THE PREVALENCE AND INCIDENCE OF ACTIVE SYPHILIS IN WOMEN IN MOROCCO, 1995–2016: MODEL-BASED ESTIMATION AND IMPLICATIONS FOR STI SURVEILLANCE

Eline Korenromp, 1Melanie Taylor, 1Aziza Bennani, 1Amira El-Kettani, 1Housnine El-Hilali, 1Kamal Alami, 1Jane Rowley, 1Laith Abu-Raddad, 1Giy Maziane. 1WHO, Geneva, Switzerland; 2Avenir Health, Geneva, Switzerland; 3Möh Morocco, Rabat, Morocco; 4Sy Laboratory National Institute of Hygiene, Rabat, Morocco; 5Unads Morocco, Rabat, Morocco; 6London School of Tropical Medicine and Hygiene, London, UK; 7Well Cornell Medical College, Doha, Qatar; 8Avenir Health, Glastonbury, CT, USA

Introduction In 2016, the World Health Assembly adopted the global strategy 2016–2021 for STI control through the health sector, with as impact target to reduce syphilis incidence by 90% from 2018 to 2030. We applied the Spectrum STI estimation tool to estimate national adult prevalence and incidence of active syphilis in Morocco currently and over 1995–2015, to inform its national HIV/STI strategy, target setting and program evaluation.

Methods Syphilis prevalence levels and trends were fitted through logistic regression to data from surveys in antenatal clinics conducted during 1996–2012, and among women attending family planning clinics. Prevalence data were adjusted for diagnostic test performance. Incidence was inferred from prevalence by adjusting for the average duration of infection with active syphilis. Rates estimated for ANC women were assumed to apply to the overall female adult (15–49 years) population.

Results In 2016, syphilis prevalence was estimated to be 0.56% (95% confidence interval, CI: 0.3%–1.0%). Around 21,675 (10,612–37,198) new syphilis infections were estimated to have occurred in adult women in 2016. This is a decline from the prevalence estimate for 2000 of 1.38% (0.87%–2.1%).

Conclusion Periodic population-based surveys allowed Morocco to estimate syphilis prevalence and incidence trends. The latest survey was done in 2012 and so the trends are relatively uncertain after 2012, when no new surveys were conducted. Planned recording of results from routine antenatal programmatic screening, being rolled out from 2017, should soon allow updating and re-calibration of future estimations.

IS THE INCIDENCE OF NEONATAL HERPES INFECTION ON THE RISE IN THE NETHERLANDS?

Eline Op De Coul, 1Manisha Birkram, 2Louise Van Oevelen, 3Jashvant Poonar, 4Wim Van Der Meijden. 1Centre For Infectious Disease Control, Rium, Bilthoven, The Netherlands; 2Centro For Infectious Disease Control, Rium, Bilthoven, The Netherlands; 3Department of Population Health Science and Policy, ICANN School of Medicine at Mount Sinai, New York; 4Beatrix Hospital, Goinchem, The Netherlands

Introduction Neonatal herpes can result from intrauterine, perinatal, and postnatal herpes simplex virus (HSV) transmission. Although rare, it can lead to severe disease and neonatal death. Between 1981 and 2011, neonatal herpes incidence has been monitored every five years in the Netherlands showing an increase over time. We investigated the further course of neonatal herpes incidence between 2012 and 2015, and studied longitudinal trends between 1999 and 2015. Additionally, we explored guideline adherence by health care professionals as this may contribute to changes in neonatal herpes incidence.

Methods Questionnaires were sent to all paediatric (n=93), gynaecology (n=93) and microbiology (n=47) departments of all hospitals in the Netherlands, inquiring about the number of neonatal herpes cases and guideline adherence between 2012 and 2015. Guideline adherence from 2006–2011 was obtained from previous studies.

Incidence of neonatal HSV infections was calculated by combining data from paediatric and microbiology departments taking non-response rates into account. For trend analyses, the annual numbers of neonatal herpes cases from 1999 onwards were obtained from previous surveys and from the Netherlands Perinatal Registry (Perined). Incidence trend lines were smoothed by calculating Poisson regression splines.

Results During 2012–2015, neonatal herpes incidence was 4.8 per 100 000 newborns based on survey data and 3.4 per 100 000 newborns based on Perined data. Longitudinal trend analyses displayed a minor increasing trend between 1999 and 2015. Adherence of gynaecologists and paediatricians to Dutch guidelines in case of a primary maternal HSV infection was somewhat lower in 2012–2015 compared to 2006–2011 in terms of antiviral therapy provision and performance of an elective Caesarean section.

Conclusion Longitudinal analyses showed a minor increasing trend in neonatal herpes incidence. Underlying factors of this increase might be related to a lower guideline adherence by health care professionals or other factors such as an increased age of first HSV-1 infection. Efforts should be made to underlie the importance of guideline adherence among gynaecologists and paediatricians.
had antimicrobial susceptibility testing (AST) to determine minimum inhibition concentrations (MICs) for Cefixime (CFM), Ceftiraxone (CRO), Azithromycin (AZI), Gentamicin (GEN), and Ciprofloxacin (CIP) using E-test.

**Results**

From November 2015-August 2016, 900 specimens were collected; 713 (79.2%) specimens were from BH and 187 (20.8%) were from SCC. Among the 900 specimens, 479 (53.3%) had NG growth; 478 (99.8%) NG isolates had AST performed. Seventeen men had repeat NG infections. Among the 461 men with at least one infection, 291 (63.1%) had sex with women only, 138 (29.9%) had antibiotic use in the last 2 weeks, and all received treatment for gonorrhoea. The median age of men with NG infection was 29 years (range 14–76 years). All NG isolates were susceptible by Clinical and Laboratory Standards Institute standards to CFM, CRO, AZI and GEN; 438 of 478 (91.6%) isolates were resistant to CIP.

**Conclusion**

We report the first 10 months of data from EGASP Thailand. Most isolates were found to be susceptible to all tested antibiotics except CIP. Surveillance is critical to assess trends and risk factors for NG, and to monitor for emergence of resistance.

### P3.66 HOW FAR IS THE FIGHT AGAINST HBV AND HIV AMONG ANTENATAL ATTENDEES IN MAKURDI METROPOLITAN CITY, BENUE STATE, NIGERIA

1Emmanuel Mugh Mbasurauga, 1Atakpa Pb, 2Iroegbu Cu, 3Ike Ac.

1. Department of Biological Sciences, Benue State University Makurdi, Makurdi, Nigeria; 2Department of Biological Sciences, Cross River University of Technology Calabar, Calabar, Nigeria; 3Department of Microbiology, University of Nigeria Nsukka, Nsukka, Nigeria

**Introduction:** Benue State in Nigeria is one of the regions in sub-Saharan Africa with rising morbidity and mortality among adults from HIV/AIDS and other sexually transmitted diseases. This retrospective study was conducted to determine the impact of the fight against HBV and HIV among antenatal attendees in Makurdi metropolitan city.

**Methods**

A total of 757 cross sectional blood samples; 250 (2007) and 507 (2012) were collected and screened for both Hepatitis B surface antigen (HBsAg) and HIV antibodies. HBsAg was screened using rapid test kits and ELISA kits while HIV antibodies was screened for using Determine (Japan) and Stat Pak (USA) rapid test kits. Other information generated with the help of questionnaire and data analysis was done using chi square in SPSS version 20 software. P values equal or less than 0.05 was considered significant.

**Results**

Overall, HBV infection rate of 12.4% (2007) was significantly higher (p=0.027) than 7.5% in 2012 but there was no difference in HIV rates between 2007 and 2012 (p=0.077). There was also a significant difference in HBV rates among attendees with no formal education in 2007 (26.7%) and those of 2012 (8.3%) (p=0.029). HIV on the other hand was significantly (p=0.025) lower among individuals with secondary education in 2008 (1.2%) compared with those of 2012 (8.2%). Farmers (2008) significantly had higher HBV (35.5%) than their counterpart in 2012 (0.0%) (p=0.001). Similarly, HBV infection rates recorded in 2007 was significantly higher than those of 2012 among those vaccinated, unvaccinated (p=0.016), as well as those with history of transfusion (p=0.008), Alcoholics (p=0.043) and surgery (p=0.043).

**Conclusion**

The study observed a significant decrease in HBV infection between 2007 and 2012 attributable to HBV vaccination, safer blood transfusion and surgery. Hence, there is need to sustain the fight against HBV but efforts needs to be intensified towards combating HIV.

### P3.67 RECRUITMENT AND RETENTION OF CHLAMYDIA TRACHOMATIS POSITIVE WOMEN IN THE MULTICENTER LONGITUDINAL COHORT STUDY FEMCURE

1-5L Eppinga, 1-5CPA Hoebbe, 1-5HE Heijman 5AA of Hogewoning, 11-5HM Gätz, 11-5C de Vries, 9P C Wolfs, 11-5H TIM Duine-Muypens, 11-5Public Health Service South Limburg, Department of Sexual Health, Infectious Diseases and Environmental Health, Gelven, the Netherlands; 11-5Maastricht University Medical Centre – School of Public Health and Primary Care (CAPHR), Maastricht, the Netherlands; 11-5ST Outpatient Clinic, Public Health Service Amsterdam (GGD Amsterdam), Amsterdam, The Netherlands; 11-5Department Infectious Disease Control, Municipal Public Health Service Rotterdam-Rijnmond (GGG Rotterdam), Rotterdam, The Netherlands; 11-5National Institute of Public Health and the Environment (RIVM), Epidemiology and Surveillance Unit, Centre for Infectious Disease Control, Bilthoven, The Netherlands; 11-5Department of Public Health, Erasmus MC – University Medical Centre Rotterdam, Rotterdam, The Netherlands; 11-5Department of Infectious Diseases, Public Health Service of Amsterdam (GGD Amsterdam), Amsterdam, The Netherlands; 11-5Centre for Infection and Immunity Amsterdam (CINIMA), Academic Medical Centre (AMC), Amsterdam, The Netherlands; 11-5Department of Dermatology, Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands

**Introduction**

Longitudinal cohort studies provide unique insights but preventing drop-out and missing values is challenging. The aim of this study is to describe how to recruit and maximise retention of 400 Chlamydia trachomatis (CT) positive women in FemCure, an ongoing longitudinal multicenter cohort study aiming to recruit (extra)genital CT positive women.

**Methods**

Recruitment took place at 3 STI-clinics (South Limburg, Amsterdam and Rotterdam). Of the invited women 29% joined. They collected vaginal, anorectal and (nurse-taken) oral swabs and completed online questionnaires pre-treatment, 1, 2, 4, 6, 8, 10 and 12 weeks post-treatment. To minimise loss to follow up (LTFU) various reminders were sent, small incentives were given and no show at the 2nd visit were replaced. Logistic regression analyses were used to assess predictors for LTFU (i.e. age, education level, steady partner, ethnicity, previous CT diagnosis, recruitment clinic, and anatomic site of infection). The results include the first 7 months of recruitment.

**Results**

By 11-dec-16 143 participants completed fu. Of them, 81% had complete data, 17% (n=24) was LTFU, of which 18 before the 2nd visit. Nine cases had missing data. Of all questionnaires and swabs (n=1144), 12% was completed after a reminder. Multivariate logistic regression showed that education and age were associated with LTFU. Low education was related to more LTFU than higher education (OR=2.8, 95% CI 1.1–6.8). Those aged 23-29 were related to more LTFU than those <23 (OR=2.5, 95% CI 1.0–6.4). No other variables were statistically significantly associated, this may change with ongoing recruitment. At the last visit 86% reported to participate again in a similar study (reasons given include helping others/friendliness of the staff) while the others mention time constraints as a barrier.

**Conclusion**

These preliminary results show a retention rate of 81% without missing data. Approaches described, especially combined with committed healthcare providers can be used to motivate participants to complete fu in future longitudinal multicenter studies.