

ABSTRACT

Background:

Hepatitis E has been a significant health problem world-wide. As there is very less data documented data with respect to sero-prevalence of hepatitis E in pregnant mothers in India, this study was done to assess the sero-prevalence of subclinical hepatitis E viral infection in asymptomatic pregnant mothers attending routine antenatal check up in a tertiary care hospital in Chennai.

Materials and methods:

The study was a cross sectional study conducted among 200 asymptomatic pregnant women of age > 18 years attending antenatal OPD in a tertiary care hospital at Chennai conducted between May 2015 and September 2015 after ethical clearance from the Institute Ethics committee. Their clinical and demographic profile was collected based on a structured proforma; after informed consent, blood samples were taken for IgG and IgM antibodies to detect HEV infection. The results were analysed in STATA12 software. Chi-squared test was done to find out the significance of categorical data. P value of <0.05 was considered significant.

Observations:

The mean age group of the population was 24.12 ± 3.64 ; majority of them fell in 2nd trimester (49%). 40% have completed higher secondary education and 57% of women belonged to the upper lower modified Kuppusamy's socio-economic status scale. Only 24.5% were boiling water before use and 24.5% did not have drainage facilities at home. 4.5% and 6.5% of the study group were positive for both IgG and IgM

respectively. Seroprevalence was highly associated with women not having a habit of hand washing, not having adequate drainage facilities, who are consuming non vegetarian diet, poor socio-economic status. Analysis of anti HEV seroprevalence with age, gravida, educational level, however revealed no significant association.

Conclusion

From the present study we conclude that there is very low prevalence of anti HEV IgM and IgG antibodies among asymptomatic pregnant women when compared with study results of north India.

As pregnant women are possibly susceptible to hepatitis E infection, it may be suggested that hepatitis E vaccination may be considered for this population.

Since there is a low level of exposure to HEV compared to other endemic regions in north India and moreover, pregnant women are potentially high risk for exhibiting fatal fulminant hepatic failure commonly in their third trimester of pregnancy, hepatitis E vaccination may be considered for this population.