

**P3.221 HIGH LEVELS OF SUSCEPTIBILITY IN *NEISSERIA GONORRHOEAE* ISOLATES FROM SASKATCHEWAN CANADA (2003–2015) TO NEW AND OLDER ANTIBIOTICS USED FOR TREATMENT**

<sup>1</sup>SD Thakur, <sup>2</sup>PN Levett, <sup>2</sup>G Horsman, <sup>1</sup>JR Dillon. <sup>1</sup>Department of Microbiology and Immunology, College of Medicine, University of Saskatchewan, Saskatoon, Canada; <sup>2</sup>Saskatchewan Disease Control Laboratory, Regina, Canada

10.1136/sextrans-2017-053264.456

**Introduction** Antibiotics should have an efficacy of at least 95% for treating infections caused by *Neisseria gonorrhoeae* (Ng). When more than 5% of Ng isolates are resistant to an antibiotic, treatment guidelines must be changed to a more effective antibiotic. Trends in the antimicrobial susceptibility (AMS) of Ng isolates from Saskatchewan, Canada were ascertained (2003 – 2015) to ascertain whether older antimicrobials might be effective.

**Methods** The susceptibility of 685 Ng isolates to 7 antibiotics was determined by the agar dilution method.  $\beta$ -lactamase production was determined using nitrocefin.

**Results** From 2006–2012, penicillin resistance was below 5% (0%–4.0%) of Ng isolates tested. Penicillin resistance above 5% occurred in 2003 (6.7%), 2004 (6.8%), 2005 (11.5%), 2013 (27.5%) and 2014 (13.5%). Tetracycline resistance remained above 5% (11.8% to 89.1%) of Ng tested throughout the study. Ciprofloxacin resistance ranged between 0% and 1.9% of isolates tested up to 2009 but was over 5% thereafter. All isolates were susceptible to spectinomycin. Over 95% of Ng isolates tested were susceptible to azithromycin except in 2010 (27.6% resistant; 8/29) and 2013 (7.2% resistant; 5/69). Twelve (1.8%) isolates over the period showed reduced susceptibility to cefixime (2006 - 1/55; 2012 - 2/50; 2013 - 4/69; 2014 - 2/89; 2015 - 1/63) and/or ceftriaxone (2012 - 2/50). One isolate was resistant to both azithromycin and cefixime.

**Conclusions** Cases of gonorrhoea in Saskatchewan (>95%) are diagnosed by nucleic acid testing with no AMS testing. Our research showed that many no-longer recommended antibiotics (penicillin, ciprofloxacin) were still effective over many years. Even with the recent higher percentages of Ng isolates resistant to penicillin and ciprofloxacin, ~87% of Ng in the province remains susceptible to these antibiotics. The development of NAATs to test for AMS would enhance knowledge of true levels of resistance and allow discretion as to whether older but still effective antibiotics could be used in individual patient care.

**P3.222 FACTORS ASSOCIATED WITH MATERNAL-CHILD TRANSMISSION OF HIV-1 IN SOUTHEASTERN BRAZIL: A RETROSPECTIVE STUDY**

<sup>1</sup>Thiago Nascimento Do Prado, <sup>2</sup>Debbie Bain Brickley, <sup>2</sup>Nancy Hills, <sup>1</sup>Jefferson Vitorino Cantão De Souza, <sup>3</sup>Sandra Fagundes Moreira Da Silva, <sup>1</sup>Eliana Zandonade, <sup>1</sup>Angélica Espinosa Miranda. <sup>1</sup>Universidade Federal do Espírito Santo, Vitória – ES, Brazil; <sup>2</sup>University of California (UCSF), San Francisco, USA; <sup>3</sup>Serviço de Infectologia, Hospital Infantil Nossa Senhora da Glória, Vitória – ES, Brazil

10.1136/sextrans-2017-053264.457

**Introduction** Mother-to-child transmission (MTCT) is the main mode of acquisition of HIV-1 among young children worldwide. In Brazil, the southeast region is the geographical area that reports the majority of MTCT cases. The goals of this

study were to estimate the rate of HIV MTCT and to identify factors associated with MTCT in Espírito Santo State, in southeast Brazil.

**Methods** This study was a review of the data from the Brazilian National Information on Reportable Diseases System (SINAN) for HIV-infected pregnant women and for AIDS among children under 13 years old. The study population was comprised of all HIV-infected pregnant women reported to SINAN in the State of Espírito Santo, Brazil between January 1, 2007 and December 31, 2012.

**Results** A total of 470 women were included in the study. The proportion of MTCT during this period was 14.0% (95% CI 10.9–17.0). In a multivariable logistic regression model incorporating the significant covariates identified in bivariate analyses, women who had less than primary school education had increased odds of MTCT (OR=2.64; 95% CI 1.34–5.22) compared to women with more than primary school education. Emergency caesarean delivery was associated with increased odds of MTCT (OR=4.40; 95% CI 1.12–17.08) compared to vaginal delivery. In addition, pregnant women who did not receive ART during prenatal care had higher odds of MTCT (OR=2.21; 95% CI 1.10–4.47) compared to pregnant women who received ART during prenatal care.

**Conclusion** Health information systems can provide the basis for monitoring and analysing the health situation in municipalities and states, with a view towards health planning and management. This study identified a high rate of HIV MTCT in Espírito Santo State and effort should be made to encourage health care workers and pregnant women to use MTCT prevention services.

**Support:** University of California, San Francisco's International Traineeships in AIDS Prevention Studies (ITAPS), U.S. NIMH, R25MH064712

**P3.223 ANTIMICROBIAL SUSCEPTIBILITY PROFILE OF *NEISSERIA GONORRHOEAE* DETECTED IN A PUBLIC HOSPITAL IN BUENOS AIRES, ARGENTINA**

<sup>1</sup>M Vacchino, <sup>2</sup>M Tilli, <sup>1</sup>R Gianecini, <sup>2</sup>M Almuzara, <sup>2</sup>S Palombarini, <sup>1</sup>C Oviedo, <sup>3</sup>G Sanchez, <sup>3</sup>S Vulcano, <sup>1</sup>P Galarza. <sup>1</sup>Instituto Nacional de Enfermedades Infecciosas (INEI)-ANLIS, Ciudad Autónoma de Buenos Aires, Argentina; <sup>2</sup>Hospital Interzonal General de Agudos Eva Perón, San Martín – Buenos Aires, Argentina; <sup>3</sup>Asaigo ITS, Ciudad Autónoma de Buenos Aires, Argentina

10.1136/sextrans-2017-053264.458

**Introduction** Gonococcal disease is one of the most common bacterial sexually transmitted infections in the world. The emergence of antimicrobial resistance of *Neisseria gonorrhoeae* (Ng) to the first-line antimicrobial agents already compromise treatment effectiveness and control of Ng infections. The aim of this study was to know the susceptibility profiles of Ng isolates and clinical features of the patients treated at a public hospital located in the suburbs of Buenos Aires.

**Methods** We studied 40 isolates of Ng recovered between 2014 and 2015 by the laboratory of bacteriology, from patients attending to the STD office of Eva Perón Hospital. Minimum inhibitory concentrations (MICs) were determined for penicillin (PEN), tetracycline (TET), ciprofloxacin (CIP), azithromycin (AZI), cefixime (CFX) and ceftriaxone (CRO) by agar dilution method (CLSI). B-lactamase was performed by chromogenic cephalosporin method (Nitrocefin).