Correspondence on Editorial regarding “Elimination of viral hepatitis: How far are we?”

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Running head: Accelerating efforts to eliminate viral hepatitis

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We would like to express our gratitude to Professor Cho for her interest in our paper and for sending us an editorial. As viral hepatitis is recognized as a major public health issue worldwide, the World Health Organization (WHO) has called for the elimination of viral hepatitis B and C by 2030 [1-3].

According to the WHO’s 2024 Global Hepatitis Report [4], between 2020-2022, the number of new hepatitis B cases decreased from 1.5 to 1.2 million, while the death rate increased from 820,000 to 1.1 million. In 2022, the diagnosis rate of hepatitis B was 13.4%, and the treatment rate was only 2.6% for all patients with hepatitis B and 19.5% for those diagnosed. Between the same years, the new number of hepatitis C cases showed a slow decline from 1 million to 980,000, and the death rate decreased from 290,000 to 240,000. However, this was still below the target. The diagnosis and treatment rates of hepatitis C were 36% and 13%, respectively. Therefore, a huge scale-up of hepatitis diagnosis and treatment is required to achieve the WHO target.

In our nationwide study in Korea [5], the prevalence of hepatitis B surface antigen in the 10–18 age group had substantially decreased to \( \leq 0.1\% \). However, liver-related mortality associated with hepatitis B was 18.9 per 100,000 people, which was substantially higher than the WHO target of \( \leq 4\% \) per 100,000 people. In addition, the linkage-to-care rate was only 39.4%, and the treatment rate was only 22.2% for all patients with hepatitis B and 67.3% for those eligible for antiviral treatment. Hepatitis B-related deaths are mainly related to hepatocellular carcinoma (HCC), which is thought to be attributed to the aging patient population and limited antiviral treatment. A modeling analysis of hepatitis B patients showed that expanding treatment eligibility by removing hepatitis B virus (HBV) DNA restriction in cirrhosis or lowering the alanine aminotransferase (ALT) criteria in non-cirrhosis patients significantly reduced liver disease mortality while simultaneously being cost-effective [6]. A recent modeling study from China [7] using seven scenarios, increasing diagnosis, linkage-to-care, and treatment rates, showed that HBV elimination is expected to accelerate in eight years, and approximately 2 million lives will be saved if the diagnostic and treatment rates are raised to 90% and 80%, respectively, as compared to the status quo (China is expected to reach its HBV mortality elimination target by 2059).

However, the major hepatitis B practice guidelines involve complex decision making and recommend optional treatment for cases with low evidence. Recently, in March 2024, the WHO released the Hepatitis B Practice Guidelines, which expanded treatment eligibility [8]. It recommends that all patients with significant fibrosis (previously only cirrhosis) based on thresholds of non-invasive tests (APRI score \( \geq 0.5\) or transient elastography \( >7\text{KPa}\)),
regardless of HBV DNA or ALT levels, and those with HBV DNA >2,000 IU/mL (previously >20,000 IU/mL) and ALT above the upper limit of normal should be treated. It also includes an additional conditional recommendation (if there is no access to HBV DNA) to treat patients with chronic hepatitis B based on persistently abnormal ALT levels alone. Academic societies should strive to reach a consensus on the expansion of antiviral treatment indications to lower mortality rates and revise the practice guidelines. Furthermore, the government needs to expand the reimbursement criteria for treatment and provide sufficient financial support to patients.

Meanwhile, in Korea, our study showed that the incidence rate of hepatitis C remained high at 11.9 per 100,000 people, with linkage-to-care and treatment rates of 65.5% and 56.8%, respectively. The annual liver disease mortality rate from hepatitis C was 2.02 per 100,000 people [5]. The most effective strategy is to eliminate the source of hepatitis C infection by identifying and treating asymptomatic infected individuals through testing, thereby reducing new infections and mortality. Several studies from Korea have shown that one-time universal screening for hepatitis C is cost-effective and reduces hepatitis C virus (HCV) associated mortality and HCC [9-11]. Based on these results, the Korean Ministry of Health and Welfare recently decided to introduce a hepatitis C antibody test in the National Health Check-up for 56-year-olds in 2025. It is necessary to take such measures to increase the treatment rate by simplifying the diagnosis and treatment linkage processes for HCV antibody-positive patients identified through screening.

The Korea Disease Control and Prevention Agency, in collaboration with the Korean Association for the Study of the Liver, has developed an index related to country validation for the elimination of viral hepatitis in Korea in accordance with the WHO’s guidance. Additionally, the 1st national strategic plan for viral hepatitis B & C control was established and announced in 2023. This action plan includes strategies and detailed tasks for establishing a full-cycle hepatitis management system, including prevention, diagnosis, and treatment, with the goal of reducing viral hepatitis mortality by 40% in 2027. Although these progressive steps have been taken towards the WHO’s 2030 elimination target, significant gaps remain. Therefore, it is necessary to make a collective effort to accelerate progress and address the gaps in the coverage of testing and treatment of hepatitis B and C to achieve the WHO target.
References


