HIV-1 and Hepatitis B, Hepatitis C Co-infection in Selected Informal Urban Settlements in Nairobi.

Glennah Kerubo

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ABSTRACT

Hepatitis B and C are major global health problems and the leading cause of liver cancer worldwide. On the other hand, HIV-1 is a lentivirus causing AIDS. These viruses are endemic in Africa and particularly, sub-Saharan Africa. In Kenya, HBV is highly prevalent and major cause of liver cancer. Co-infection of HIV-1 and HCV or HBV represents a public health problem of growing importance. As a result of sharing similar routes of transmission, many people are co-infected with HIV-1 and HCV, or HIV-1 and HBV. However, data on the prevalence ofHIV-1/HBV andHIV-1/ HCV co-infection is limited, especially in Sub-Saharan Africa. The details on rates and prevalence of co-infection between HIV-1 and HBV/HCV in the general population and especially in informal urban settlements are also scanty. This study was carried out with an aim of determining the prevalence of HBV and HCV in informal settings. It also sought to determine the rate of HIV/HBV and HIV/HCV co-infection. A total of 1312 samples were randomly selected from Korogocho and Viwandani and collected on dried blood spots. They were analyzed for the presence of HIV, HBV and HCV using rapid tests and ELISA. HIV/HBV and HIV/HCV co-infection rates were also determined. The prevalence of HIV, HBV and HCV were found to be 20.4%, 13.3% and 0.76% respectively. The study also found the prevalence of HIV to be high in those above 45 years as compared to those aged 15-24 years. HIV, HBV and HCV infections were not significantly different with gender. This study also found HIV and HBV to be significantly high among those who are divorced as compared to those who are never married. The study also revealed association between HIV, HBV and HCV suggesting same modes of transmission.