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. β-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 (AZI), cefixime (CFX) and ceftriaxone (CRO) by 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 pregnant women who received ART during prenatal care. 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 Espirito 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

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).
Results Isolates were recovered from: urethra (36), endocervix (3) and conjunctiva (1). Results of MIC 50 and MIC 90 (µg/ml) were: PEN 0.5 and 4; TET: 1 and 32; CIP: 1 and 4; AZI: 0.25 and 0.5; CFX: 0.016 and 0.03; CRO: 0.008 and 0.016. Isolates with combined resistance to CIP-AZI-PEN, PEN-TET-CIP and CIP-TET-AZI were observed. Cephalosporin resistant Ng isolates was not observed although 2 isolates with decreased susceptibility to CFX (MIC 0.125 µg/ml) were found. The patient medical records were reviewed and no epidemiological relation was found among the patients with harbours strains with simultaneous resistance and clinical features. Patients were treated with CRO 300 mg IM plus AZI 1 g. The post treatment clinical controls were negative.

Conclusion The finding of Ng strains with decreased susceptibility to third generation cephalosporins is a warning signal. In addition to this, the presence of isolates with resistance to different classes of antibiotics, support the need to strengthen surveillance studies, evaluate treatment failures and improve prevention strategies to control of gonorrhoea in our population.

P3.224 PARTNER NOTIFICATION AND PARTNER TREATMENT FOR CHLAMYDIA: ATTITUDE AND PRACTICE OF GENERAL PRACTITIONERS IN THE NETHERLANDS

Introduction: Chlamydia prevalence remains high despite scaled-up control efforts. In the Netherlands, the majority of chlamydia patients are seen by general practitioners (GPs). Partner notification (PN) and partner treatment (PT) are addressed in GP guidelines but may not be fully covered in daily practice. As part of a larger research project into the potential of direct partner treatment for chlamydia (PICC-UP: Patient Initiated Contact treatment for Chlamydia), we investigated current practice and attitude of GPs towards PN/PT.

Methods Multiple data-sources were combined. First, we collected information on current practice via two short questionnaires around a national GP conference: a pre-conference survey (n=1411) and a handout one on location (n=271). Furthermore, quantitative data on (potential) PT were obtained from a pre-conference survey (n=1411) and a handout one on location (n=271). Finally, we obtained more insight into GPs’ attitude towards PN/PT in a vignette study among GPs in the same network (n=268).

Results In the questionnaires, the large majority of GPs (>95%) indicated to discuss PN of current and ex-partner(s) with chlamydia patients. Usually, GPs leave further steps to the patients (83%); partners are rarely treated directly (4%), except when partners are registered in the same practice (16%). Of all prescriptions of Azithromycin linked to chlamydia episodes, 2% were double dosages, presumably for PT. At STI consultations, the partners of 6/100 chlamydia patients were treated directly, either via partner prescription or double doses for the index patient. Test-results were communicated over the telephone in two thirds of chlamydia diagnoses, limiting the options for PN/PT. In the vignette study, the GPs’ attitude appeared to be more open to PT than in current practice: 16%–20% of GPs indicated willingness to provide direct PT, depending on patient/partner profile; a larger group (24%–45%) would prescribe treatment for an (unseen) partner if the patient could notify him/her first. Advantages of direct PT given by the GPs were: better transmission control because of a higher chance to treat partners (at the same time), easier, cheaper. Disadvantages mentioned were: no chance to talk and give advice to partners, overtreatment, leading to resistance, impact on patient-GP relation and privacy. GPs were concerned about prescribing antibiotics for a patient they have not seen. The opinion of 10% of GPs was that direct PT should be possible for partners of all chlamydia patients, 21% thought for many, others only for some or by exception, while 11% was not in favour of it at all.

Conclusion At present, GPs in the Netherlands rarely treat partners of chlamydia cases directly, except for partners registered in the same practice. GPs may be open to options for direct PT, provided there are clear guidelines to arrange this legally and practically.