Study Recommends Upgrades to Global Hepatitis B Care

Experts recommend removing financial barriers and decentralizing care into primary health facilities to improve hepatitis B care retention.

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Current hepatitis B virus (HBV) care delivery models are failing to keep patients engaged in lifelong care, impeding the world's ability to meet the World Health Organization's (WHO) 2030 hepatitis B elimination goals, according to a University of Liverpool news release about a recent global review.

Published in the Lancet Gastroenterology & Hepatology, the WHO-supported review is the first global systematic review and meta-analysis of HBV. After analyzing data concerning more than 1.7 million people with chronic HBV across 50 countries, researchers found significant drop-offs in diagnosis, treatment initiation and long-term care retention.

HBV is a highly contagious viral infection that can cause severe liver damage and liver cancer. The virus is easily spread via HBV-positive blood, semen or other body fluids. Pregnant women with HBV can also pass the virus on to their babies, usually during childbirth.

The WHO estimates that 254 million people were living with chronic HBV in 2022 and that 1.2 million new cases are diagnosed annually. That same year, HBV resulted in about 1.1 million deaths, primarily due to cirrhosis and liver cancer.

According to the release, key findings of the review show that:

- Specialist-led hospital care achieved the best results but still showed major gaps: Fewer than 75% of patients were assessed for treatment eligibility; of those eligible, only 78% began therapy. Retention plummeted among those not receiving treatment.
- Primary care, comanaged care and passive referral models fared worse, with lower rates of

assessment, initiation of care and retention once in care.

- Postpartum care for women diagnosed during prenatal care had particularly low follow-up rates.
- Community screening with active linkage to specialist care achieved high treatment initiation rates for eligible patients.

“This is the first global review to map our progress across the hepatitis B care pathway,” said lead author Alexander Stockdale, MBChB, MRes, PhD, DTM&H, MRCP, in the release. “Without urgent changes, millions will miss out on lifesaving treatment. Many patients are not being fully assessed or being started on antivirals when they could benefit, and far too many are lost to follow-up over time. Strengthening primary care in low- and middle-income countries is essential to prevent hepatitis B–related deaths — already estimated at 1.1 million in 2022.”

While chronic HBV is not curable, it is treatable. The goal of therapy is to reduce the risk of complications, including premature death. Treatment can help prevent cirrhosis, liver failure and liver cancer by halting HBV replication and reducing viral load. Many medications that aim to cure hepatitis B are under study.

People who have not been infected with HBV can be vaccinated against the virus to prevent infection. What’s more, because of routine HBV vaccination, the number of new hepatitis B cases in the United States has declined from about 260,000 a year in the 1980s to about 17,650 during 2023, according to the Centers for Disease Control and Prevention.

To improve global HBV care, researchers recommend removing financial barriers to care such as out-of-pocket costs for testing and treatment. They also encourage same-day assessment and treatment initiation and improvements in long-term engagement using adherence and retention strategies from HIV care programs.

“We need simple, decentralized models—integrating hepatitis B into primary care or existing HIV and chronic disease services,” said senior author Philippa Easterbrook, MD, FRCP, MPH, DTM&H, said in the release. “The HIV response has proven that streamlined care can achieve over 90% diagnosis, treatment initiation, and retention. It’s time we applied those lessons to hepatitis B.”
