

Abstract

Introduction and objectives: Hepatitis E is an enterically transmitted disease, which may cause fulminant hepatitis in pregnant women and the immunocompromised. The published data on the sero-prevalence of hepatitis E virus (HEV) infection in Sri Lanka is limited to two published abstracts. The present study has been done to determine the sero-prevalence of HEV exposure and to identify the factors associated with past exposure in a selected sample of pregnant women.

Methods: This is a descriptive cross-sectional study carried out in Castle Street Hospital for Women from December 2019 to April 2020 in pregnant women aged 16-42 years. We collected 260 blood samples with data related to socio-demography and associated factors using a questionnaire in every consecutive pregnant woman who attended the OGTT clinic. Sera were tested for anti-HEV IgG using an ELISA at the Virology Laboratory of the University of Peradeniya to determine the sero-prevalence rate with associated factors.

Results and Conclusion: Only one pregnant woman was positive for anti-HEV IgG with a prevalence rate of 0.38%. The mean age of the study sample was 28 (SD \pm 7.7) years, and the mean gestational age was 21 weeks (SD \pm 7.9). The majority (n= 149; 57%) were with multi parities, 68% in 2nd trimester (n= 176) and 62% were Sinhalese (n= 161). They had a literacy rate of 99.6% (n= 259), 80% had secondary level education (n= 209), 90.3% reported using hygienic practices (n= 235), 82% reported using purified chlorinated water for drinking (n= 214) and 97% reported to have water-sealed toilets with proper sewage disposal (n= 252). An anti-HEV IgG sero-prevalence of 0.38% suggests a low exposure to HEV. Exposure to enteric infections is generally through improper sewage disposal, contaminated drinking water and poor sanitary facilities, which were not identified in the study sample. Large-scale studies in different communities are needed to determine the actual exposure to HEV in Sri Lanka.

Keywords: Hepatitis E virus, Sero-prevalence, Pregnant women, Sri Lanka