# Community-based study of hepatitis B markers in women of reproductive age

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**Community-based study of hepatitis B markers in women of reproductive age**

Bhalla P, Garg S, Kakkar M, Sharma VK.

Department of Microbiology and PSM Maulana Azad Medical College and Associated Lok Nayak Hospital, New Delhi.

Correspondance: Dr. Kakkar, Block Q,Plot 18, Model Town I, New Delhi 110009

**Letter:**

Several cross- sectional studies have been carried out in various risk groups for the prevalence of hepatitis B virus (HBV) markers. [1.2]

However few focused on the overall maintenance and transmission of HBV in the community, such as that of Tandon et al[2] who reported a carrier rate of 2%- 8% in the general population. As part of a community- based study of reproductive tract infections, we studied women in the sexually active age group (15-45 years) for the prevalence of HBV markers.

We screened an urban slum in the vicinity of our college during August 1996 to November 2000; the slum comprised 826 hutments with a population of 3676. The population consisted with of migrants living in over covered and stressful conditions with loosened traditional and social support services. Of the 446 eligible women (including 66 pregnant women) identified blood was collected from 329 (73.7%); they were asymptomatic for hepatitis. History of jaundice blood transfusion or parent real drug therapy during the past 5 years was asked for HBsAg detection was done by rapid latex agglutination slide test (Virutex; Tulip Diagnostics) Positive samples were confirmed by solid- phase sandwich immunoassay (Nava path; Bio-Red Laboratories USA). Samples positive for HBsAg were tested for the presence of HBeAg using sandwich enzyme immunoassay (Monalisa; Sanofi Diagnostics Pasteur SA France).

Nineteen (5.8%) of these 329 women were positive for HBsAg. The HBsAg carrier arte was 3.1% (6/196) in the 15-29 years and 9.7% (13/133) in the > 30 years age groups and 6.9% (4/58) among pregnant women. This is in conformation with figures from community- based studies both in India and abroad [3.4] HBeAg was detected in 5 (26.3%) of 19 HBsAg- Positive samples; reported rates in other Indian studies range from 7.8% to 40% [5.6]

Families of 8 of the HBsAg-positive women were tested. This included 5 husbands and 23 children. Clustering was observed in only one family, with the husband and one of four children being positive for HBsAg i.e., 2/28 (7.1%) which is an agreement with the findings of others.[7.8]

HBeAg could not be demonstrated in any member of the 8 families. None of the family member had received prior vaccination against HBV.

Despite the email sample size and the other limitation in our study we suggest that HBeAg-Positive individuals should be motivated to have their family member screened for HBV and vaccinated if necessary.

**References**

Tandon BN, Gandhi BM, Joshi YK, Aetiological spectrum of viral hepatitis : Prevalence of marker of hepatitis A and B infection in north India. Bull WHO 1984;62;67-73.