HEPATITIS C CASCADE OF CARE AMONG PEOPLE WHO INJECT DRUGS IN VANCOUVER, CANADA

Authors: Young S1, Wood E1,2, Milloy MJ1,2, DeBeck K2,3, Dobrer S2, Nosova E2, Kerr T1,2, Hayashi K2,4

1. Department of Medicine, University of British Columbia, Vancouver, BC, CANADA, V5Z 1M9
2. British Columbia Centre on Substance Use, British Columbia Centre for Excellence in HIV/AIDS, St. Paul’s Hospital, 608-1081 Burrard Street, Vancouver, BC, CANADA, V6Z 1Y6
3. School of Population and Public Health, University of British Columbia, 5804 Fairview Avenue, Vancouver, BC, CANADA, V6T 1Z3
4. Faculty of Health Sciences, Simon Fraser University, Blusson Hall, 8888 University Drive, Burnaby, BC. CANADA, V5A 1S6

Background: People who inject drugs (PWID) have high rates of Hepatitis C Virus (HCV) infection and account for the majority of new infections in developed nations. Treatment of PWID with chronic HCV has been highlighted as a key step in controlling the spread of HCV infection. However, little is known about the rates of diagnosis and treatment for HCV among PWID. Therefore, this study sought to characterize the cascade of HCV care among PWID in Vancouver, Canada.

Methods: Data were derived from three prospective cohort studies of PWID in Vancouver, Canada between December 2005 and May 2015. We identified the progression of participants through five steps in the cascade of care: (1) chronic HCV; (2) linkage to HCV care; (3) disease staging; (4) initiation of treatment; and (5) completion of treatment. Predictors of undergoing disease staging were identified using a multivariable extended Cox regression model.

Results: Among 1571 participants with chronic HCV, 1359 (86.5%) had ever been linked to care, 1257 (80.0%) had undergone disease staging, 163 (10.4%) had ever started HCV treatment, and 71 (4.5%) had ever completed treatment. In multivariable analyses, HIV seropositivity, use of methadone maintenance therapy, and hospitalization in the past 6 months were independently and positively associated with undergoing disease staging (all P < 0.001), while daily heroin injection was independently and negatively associated with undergoing disease staging (P < 0.001).

Conclusion: Among this cohort of PWID, while a large proportion had been linked to HCV care, few had been started on or completed treatment for HCV. Our findings highlight the importance of interventions targeting both physicians and patients to improve education surrounding the prescribing of HCV treatment for PWID with active substance use.
Disclosure of interest statement: The study was supported by the US National Institutes of Health (VIDUS & ARYS: U01DA038886, ACCESS: R01DA021525). This research was undertaken, in part, thanks to funding from the Canada Research Chairs program through a Tier 1 Canada Research Chair in Inner City Medicine which supports Dr. Evan Wood, as well as a CIHR Foundation grant supporting Dr. Thomas Kerr (FDN-148476). Dr. Kora DeBeck is supported by a Michael Smith Foundation for Health Research (MSFHR) / St. Paul’s Hospital Foundation– Providence Health Care Career Scholar Award and a Canadian Institutes of Health Research (CIHR) New Investigator Award. Dr. Hayashi is supported by a CIHR New Investigator Award (MSH-141971). Dr. Milloy is supported by a CIHR New Investigator Award, an MSFHR Scholar Award and the US NIH (R01-DA0251525). His institution has received an unstructured gift from NG Biomed, Ltd., to support his research.