

Editorial

The Silent Epidemic : Chronic Hepatitis B and Its Global Impact

In the landscape of global health, certain diseases persist quietly, often overshadowed by more prominent health crises. Chronic Hepatitis B (CHB) is one such silent epidemic. Despite being preventable and treatable, it continues to claim over a million lives annually, primarily due to complications like cirrhosis and liver cancer. This editorial delves into the global impact of CHB, examining its prevalence, the challenges in diagnosis and treatment, and the urgent need for enhanced public health strategies.

Understanding Hepatitis B :

Hepatitis B is a viral infection that attacks the liver, leading to both acute and chronic diseases. The World Health Organization (WHO) estimates that approximately 254 million people worldwide were living with chronic hepatitis B infection in 2022, with 1.2 million new infections each year. The virus is most commonly transmitted from mother to child during birth and delivery, in early childhood, as well as through contact with blood or other body fluids during sex with an infected partner, unsafe injections, or exposures to sharp instruments.

Global Burden and Regional Disparities :

The global burden of Hepatitis B is disproportionately high in certain regions. In 2022, the WHO reported that 83% of the estimated 1.3 million deaths from viral hepatitis were attributed to Hepatitis B. The highest prevalence rates are found in the WHO Western Pacific Region and the WHO African Region, where 97 million and 65 million people are chronically infected, respectively. These regions also face significant challenges in healthcare infrastructure, leading to limited access to diagnosis and treatment.

In contrast, the WHO European Region and the Region of the Americas report significantly lower prevalence rates, highlighting the disparities in healthcare access and resources between regions.

Challenges in Diagnosis and Treatment :

One of the most pressing issues in combating chronic Hepatitis B is the low rates of diagnosis and treatment. According to the WHO, only 13% of people living with chronic Hepatitis B infection had been diagnosed by the end of 2022, and a mere 3% had received antiviral therapy. This underdiagnosis is compounded by the fact that many individuals with CHB remain asymptomatic for years, unknowingly

harboring the virus and unknowingly transmitting it to others.

The lack of widespread screening programs, especially in high-prevalence regions, exacerbates this issue. Additionally, the stigma associated with Hepatitis B, often linked to misconceptions about its transmission, further deters individuals from seeking testing and treatment.

Preventive Measures and Vaccination :

Prevention remains the most effective strategy against Hepatitis B. The Hepatitis B vaccine is safe, effective, and widely available. Vaccination within 24 hours of birth prevents the spread of the virus from mother to child, significantly reducing the risk of chronic infection.

Despite the availability of the vaccine, global coverage remains uneven. In the WHO African Region, only 18% of newborns receive the Hepatitis B birth-dose vaccination, contributing to the high prevalence of the disease in that region. Increasing vaccination rates, particularly among newborns and high-risk populations, is crucial in the fight against hepatitis B.

Innovations in Treatment :

While a cure for Hepatitis B remains elusive, significant advancements have been made in treatment options. Antiviral therapies can effectively suppress the virus, reducing the risk of liver damage and transmission. However, these treatments require lifelong adherence and do not eliminate the virus entirely.

Researchers are exploring novel approaches, including gene-editing technologies like CRISPR, to develop potential cures. For instance, scientists in Melbourne are developing an mRNA-based treatment to prevent primary liver cancer by targeting Hepatitis B infections. Early trials are promising, and the treatment aims to be administered to people with serious liver inflammation due to Hepatitis B, identified through a simple blood test. Researchers hope this method will significantly reduce the risk of developing primary liver cancer, which is increasing worldwide and often diagnosed too late for curative treatments.

The Road Ahead : Global Strategies for Hepatitis B Elimination.

To combat the silent epidemic of chronic Hepatitis B, a multifaceted approach is necessary :

Enhanced Screening and Diagnosis :

Implementing widespread screening programs, especially in high-prevalence regions, can facilitate early detection and timely treatment.

Public Awareness Campaigns : Educating the public about Hepatitis B, its transmission and the importance of vaccination can reduce stigma and encourage individuals to seek testing and treatment.

Strengthening Healthcare Infrastructure : Investing in healthcare systems, particularly in low-resource settings, can improve access to diagnosis, treatment, and preventive services.

International Collaboration : Governments, international organizations, and non-governmental entities must collaborate to share resources, knowledge and strategies to combat hepatitis B globally.

Research and Development : Continued investment in research is essential to develop new treatments and, ultimately, a cure for Hepatitis B.

CONCLUSION

Chronic hepatitis B remains a significant global health challenge, silently affecting millions and claiming over a million lives annually. While progress has been made in prevention and treatment, much remains to be done. By enhancing screening, increasing vaccination coverage, and investing in research and healthcare infrastructure, the global community can work towards eliminating Hepatitis B and reducing its impact on future generations. The time to act is now, for inaction will only allow this silent epidemic to continue its devastating course.

FURTHER READING

- 1 World Health Organization (2024). WHO sounds alarm on viral hepatitis infections claiming 3500 lives each day. Retrieved from WHO.
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- 4 Hepatitis B Foundation (ND). Hepatitis B Facts and Figures. Retrieved from Hepatitis B Foundation.
- 5 Verywell Health (2022). Understanding If There's a Cure for Hepatitis B. Retrieved from Verywell Health.
- 6 Herald Sun (2022). Liver cancer could be stopped by 'assassin' treatment. Retrieved from Herald Sun.

Hony Editor, JIMA

Kakali Sen