3. VIRAL HEPATITIS

3.1. Antenatal screening for HBsAg and prevention of perinatal transmission of hepatitis B virus (HBV) infection with Hepatitis B immunoglobulin and/or hepatitis B vaccine in a tribal community

Studies on effectiveness of hepatitis B immunoglobulin in preventing vertical transmission of infection have shown contradicting results. The high prevalence of hepatitis B among the Nicobarese, gives an opportunity to study the efficacy of passive-active immunization with HB IG and hepatitis B vaccine over vaccine alone in preventing vertical transmission. A study was initiated in Car Nicobar with this objective. However, the study population got displaced due to the tsunami of December 2004. Hence the progress of the project is slow.

Hepatitis B infection is an important public health problem among the tribal population of Andaman and Nicobar islands with very high HBsAg rates. As elevated carrier rates in high endemic areas are largely due to mother-to-infant transmission, it is necessary to introduce hepatitis B vaccination for the newborns among the tribal population of these islands. In view of this, a project has been initiated to compare the efficacies of two regimes, one using hepatitis B vaccine alone and the other using hepatitis B vaccine along with hepatitis B immunoglobulin. The study is designed to be conducted as a double blind placebo controlled trial with three arms. Infants in two arms constitute those borne to HBsAg positive mothers and the third arm constitutes infants born to HBsAg negative mothers. Infants in arm one will receive hepatitis B immuneglobulin soon after birth and hepatitis B vaccine on 0^{th} day, 1 m, 2 m and 6 m of age. Those in second arm will receive placebo and hepatitis B vaccine in the same schedule as that for arm one. Infants in the third arm will receive hepatitis B vaccine alone. Follow-up samples would be collected from these infants at 1 m, 2 m 6 m and 1 year of age and would be screened for anti-HBs and HBsAg in order to assess the sero-protection and carrier rates. The findings of the study would

be useful in formulating the strategies for interrupting the perinatal transmission among other tribal communities of these islands. Till now 117 pregnant women have been screened and 21 (17.9%) of them were positive. However, the tsunami that hit the islands last December severely disrupted the life of the people of the islands. The whole surviving population was displaced. Even now, almost all the people are living in temporary shelters. Because of these unanticipated incidents, the study is almost at a standstill. It can only be restarted once life on the island returns to normalcy.