



UNIVERSITY OF NAIROBI

# **HBV and HCV viral co-infections among HIV-infected treatment naive participants recruited in HIV-1 molecular diversity cross-sectional survey, Western Kenya**

Micah Oyaro 1, 2 (John Mbithi 2, Fred Oyugi 1, Omu Anzala 1

1. University of Nairobi/Kenya, 2. Kenyatta University/Kenya



# Objectives



UNIVERSITY OF NAIROBI

- To determine the prevalence of HBV and HCV viral infections in HIV-infected patients
- To determine the predisposing risk factors for HIV and hepatitis viral co-infections
- To create public awareness of HIV and hepatitis co-infections due to shared modes of transmission



# Methods (1)



UNIVERSITY OF NAIROBI

- **Study design:** Cross-sectional
- **Recruitment region:** Western Kenya (study participants were recruited from VCT centres at district hospitals (Bungoma, Busia) and, Kakamega provincial hospital)
- The nurse counsellors administered the study questionnaire that captured demographic data and sexual behaviour (no. of SPs, condom use and history of previous STDs). Whole blood was collected for HIV and HBV/HCV tests



# Methods cont'd



UNIVERSITY OF NAIROBI

- Laboratory investigations included detection of serological markers for HBV (HBsAg) and HCV (anti-HCV) with std ELISA technique. HIV serostatus was confirmed with fourth generation kit, Vironostika Uniform I & II.
- Social demographic data was analysed using SPSS and Chi-test statistical tools
- Study was approved by Kenyatta National Hospital and Ethics Research Committee



# Results (1)



UNIVERSITY OF NAIROBI

- 130 HIV-infected adults, 96 (74%) females and 34 (26%) males were enrolled and screened for HBV and HCV infections. In total, ten samples had hepatitis co-infection
- Seven samples (5.38%) were co-infected with HBV and three samples (2.3%) with HCV. None had the triple (HIV/HBV/HCV) infections
- Data analysis indicated no significant association between the risk factors and co-infections



# Discussion & Conclusions



UNIVERSITY OF NAIROBI

- Our data show a high seroprevalence (7.69 %) of hepatitis co-infections in HIV-infected patients suggesting routine screening for hepatitis infections among HIV care and support services (VCTs).
- Promotion of preventive campaigns through education and vaccination (HBV) interventions may reducing the infections in the general population



# Future perspectives



UNIVERSITY OF NAIROBI

- Investigate role of hepatitis co-infections in HIV-infected patients (before HAART initiation and during HAART )
- Study the co-infections in HIV low and high-risk populations
- Expand research on HIV and HIV-associated infections (TB, Hepatitis, HPV etc) for better treatment and care of HIV-infected patients