

## **Hepatitis B virus coinfections: Prevalence and CD4 profile among patients on comprehensive care services in Kenya**

J. Mwangi<sup>1,2</sup>, Z. Nganga<sup>2</sup>, J. Kinyua<sup>1</sup>, N. Lagat<sup>1</sup>, J. Muriuki<sup>1</sup>

<sup>1</sup>*Kenya Medical Research Institute, Centre for Virus Research, NAIROBI, Kenya,* <sup>2</sup>*Jomo Kenyatta University of Agriculture and Technology, Institute of tropical Medicine and Infectious diseases, Nairobi, Kenya*

**Background:** In resource-limited settings, HIV co-infections are not routinely tested for. Yet antiretroviral therapy (ART) is increasingly becoming available to a wider population requiring treatment. Since Human immunodeficiency Virus and Hepatitis B virus share common risk factors, co-infections are an important public health problem in areas of high prevalence for both the viruses. Testing for both infections is therefore important for expanded care and management especially among the HIV infected. In this study determination of seroprevalence of HIV/HBV co-infection and CD4 was carried out in Kenya.

**Methods:** A multi centre study involving 840 blood samples collected from patients attending comprehensive care clinics was carried out. HIV and HBV serostatus was determined using ELISA and Rapid tests while CD4 count was done using FACScan flow cytometer

**Results:** Among the 840 HIV infected individuals, 151(18%) patients tested positive for HBV. Co-infections were higher in females (62%) than males (38%) with the age categories between 22-45 years having the majority (76%) of the co-infected individuals. Most, (73%) of the patients had CD4 count below normal, with 40% having a count > 200 cell/m<sup>3</sup>. Among the co-infected, 57 %( 65) of them had counts below 200cells/m<sup>3</sup>

**Conclusion:** In conclusion, there is need to include screening for hepatitis B in the repertoire of the tests done in comprehensive care clinics for HIV and AIDS.