

determine the minimum inhibitory concentration (MIC) of these strains to AZM. All AZM-R isolates (MIC $\geq 2 \mu\text{g/ml}$) were screened for mutations in 23S rRNA, *mtrR* and *erm* genes and genotyped using *N. gonorrhoeae* multi-antigen sequence typing (NG-MAST).

Results 50 (6.3%) AZM-R isolates were collected, including 21 with azithromycin high-level resistant (AZM-HLR, MIC $\geq 256 \mu\text{g/ml}$) and 29 with azithromycin middle-level resistant (AZM-MLR, MIC between 2 to 16 $\mu\text{g/ml}$). There were 18 strains had mutations (A2143G) and 12 strains had mutations (C2611T) in the four copies of the 23S rRNA gene in the AZ-HLR and AZ-MLR group respectively. Analysis of the promoter and coding region of *mtrR* gene, significantly more AZM-HLR exhibited one pattern contained G45D and Y105H mutations compared with the AZM-MLR and AZ-S. Only one strains with positive PCR detection of *ermB* gene (MIC=2 $\mu\text{g/ml}$). Among all the isolates, 81 sequence types (STs) were identified by NG-MAST, of which 8 STs were more often in the AZ-R group. Some STs (ST3356 and ST1866) that were observed had been noted in a previous reports of emerging AZM-R *N. gonorrhoeae* in Nanjing, Chongqing and Guangzhou. No resistant strains cluster was observed by NJ phylogenetic tree.

Conclusion AZM should not be recommended as a monotherapy for gonococcal in Shenzhen. The high-level and middle-level resistance to AZM in *N. gonorrhoeae* were mainly mediated by specific mutations A2059G and C2611T in 23S rRNA respectively. Repeated emergence of ST1866 and ST3356 may help us to better monitor and analyse the epidemiological characteristics of AZM-R *N. gonorrhoeae* strains.

Support: Shenzhen Centre For Chronic Disease Control has been responsible for antimicrobial resistance surveillance program of *N. gonorrhoeae* in Shenzhen since 1992.

LB3.245 GENOTYPING OF HIGH-RISK HUMAN PAPILLOMAVIRUS TYPES ASSOCIATED WITH PREDICTOR FACTORS TO CERVICAL CANCER IN WOMEN WITHOUT CYTOLOGICAL ABNORMALITIES: A CROSS SECTIONAL EPIDEMIOLOGICAL STUDY

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Introduction The mucosal *Human Papillomavirus* (HPV) types have been described in the *Alphapapillomavirus* genus and infect the anogenital epithelium. There are viral groups based on their oncogenic activity as high-risk types, low-risk types and types of undetermined-risk. The aim of the study was to evaluate HPV frequency and co-factors related to cervical cancer in sexually active women from Rio de Janeiro city. This cross-sectional design study was performed at public health institutions from 2014 to 2016.

Methods Clinical samples were collected with a cervical cytobrush and stored at -20°C . After nucleic acid amplification, specific primers of high-risk types (HPV-16, -18, -31/-45) were used. Statistical analysis was applied in 18 socio-demographic variables.

Results This study demonstrated that of the 100 participants, 20% were DNA HPV positive. Of these, 8% were amplified by HPV-18/-45; and 12% were undetermined types. HPV-16 and -31 types were not detected. Comparing the genotypes,

37.5% were predominately over 45 years old, 62.5% of respondents were HPV-18 positive, married and/or of co-habitation matrimonial status and 62.5% don't smoke. All of them don't use drugs and alcohol, four patients (50%) have monthly income between one to four minimum wages, 37.5% started sexual activity before the age of 17 years and 50% had less than five sexual partners. Twenty five percent of the patients have had multiple infections and were unmarried. The 3% who have had the both types of HPV infection had more than five sexual partners. A highly significant factor associated with HPV infection was who did not use the condom and had an income between one to four minimum wages, both with 87.5%.

Conclusion This epidemiological study showed a strongly association among the presence of DNA HPV types with risk factors in unimmunized women. A large challenge to public health is cancer prevention in populations from developing countries with high risk exposure associated with the history of other sexually transmitted diseases (STDs) in different geographic regions.

Support: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)/Programa Brasil Sem Miséria; Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)

LB3.246 PREVALENCE AND RISK FACTORS OF HUMAN PAPILLOMAVIRUS INFECTION IN UNIMMUNIZED WOMEN IN BRAZIL

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Introduction The Brazilian Immunisation Program recommended the vaccine to be administered at 9 to 11 years of age before most adolescents became sexually active. The aim of this study is to describe the *human papillomavirus* (HPV) infection prevalence among unimmunized women and to identify the risk factors as demographic, behavioural and biological variables.

Methods An epidemiological study was performed in women randomly selected during 2014 to 2016. About 100 cervical cell scrapings were collected with a cytobrush. DNA extraction and HPV detection were performed by PCR, Nested PCR and specific primers. DNA quality was amplified by β -globin PCR primers. Restriction fragment length polymorphism (RFLP) patterns of L1 PCR products were used for genotyping.

Results In the population studied, HPV prevalence was of 20%. HPV 18 and 45 were the most frequently detected HPV types. A group of 100 women was divided into six aged groups (≤ 25 y.o; 26 to 30 y.o; 31 to 35 y.o; 36 to 40 y.o; 41 to 45 y.o; ≥ 45 y.o). Distribution among racial/ethnic groups was representative when 47% of women were white and 53% were black and on the race/ethnicities. Most women were currently not married (56%) and married or cohabitating (44%) ($p < 0.05$). Psychosocial and psychosexual issues demonstrated that six percent of the women exhibit history of sexually transmitted diseases, except HIV, with 85% of women having sex with until to five partners ($p < 0.03$). About the employment status of all the participating women, 90% reported having had at least one until four basic salaries. Only 5% women have had higher education. The most women (87%) have had secondary and fundamental education.

Conclusions The data from this study recorded the prevalence of high-risk HPV genotypes. Sociodemographic characteristics related to sexual health were relevance significantly in women without cytological abnormalities. These results may be useful to future epidemiological surveillance reports and evaluation of new clinical and subclinical cases of cervical intraepithelial neoplasia and genital warts.

Support: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)/Programa Brasil Sem Miséria; Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)

LB3.247 FACTORS ASSOCIATED WITH THE ABANDONMENT OF THE ANTIRETROVIRAL TREATMENT AMONG PATIENTS WITH HIV/AIDS ACCOMPANIED THE CENTRE OF REFERENCE STD/AIDS OF CAMPINASSP, BRAZIL

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Introduction The objective of the study was to identify and analyse the sociodemographic, epidemiological, clinical and laboratory factors associated with treatment abandonment and follow-up among PLHA.

Methods This is a retrospective case control study of a sample of medical records of adult patients with HIV who use a referral centre for STD in municipality of Campinas-SP, Brazil. Cases were patients without antiretroviral withdrawal at the pharmacy for 365 days or more, obtained from the Logistic Control System of Medicines in July 2015, (n=50). For controls group, 100 adult patients adhering to ART were randomly selected for 365, and 58 meet the criteria, from March 2014 to March 2015. After the univariate analysis of the data, a multiple logistic regression model was adjusted considering cases, controls and covariates of interest.

Results The variables that favoured the abandonment of follow-up and treatment were: black/brown referred colour (OR=6.54, 95% CI: 1.48–28.88), being unemployed (OR=6.38, 95% CI: 1.61–25.35), being heterosexual (OR=6.94, 95% CI: 1.18–40.97) and being smoker (OR=10.39, 95% CI: 2.59–41.69). Higher education (OR=0.05, 95% CI: 0.00–0.46) and to be attended by multi professional team (OR=0.19, 95% CI: 0.04–0.96) appeared as protective factors of abandonment.

Conclusion The abandonment of follow-up and treatment among the patients from STD/HIV referred centre in Campinas were positively associated with socioeconomic precariousness. Access to the multiprofessional team was a protective factor to prevent abandonment of ART in the study population.

LB3.248 FACTORS ASSOCIATED WITH SURVIVAL OF PATIENTS COINFECTED WITH AIDS AND HCV

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Introduction The objective of this study was to analyse the survival of patients with coinfection AIDS/HCV according to sociodemographic, epidemiological, clinical, and the utilisation of health services in the South and Southeast of Brazil.

Methods This is a retrospective cohort study. The sample of medical records of individuals older than 13 years diagnosed with AIDS, reported in the SINAN in 1998 and 1999 with follow-up of 10 years.

Results Of the 2091 cases of AIDS in over 13 years studied, 307 (14,7%) were diagnosed with Hepatitis C and 223 (72,6%) were male. After analysis of the survival curves by KaplanMeier method a multiple regression model of Cox was adjusted. The variables positively associated with longer survival were: being female (HR=0.68 CI95%: 0.510.83), higher education (HR=0.51 CI95%: 0.35–0.76), CD4 diagnostic criteria (HR=0.57 CI95%: 0.46–0.72). Variables associated negatively with survival were: age ≥ 60 years (HR=2.47 CI95%: 1.38–4.26), irregular use of ARV (HR=8,71 CI95%: 6.72–11.27), not having consulted with other health professionals than physician and/or nurse (HR=1.25 CI95%: 1.031,53), coinfection AIDS-tuberculosis (HR 1.42 CI95%: 1.17–1.71) and one or more opportunistic infections (HR=1,37 95% CI: 1.21–1.55). Patients with AIDS/HCV coinfection had lower survival than those without coinfection. The cumulative survival in accordance with the KaplanMeier method was 82% in non coinfecting and 78% in coinfecting after 60 months of the diagnosis of AIDS. However coinfection AIDS/HCV didn't remain in the final model as a predictor of survival.

Conclusion Despite the progress in HIV treatment and control, some challenges remain, including overcoming inequalities, early diagnosis, and ensuring the availability and adherence to treatment with drug combination with lower toxicity and ease intake. AIDS and Hepatitis C are two chronic diseases can be analysed as markers of quality of care and AIDS in Brazil.

LB3.249 HIV/AIDS AND TUBERCULOSIS ON TRANVESTITES AND TRANSGENDERS (MTFS) IN SÃO PAULO, BRAZIL

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Introduction To know the conditions of life and health, to identify differences between transvestites and MtFs, and to verify the proportion of cases of HIV-AIDS and tuberculosis in these subgroups.

Methods A cross-sectional study realised in São Paulo city, Brazil, in 2014, with the application of a KAP questionnaire (Knowledge, Attitudes and Practices) to a convenience sample of 124 individuals (58 transvestites and 66 MtFs) aged ≥ 18 years. Comparisons between the percent distributions of the groups were performed using the Pearson chi-square test or Fisher's exact test, considering a significance level of 5%.

Results The mean age of all respondents was 32.2 years (SD=9.9 years). Statistical differences were observed between groups regarding prostitution and passage through prisons