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## **Studies on the Serological Markers of Hepatitis B Virus Infection among Children in Riyom LGA, North Central Nigeria.**

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### **ABSTRACT**

#### **Abstract**

Background: Globally, hepatitis B virus (HBV) infection has been identified as one of the most common infectious diseases of major health concern. This study was conducted to assess the prevalence of Hepatitis B virus infection among Children in selected communities at Riyom L.G.A. of Plateau State Nigeria.

Methodology: Two hundred (200) sera samples were collected from Pupils attending Primary Schools at three locations of study and analyzed using the HBs Ag Monolisa ELISA kit and the HBV-5 panel test for the qualitative assessment of the markers of hepatitis B virus infection in human serum, plasma and whole blood.

Result: Overall result from the total samples assayed showed that, 58(29.0%) were seropositive, [{P value of 0.020}: P < 0.05] which indicates statistical significance. considering age of infection, children aged 5-9 years recorded a high prevalence of 15.0 %, [{ P value of 0.460}: P > 0.05]. Gender consideration of subjects screened showed that male subjects had a prevalence of 19.0% compared to 10.0% for Females [{P value of 0.0435}: P < 0.05]. Risk factors such as blood transfusion accounted for 1.5 %, [{ P value of 0.6138}:P > 0.05]. while subjects with traditional method of circumcision recorded a higher prevalence of 9.5% [{P value of 0.3120}:P < 0.05]. Considering markers for HBV infection, findings showed that the highest rate of positivity recorded with the HBsAg showed 25% among children screened, HBeAg recorded 4.0%. Anti-HBs which indicate antibody to the HBsAg showed 35(17.5%)

positivity while, Anti-HBe positivity recorded 15.0%. Similarly, Anti-HBc Positivity showed a record of 13.5% positivity.

Conclusion: The result obtained from this study showed a higher prevalence of the Hepatitis B Virus at our locations of study compared to similar studies conducted earlier within our location of study. It is strongly suggested that accurate diagnosis with effective screening of pregnant mothers be intensified, while the need for timely vaccination of children at risk be promptly embarked upon.

**Key words:** HBV Infection, Serological markers, Children.