A global investment framework for hepatitis C elimination

Alisa Pedrana1, Jessica Howell1, Nick Scott1, Sophia Schroeder1, Christian Kuschel1, David Wilson1, Jeffrey Lazarus2, Ricardo Baptista Leite3, Rifat Atun4, Sharon Hutchinson5, Margaret Hellard1.

1Disease Elimination Program, Public Health Discipline, Burnet Institute, Melbourne, Australia; 2University of Barcelona, Barcelona Institute for Global Health, Barcelona, Spain; 3University of California, University of Lisbon, Portugal; 4Harvard University, Department of Global Health and Population, Boston, United States; 5Glasgow Caledonian University, Glasgow, United Kingdom, on behalf of the WISH Viral Hepatitis Forum.

Background

Direct-acting antivirals (DAAs) make it possible to eliminate hepatitis C as a public health threat by 2030. However, investment in hepatitis C programs has been slow. One potential explanation is the lack of a strategic approach to investment in prevention, testing and treatment activities to achieve elimination. We proposed an investment framework to guide policymakers and funders in making investment decisions that will enable hepatitis C elimination.

Methods

Our framework utilizes a public health approach to identify national activities aimed at reducing hepatitis C transmission, morbidity, and mortality, and international activities necessary to provide an enabling environment for countries to achieve maximum effectiveness. Key enablers were highlighted including public support, community mobilization, and skilled workforces that can facilitate the rapid scale-up of national activities. We also modelled the health and economic (direct and indirect) benefits of scaling up hepatitis C elimination activities to meet the WHO global elimination targets by 2030.

Investment framework for viral hepatitis elimination

Results

Hepatitis C elimination becomes cost saving by 2030

- Between 2018 and 2030, the total cost of elimination is estimated at $51 billion, with minimal ongoing cost beyond 2030
- This compares to $343.2 billion expected expenditure on HIV, Tuberculosis and Malaria over same time period

Elimination strategy - 90% of people living with hepatitis C diagnosed and 80% of diagnosed people started on treatment by 2030
Progress strategy – 45% of people living with hepatitis C diagnosed and 80% of diagnosed people started on treatment by 2030

Investing in viral hepatitis elimination provides multiple economic benefits

- Direct benefits - prevent 12 million new hepatitis C infections and 2.1 million deaths
- Indirect economic benefits - cumulative mortality and morbidity averted leads to larger, more productive workforce

Investment in hepatitis C programs to achieve elimination can be both cost-effective and becomes cost-saving by 2027. An investment case can help raise the profile of HCV elimination and build political commitment to help mobilize domestic, private and international resources to support countries to implement elimination programs.

Conclusion

Investment in hepatitis C programs to achieve elimination can be both cost-effective and becomes cost-saving by 2027. An investment case can help raise the profile of HCV elimination and build political commitment to help mobilize domestic, private and international resources to support countries to implement elimination programs.

How can we eliminate viral hepatitis by 2030?

- Increase access to low-cost diagnostics and treatment through advocacy, international support, private partnerships and community mobilization
- Integrate activities into existing health programs to strengthen infrastructure, improve co-ordination and optimize resource allocation
- Strengthen health systems, including improving workforce skills and investments in technology and surveillance systems
- Use country-specific investment cases to mobilize domestic, private and international resources and optimize allocation
- Build political commitment and support for VH elimination
- Embed in the agenda for sustainable development – UHC

Further information:
Alisa Pedrana; email alisa.pedrana@burnet.edu.au

Disclaimer of Interest Statement: The authors acknowledge funding support from Qatar Foundation to support the work and to facilitate the WISH Viral Hepatitis Forum. The Burnet also received funding support from GlaxoSmithKline, GSK and Merck for investigator initiated research.

burnet.edu.au