## P3.21 PREVALENCE OF TRICHOMONAS VAGINALIS PREDICTED TO INCREASE SUBSTANTIALLY IN AUSTRALIA DUE TO REPLACEMENT OF PAP SMEARS WITH HPV TESTING FOR CERVICAL SCREENING: A MODELLING STUDY

<sup>1</sup>BB Hui, <sup>1</sup>C Reulin, <sup>1</sup>RJ Guy, <sup>1,2</sup>B Donovan, <sup>3</sup>JS Hocking, <sup>1</sup>MG Law, <sup>1</sup>DG Regan. <sup>1</sup>The Kirby Institute, UNSW Australia, Sydney, New South Wales, Australia; <sup>2</sup>Sydney Sexual Health Centre, Sydney Hospital, Sydney, New South Wales, Australia; <sup>3</sup>Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Victoria, Australia

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Introduction The prevalence of trichomoniasis is very low ( $\sim 0.4\%$ ) in the general Australian population. This is attributed in part to the opportunistic detection of *Trichomonas vaginalis* (TV) in PAP smears of women participating in the cervical screening program. From 2017 the cervical screening program will transition from cytology to human papillomavirus (HPV) testing as the primary triage. We hypothesise that as a result of this transition, and with an increasing proportion of the population vaccinated against HPV, fewer cases of TV will be detected and the prevalence will consequently increase.

Methods A mathematical model was developed to describe the transmission of TV in the general population. We assume that following the transition from cytology to HPV testing; individuals with asymptomatic TV who test negative for high-risk (HR) HPV will remain undiagnosed and untreated. We investigate the change in TV prevalence over time as the proportion of the population vaccinated against HR HPV increases. We assume ongoing coverage of 80% in the HPV vaccination program.

**Results** Our modelling predicts that if the prevalence of HR HPV does not change then 10 years after the transition from PAP to HPV testing, TV prevalence will have increased from 0.4% to 1.65%, and after 20 years prevalence will have reached 3.83%. If we assume that HR HPV prevalence continues to decrease at the current rate, TV prevalence will reach 1.68% after 10 years and 4.06% after 20 years.

**Conclusion** Our results suggest that TV prevalence will increase in Australia over time due to changes in the cervical screening program. The extent of this increase will depend on the impact of HPV vaccination on the prevalence of HR HPV. Consideration should be given to enhancing TV surveillance to monitor for increasing incidence. Adding a TV test to the HPV test that will be used in cervical screening and or including TV in sexual health checks for asymptomatic individuals (contingent on an observed increase in incidence) should also be considered.

## P3.22 PREVALENCE AND DETERMINANTS OF TOBACCO USE AMONG PATIENTS LIVING WITH HIV (PLHIV) IN KINSHASA

B Bepouka, H Situakibanza, Kiazayawoko Florian, M Mbula. University of Kinshasa, Kinshasa – Rep.Dem.do Congo

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Introduction Worldwide the prevalence of smoking among people living with human immunodeficiency virus (HIV) is elevated compared to the general population. Tobacco use remains one of the major cardiovascular risk factors and its use in antiretroviral (ARV) treated human immunodeficiency virus infected people may lead to activation of immune cells and rendering them more susceptible to HIV. We determined the prevalence of and factors associated with tobacco use in an antiretroviral treated HIV infected congolease people.

Methods The study was a cross-sectional, conducted in Kinshasa, Democratic republic of Congo(DRC). We randomly selected patients and 9 support structures for PLHIV, from May 2015 to August 2015. Socio-demographic, tobacco and alcohol use data were collected using World Health Organisation stepwise approach to surveillance (STEPS) questionnaire. The Chi-square test was used to compare categorical variables between tobacco users and non tobacco users. The multiple logistic regression analysis was used to determine the predictors of tobacco use status.

**Results** On a global active file of 5724 PLHIV, 400 were included.Of 400 ARV treated HIV infected participants, 309 (77.3%) were females and 91 (22.7%) were males. The mean age of participants was 43 years. About 32 (8%) of participants were tobacco users. A higher proportion of females than males (59.4% versus 40.6%, p=0.521) used tobacco. Food insecurity (AHR: 3.349; 95% CI: 1.378–8.142; p=0.008) and alcohol consumption (AHR 3,826; 95% CI:1,583–9,249; p=0,003) were significant independent predictors of tobacco use.

**Conclusion** Tobacco use among ARV treated HIV infected people was common. Food insecurity and alcohol consumption were the risk factors for tobacco use. There is need to scale up the awareness on how tobacco use, apart from being a risk factor for cardiovascular diseases, interferes with viral suppression despite treatment with antiretroviral drugs.

## P3.23 DETERMINANTS OF NON-ADHERENCE TO ANTIRETROVIRAL THERAPY IN ADULTS IN THE CITY OF KINSHASA

<sup>1</sup>B Bepouka, <sup>1</sup>H Situakibanza, <sup>1</sup>F Kiazayawoko, <sup>2</sup>N Aliocha. <sup>1</sup>University of Kinshasa, Kinshasa – Rep.Dem.do Congo; <sup>2</sup>Cité Des Aveugles, Kinshasa – Rep.Dem.do Congo

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Introduction Adherence of 95% or more to antiretroviral therapy is generally considered necessary for optimal virologic suppression in patients living with HIV/AIDS (PLWHA). In the African context of access followed by low viral load, understand the determinants of poor adherence is essential to improve compliance, optimise virologic suppression and reduce morbidity and mortality.

Method A transversal analytical study referred to was conducted on patients aged at least 18 years on antiretroviral treatment for at least three months. We randomly selected patients and 9 support structures for PLWHA from 63 following more than 100 patients in Kinshasa, from May 2015 to August 2015. The Case Adherence Index (subjective method) and renewal of order (method objective) were used as indicators of compliance. Khi-2 and Student tests were used for comparisons. The determinants of nonadherence were sought in multivariate logistic regression analysis.

**Results** On a global active file of 5724 patients, 400 were included. The median age was 43 years and the sex ratio in favour of the three women. The overall incidence of non compliance was 25%. The prevalence of non-objective compliance was higher than that of non-subjective compliance (29% vs 21%, p=0.01). In multivariate analysis, the payment of the consultation [adjusted OR 1.70 95% CI (1.020 to 2.813),