

Hepatitis E virus: an emerging enigmatic and underestimated pathogen

ABSTRACT

Hepatitis E virus (HEV) is an RNA virus causing hepatitis E disease. The virus is of one serotype but has diverse genotypes infecting both humans and animals. Based on evidence from seroprevalence studies, about 2 billion people are estimated to have been infected with HEV globally. HEV, therefore, poses a significant public health and economic challenge worldwide. HEV was discovered in the 1980s and was traced back to the 1955 – 1956 outbreak of hepatitis that occurred in India. Subsequently, several HEV epidemics involving thousands of individuals have occurred nearly annually in different countries in Asia and Africa. Initially, the virus was thought to be only enterically transmitted, and endemic in developing countries. Due to the environmental hygiene and sanitation challenges in those parts of the world. However, recent studies have suggested otherwise with the report of autochthonous cases in industrialised countries with no history of travel to the so-called endemic countries. Thus, suggesting that HEV has a global distribution with endemicity in both developing and industrialised nations. Studies have also revealed that HEV has multiple risk factors, and modes of transmission as well as zoonotic potentials. Additionally, recent findings have shown that HEV leads to severe disease, particularly among pregnant women. In contrast to the previous narration of a strictly mild and self-limiting infection. Studies have likewise demonstrated chronic HEV infection among immunocompromised persons. Consequent to these recent discoveries, this pathogen is considered a re – emerging virus, particularly in the developed nations. However, despite the growing public health challenges of this pathogen, the burden is still underestimated. The underestimation is often attributed to poor awareness among clinicians and a lack of routine checks for the disease in the hospitals. Thus, leading to misdiagnosis and underdiagnosis. Hence, this review provides a concise overview of epidemiology, diagnosis, and prevention of hepatitis E.

Keyword: Hepatitis E; Hepatitis E Virus; HEV; Emerging disease; Chronic HEV infection; HEV treatment; HEV Vaccine