## Sero-prevalence for past HEV infection among patients attending the medical wards of District General Hospital, Kilinochchi

Sarmila V.1, Murugananthan K.2\* and Pirasath S.3

<sup>1</sup>Department of Medical Laboratory Sciences, Faculty of Allied Health Sciences,
University of Jaffna, Sri Lanka

<sup>2</sup>Department of Microbiology, Faculty of Medicine, University of Jaffna.

<sup>3</sup>Specialist Physician in Internal Medicine (Act), District General Hospital Kilinochchi.

## kalamathy6@gmail.com

Hepatitis E virus (HEV) is a common cause of enterically transmitted acute viral hepatitis in humans and it remains as a major public health issue in developing countries. There is no published study on the prevalence on hepatitis E in Sri Lanka. Therefore, this study was designed to determine the prevalence and influencing risk factors of HEV infection among the patients attending medical wards of District General Hospital, Kilinochchi. A descriptive cross-sectional study was performed among patients (randomly selected) attending the medical wards of District General Hospital, Kilinochchi. Blood samples were collected from 90 patients aged 16-93 years, from July 2021 to August 2021 and an interview-administered questionnaire was used to collect the data on risk factors for acquiring HEV infection such as exposure to hepatitis E prevalent country, source of drinking water, types of toilet and pits, past medical history of liver disease or other serious illnesses, history of blood transfusion. Serum samples were qualitatively analysed for anti-HEV IgG using an ELISA kit (AccuDiag<sup>TM</sup>, USA) and the results were reported as positive for anti-HEV IgG and negative for anti-HEV IgG. The study included 53 (58.9%) males and 37 (41.1%) females. Out of 90 samples, 5 (5.56%) were positive for anti-HEV IgG. This is the first report regarding the seroprevalence of HEV infection among patients attending the medical wards of District General Hospital, Kilinochchi in the Northern Province of Sri Lanka and 5.56% had been exposed to HEV in the past. However, the influencing factors are not determined as clinically significant because of the low seropositivity. Further studies in a larger population are required to describe the factors associated with past HEV infection in Sri Lanka. In addition, efforts have to be taken to improve the general sanitary facilities as they have a substantial effect on the HEV infection in a population.

Keywords: Past exposure, HEV infection, Sero-prevalence, ELISA, Sri Lanka