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Letters to the editor

Schistosomiasis: A neglected cause of liver disease in the Philippines

Dear Editor,

It is interesting to read the review article by Ornos et al. [1]. on liver diseases in the Philippines. The authors mentioned common diseases such as NAFLD, hepatitis B, C, and alcohol liver disease as causes of chronic liver disease in the Philippines. A neglected cause of liver disease common in tropical countries such as the Philippines is schistosomiasis (bilharziasis). The World Health Organization recognizes schistosomiasis as one of the neglected tropical diseases, and in 2020, it is estimated that 240 million people worldwide are affected by this disease, together with an additional 700 million at risk of infection [2]. Schistosoma-induced liver injury results from a granulomatous inflammatory reaction around trapped Schistosoma eggs in the presinusoidal periportal spaces. Chronic infection can lead to collagen deposition in the periportal space leading to schistosomal-associated liver fibrosis, known as "Symmers' pipestem fibrosis," and is one of the most important causes of non-cirrhotic portal hypertension worldwide [3]. Schistosoma japonicum, the most common parasitic blood fluke in the Philippines, is endemic in 12 regions, 28 provinces, and 196 towns in the Philippines, with a 4.68% national prevalence of the disease, estimated 12.4 million Filipinos at risk and 2.7 million exposed to the infection [4,5]. Despite the decreasing mortality rate of schistosomiasis in the Philippines over the last six decades, it remains an economic and public health concern. For that reason, every January, the Philippines Department of Health leads activities related to schistosomiasis awareness and mass drug administration with the vision of "Schistosomiasis Free Philippines" [4,6]. Once fibrosis sets in, despite successful parasite elimination, Schistosoma associated coinfection or comorbidities with any of the common chronic liver disease etiologies can enhance tissue damage leading to worsening liver function and disease progression [3]. In endemic countries such as the Philippines, schistosomiasis should be considered one of the common causes of liver disease.

Declaration of interests

None.

Reference

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Balancing perspectives: Schistosomiasis in the liver disease landscape of the Philippines

Dear Editor, We greatly appreciate the insightful commentary on our article, "Liver Diseases: Perspectives from the Philippines" [1]. The perspective on the inclusion of schistosomiasis as a cause of liver disease in the Philippines is indeed valuable.

While our review focused on prevalent causes of liver diseases, we recognize the significance of schistosomiasis in the country's health landscape. Schistosomiasis, caused by *Schistosoma* sp., remains endemic in certain regions of the Philippines [2,3]. We acknowledge its impact on liver health due to the granulomatous inflammatory reaction and subsequent fibrosis associated with this parasitic infection.

However, it's essential to contextualize the current situation of liver disease morbidity and mortality in the Philippines. Although prevalent, schistosomiasis may not rank as a primary cause of liver disease on a national scale. In the clinical settings we encounter, schistosomiasis cases are comparatively fewer and are often managed effectively. The decreasing mortality rate of schistosomiasis over the years signifies commendable progress, yet we understand that localized cases, especially in endemic regions, might still pose a challenge [2,3]. Research exploring the burden of schistosomiasis-associated liver diseases is needed to ascertain and accurately assess its impact.

We acknowledge the possibility of coexistence with other liver diseases such as hepatitis B, alcohol-related liver disease, and NAFLD [4]. This intersection of etiologies has the potential to exacerbate liver damage [5]. Therefore, research is needed to delve into this interplay and explore potential management strategies. Developing guidelines that address the impact of schistosomiasis on liver health could offer a structured approach to tackling the impact of this infection on health.

There is a need to continue fostering awareness and understanding of liver diseases in the Philippines. We remain committed to highlighting various aspects of liver health and diseases while being mindful of each etiology's relative prevalence and impact. We thank the commentary for engaging in this important dialogue and

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