A FUTURE WITHOUT HEPATITIS: BREAKING DOWN BARRIERS, BUILDING UP SYSTEMS

by

Anupama DS, Aniruddha Inamdar, and Sanjay Pattanshetty

Each year on July 28, the world pauses to raise awareness about viral hepatitis, a group of diseases still claiming millions of lives. The day commemorates Dr. Baruch Blumberg, who discovered the hepatitis B virus and developed its vaccine. This year's theme, "Let's Break It Down," is a powerful call to dismantle the financial, social, and systemic barriers hindering progress toward hepatitis elimination and liver cancer prevention. It highlights that hepatitis is more than a medical condition; it is a critical issue of health equity and social justice, with a disproportionate impact on marginalized communities.

Global Health Security Issue

Hepatitis is increasingly recognized as a global health security issue, given its high mortality, silent spread, and potential to overwhelm health systems. Tackling it requires strong international cooperation in vaccines, diagnostics, and treatment, especially in resource-constrained countries where gaps remain stark. It is estimated that USD 6 billion is the additional funding required annually in order to reach the hepatitis elimination target in low-and middle-income countries. A globally coordinated response can help pool procurement, harmonize regulatory pathways, and lower costs through market-shaping strategies and technology transfer. Table 1 provides a list of international organizations/initiatives that are tackling hepatitis with their synergistic activities.

Despite notable advances in prevention and treatment, hepatitis remains a significant global health challenge. According to WHO estimates, as of 2022, 254 million people are living with chronic hepatitis B and 50 million with chronic hepatitis C, bringing the global total to more than 300 million individuals affected. Chronic HBV prevalence is around 3.3% globally, but it is markedly higher in certain regions, such as sub-Saharan Africa and parts of East Asia, where prevalence can exceed 7.5%. Each year, about 2.2 million new infections occur from hepatitis B and C combined. Tragically, hepatitis-related mortality is rising: in 2022, approximately 1.3 million people died from hepatitis B and C, equivalent to nearly 3,500 deaths every day. This is a marked increase from 1.1 million deaths in 2019, placing hepatitis among the leading causes of global mortality. If current trends continue, it is expected to surpass tuberculosis and malaria as a leading infectious cause of death by 2040.

One of the greatest challenges in addressing hepatitis is the substantial gap in diagnosis and treatment. Currently, only 13% of individuals with chronic hepatitis B and 36% with hepatitis C are diagnosed. Even fewer receive treatment—just 3% for HBV and 20% for HCV. There is clear disparity among regions, with the Western Pacific Region facing the highest undiagnosed and untreated percentage of population at 36% and 38%, respectively. These gaps highlight the urgent need for expanded access to testing and care if we are to meet the 2030 WHO targets, which call for 80% of cases to be diagnosed and treated. Without scaling up these efforts, millions will remain unaware of their infection status, putting them at continued risk for severe liver disease, cirrhosis, and cancer.

Rays of Hope

Despite these gaps, significant progress has been made with the WHO's support in guiding countries to develop national hepatitis strategies, expand access to diagnostics and treatment, and raise public awareness. A key success is the hepatitis B vaccination program including a timely birth dose which, alongside antenatal care, effectively prevents mother-to-child transmission in high-burden regions. Nonetheless, implementation challenges persist, particularly in regions with high disease burden. Coverage of the timely hepatitis B birth dose remains low in many low- and middle-income countries, especially in sub-Saharan Africa. There is a critical problem of lack of effective data on the coverage of the hepatitis B birth dose given within 24 hours of birth.

Table 1: International Collaborative Actions for Hepatitis

Organization/Initiative	Key Activities
World Health Organization	Global Health Sector Strategy 2022-2030 Regulatory advances in diagnostic cooperation Triple Elimination Initiative
GAVI, The Vaccine Alliance	• Hepatitis B birth dose grant programme • Vaccine procurement support • Health systems strengthening
Coalition for Global Hepatitis Elimination (CGHE)	• Policy advocacy • Elimination planning • Technical assistance
World Hepatitis Alliance (WHA)	• Advocacy campaigns • Policy guidance • Community mobilization
Foundation for Innovative New Diagnostics (FIND)	• Hepatitis C Elimination through Access to Diagnostics (HEAD)-Start project • Diagnostic development • Point-of-care testing
The Hepatitis Fund	• Multi-year grant programs • Screening and treatment scale-up • Birth dose vaccination
International Vaccine Institute (IVI)	• Hepatitis E vaccine research • Clinical trials • South-South cooperation
PROLIFICA Consortium	• HBV-related liver cancer research • Clinical studies • Capacity building
Hepatitis C PACT	• Community-based testing • Financing solutions • Patent barriers
TherVacB (EU Horizon 2020)	• Clinical trials • Therapeutic vaccine development • Capacity building

Weak health systems, limited cold-chain infrastructure, and gaps in maternal care all contribute to missed opportunities for early protection. Moreover, the costs of diagnostic testing and antiviral treatments though significantly reduced in recent years still pose barriers in many under-resourced settings. Social stigma and misinformation further discourage people from seeking care, especially among high-risk groups such as people who inject drugs, prison populations, and migrants. Inadequate surveillance and weak data systems make it difficult to track progress or allocate resources effectively. Notably, 10 countries— Bangladesh, China, Ethiopia, India, Indonesia, Nigeria, Pakistan,

the Philippines, Russia, and Vietnam—account for nearly two-thirds of the global hepatitis burden, underscoring the need for targeted and context-specific responses.

Recognizing these challenges, the WHO has set forth a comprehensive elimination plan aimed at achieving major reductions in new infections and hepatitis-related deaths by 2030. These goals include a 90% reduction in new HBV and HCV infections, a 65% reduction in mortality, and universal coverage of the hepatitis B vaccine, especially the timely birth dose. The WHO also promotes a people-centered approach to hepatitis elimination, advocating for integrated care models that bring hepatitis services into the fold of primary healthcare, HIV, TB, and maternal and child health programs. Additionally, the WHO has developed simplified treatment guidelines, enabling task-sharing with trained non-specialist providers and ensuring services are more accessible, particularly in rural and hard-to-reach areas.

Countries Exhibiting Political Will

There are encouraging signs from countries and regions that have made remarkable progress toward hepatitis elimination, demonstrating what is possible with strong political will, integrated systems, and community-driven approaches. Egypt, once home to one of the highest burdens of hepatitis C globally, has emerged as a global leader in elimination efforts. By 2023, Egypt had screened over 60 million people and treated more than 4 million using locally produced, affordable direct-acting antivirals. Its government-led "100 million health" campaign integrated hepatitis services with screening for other non-communicable diseases and brought decentralized care to rural communities.

Mongolia, facing one of Asia's highest hepatitis C prevalence rates, has screened over 80% of its adult population and made testing and treatment accessible through government subsidies and national insurance. Georgia, the first country to launch a nationwide hepatitis C elimination program, has diagnosed over 70% of cases and cured 95% of those treated by 2022, with robust surveillance systems and outreach to key populations.

India has made notable progress toward hepatitis elimination, particularly through the National Viral Hepatitis Control Program (NVHCP), launched in 2018 with the goal of eliminating hepatitis C by 2030 and reducing the burden of hepatitis B and other forms. Key achievements include the integration of hepatitis B vaccination into the Universal Immunization Programme, free testing and treatment for hepatitis B and C across public health facilities, and the expansion of diagnostic services to primary care levels, including rapid diagnostic tests. The program has also emphasized public awareness, infection control, and surveillance through digital platforms. Despite these efforts, gaps remain in awareness, birth-dose coverage, and blood safety practices, but the country's commitment is evident through policy action and alignment.

As a regional entity, the European Union, through its standardized monitoring systems, coordinated prevention strategies, shared financing mechanisms, and integrated policy frameworks, has adopted a multi-layered approach to hepatitis elimination. For instance, The EU4Health Programme funds targeted efforts such as VH-COMSAVAC (Viral Hepatitis COMmunity Screening, Vaccination, and Care) for migrants and upcoming calls focused on hepatitis B prevention. The EU also leads on therapeutic innovation through initiatives like TherVacB, a €21 million Horizon 2020-funded vaccine program now in clinical trials.

Need to Focus on Low-Performing Areas

However, not all countries are on this trajectory. In sub-Saharan Africa, progress is hindered by low hepatitis B birth dose coverage, limited testing, and insufficient treatment access. Contributing factors include low public awareness, stigma, high out-of-pocket costs, poor integration with primary care, weak lab infrastructure, and a lack of political prioritization. In many of these settings, hepatitis programs receive limited financing and are not well integrated into broader universal health coverage frameworks. The contrast between high- and low-performing countries highlights several key lessons: strong leadership and political commitment, universal access to affordable diagnostics and treatment,

integration into primary care, innovative financing (such as local drug production), and data-driven planning are all essential components of a successful elimination strategy.

To accelerate progress, the global community must commit to a set of strategic actions. Strengthening immunization systems particularly ensuring the timely birth dose remains foundational. Widening the reach of point-of-care diagnostics and integrating hepatitis testing into routine visits, including antenatal and HIV care, can improve early detection. Treatment access must also be expanded by scaling up procurement of DAAs for HCV and antiviral therapies for HBV, while decentralizing treatment services to reach underserved populations. Combating stigma through community-led awareness campaigns and engagement with people living with hepatitis will be key to shifting public attitudes and increasing health-seeking behavior.

Robust surveillance systems are critical for measuring progress and guiding program planning. Governments must invest in standardized, nationwide data systems to monitor testing, treatment, and health outcomes. At the same time, high-burden countries particularly those in Asia and sub-Saharan Africa require focused international support, technical assistance, and domestic political will. Strategic partnerships with global health agencies and development banks can help close financing gaps. Long-term investment in research and innovation including for a hepatitis C vaccine, curative therapies for HBV, and new service delivery models is also essential to sustaining progress.

As we mark World Hepatitis Day 2025, the theme "Hepatitis: Let's Break It Down" reminds us that the tools to end hepatitis as a public health threat already exist. What is needed now is coordinated, people-centered, and equitable action. The barriers that prevent people from accessing prevention, diagnosis, and care are surmountable but only if we work together. With strong political commitment, adequate financing, and community engagement, the goal of hepatitis elimination by 2030 is within reach. The message is clear: hepatitis elimination cannot wait.

Dr. Anupama DS is an Associate Professor at NIMS Institute of Public Health and Governance at NIMS University, Rajasthan, Jaipur, India, with a keen interest in evidence synthesis, health policy, mixed-method research, and global governance for health.

Mr. Aniruddha Inamdar is Assistant Professor at NIMS Institute of Public Health and Governance at NIMS University, Rajasthan, Jaipur, India, with a keen interest in EU-India cooperation, international relations, and health diplomacy.

Prof. Dr Sanjay Pattanshetty is the Director of NIMS Institute of Public Health and Governance at NIMS University, Rajasthan, Jaipur, India, with a keen interest in health diplomacy, international relations, and global governance for health.