusion** Was not observed seasonal relation nor increase in demand and positivity of VDRL tests after Carnival over the studied years.

**Disclosure of interest statement** The STD sector is funded by the Federal Fluminense University, Brazil. No pharmaceutical grants were received in the development of this study.

**P09.31 FACTORS ASSOCIATED WITH SYPHILIS SEROREACTIVITY AMONG POLYDRUG USERS IN NORTHEAST BRAZIL: A CROSS-SECTIONAL STUDY USING RESPONDENT DRIVEN SAMPLING**

<sup>1</sup>CJ Baptista\*, <sup>1</sup>I Dourado, <sup>2</sup>TM Andrade, <sup>1</sup>S Brignol, <sup>3</sup>FI Bastos. <sup>1</sup>Instituto de Saúde Coletiva, Universidade Federal Da Bahia; <sup>2</sup>Faculdade de Medicina Da Bahia, Universidade Federal Da Bahia; <sup>3</sup>Instituto de Comunicação E Informação Científica E Tecnológica Em Saúde, Fiocruz

10.1136/sextrans-2015-052270.415

**Introduction** The burden of sexually transmitted infections (STIs), such as syphilis, is greatest in median and low-income countries with serious consequences to sexual and reproductive health and increased risk to HIV infection. The prevalence of syphilis among drug users is higher than in the general population. Our aim is to report the rate of syphilis seroreactivity and associated factors among polydrug users (PDUs) in Northeast Brazil.

**Methods** A cross-sectional study recruited 424 PDUs in Northeast Brazil through respondent driven sampling in 2009. Data was collected data using audio computer-assisted self-interview and rapid tests used for syphilis screening. Multivariable logistic regression was used to estimate factors associated with syphilis

seroreactivity. Estimates were weighted by the inverse of the participant social network size.

**Results** Mean age was 29.3 years (range: 18–62), 74.0% were males, and 89.8% were non-white. Syphilis seroreactivity was 16.6%. Being female (wOR: 2.14, 95% CI: 1.09–4.20), over 29 years old (wOR: 4.44, 95% CI: 2.41–8.19), exchange sex for money or drugs (wOR: 3.51, 95% CI: 1.84–6.71), “No/low” self-perceived risk of HIV infection (wOR: 5.13, 95% CI: 1.36–19.37), and having nine or less years of education (wOR: 2.92, 95% CI: 1.08–7.88) were associated with syphilis seroreactivity.

**Conclusion** One of the most urgent needs for syphilis prevention and control is the availability of rapid point-of-care diagnostic tests and treatment, including the integration of STIs services into primary health-care and HIV-care/prevention settings. Gender issues, education in health, access to public services, social interventions focusing human rights, and social inequalities need more coverage for most at risk populations.

**Disclosure of interest statement** This study was funded by the Brazilian Ministry of Health/Department of SDT/AIDS and viral hepatitis, with technical advisor from CDC Brazil. The first author is supported by a grant from the Brazilian National Research Council (CNPq) for his PhD studies.

**P09.32 CORRELATES OF HIV TESTING AMONG POLYSUBSTANCE USERS IN 10 BRAZILIAN CITIES: A RESPONDENT DRIVEN SAMPLING SURVEY**

<sup>1</sup>CJ Baptista\*, <sup>1</sup>I Dourado, <sup>2</sup>TM Andrade, <sup>1</sup>S Brignol, <sup>3</sup>FI Bastos. <sup>1</sup>Instituto de Saúde Coletiva, Universidade Federal Da Bahia; <sup>2</sup>Faculdade de Medicina Da Bahia, Universidade Federal Da Bahia; <sup>3</sup>Instituto de Comunicação E Informação Científica E Tecnológica Em Saúde, Fiocruz

10.1136/sextrans-2015-052270.416

**Introduction** The goal to end HIV/aids pandemic by 2030 has set a number of policies such as 90% of people living with HIV knowing their HIV status, therefore early diagnosis is fundamental as component of a comprehensive HIV prevention. In Brazil, 33.6% of interviewees in the general population reported ever been tested for HIV in 2005. Little is known about HIV testing among illicit polysubstance users (PSUs). We aim to assess correlates of never been tested for HIV among illicit PSUs.

**Methods** A cross-sectional study recruited 3,449 PSUs in 10 Brazilian cities through respondent driven sampling in 2009. Data was collected using computer-assisted self-interview. To determine correlation, multivariate logistic regression with adjusted odds ratio (aOR, 95% confidence intervals) was performed. Estimates were weighted by the inverse of the participant social network size.

**Results** Overall, 56% had never tested for HIV. Statistically significant odds ratios of never tested were: being male 0.43 (0.36–0.51), non-white 0.75 (0.64–0.88), < = 30 years old 0.65 (0.57–0.76), income <US\$200 (0.71, 0.60–0.86), no-income 0.62 (0.51–0.74), < = 10 years of education (0.82, 0.69–0.98), and no formal education (0.48, 0.35–0.65). Never testing for HIV were also correlated to the following factors: sex exchange (0.85, 0.73–0.98), disagree that sex without condom can transmit HIV (0.30, 0.18–0.50) and that people apparently healthy should be HIV infected (0.53, 0.36–0.77); not receiving counseling on STIs in the last 12 months before the interview (0.73, 0.61–0.88), not knowing free HIV testing services (0.22, 0.19–0.26), and never had syphilis in lifetime (0.77, 0.60–0.99).

**Conclusion** There is a need to increase access to and uptake of HIV testing among PSUs in Brazil. The availability of self-testing

is a possibility to further expand early diagnosis of HIV. However, sociodemographic disparities, stigma and discrimination among PSUs need to be addressed before implementation.

**Disclosure of interest statement** This study was funded by the Brazilian Ministry of Health/Department of SDT/AIDS and viral hepatitis, with technical advisor from CDC Brazil. The first author is supported by a grant from the Brazilian National Research Council (CNPq) for his PhD studies.

**P09.33 SEXUAL BEHAVIOURS AND UNPROTECTED SEX WITH CASUAL AND COMMERCIAL PARTNERS AMONG POLYSUBSTANCE USERS IN BRAZIL: FINDINGS FROM A RESPONDENT DRIVEN SAMPLING STUDY**

<sup>1</sup>CJ Baptista\*, <sup>1</sup>I Dourado, <sup>2</sup>TM Andrade, <sup>1</sup>S Brignol, <sup>3</sup>FI Bastos. <sup>1</sup>Instituto de Saúde Coletiva, Universidade Federal Da Bahia; <sup>2</sup>Faculdade de Medicina Da Bahia, Universidade Federal Da Bahia; <sup>3</sup>Instituto de Comunicação E Informação Científica E Tecnológica Em Saúde, Fiocruz

10.1136/sextrans-2015-052270.417

**Introduction** Unprotected sexual intercourse (USI) is a known risk factor for HIV infection. And bisexual men (BSM) who engage in USI with casual and commercial partners may be at a higher risk. Our aim is to estimate prevalence of men having sex with men (MSM), BSM, and USI to guide prevention via sexual route among polysubstance users (PSUs).

**Methods** A total of 3,449 PSUs were recruited in a cross-sectional study in 10 Brazilian cities through respondent driven sampling in 2009. Data was collected using audio computer-assisted self-interview. Estimates were weighted by the inverse of the participant's social network size.

**Results** Among 2,682 (73.7% of the sample) males, 4.4% referred having sex only with men (MSM), 16.2% with both men and women (BSM). 64.8% engaged in USI with commercial partnerships; whereas 47.1% of those exchanged sex for money/drugs 12 months before the interview. Casual partnerships 12 months before the interview were reported by 47.9% of men; whereas 62.3% of those reported USI with that casual partners.

**Conclusion** It is urgent to design interventions among males PSUs in Brazil who engage in commercial and casual USI. Social interventions, education in health, and linkage to health services are needed to prevent sexual transmission of HIV in this group most at risk.

**Disclosure of interest statement** This study was funded by the Brazilian Ministry of Health/Department of SDT/AIDS and viral hepatitis, with technical advisor from CDC Brazil. The first author is supported by a grant from the Brazilian National Research Council (CNPq) for his PhD studies.

**P09.34 MOLECULAR IDENTIFICATION OF *TREPONEMA PALLIDUM* STRAINS FROM SYPHILITIC LESIONS IN STI CLINIC PATIENTS, LIMA, PERU**

<sup>1</sup>JA Flores\*, <sup>1</sup>SK Vargas, <sup>1</sup>SR Leon, <sup>1,2</sup>KA Konda, <sup>2</sup>JY Chow, <sup>3</sup>GM Calvo, <sup>4</sup>HJ Salvatierra, <sup>5</sup>B Brown, <sup>2</sup>JD Klausner, <sup>1</sup>CF Caceres. <sup>1</sup>Unit of Health, Sexuality and Human Development, and Laboratory of Sexual Health, Universidad Peruana Cayetano Heredia, Lima, Peru; <sup>2</sup>Division of Infectious Diseases, David Geffen School of Medicine, University of California, Los Angeles, CA, USA; <sup>3</sup>Epicentro, Lima, Peru; <sup>4</sup>Alberto Barton Health Center, Health Directorate of Callao, Lima, Peru; <sup>5</sup>School of Public Health, University of California, Irvine, CA, USA

10.1136/sextrans-2015-052270.418