

## CHANGES IN INJECTION DRUG USE AMONG RECENTLY HEPATITIS C VIRUS-INFECTED PERSONS WHO INJECT DRUGS OFFERED TREATMENT IN MONTREAL, CANADA

Artenie AA<sup>1,2</sup>, Zang G<sup>2</sup>, Jutras-Aswad D<sup>2,3</sup>, Turcotte M-E<sup>2</sup>, Bouchard R<sup>2</sup>, Puzhko S<sup>2,4</sup>, Deschenes E<sup>2</sup>, Bruneau J<sup>2,5</sup>

<sup>1</sup>Department of Epidemiology, School of Public Health, Université de Montreal;

<sup>2</sup>Research Centre, Centre Hospitalier de l'Université de Montreal; <sup>3</sup>Department of Psychiatry, Faculty of Medicine, Université de Montréal; <sup>4</sup>Department of Family Medicine, Faculty of Medicine, McGill University; <sup>5</sup>Department of Family and Emergency Medicine, Faculty of Medicine, Université de Montréal

**Introduction:** It is unclear whether offering hepatitis C virus (HCV) treatment to people who inject drugs (PWID) can positively impact injection drug use behaviours. This study examined changes in injection drug use among recently HCV-infected PWID systematically referred for HCV clinical assessment and treatment and offered targeted health care services, over the course of one year.

**Methods:** The study sample included PWID with documented HCV seroconversion recruited and followed-up semi-annually at least twice in IMPACT (2007- 2014), a longitudinal prospective study in Montreal, Canada. Participants with contra-indications to treatment due to severe physical or psychiatric co-morbidity were offered targeted health care services. Pegylated interferon-alpha (12–24weeks) was offered to all other participants who did not spontaneously resolve their infection. At each study visit, data were collected on socio-demographic factors, drug use patterns and health care services use. Logistic regression was used to assess changes in injection drug use at one-year follow-up.

**Results:** Of the 68 eligible participants (mean age: 35.6; 75.0% male), 26.5% received treatment [(RT), Sustained virologic response: 61.1%], 25% spontaneously resolved their infection (SR), 13.2% had a contra-indication (CI) and 35.3% refused (R). The R group was less likely to report regular medical care during follow-up relative to the other three groups ( $p < 0.001$ ). In multivariate analyses adjusting for age, gender and injection drug use at baseline, the RT [Adjusted odds ratio (AOR): 0.21; 95%Confidence interval (CI): 0.04, 1.05], SR (AOR: 0.21; 95%CI: 0.04, 1.07), and CI (AOR: 0.14; 95%CI: 0.02, 0.95) groups were less likely to report injection drug use compared to the R group at follow-up.

**Conclusion:** PWID who received treatment, spontaneously resolved their infection or presented with a treatment contra-indication reported reduced injection drug use at follow-up relative to those who refused therapy. Greater exposure to regular medical care during follow-up could partially explain these changes.

**Disclosure of Interest Statement:** Nothing to declare.