

Epidemiology of hepatitis B in eastern Kenya

Abstract:

A cross-sectional survey of outpatients attending the three distinct hospitals in the towns of Mombasa, Kilifi, and Malindi was conducted to determine the patterns of hepatitis B transmission in eastern Kenya. Of 1,533 study subjects (mean age 21.9 +/- 13.2 years; range, 4 months to 80 years), 11.4% were positive for HBsAg and 56.2% were seropositive for at least one hepatitis B marker (HBsAg, anti-HBs, or anti-HBc). Anti-delta antibody was found in 1.2% of HBsAg-positive samples. HBeAg was found in 36.0% of HBsAg-positive samples obtained from women of childbearing age. The prevalence of seropositivity for hepatitis B markers was positively correlated with age, increasing from 20% in subjects less than 4 years old to more than 80% in study subjects greater than 40 years old. On multivariate analysis, male sex was found to be associated with HBsAg positivity, and age and previous deliveries of children were associated with seropositivity for any hepatitis marker (HBsAg, anti-HBs, or anti-HBc). An effective hepatitis B immunization strategy in this region of Kenya would require vaccination early in life because a major portion of hepatitis B transmission occurs in childhood.