

Cover Story



One Life, One Liver - Toward the elimination of viral hepatitis

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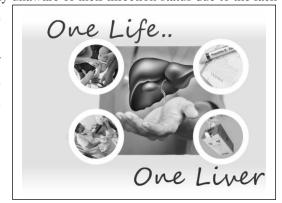
Cover photo: The cover denotes some of the steps taken in Sri Lanka to achieve hepatitis B elimination status in the country.

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Viral hepatitis has been a persistent public health problem across the world. An estimated 354 million people are currently living with hepatitis B or C infection globally, with many unaware of their infection status due to the lack

of symptoms in the early stages of the disease. The data indicate that at least one person across the world dies from viral hepatitis every 30 seconds, which amounts to over 1 million deaths per year. The number exceeds the annual death toll from HIV and malaria combined. The burden is highest in the WHO Western Pacific Region and the WHO African Region, where 116 million and 81 million people are chronically infected with Hepatitis B, respectively. An estimated 18 million people are hepatitis B infected in the WHO South-East Asia Region.



The World Health Organization has set a goal to eliminate hepatitis B as a public health threat by 2030. Under the elimination strategies, the number of new hepatitis B infections and deaths would be reduced by at least 90% and 65% respectively, between 2016 and 2030. Hepatitis B elimination is currently defined as <0.1% HBs Ag prevalence in those aged 5 years or less. The road map toward elimination of viral hepatitis includes prevention, early diagnosis, treatment and community intervention strategies.

Elimination of hepatitis B is a realistic goal. However, it will require concerted efforts from governments, healthcare providers and individuals. To achieve hepatitis B elimination, the WHO has outlined a comprehensive approach that includes four key strategies.



- 1. Universal vaccination Vaccination is one of the most effective ways in preventing hepatitis B infection. The WHO recommends that all infants receive three doses of the hepatitis B vaccine as part of routine childhood immunization. In addition, catch-up vaccination campaigns are essential to protect adolescents and adults who were not vaccinated during infancy. High-risk groups such as healthcare workers, illicit drug users and people with multiple sexual partners should be vaccinated to prevent and control the spread of the disease.
- 2. **Diagnosis and treatment -** Prompt and accurate diagnosis of hepatitis B is crucial for timely treatment and preventing further transmission. It is essential to ensure access to affordable and realistic diagnostic services, particularly in resource-limited settings. For those living with chronic hepatitis B, access to appropriate treatment and care is vital to prevent disease progression and reduce the risk of complications. There are several medications approved to treat viral hepatitis B and C, and new drugs are in development. Monitoring and regular follow-up of patients on treatment are essential to ensure treatment adherence and detect any potential drug resistance. In cases where complications arise, early intervention can be lifesaving. It is aimed to diagnose at least 90% of patients living with hepatitis B and to treat at least 80% of them by 2030.
- 3. **Blood and injection safety -** It is recommended to screen 100% of all blood donations in a quality-assured manner and to ensure that comprehensive harm reduction services are available for people who inject drugs.
- 4. **Public awareness and education -** Raising awareness about hepatitis B & C among the public is crucial in reducing stigma, promoting testing and encouraging preventive measures. Education campaigns targeting the public, including high-risk groups as well as healthcare providers, play a significant role in increasing knowledge and attitudes about hepatitis B & C and its modes of transmission.

Cover picture of this Issue indicates some of the steps taken in Sri Lanka to achieve hepatitis B elimination status in the country. Immunization of infants against hepatitis B, screening of blood for hepatitis virus and safe handling and disposal of needles and medical waste are some of those practiced in Sri Lanka. In 2022, an island-wide survey was carried out by the Epidemiology Unit, Ministry of Health to determine the hepatitis B prevalence, which confirmed its control status in the country.

Challenges on the path to elimination

Despite significant progress toward elimination, several challenges persist globally in the quest for hepatitis B & C elimination. One of the primary obstacles is having limited availability and affordability of diagnostic tests, especially in low- and middle-income countries. It is estimated that only 10% of the people with chronic hepatitis B know their diagnostic status. Expanding access to these services is critical to ascertain that all at-risk groups and those living with hepatitis are getting appropriate care. In the meantime, stigma and misconception surrounding hepatitis B & C continue to hamper testing and compliance with treatment, making it difficult to prevent and control the disease.

Conclusions

As we march towards the 2030 goal of eliminating viral hepatitis, we should not forget that this is not just a medical u but a moral obligation to assure the wellbeing of our future generation. By continuing to invest in hepatitis B vaccination, early detection and treatment, and public awareness campaigns, we can pave the way towards a world



free of hepatitis B for our children soon; a world where every child is vaccinated, every person knows their hepatitis B status and every infected individual receives optimal care and support they need.

References

- 1. Viral Hepatitis elimination: a challenge, but within reach, *The Lancet* 2022; 400(10348): 251. https://doi.org/10.1016/S0140-6736(22)01377-0.
- 2. WHO. *Hepatitis B Fact Sheet*. Newsroom, 12 July 2023. Available from: https://www.who.int/news-room/fact-sheets/detail/hepatitis-b. Accessed 20 July 2023.
- 3. WHO. *Guidelines for the Prevention, Care and Treatment of Persons with Chronic Hepatitis B Infection.* Guidelines, 1 March 2015. Available from: https://www.who.int/publications/i/item/9789241549059.
- 4. Hsu, YC., Huang, D.Q. & Nguyen, M.H. Global burden of hepatitis B virus: current status, missed opportunities and a call for action. *Nat Rev Gastroenterol Hepatol* 2023. https://doi.org/10.1038/s41575-023-00760-9.