Canada likely to miss WHO's hepatitis C elimination target, research shows

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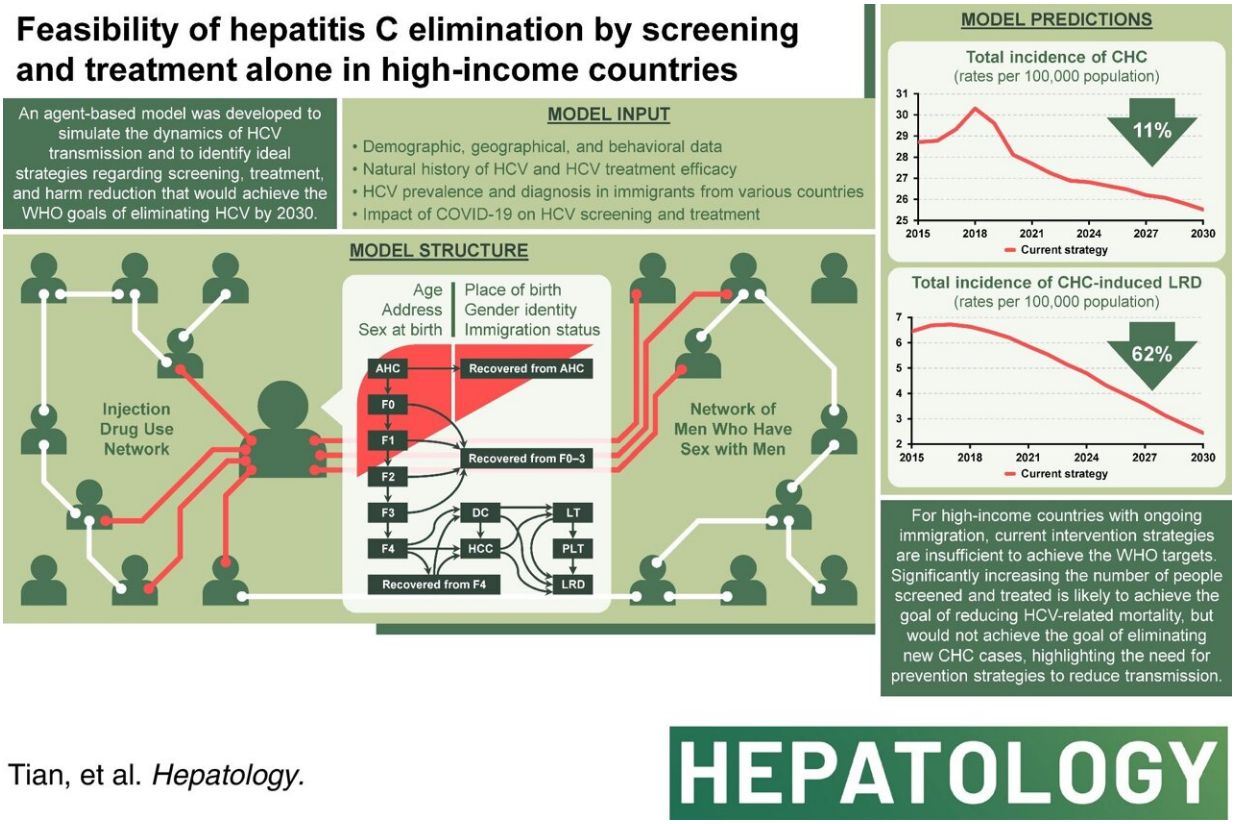

Credit: *Hepatology* (2024). DOI: 10.1097/HEP.0000000000000779

Canada will not reach the original World Health Organization's (WHO) target of eliminating the hepatitis C virus (HCV) by 2030 and lags in comparison to other developed countries, a new study led by researchers

at the University of Waterloo has found.

HCV is an infection that poses a major public health threat that affects an estimated 250,000 Canadians—despite having a highly effective medication.

When gone unscreened, HCV is a highly debilitating infection that causes liver failure and could lead to death. Due to its asymptomatic nature, it is also known as a silent killer to those infected with the virus. The infection typically spreads through contact with an infected person's blood, most commonly through needle sharing.

"There is no model in Canada to track the elimination process," said Dr. William W.L. Wong, associate professor at Waterloo's School of Pharmacy, which offers the most innovative pharmacy curriculum in North America by integrating biomedical and pharmacy science with clinical, behavioral and social sciences to emphasize patient-focused care.

Wong, the study's lead author and newly appointed 2024 Applied Public Health Chair, added, "We are not likely to reach the WHO goal of eliminating HCV by 2030 if screening and treatment are the only focus for policymakers. We need to screen for the disease earlier and encourage harm-reduction strategies be put in place. If patients do not change high-risk behaviors, such as sharing needles, HCV re-infection can be high even after they were cured the first time."

Wong used a novel mathematical modeling system to help determine how Canada's progress would fare to eradicate HCV. Based on Wong's model, reaching the WHO goals by 2030 will be impossible if the current status quo treatment and screening policies don't change.

"Picture a game, such as The Sims, where you build a dynamic

population," Wong said. "Similar to the game, we simulated Ontario's population, including those with HCV. We looked at how the disease is transmitted and how it moves around the population with different risk activities triggered."

The researchers suggest that policymakers should consider harm-reduction strategies such as implementing clean needle distributions, reducing the sharing of drug use equipment and other high-risk exposures.

The researchers will be integrating future work with other sexually transmitted and blood-borne infections, including hepatitis B virus, human papillomavirus and HIV.

The study, "Feasibility of hepatitis C elimination by screening and treatment alone in high-income countries," was recently published in the journal *Hepatology*.

More information: Feng Tian et al, Feasibility of hepatitis C elimination by screening and treatment alone in high-income countries, *Hepatology* (2024). DOI: 10.1097/HEP.0000000000000779

Provided by University of Waterloo