

Methods

1. Retrospective study of 3 cohorts of WRA starting ART at 4 health centres in Addis Ababa between 2009 and 2011 to examine pregnancy rates over time;
2. Interviews with HIV+ pregnant women regarding reasons for their pregnancy.

Results Among 167 women who started ART in 2008/9, 4.2% had become pregnant. Of 165 who started ART in 2009/10, 9.1% had become pregnant. Of 161 enrolled on ART in 2010/11, 13.7% had become pregnant. In the first cohort, the pregnancy rate dropped from 4.2% to 4.1% after one year and 3.8% after two years on ART. In the second cohort, the rate dropped from 9.1% to 7.5% after one year on ART. The third cohort was too recent to assess pregnancy rates after one year.

Among 297 WRA enrolled in HIV care, 24% had become pregnant after knowing they were HIV+. Of these, 74% were on ART; 61% were planned pregnancies.

Conclusions Women recently enrolled on ART had higher pregnancy rates than women on ART after one year, possibly reflecting the monthly FP counselling once on ART. The data further show substantial unmet need for FP, as 39% reported an unintended pregnancy.

P4.047 DISCLOSURE OF HIV STATUS IN HIV INFECTED CHILDREN IN KENYA

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D W Warui, ²C McGrath, ¹J W Thiga, ²N Yatchi, ¹M Attwa, ²M H Chung. ¹Coptic Hope Center for Infectious Diseases, Nairobi, Kenya; ²University of Washington, Seattle, WA, United States

Background Greater access to ART has resulted in more HIV-infected children surviving into adolescence and adulthood. Adolescence is associated with a sense of independence and sexual debut, therefore knowledge of HIV status may improve ART adherence and help in preventing HIV transmission. This study aimed to determine the incidence rate of and factors associated with disclosure in HIV-infected children at the Coptic Hope Center, Nairobi, Kenya.

Methods This was a retrospective cohort of HIV-infected children aged 8–14 years unaware of their HIV status at enrollment. Disclosure was defined as knowledge of HIV status as reported by caregiver and confirmed by child, as assessed at every clinic visit. Cox proportional hazards regression models were used to determine incidence rate and factors associated with paediatric disclosure of HIV status during 1-year follow-up.

Results At enrollment, 112 of 136(82%) HIV-infected children were unaware of their HIV-status. Among these, 77 (69%) were 8–10 years of age [median 10.2 years, Interquartile range (IQR), 8.9–11.6]. Disclosure occurred in 46 (41%) of the children. One-year incidence of disclosure per 100 person-years was 67.7 [95% Confidence Interval (CI): 50.7–90.4]. Disclosure was more likely to happen to children aged 11–14 years as compared to those aged 8–10 years. Disclosure in children aged 11–14 years was higher in the first 6 months, but in children aged 8–10 years, disclosure was higher in the last 6 months of follow-up. In multivariate analysis, older age [adjusted hazard ratio (aHR), 1.53, $P < 0.001$] and WHO stage 3/4 (aHR, 0.48, $P = 0.04$) were associated with disclosure. Attendance of disclosure sessions was suggestive of increase in disclosure probability (aHR, 3.15, $P = 0.11$).

Conclusions While paediatric disclosure was low, disclosure sessions may play a role in facilitating disclosure. These results reinforce the continued need for development and evaluation of paediatric disclosure interventions to increase disclosure incidence.

P4.048 GENDER EFFECT OF HIV ON NEUROPSYCHOLOGICAL FUNCTIONING

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J Menon, ¹M Ngoma, ¹K Kalima, ²K Hestad. ¹University of Zambia, Lusaka, Zambia; ²Norwegian University of Science and Technology, Trondheim, Norway

Gender effect of HIV on Neuropsychological functioning

Introduction It has been established that HIV enters the central nervous system (CNS) early after infection and eventually results in both structural and functional brain changes in about 30–50% of cases (Shaw *et al.* 1985). Even in their milder forms these changes may have significant effects on day-to-day functioning (Antinori *et al.* 2007).

Objective This study examines neuropsychological differences, especially gender difference, between HIV seropositive (HIV+) patients being followed in a University of Zambia clinic and demographically comparable seronegative (HIV-) controls recruited in the same setting.

Materials and Methods 38 HIV+ subjects on antiviral treatment and 42 HIV- participants with similar age education and gender. They were all administered a standardised neurocognitive test battery that has been found sensitive to HIV Associated Neurocognitive Disorder (HAND) in the USA and internationally (e.g., in China, India, Romania and Cameroon).

Results The test battery was found to be applicable to a Zambian population. A clear HIV effect was seen with a medium to high overall effect size (Cohen's $d = 0.74$). However, it was only the female seropositive group who showed this effect of HIV.

Conclusion HIV can result in neuropsychological deficits in Zambia, where the clade C of the virus dominates. It is suggested that the HIV infected women are more at risk for developing cognitive deficits than men, possibly because of gender related social, financial and healthcare disadvantages.

P4.049 LOPINAVIR/RITONAVIR IN COMBINATION WITH TENOFOVIR/EMTRICITABINE AS POST EXPOSURE PROPHYLAXIS (PEP) TO HIV - AN EFFECTIVE AND WELL TOLERATED REGIMEN

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M C Schreiner, G Stingl, A Rieger, A Jalili. *DIAID, Department of Dermatology, Medical University of Vienna, Allgemeines Krankenhaus, Vienna, Austria*

Introduction PEP to HIV is a course of antiretroviral drugs administered within 72 hrs after events with high risk of exposure to HIV aiming to reduce the odds of established infection. We evaluated the putative HIV exposed individuals referred to the Medical university of Vienna general hospital and indicated for PEP in years 2008–2012.

Methodology and Results We have analysed the data from 450 individuals. Our data demonstrates that:

- 44.1% are females,
- indication type: unprotected homosexual contact [28.5%, from which 45% of source patients (SPs) were HIV positive], needlestick injuries (22.8%, 37.5% HIV positive SPs), unprotected heterosexual contact (21.4%, 20% HIV positive SPs), occupational exposure (12.8%, 100% HIV positive SPs), rape (11.4%) and needle exchange by IDUs (2.8%) where HIV status of SPs were unknown,
- PEP regimens were combination of lopinavir/ritonavir with tenofovir/emtricitabine (79.4%), darunavir/ritonavir with tenofovir/emtricitabine (10.1%) or lopinavir/ritonavir with lamivudine/zidovudine (10.5%),
- 58.8% of individuals tolerated the PEP without any adverse events, 35.3% had minor adverse events (nausea, fatigue, diarrhoea, abdominal discomfort or slight elevation of pancreatic enzymes) and in 5.8% PEP was modified or discontinued (severe adverse events: strong diarrhoea, abdominal pain and vomiting or significant elevation of liver function parameters),