## HUMAN IMMUNODEFICIENCY VIRUS AND HEPATITIS B VIRUS COINFECTION RATES IN INFANTS SEEKING HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSIS IN SELECTED HEALTH FACILITIES IN THREE PROVINCES IN KENYA

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## **ABSTRACT**

Human immunodeficiency virus (HIV) and Hepatitis B virus (HBV) infections cause a significant trepidation among infants in sub-Saharan Africa. The infections mainly occur via perinatal or in utero transmission due to infectivity of the mother. The symptoms will vary depending on the stage of infection but HBV has a more adverse clinical course when in conjunction with HIV than when there is mono-infection. The study describes the distribution and prevalence of HIV-HBV co-infections among the infants aged between six weeks and eighteen months in selected health facilities in three provinces: Central, Eastern and Coast provinces in Kenya. Samples were collected from post-natal clinics where mothers take their infants for vaccination after six weeks. The samples were collected on filter papers as dried blood spots (DBS). The samples were tested for HIV and Hepatitis B using polymerase chain reaction and rapid serological tests. The data obtained was analyzed for frequencies and correlations using SPSS (10.0). A total of 567 samples were analyzed for HIV and HBV rates as well as HIVHBV co-infection. The prevalence of HIV and HBV was found to be 10.1% and 1.4% respectively. However, there were no cases of HIV-HBV co-infection detected in the study. These findings show that though on a small scale, HBV infection may become a major problem in infants and young children if not addressed adequately. The Ministry of Public Health and Sanitation needs to take this into consideration when developing diagnostic policies for infants in Kenya