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

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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?

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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.

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

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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