ESTIMATING TRENDS IN HEPATITIS C INCIDENCE AMONG INDIVIDUALS ATTENDING PRIMARY CARE CLINICS THAT SPECIALISE IN THE CARE OF PEOPLE WHO INJECT DRUGS IN AUSTRALIA BETWEEN 2009 AND 2019

Authors:
Wilkinson AL[1,2], van Santen DK[1,2], Traeger M[1,2], Harney B[1,2], Doyle J[1,2], El-Hayek C[1], Spelman T[1], Howell J[1], Sacks-Davis R[1,2], Asselin J[1], Scott N[1], Donovan B[3], Guy R[3], Stoové M[1,2], Hellard M[1,2,4,5], Pedrana A[1,2], on behalf of EC Partnership and ACCESS.

[1] Department of Disease Elimination, Burnet Institute, Melbourne, Australia
[2] School of Population Health and Preventive Medicine, Monash University, Melbourne, Australia
[3] Kirby Institute, UNSW, Sydney, Australia
[4] Infectious Diseases Department, Alfred Health, Melbourne, Australia.
[5] Doherty Institute and Melbourne School of Population and Global Health, University of Melbourne

Background: People who inject drugs (PWID) are a key population at risk for hepatitis C virus (HCV) infection. However, little is known about HCV incidence trends in PWID and whether DAAs are having an impact on halting transmission. Therefore, we aimed to assess HCV incidence trends within primary care clinics that offer general care and services specifically for people who inject drugs.

Methods: We used linked data from individuals attending 13 primary care clinics, captured by the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance between 2009 and 2019. Follow-up began on the date of first HCV-antibody negative result and ended on the date of incident infection or last recorded HCV-antibody negative. Infection date was the midpoint date between the last negative and first positive HCV-antibody or HCV RNA. A Poisson model calculated incidence trends.

Results: A total of 5,978 individuals contributed 16,896 person-years (py) of follow-up and 212 incident infections. At the first HCV antibody test observed, median age was 30 years (interquartile range [IQR] 24-38). Median inter-test interval was 1.3 years (IQR 0.5-2.6). Median HCV seroconversion interval was 2.8 years (IQR 0.9-3.2). HCV incidence changed over calendar time (p-value<0.001), remaining stable between 2009 and 2013 and declining afterwards. HCV incidence was 1.9 /100 py in 2009, 1.7 /100 py 2014 and 0.3 /100 py in 2019.

Conclusions: A major decrease in HCV incidence was observed among individuals attending primary care clinics between 2014 and 2019 in Australia. Careful interpretation however is needed; anticipation and the introduction of access to DAAs in 2016 influenced testing and use of test interval midpoint as event date means cases may have shifted into the pre-DAA era. Because these trends are being used to monitor progress towards elimination, future work will aim to understand the population these clinics represent and the effect of methodological decisions on incidence estimates.

Disclosure of Interest Statement: ***See example below:***
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