

Enhanced treatment for hepatitis C could cut prevalence by 80%

December 1 2015, by Ziba Kashef



Novel antiviral therapies for hepatitis C could reduce the prevalence of the blood-borne infection by more than 80%, according to an analysis by Yale researchers. The finding raises the possibility of greatly reducing, and even eliminating, hepatitis C in the United States if enhanced screening and treatment efforts target high-risk populations.



The study published online Dec. 1 in Clinical Infectious Diseases.

Recently approved direct-acting antiviral medications have transformed treatment for individuals with hepatitis C virus (HCV), and are effective in over 90% of cases. The antivirals have the potential to significantly reduce or eliminate HCV in two ways: through treatment to prevent HCV-related complications and deaths, and by preventing further transmission among injection-drug users.

To study the effects of the new treatments on the U.S. population, the Yale team developed a transmission model to predict the effect of treatment with direct-acting antivirals over time. They also quantified the impact of use of the antivirals at current and at enhanced screening and treatment rates. Their analysis included outcomes such as cirrhosis, liver transplants, and mortality.

"The key finding is that a four-fold increase to the number of patients treated each year could virtually eliminate HCV from the non-injecting population within a decade," said Jeffrey Townsend, associate professor of public health and senior author of the study. More modest increases in screening and treatment would also markedly reduce new infections and mortality, Townsend and co-authors determined.

The researchers also noted that expanded screening and treatment alone would not be sufficient to reduce HCV among individuals most at risk—injection-drug users. "In order to completely eliminate HCV, efforts to access that community are extremely important," said David Durham, lead author of the study. Such efforts might include enhanced screening and treatment with the new therapies in combination with targeted behavioral interventions such as needle-exchange programs or opioid substitution therapy.

"We should be very optimistic about the prospect of eliminating HCV as



a disease within the U.S. using these direct acting antivirals, especially if they are combined with targeted behavioral interventions to reduce transmission," said Townsend. However, he added, "due to the currently high cost of these treatments, as a society we need to think carefully about how to make that happen."

More information: The Impact of Enhanced Screening and Treatment on Hepatitis C in the United States. *Clin Infect Dis.* first published online November 30, 2015 DOI: 10.1093/cid/civ894

Provided by Yale University

Citation: Enhanced treatment for hepatitis C could cut prevalence by 80% (2015, December 1) retrieved 3 May 2024 from

https://medicalxpress.com/news/2015-12-treatment-hepatitis-prevalence.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.