among women and it is even higher in HIV-infected women. Our goal was to determine the prevalence rate of High-risk (HR) HPV and associated factors among HIV-infected women attending referral care centres for HIV/AIDS in different regions of Brazil.

Methods Cross-sectional study conducted among HIV-infected women attended at referral care centres for HIV/AIDS in nine states of Brazil. Women from 18 to 49 years that accept to participate and were not pregnant at the time of the approach were recruited for the study. The HPV screening was realised using qPCR in closed system, *In vitro Diagnostic*, COBAS-HPV Roche. The cytology results were available by the Bethesda System.

Results A total of 802 (89.1%) women participated. Median age was 39 (Inter quartile range (QR34-46)) years and median education was 9 (IQR6-11) years. The general prevalence of HR-HPV was 28.4% (228/802). The prevalence rate of HPV-16 was 8.1% (65/802), HPV 18 was 3.7% (30/802) and other types of HR-HPV were 23.6% (189/802). The factors associated with HR-HPV in the multivariate logistic regression analysis were: age ranging from 18 to 34 years [OR=1.43 (95% CI:1.18–1.75)], drug abuse [OR=1.61 (95%CI:1.10–2.42)] and abnormal cervical cytology [OR=1.56 (95%CI:1.34–1.81)].

Conclusion Results showed high prevalence of high-risk HPV infection in women living with HIV in Brazil. The infection was significantly associated with age less than 35 years old, illicit drug use and abnormal cervical cytology. HR-HPV test in HIV-seropositive women is a useful procedure to implement cervical cancer screening.

Support: *Technical cooperation agreement, Brazilian Department of STI, AIDS and viral hepatitis, Ministry of Health and United Nations office for drugs and crime. Project BRA/K57, process #01/2013*

P3.14 PREVALENCE OF *CHLAMYDIA TRACHOMATIS* AND *NEISSERIA GONORRHOEA* AND ASSOCIATED FACTORS AMONG WOMEN LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS IN BRAZIL: A MULTICENTER STUDY

[1]Angelica E Miranda, [2]Mariangela F Silveira, [3]Ana Gabriela Travassos, [4]Teresinha Tenorio, [5]Isabel Cristina Chulvis Do Val, [6]Leonor Lannoy, [7]Hortensio S Mattos-Junior, [8]Newton Sergio de Carvalho. *[1]Universidade Federal do Espirito Santo – Vitoria – ES, Brazil; [2]Universidade Federal de Pelotas, Pelotas – RS, Brazil; [3]Universidade Estadual da Bahia, Salvador – BA, Brazil; [4]Universidade Federal de Pernambuco, Recife – PE, Brazil; [5]Universidade Federal Fluminense, Niterói – RJ, Brazil; [6]Unidade de Saúde Mista da Asa Sul, Brasília – DF, Brazil; [7]Laboratório São Marcos, Vila Velha – ES, Brazil; [8]Universidade Federal do Paraná, Curitiba – PR, Brazil*

10.1136/sextrans-2017-053264.251

Introduction *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (GC) cause infections in the female genital tract, increasing susceptibility to and infectiousness of HIV. Our objectives were to determine prevalence and associated factors of CT and GC among HIV-infected women in Brazil.

Methods Cross-sectional study, including HIV-infected women attending nine referral centres in nine states of Brazil, aged 18 to 49 years, not pregnant. An interview was conducted including sociodemographic, epidemiological and clinical characteristics. After the interview, gynaecological examination was conducted to collect cervical cytology and vaginal secretion to Chlamydia trachomatis, Neisseria gonorrhoeae and HPV tests through molecular biology.

Results A total of 802 (89.1%) women participated. The prevalence of CT was 17 cases (2.1%) and GC was 7 cases (0.9%). The prevalence of a positive test for both CT and/or GC was 2.7%. The factors associated with positive CT/GC test in the multivariate logistic regression analysis were abnormal papanicolau smear [OR 4.1 (95% CI:1.54–11.09)] and the presence of abnormal cervical discharge [OR=2.6 (95% CI:1.02–6.71)]. Among the 377 women that reported previous STI: 245 (65.0%) reported using condom more frequently after being diagnosed. Regarding how they discovered the STI, 62 (16.4%) the partner told he was infected by an STI; 157 (41.6%) had STI symptoms and looked for care and 158 (41.9%) discovered it in a routine consultation for another reason.

Conclusions The control of STI represents a unique opportunity to improve reproductive health of women living with HIV. This diagnostic can change their behaviour and reduce the sexual transmission of HIV and bacterial STI. Controlling STI and identifying factors associated with such diseases continues to be an important element in the design of interventions targeting STI and as a result, HIV prevention in Brazil.

Support: *Technical cooperation agreement, Brazilian Department of STI, AIDS and viral hepatitis, Ministry of Health and United Nations office for drugs and crime. Project BRA/K57, process #01/2013*

P3.15 UNPROTECTED SEX WITH NON-COMMERCIAL PARTNERS AS THE MAIN RISK FACTOR TO GET STI FOR FEMALE SEX WORKERS IN ARMENIA

A Asmaryan, S Grigoryan, E Hovhannisyan. *National Centre for AIDS Prevention, Republic of Armenia*

10.1136/sextrans-2017-053264.252

Introduction HIV Biological and Behavioural Surveillance surveys (BBSS) were conducted among female sex workers (FSW) in Armenia in 2010, 2012, and 2014. These surveys used respondent driven sampling (RDS), an effective method for recruiting hidden populations.

Methods In 2016 the BBSS using RDS among FSW were conducted in Yerevan the capital of Armenia. The sample size was 300. Prevalence of HIV, syphilis, Trichomoniasis, *Neisseria gonorrhoeae* (NG) and *Chlamydia trachomatis* (CT) were measured and knowledge and sexual risk behaviours were assessed.

Results HIV prevalence was low at 0.1% among FSW in Yerevan. NG prevalence was 4%, 29% of FSW were positive for Trichomoniasis. The prevalence of CT was 12%, syphilis prevalence was 4%. 34% of FSW in Yerevan reported having had genital ulcers or sores in the past 12 months.

More than 95% of FSW in all survey locations reported using condoms the last time they had sexual intercourse with a client. 89% of FSW in Yerevan reported sex with non-commercial partners in the past 12 months and 38% reported not using condoms during their last sex with them.

Conclusion There was a significant increase from 90.2% in 2012 to 99.6% in 2016 in the use of condoms with the most recent client among FSW. But there was no overall significant change in STI prevalence among FSW between 2012 and 2016. Many FSW reported having sex with non-commercial

partner, and condom use with them is significantly lower than with clients. Therefore, we can conclude that unprotected sex with non-commercial partners is the main risk factor to get STI for FSW in Armenia. These findings highlight the need for HIV prevention interventions that engage both FSW and their sex partners, especially non-commercial. Improvement of condom negotiation skills, provision of HIV/AIDS risk and transmission education should be the focus of interventions targeting FSW. Additionally, health care and other service providers should encourage routine HIV testing and STI screening for FSW and their partners.

P3.16 IMPACT OF RAPID SUSCEPTIBILITY PROFILING ON THE EMERGENCE AND SPREAD OF ANTIBIOTIC RESISTANCE IN GONORRHOEA

[1]Ashleigh Tuite, [2]Katherine Hsu, [3]Thomas L Gift, [4]Joshua A Salomon, [5]Yonatan H Grad. *[1]Havard University, Boston, USA; [2]Massachusetts Department of Public Health, Boston, USA; [3]Centres for Disease Control and Prevention, Atlanta, USA; [4]Harvard Univeristy, Boston, USA; [5]Harvard University, Boston, USA*

10.1136/sextrans-2017-053264.253

Introduction Increasing antibiotic resistance limits treatment for gonorrhoea. We examined the extent to which a hypothetical point-of-care (POC) test reporting antibiotic susceptibility profiles could delay emergence of resistance and prolong effectiveness of existing antibiotics.

Methods We developed a deterministic compartmental model describing gonorrhoea transmission in a risk-stratified single-sex population with three different antibiotics available to treat infections. Probabilities of resistance emergence on treatment and fitness costs associated with resistance were based on characteristics of fluoroquinolones, azithromycin, and ceftriaxone, as inferred from a previous phylogenomic analysis. We compared strategies in which a POC test was used to guide therapy in varying proportions of cases against the current empiric approach (dual treatment with azithromycin plus ceftriaxone).

Results Based on current estimates of gonoccoal susceptibility patterns in the United States, the model indicated that continued empiric dual antibiotic treatment without POC testing resulted in >5% of isolates being resistant to both azithromycin and ceftriaxone within 15 years. When POC testing was used in 10% of identified cases, this time was delayed by 4 years, while time to reach a 1% prevalence of triply-resistant strains was delayed by 5 years. With POC testing in >55% of identified cases, it took over 100 years for dual and triple resistance to exceed 1%, and with POC testing in ≥75% of cases, strains resistant to azithromycin and/or ceftriaxone did not persist in the population. Results were sensitive to assumptions about fitness costs and test sensitivity only when POC test deployment was relatively low (<25%).

Conclusion Rapid diagnostics that indicate antibiotic susceptibility have the potential to extend the usefulness of existing antibiotics for treatment of gonorrhoea. More broadly, integration of evidence on fitness costs associated with resistance can enhance strategies for rational antibiotic selection and further delay emergence of resistance.

P3.17 QUALITY OF LIFE IN HIV/AIDS PATIENTS- AN EXPLORATION

Asmin Sha. *Al Iqbal Hospital, Thrissur, India*

10.1136/sextrans-2017-053264.254

Introduction HIV/AIDS impacts heavily on the infected individual and the society at large, there is therefore a need to evaluate the quality of life of HIV-infected individuals.

Objectives: To assess the impact of HIV/AIDS on the Health related quality of life (HRQOL) of people living with HIV/AIDS (PLWHA), and to investigate the determinants of the QOL of PLWHA.

Methods A descriptive cross-sectional study design was used. One hundred and three (103) PLWHA accessing healthcare were consecutively selected. A questionnaire, containing data on socio-demographic and medical profiles, on the WHO-QOL-HIV Bref was used to assess each study participant. HRQOL was evaluated to assess quality of life domains that included physical and physiological health, level of independence, social relationships, environment, and spirituality/religion/personal beliefs. Means, standard deviations, and statistical tests for differences were performed.

Results The mean age of the respondents was 41.0 (range 21–73); 48 (46.6%) of the participants were males. The QOL mean scores were highest for the spirituality/religion/personal beliefs domain (16.88±2.83) and lowest for the environment domain (14.08±1.95). The overall QOL mean scores in the other four domains were similar: physical health (15.92 ±3.05), psychological health (15.35±3.20), level of independence (15.90±3.52), social relationships (15.11±2.26). Significant differences were observed in all domains among respondents with family support compared to those without family support. Similarly, asymptomatic patients had significantly higher QOL scores compared to symptomatic patients. Improved QOL was influenced by higher educational levels in all domains except the spirituality/religion/personal beliefs domain.

Conclusion The impact of HIV on the HRQOL was highest in the environment and social relationships domains. Also, HIV serostatus, presence of family support, and educational levels had significant effects on the QOL of PLWHA.

P3.18 MONITORING *CHLAMYDIA TRACHOMATIS* INFECTIONS AFTER TREATMENT FOR TEST OF CURE PURPOSES

[1]B Versteeg, [1,2]SM Bruisten, [1]T Heijman, [1]W Vermeulen, [1]MS van Rooijen, [1,4]AP van Dam, [1,2]MF Schim van der Loeff, [1,2,3]HJC de Vries, [1,4]M Scholing. *[1]Department of Infectious Diseases, Public Health Service Amsterdam, Amsterdam, the Netherlands; [2]Centre for Infection and Immunity Amsterdam (CINIMA), Academic Medical Centre, University of Amsterdam, Amsterdam, the Netherlands; [3]Department of Dermatology, Academic Medical Centre, University of Amsterdam; [4]Department of Medical Microbiology, OLVG General Hospital, Amsterdam, The Netherlands*

10.1136/sextrans-2017-053264.255

Introduction Performing a test of cure (TOC) could demonstrate success or failure of antimicrobial treatment of *C. trachomatis* (CT) infection, but the value of using a nuclear acid amplification test (NAAT) based TOC after treatment is subject to discussion, as the presence of CT nucleic acids after treatment may be prolonged and intermittent without the presence of infectious bacteria. We used cell culture to assess if a NAAT positive TOC indicates the presence of viable CT.