

susceptibility to ceftriaxone, spectinomycin, ciprofloxacin and tetracycline were tested using agar dilution method, according to the recommendations from CLSI. NG-MAST was performed for molecular epidemiology and full-length *porB* sequences were used for phylogenetic analysis.

**Results** All (100%) isolates were resistant to ciprofloxacin, tetracycline, and 41.6% produced  $\beta$ -lactamase. According to the CLSI breakpoints, all (100%) isolates were susceptible to spectinomycin ( $S < 32 \mu\text{g/ml}$ ) and 99.7% to ceftriaxone ( $S \leq 0.25 \mu\text{g/ml}$ ). However, using the European breakpoints 5.2% of the isolates were resistant to ceftriaxone (EUCAST,  $S \leq 0.125 \mu\text{g/ml}$ ). The most prevalent NG-MAST clusters in 2007 included ST568 ( $n = 13$ ), ST270 ( $n = 9$ ), ST421 ( $n = 7$ ), and ST2288 ( $n = 5$ ). The most prevalent clusters in 2012 included ST1053 ( $n = 4$ ), ST2318 ( $n = 4$ ), ST5990 ( $n = 4$ ), and ST1614 ( $n = 4$ ). Isolates with identical or phylogenetically similar STs had similar MICs of ceftriaxone. Many novel STs were identified.

**Conclusion** Ceftriaxone and spectinomycin can continuously be recommended for treatment of gonorrhoea in Nanjing, China. The different molecular epidemiologic clusters in 2007 and 2012 indicate fluctuations in the sexual networks in Nanjing. The identified correlations between NG-MAST STs and MICs of antimicrobials suggest that NG-MAST can supplement the AMR surveillance in China, which needs to be further strengthened.

**P3.289 MIC CREEP TO CEFTRIAXONE AND LOW LEVELS OF RESISTANCE TO AZITHROMYCIN IN 7 COUNTRIES FROM SOUTH AMERICA AND THE CARIBBEAN**

doi:10.1136/sextrans-2013-051184.0744

The Gonococcal Antimicrobial Susceptibility Program (GASP) Network in Latin America and the Caribbean, <sup>1</sup>P Araya, <sup>2</sup>G Borthagaray, <sup>3</sup>P Galarza, <sup>4</sup>A Llop, <sup>5</sup>D Payares, <sup>6</sup>O M Sanabria, <sup>7</sup>S D Thakur, <sup>8</sup>M E Trigos, <sup>9</sup>J R Dillon. <sup>1</sup>Instituto de Salud Publica de Chile, Santiago, Chile; <sup>2</sup>Facultad de Quimica, Universidad de la Republica, Montevideo, Uruguay; <sup>3</sup>Centro Nacional de Referencia en ITS INEI-ANLIS "Dr Carlos Malbran", Buenos Aires, Argentina; <sup>4</sup>Instituto de Medicina Tropical "Pedro Kouri", Ministerio Salud Publica, Habana, Cuba; <sup>5</sup>Instituto Nacional de Higiene "Rafael Rangel", Caracas, Venezuela; <sup>6</sup>Instituto Nacional de Salud, Bogota, Colombia; <sup>7</sup>GASP-LAC Coordinating Centre, University of Saskatchewan, Saskatoon, SK, Canada; <sup>8</sup>Centro Departamental de Vigilancia, Informacion y Referencia, CDVIR, La Paz, Bolivia, Plurinational State of; <sup>9</sup>University of Saskatchewan, Saskatoon, SK, Canada

**Background** The World Health Organization (WHO) issued an international action plan in 2012 to mitigate the health impact of antimicrobial resistant *Neisseria gonorrhoeae* isolates. A key strategy is to strengthen international surveillance of gonococcal antimicrobial susceptibility. The Gonococcal Antimicrobial Surveillance Program (GASP) in Latin America and Caribbean (LAC) has reported on AMR trends from 1990. The present study presents regional trends in antimicrobial susceptibility between 2010 and 2011.

**Methods** Seven countries reported using either agar dilution (CLSI), Etest or disc diffusion assays to determine antimicrobial susceptibility. Countries were asked to report MIC data and categories of susceptibility.

**Results** Seven countries tested 1019 isolates of *N. gonorrhoeae* in 2010 and 1216 isolates in 2011 to ceftriaxone, penicillin, tetracycline and ciprofloxacin ( $n = 7$ ); azithromycin ( $n = 4$ ) and spectinomycin ( $n = 3$ ). Several countries reported a 2-fold increase in MIC<sub>50</sub> to ceftriaxone (from 0.004 to 0.008  $\mu\text{g/mL}$ ) between 2010 and 2011 and 12 isolates with ceftriaxone MICs  $0.125 - \geq 0.25 \mu\text{g/ml}$  were reported in 2011. All isolates were susceptible to spectinomycin. Resistance to azithromycin increased slightly from 1.0% (6/612) to 1.7% (20/1169) while resistance to ciprofloxacin decreased from 42.1% (429/1019) to 36.2% (439/1214) of isolates tested between 2010 and 2011. Resistance to penicillin increased from 31% (310/1016) in 2010 to 35% (428/1216) in 2011 while the percentage of isolates resistant to tetracycline was stable (2010 – 21.8%, 187/858; 2011 – 22.6%, 275/1216).

**Conclusions** Third generation cephalosporins and spectinomycin continue to be viable options for the treatment of gonorrhoea in the countries reporting. Low percentages of resistance to azithromycin continue to be reported. There has been a steady decline in capacity for *N. gonorrhoeae* diagnosis and antimicrobial susceptibility testing in the region. The implementation of the WHO action plan to control the spread and impact of antimicrobial resistance in *N. gonorrhoeae* is an urgent priority.

**P3.290 HIGH RATES OF CHLAMYDIA POSITIVITY IN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE ATTENDING AUSTRALIAN SEXUAL HEALTH SERVICES; THE AUSTRALIAN COLLABORATION FOR CHLAMYDIA ENHANCED SENTINEL SURVEILLANCE (ACCESS)**

doi:10.1136/sextrans-2013-051184.0745

<sup>1,2,3</sup>C C O'Connor, <sup>1</sup>H Ali, <sup>1</sup>R Guy, <sup>4,5</sup>C K Fairley, <sup>4,5</sup>M Y Chen, <sup>6</sup>L Marshall, <sup>1</sup>J Kaldor, <sup>7</sup>M Hellard, <sup>1,8</sup>B Donovan, <sup>1,9</sup>J Ward. <sup>1</sup>Kirby Institute, The University of New South Wales, Sydney, Australia; <sup>2</sup>RPA Sexual Health, Sydney Local Health District, Sydney, Australia; <sup>3</sup>Central Clinical School, Sydney University, Sydney, Australia; <sup>4</sup>School of Population Health, University of Melbourne, Melbourne, Australia; <sup>5</sup>Melbourne Sexual Health Centre, Melbourne, Australia; <sup>6</sup>Fremantle Hospital, Fremantle, Australia; <sup>7</sup>Centre for Population Health, Macfarlane Burnett Institute for Medical Research and Public Health, Melbourne, Australia; <sup>8</sup>Sydney Sexual Health Centre, Sydney Hospital, Sydney, Australia; <sup>9</sup>Baker Institute, Alice Springs, Australia

**Introduction** Australia has a widely dispersed network of public sexual health services that see large numbers of people at risk of genital *Chlamydia trachomatis* infection. ACCESS was established to monitor chlamydia testing and positivity rates nationally and to assist the interpretation of chlamydia diagnoses reported through passive surveillance. We report on chlamydia testing and positivity in Aboriginal and Torres Strait Islander (hereafter Aboriginal) people attending 18 sexual health services participating in ACCESS between 2006 and 2011.

**Methods** Using line-listed data, we analysed Aboriginal status reporting, testing rates based on first visits and chlamydia positivity in those tested. Outcomes were stratified by age group, sex, and year of attendance and were compared with non-Indigenous clients using a chi-square test and multivariate logistic regression ( $p < 0.05$ ).

**Results** From 2006 to 2011, 7,103 (4.2%) Aboriginal people and 161,626 (95.8%) non-Indigenous people attended participating sexual health services for an initial visit. Of the Aboriginal people 5,280 (74%) were tested for chlamydia. The positivity rates in Aboriginal people were 17.0% in women (23.3% in 15–19 year olds and 18.9% in 20–24 year olds) and 17.3% in men (20.2% in 15–19 year olds and 24.3% in 20–24 year olds). There were increasing trends seen in chlamydia positivity in Aboriginal and Torres Strait Islander females and non-Indigenous males and females between 2006 and 2011 ( $p$ -trend  $< 0.01$ ). On multivariate analysis, positivity was associated with younger age, being heterosexual and living in Queensland in both Aboriginal men and women. In addition, in Aboriginal men, positivity was associated with not living in a remote area, and not having sex overseas; and in Aboriginal women, it was associated with attending in 2010 or 2011.

**Conclusion** The high Chlamydia positivity rates and increases over time highlight the need for enhanced prevention and screening programmes in Aboriginal people in Australia.

**P3.291 ASSOCIATIONS OF CHLAMYDIA TRACHOMATIS INFECTION IN MEN AND WOMEN WITH GENITAL DISCHARGE SYNDROMES IN JOHANNESBURG, SOUTH AFRICA**

doi:10.1136/sextrans-2013-051184.0746

F Radebe, C Ricketts, V Kekana, A Vezi, I Basson, P Magoosa, N Bhujraj-Sewpershad, G de Gita, V Maseko, D A Lewis. National Institute for Communicable Diseases (NIHLS), Sandringham, South Africa