

Review of: "[Mini Review] Global Burden and Evolving Understanding of Hepatitis E Virus"

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Potential competing interests: No potential competing interests to declare.

Reviewer's report

Manuscript title: Global Burden and Evolving Understanding of Hepatitis E Virus

In this Mini Review, authors aimed to highlight the significant public health concern posed by Hepatitis E virus (HEV), which is one of the leading causes of acute viral hepatitis, especially in developing countries.

General Observation: This review is significant for enhancing the global understanding of HEV infection. However, given the limited number of studies on HEV in many regions of the world, authors should carefully evaluate their sources of information to ensure the accuracy of their conclusions.

Specific Observations:

Keywords: Authors should add keywords.

Abstract: It is better to add pregnant women to the abstract as a high-risk population because the infection by HEV in this population, especially during the third trimester, is of concern.

I. Introduction:

When the authors mention "The World Health Organization estimates that 2.3 billion people...", they should specify that these values are from 2018. If more recent data are available, it would be preferable to include them. If not, they should clearly state that these statistics are from 2018.

I. Background:

When the authors mentioned "During the following decades, they were widely reported in the Middle East and North Africa," they should include a reference to support this statement.

I. Epidemiology:

1. Virological characteristics

Hepeviridae should be in italics.

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The authors mentioned "The Piscihepevirus genus was recently isolated from trout"; they should remove the word "recently," since the isolation occurred in 2014.

Same for genetic diversity: "Other genotypes, such as VHE-5, VHE-6, VHE-7, and VHE-8, have been recently documented in animals, which are considered potential virus reservoirs"

Authors should also remove the word "recently" and verify its usage throughout the entire manuscript.

Geographic distribution

When the authors mentioned the Mediterranean region, they referred to outbreaks. However, in the same paragraph, they also discussed studies on both outbreaks and seroprevalence, such as the case of HEV in pregnant women in Tunisia. This paragraph should be rephrased for clarity.

Another work in Tunisia, could be added (Neffatti et al., 2017): Rate of 5.1% for IgG anti-HEV and of 1.4% for IgM anti-HEV in pregnant women

Additionally, when the authors referred to the Mediterranean region as an endemic area, this should be better explained. They should also mention that "little is known about HEV in this region and that the few studies conducted have shown that..."

Regarding industrial countries, is there any new data? The referenced study is from 2006. As this is a review, it should include more recent information.

Mechanisms of HEV Persistence in Immunocompromised Individuals

Regarding the viral factors and the relationship between genotype and chronicity, I believe further studies based on large cohorts and significant statistical analyses of various genotypes are necessary to conclusively determine if one genotype can lead to chronicity while others cannot.

Virological Diagnosis

In this section, the authors could include a figure illustrating the kinetics of markers and the most appropriate virological tests for each period. This would make the information clearer for the reader.

Conclusion Authors should add a conclusion.

References: Authors should uniform the language of the references used to English.