# HEPATITIS C TREATMENT INITIATION AMONG PEOPLE WHO INJECT DRUGS IN AUSTRALIA: TIME-TO-EVENT ANALYSIS OF A LONGITUDINAL COHORT

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## Background:

Despite the universal access to direct acting antivirals (DAAs) in Australia since 2016, the treatment uptake of DAAs remains low. To achieve WHO hepatitis C elimination targets in Australia, transformation of the health system tailored to people who inject drugs are needed. Our study aimed to understand the social and drug use characteristics influencing treatment initiation, and the time-to-treatment-initiation to inform strategies to improve hepatitis C care.

## Methods:

Our study is a secondary analysis of the SuperMIX dataset, which is the longest-standing cohort study of people who inject drugs in Australia and involves routine data collection on the characteristics of participants and their health outcomes over more than a decade. Time-to-event analysis using Cox regression methods, was performed for the data collected between 2009 and 2021, among a selected cohort of hepatitis C-positive participants.

#### **Results:**

Among 243 participants who were ever tested positive for active hepatitis C infection, 77 people (31.7%) reported treatment initiation while 166 people (68.3%) did not initiate treatment. The median time-to-treatment from the time of hepatitis C positive result was around 8.1 years. After accounting for the delay in treatment initiation while waiting for DAAs to become available, the adjusted mean time-to-treatment was 2.4 years.

Cox regression analysis showed treatment initiation was positively associated with employment (HR 2.0, p=0.018), Opioid Agonist Therapy (HR 1.9, p=0.014) and engagement in health or welfare services (HR 2.0, p=0.017), whilst negatively associated with injecting 1-3 times a week (HR 0.5, p 0.048).

# **Conclusion:**

There is considerable delay in treatment initiation of hepatitis C in Australia. Strategies to improve engagement with health services including incorporating employment as well as drug and alcohol services into routine hepatitis care are needed.

# **Disclosure of Interest Statement:**

No conflict of interest.