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EDITORIAL

Toward Global Viral Hepatitis Eradication by 2030: Challenges and Strategies

Avances hacia la erradicación mundial de las hepatitis virales en 2030: retos y estrategias

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Viral hepatitis remains a global health challenge, causing millions of chronic infections and deaths worldwide. The impact of hepatitis B and C virus (HBV and HCV, respectively) is particularly concerning, as these silent killers slowly damage the liver, often leading to cirrhosis, liver cancer, and ultimately, death. It is considered that viral hepatitis is responsible for millions of deaths, comparable to the combined mortality of tuberculosis, HIV/AIDS, and malaria. This public health threat disproportionately affects vulnerable populations and those individuals with limited healthcare access. In response to this crisis, the World Health Organization (WHO) set an ambitious goal in 2016: ''to eliminate viral hepatitis as a public health threat by 2030''. The expected objectives are: a 90% reduction in new infections, a 65% decrease in mortality, a 90% increase in diagnosis, and an 80% rise in treatment rates.[1,2]

Over the past decade, substantial progress has been made in the fight against viral hepatitis. Notable achievements include the widespread adoption of HBV vaccination programs, particularly among infants, leading to a significant reduction in new infections; and the development of a direct-acting antiviral (DAA) agent for HCV, offering cure rates exceeding 95%. The use of easy-to-manage and safe pan-genotypic regimens not only provides effective treatment options but also the most powerful opportunity to achieve HCV elimination. These two advances have transformed the landscape of hepatitis care and treatment, offering hope, and improving prospects for viral hepatitis eradication worldwide; however, these measures alone are insufficient. Clear knowledge of epidemiology, with the identification of infected individuals, linkage to treatment administration structure, and surveillance programs after viral eradication for people with advanced liver disease are the key elements in the so-called ''cascade of care''.[3] Therefore, the Hepatitis Plan provides goal-oriented objectives and strategies that can be implemented by a broad mix of stakeholders at all levels and across public and private sectors. Based on global goals and targets, countries have developed their own programs, tailored to the country's viral hepatitis epidemiology, healthcare system, and financial resources.[1,2]

The following are the main strategies to be implemented to meet the global objectives:

Integrated Services: combining hepatitis services with existing healthcare platforms.

Community Engagement: training affected communities in the planning and delivery of healthcare services.

Surveillance and Data: implementing strong monitoring systems to track progress and identify areas requiring intervention and allocate resources in an informed manner.

International Collaboration: sharing best practices, technologies, and expertise will expedite progress toward elimination.

The COVID-19 pandemic has added an extra layer of complexity to the fight against viral hepatitis, with the

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disruption of essential health services and limited access to hospital care. This global emergency has made patient follow-up impossible for a long time. In turn, access to treatment has been affected, and screening campaigns have become more difficult to implement.[4] Furthermore, the pandemic has exacerbated existing health and social inequities, disproportionately affecting populations at risk for viral hepatitis, HIV, and sexually transmitted infections. However, innovative approaches to healthcare delivery have emerged during the COVID-19 pandemic, such as telemedicine, self-test and home collection kits, multimonth drug refills, and increased contact tracing capacity. These adaptations can be leveraged and made more sustainable and effective in achieving the goal of eliminating viral hepatitis.

Despite efforts to achieve the WHO global hepatitis elimination target, this goal is, to date, not attainable, and this is why in some cases the elimination of hepatitis by 2050 has begun to be considered.[1] Achieving elimination in a well-defined group or context currently seems more feasible and verifiable than implementing a macroelimination plan. Since 2017, the European Association for the Study of the Liver (EASL) has adopted a stepwise microelimination strategy as a valid alternative, ultimately leading to macroelimination.[1,5,6] Conceivable target populations for microelimination, to be defined based on the country's epidemiology, could include indigenous communities, birth cohorts with high viral hepatitis prevalence, hemodialysis patients, coinfected people, migrants from high-prevalence countries, persons who inject drugs (PWID), people with hemophilia and other inherited blood disorders, men who have sex with men (MSM), prisoners and transplant recipients.

Since PWID are the main drivers of HCV transmission in Western countries, careful consideration is required. After infection, these individuals continue to be exposed to the virus and constitute an active reservoir. Numerous theoretical modeling studies have explored the potential impact of HCV treatment on PWID. Even before the availability of DAAs, HCV treatment among active injection drug users has been associated with a reduction in viral transmission and prevalence of infection. However, previous guidelines did not recommend treatment of this population due to concerns about poor adherence, high reinfection rates, interferon toxicity, and ribavirin teratogenicity. With the advent of DAAs, the landscape has changed dramatically and HCV treatment as prevention has become a feasible strategy. PWID quickly moved from being at the bottom of the list to becoming a target group that should be treated to reduce the viral reservoir. However, it is important to keep in mind that treatment in these populations must be accompanied by other concomitant harm reduction strategies, such as needle and syringe programs or opioid substitution therapy to eliminate the potential risk of reinfection.[3]

Concerning the local situation, in 2022, Argentina enacted the National Law for the Comprehensive Response to HIV, viral hepatitis, other sexually transmitted diseases, and tuberculosis (Law 27675). While this law aims to facilitate access to treatments and underscores the importance of diagnosis during pregnancy, it is vital to acknowledge that it falls short. The greatest challenge lies in the fact that a substantial number of people in our country are unaware of their infection status. Moreover, disparities and vulnerabilities within our society highlight the need to address not only access to care but also the imperative for increased awareness, education, and outreach to effectively reach all affected communities.

In summary, eliminating viral hepatitis by 2030 is an ambitious goal that requires the collective effort of governments, healthcare providers, civil society, and international organizations. While progress is evident, significant challenges persist in the quest for viral hepatitis elimination, such as, improving awareness and reducing discrimination against HCV-positive individuals, ensuring improved and affordable tests and treatment; developing an HCV vaccine and allocating sustained and increased funding.[4] Inaction comes at a high cost, with millions of lives at risk. Eliminating viral hepatitis is not only a public health imperative but also a testament to the commitment to global health equity. Success will demonstrate what can be achieved through global collaboration and dedication to a common goal. While the 2030 global target remains the challenge, microelimination strategies offer a viable pathway to improving the lives of millions of people around the world. The COVID-19 pandemic has posed challenges and opportunities in the fight against viral hepatitis, highlighting the need for innovative and adaptable approaches to healthcare delivery. Continued innovation is essential to further the fight against infectious diseases that threaten public health.

References

1. Mangia A, Cotugno R, Cocomazzi G, Squillante MM, Piazzolla V. Hepatitis C virus micro-elimination: Where do we stand? World J Gastroenterol. Apr 28 2021;27:1728–37, http://dx.doi.org/10.3748/wjg.v27.i16.1728.
2. Black AP, Wallace J, Binka M, Butt ZA. The challenges of viral hepatitis elimination: a global response to a global problem. BMC Public Health. Jun 1 2023;23:1042, http://dx.doi.org/10.1186/s12889-023-15960-w.
3. Lombardi A, Mondelli MU. Hepatitis ESGfV. Hepatitis C: Is eradication possible? Liver Int. Mar 2019;39:416–26, http://dx.doi.org/10.1111/liv.14011.
4. Services. USDoHaH. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021-2025). Washington, DC. 2020;.
5. World Health Organization. Global progress report on HIV, viral hepatitis and sexually transmitted infections, 2021: accountability for the global health sector strategies 2016-2021: actions for impact. World Health Organization. 2021;.
6. Lazarus JV, Safreed-Harmon K, Thursz MR, et al. The Micro-Elimination Approach to Eliminating Hepatitis C: Strategic and Operational Considerations. Semin Liver Dis. Aug 2018;38:181–92, http://dx.doi.org/10.1055/s-0038-1666841.