The Impact of Current Opioid Agonist Therapy on Hepatitis C Virus Treatment Initiation Among People Who Use Drugs From the Direct-acting Antiviral (DAA) Era: A Population-Based Study

SUMMARY

Why was the study done?

Evidence that OAT is associated with increased odds of HCV treatment initiation among PWUD has been previously found. However, prior studies were mainly in small clinical or observational cohorts, and looked at impact of ever receiving OAT or recently receiving OAT, not at the impact of currently receiving OAT on HCV treatment initiation. This distinction is important, since many models of HCV treatment for PWUD have been proposed, where HCV treatment is co-located with OAT in the same clinic. So understanding if currently receiving OAT is associated with increased odds of HCV initiation could provide further evidence to support implementation of these models of care.

What were the results of the study?

People who use drugs (PWUD) who are living with chronic hepatitis C virus (HCV) infection are 1.84 times more likely to start Direct Acting Antiviral (DAA) treatment while they are currently receiving Opioid Agonist Therapy (OAT), compared to PWUD living with HCV who are not on OAT. We looked at prescription medication dispensation data from 13,803 PWUD with chronic HCV infection in British Columbia (BC) in this study. Specifically, we focused on the period of time when the new DAA medications to treat HCV infection were available in BC, and looked at dispensations of medications for OAT (e.g. methadone, buprenorphine) and DAA medications for HCV treatment. We used a time varying variable for OAT medications, so that the impact of ***currently*** receiving OAT on HCV treatment initiation could be determined.

How can these findings be used?

This study in a population-level linked administrative dataset found that current OAT is associated with a significantly higher likelihood of HCV treatment initiation among PWUD. Overall, among PWUD living with HCV infection and ***not*** currently on OAT, 22% initiated HCV treatment. Compared to PWUD living with HCV infection and ***currently*** on OAT, 47% initiated HCV treatment. HCV treatment has been found to lead to substantially lower risk of liver-related morbidity and mortality, as well as reduced extra-hepatic morbidity and mortality. DAA treatment for HCV is also associated with lower drug-related mortality among people who inject drugs (PWID) who are living with HCV infection. These findings suggest that enhanced integration between substance use care and HCV treatment will most likely lead to increased HCV treatment initiation among PWUD, which would therefore lead to potential improvements in the overall health of PWUD and PWID.

What is the reference for this study?

Sofia R Bartlett, Stanley Wong, Amanda Yu, Margo Pearce, Julia MacIsaac, Susan Nouch, Prince Adu, James Wilton, Hasina Samji, Emilia Clementi, Hector Velasquez, Dahn Jeong, Mawuena Binka, Maria Alvarez, Jason Wong, Jane Buxton, Mel Krajden, Naveed Z Janjua, The Impact of Current Opioid Agonist Therapy on Hepatitis C Virus Treatment Initiation Among People Who Use Drugs From the Direct-acting Antiviral (DAA) Era: A Population-Based Study, *Clinical Infectious Diseases*, 2021;, ciab546, https://doi.org/10.1093/cid/ciab546

Infographic: