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## UNSUPPRESSED VIRAL LOAD (VL) BY HIV EXPOSURE CATEGORY AMONG PEOPLE LIVING WITH HIV IN BRITISH COLUMBIA(BC), CANADA: 2005–2015

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Background We examined trends and determinants of unsuppressed VL among PLWH stratified on the basis of HIV exposure category over 10 years in BC, Canada.

Methods The analysis included all PLWH in BC from 04/2005 to 03/2016 identified in the provincial STOP-HIV database. This database includes: positive HIV test results, antiretroviral therapy (ART) dispensing information, laboratory data, physician billing data, hospital discharge abstracts and vital statistics linkages. For each year, individuals were classified as having an unsuppressed VL if they: 1) were newly diagnosed; 2) had any VL  $\geq\!200$  copies/mL measure; or 3) did not have a VL measured. We examined factors associated with unsuppressed VL using generalized estimating equations to build a multivariable logistic regression model.

Results Among 9778 PLWH in BC during the study period, 80.7% were male and the median age at diagnosis was 37 years. Among those with HIV exposure information, 49.0% were men who have sex with men(MSM), 33.6% were people who use injection drugs(PWID), 16.0% had only heterosexual exposures and 1.4% had other exposures. 16.4% had missing exposure information. The proportion of those with unsuppressed VL decreased from 66.5% in 2005 to 24.5% in 2015 (p<0.001, test of trend). Among MSM, unsuppressed VL declined from 60.0% to 19.8%; among PWID from 75.6% to 33.3% and among heterosexuals from 62.0% to 24.5%. In the multivariate model, PWID (aOR=1.72; 95% CI 1.58-1.88) and heterosexuals (aOR=1.20; 95% CI 1.10-1.32) had increased odds of unsuppressed VL, compared to MSM. Age, sex, year ART initiation, ethnicity, health authority residence and hepatitis C antibody status were also associated with unsuppressed VL (p<0.01 for all).

Conclusion Across BC, the proportion of PLWH with unsuppressed VL fell markedly between 2005 - 2015 from 66% to 25%. However, PWID and those with heterosexual exposures require additional supports to maximize the benefits of ART. Disclosure No significant relationships.

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## HIV CARE AND TREATMENT SERVICES FOR FEMALE SEX WORKERS: UTILISATION OF AND SATISFACTION WITH THE SERVICES IN KAMPALA, UGANDA

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Background We estimated the prevalence and factors associated with utilisation of HIV services among FSW in Kampala, Uganda.

Methods Between October 2017 to January 2018, we conducted a cross sectional study among FSW aged 18+ years at a research clinic. The women were enrolled through their routine three monthly visits. At each visit, women received a comprehensive HIV prevention, care and treatment package, peer-led -health education sessions, psycho-social support, sexually transmitted infections (STIs) screening and treatment, general health care and reproductive health services. We defined utilisation as clinic attendance for services by FSW at least once within the last six months. Data on socio-demographic characteristics, clinic attendance, HIV sero-status, sexual behaviour, illicit drug and alcohol use were collected. We used log binomial model to identify factors associated with utilisation of clinic services.

Results Eight hundred and seventy four women were included in the analysis, mean age was 32 years (SD= 6.98). The overall prevalence of utilisation of clinic services was 708/874(81%) and 662/874(76%) reported satisfaction with the clinic services. Forty percent reported poor accessibility to the clinic, and of these 222/324 (69%) reported high transport-costs challenges. All women (100%) knew their HIV status, of these 463(53%) were HIV positive, of whom 455/463(98%) were receiving ART. Seventy six percent had been treated for STIs in the last three months, and 454 (52%) reported partner violence. In the adjusted analysis, utilization of clinic services was more likely among HIV positive women (aRR=1.19; 95%CI: 1.11–1.28) and those who had been treated for STIs in the last three months (aRR=1.32; 95%CI: 1.18–1.48).

Conclusion Prevalence for utilisation of clinic services was relatively high. Those who utilised the clinic were more likely to be HIV positive women and those treated for STIs. However, interventions targeting FSW to improve utilisation of HIV care services should be considered.

Disclosure No significant relationships.

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## DETERMINANTS OF VIRAL NON-SUPPRESSION AMONG CHILDREN IN A HIV PROGRAM IN KENYA: A CROSS-SECTIONAL STUDY

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Background Kenya has an estimated 86,300 children living with HIV (CLHIV) on antiretroviral therapy (ART) of whom a third are not virally suppressed. Looking at predictors of viral non-suppression guides the program in designing intervention strategies to abate inauspicious treatment outcomes.

Methods This was a cross-sectional study that used de-identified electronic medical records of the Christian Health Association of Kenya HIV/AIDS project database. We included all CLHIV aged 9 years and below who were active in care as of  $30^{\rm th}$ September 2018 and had been on ART for at least 6 months with a recent viral load result. We defined non-suppression as a result of  $\geq 1000$  copies/mm<sup>3</sup> which was our