

Abstract

Introduction: hepatitis B virus infection is a major public health problem worldwide and in Africa. This would be the first ever documented study on epidemiology of Hepatitis B infections in the newly formed Republic of South Sudan. This study was designed to estimate the sero-prevalence of Hepatitis B virus infection amongst pregnant women attending antenatal services in Juba.

Methods: a cross-sectional study was conducted among pregnant women attending antenatal clinic services in Juba Teaching Hospital, in the period between December 2012 and March 2013. Any pregnant woman, attending antenatal care services at Juba Teaching Hospital, was included if she was a resident of Juba County for at least 1 year before pregnancy. A Hepatitis B case was defined as any women participating in the study and was found to be positive for HbsAg and confirmed by ELISA.

Results: this study documented that the prevalence of Hepatitis B surface antigen (HBsAg) among pregnant women attending ANC in Juba was 11% (31 out of the 280 samples). Other samples tested were indeterminate (36%), naturally immune (27.1%), susceptible (23%) and the remaining 1.8% was immune due to vaccination. Significant risk factors for Hepatitis B infection were loss of partner (OR 4.4 and CI of 1.4-13.9) and history of Jaundice (OR 1.7 and CI of 1.2-2.1).

Conclusion: these study findings show that only 29% of infants in Juba county are born to immune mothers (naturally or vaccine induced). The remaining 70% of babies would be at risk of infection, if a birth dose of Hepatitis B is not provided. We therefore recommended introduction of Hepatitis B Vaccine birth dose into routine infants' vaccination series to eliminate this risk.