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SVR and the global elimination goals for hepatitis C.

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Introduction

Hepatitis C virus (HCV) infection remains a significant global health challenge, affecting an estimated 58 million people worldwide. Despite being curable, HCV continues to cause substantial morbidity and mortality, largely due to underdiagnosis and limited access to treatment. In response, the World Health Organization (WHO) launched an ambitious plan to eliminate viral hepatitis as a public health threat by 2030. Central to this strategy is the concept of Sustained Virologic Response (SVR)—a clinical milestone that signifies the successful eradication of the virus from the body. Sustained Virologic Response (SVR) refers to the absence of detectable HCV RNA in a patient's blood 12 to 24 weeks after completing antiviral therapy. Achieving SVR is considered a cure, as it dramatically reduces the risk of liver-related complications such as cirrhosis and hepatocellular carcinoma [1, 2].

SVR is not just a clinical endpoint it's a public health metric. High SVR rates indicate effective treatment regimens and are essential for measuring progress toward HCV elimination. In 2016, WHO introduced the Global Health Sector Strategy (GHSS) on viral hepatitis, setting the following targets for HCV elimination by 2030. These goals were reaffirmed in the updated GHSS 2022–2030, which emphasizes integrated approaches across HIV, hepatitis, and sexually transmitted infections [3, 4].

The advent of Direct-Acting Antivirals (DAAs) revolutionized HCV treatment. These oral medications offer: Recent studies show that pan-genotypic regimens like sofosbuvir/velpatasvir (SOF/VEL) achieve SVR rates of 98.9%, even in patients with challenging conditions such as genotype 3 and cirrhosis4. SVR is the cornerstone of elimination efforts. It serves as: A measure of treatment success: High SVR rates validate the effectiveness of national treatment programs [5, 6].

A predictor of long-term outcomes: SVR reduces liver-related mortality and the incidence of hepatocellular carcinoma. **A public health indicator**: Tracking SVR rates helps assess progress toward WHO's elimination targets. The **SVR10K study**, presented at EASL 2025, analyzed over 7,000 patients treated with SOF/VEL across Asia, Latin America, the Middle East, and Europe. Key findings include: Consistent efficacy across genotypes and demographics. Improved outcomes with early treatment initiation [7, 8].

Egypt, once home to the highest HCV prevalence globally, has become a model for elimination. This study underscores the global applicability of current HCV treatment guidelines and the importance of minimizing delays in therapy. Despite the efficacy of DAAs, several challenges hinder SVR achievement: Many patients remain unaware of their infection due to asymptomatic progression. In low- and middle-income countries, cost and infrastructure barriers restrict treatment availability. Misconceptions about transmission and treatment deter patients from seeking care [9, 10].

Conclusion

As of 2025, progress toward HCV elimination is uneven. While some countries have made significant strides, others lag due to resource constraints and policy gaps. The WHO's **Global Hepatitis Report 2024** calls for urgent action, especially in low- and middle-income regions. SVR remains the linchpin of elimination efforts. By

scaling up access to DAAs, enhancing surveillance, and fostering global collaboration, the vision of a hepatitis C-free world can become a reality.

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