

# RAPID DECLINE IN THE POPULATION PREVALENCE OF CHRONIC HCV AMONG PEOPLE WHO INJECT DRUGS ASSOCIATED WITH SCALE-UP OF DIRECT-ACTING ANTIVIRAL THERAPY IN SCOTLAND: REAL-WORLD DATA

Palmateer NE<sup>1,2</sup>, McAuley A<sup>1,2</sup>, Barclay S<sup>1,3</sup>, Dillon J<sup>4</sup>, Shepherd S<sup>5</sup>, Gunson R<sup>5</sup>, Goldberg D<sup>2,1</sup>, Hickman M<sup>6</sup>, Hutchinson SJ<sup>1,2</sup>

<sup>1</sup>Glasgow Caledonian University

<sup>2</sup>Public Health Scotland

<sup>3</sup>Glasgow Royal Infirmary, Glasgow, UK

<sup>4</sup>University of Dundee

<sup>5</sup>West of Scotland Specialist Virology Centre

<sup>6</sup>University of Bristol

## Background:

We previously demonstrated the early impact of a natural experiment involving major scale-up of direct-acting antivirals (DAAs) among people who inject drugs (PWID) in the Tayside region of Scotland, compared to other areas of Scotland with no major scale-up. We found a greater decline in chronic HCV prevalence in Tayside than elsewhere in Scotland – falling by approximately a third, from 34% to 24%, in Tayside, compared to a decline from 45% to 40% in Greater Glasgow & Clyde (GGC) and no change (27%) in the rest of Scotland (RoS), between 2013-14 and 2017-18.

## Methods:

The Needle Exchange Surveillance Initiative is a national survey of PWID conducted biennially across mainland Scotland, involving a questionnaire and blood spot sample (tested anonymously for HCV-antibodies and RNA). Data from six surveys, conducted between 2010 and 2017-18, were previously used to examine uptake of HCV therapy and chronic prevalence. Here, we present the most recent data (2019-20).

## Results:

Uptake of HCV therapy (last year) in Tayside, GGC and RoS increased from 43% to 53%, 16% to 42%, and 23% to 24%, respectively, between 2017-18 and 2019-20. Chronic HCV prevalence declined by 58% (from 24% to 10%), 53% (from 40% to 19%), and 22% (from 27% to 21%) in Tayside, GGC and RoS over the same period. Within GGC, chronic prevalence declined by 48% (from 44% to 23%) in Glasgow city centre, an area with a concentration of vulnerable and chaotic PWID.

## Conclusion:

Further scale-up of DAAs has halved chronic HCV prevalence among PWID in Tayside and GGC since 2017, including in Glasgow city centre where there is an ongoing HIV outbreak. Our findings demonstrate the feasibility and effectiveness of rapid scale-up of HCV treatment in reducing chronic HCV prevalence at population level and provide compelling evidence for other countries to plan their elimination strategies.

## Disclosure of interest:

This study is funded by the National Institute for Health Research (NIHR) Programme Grants for Applied Research programme (Grant Reference Number RP-PG-0616-20008). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care. SJH received honoraria from Gilead, unrelated to the submitted work.