Genotypic Characterization of HBV Among Voluntary blood Donors in Nairobi Regional Blood Transfusion centre, Kenya
Aluora P. O, Muturi M, Gachara G., 2020

Background
HBV causes a high morbidity and mortality primarily due to its ability to cause hepatitis, liver cirrhosis and HCC. The HBV genome is prone to mutations which can lead to occult HBV infection which is associated with the development of cirrhosis and HCC.

This study sought to establish the genotypic characteristics of HBV among low risk populations, Prevalence of Occult HBV & overt HBV and the correlation between demographic factors and HBV infection.

Prevalence; Based on the CMIA results, HBV seroprevalence of 2.3% among blood donors in Nairobi reported. Prevalence by Gender; 3.33% female 1.69% male OBV -2.4%

Genotype A, sub genotype A1 exclusively prevalent with a number of mutations in the “a” determinant segment of the MHR as well as outside the “a” determinant region of the S gene associated with antibody escape.

Problem Statement
The KNBTS screens for HBsAg using the CMIA method. This test does not inform on the presence of genetic material of the virus nor the genotypic characteristics of the virus in the blood.

Demographic factors and their Association with HBV Infection($P<0.05$)
Education p=0.993 gender p=0.658 Age p=0.001; Participants aged between 19 and 28 years were more likely to be HBsAg positive compared to the other age groups.

The study recommends that the testing platform currently in use be revised to incorporate molecular testing.