



Kirby Institute

## Interventions to enhance testing, linkage to care and treatment uptake for hepatitis C virus infection among people who inject drugs: A systematic review

**Sahar Bajis<sup>1</sup>, Gregory J. Dore<sup>1</sup>, Behzad Hajarizadeh<sup>1</sup>, Evan B. Cunningham<sup>1</sup>, Lisa Maher<sup>1</sup>, Jason Grebely<sup>1</sup>**

The Kirby Institute, UNSW Sydney, Sydney, NSW, Australia

INHSU 2017, Jersey City, New York



### Background

- Globally, 20% (14 million) of people living with chronic HCV infection have been diagnosed, of which 7% have received treatment.
- HCV testing and treatment among PWID remain suboptimal
- Interventions aimed at optimising the HCV care cascade in the general population include clinician reminders to prompt testing<sup>1,2</sup>, patient navigation programmes<sup>3,4</sup> and telemedicine<sup>5</sup> to enhance linkage to care and treatment
- The aim of this review was to synthesize data on the effectiveness of interventions to improve HCV testing, linkage to care, and treatment uptake among PWID

2 1) Drainoni, ML. Am J Public Health 2012. 2) Litwin, AH. Dig Liver Dis 2012. 3) Falade-Nwulia, O J. J Viral Hepat. 2016 4) Trooskin, S. J Intern Med 2015. 5) Arora, S. N Engl J Med. 2011.

## Methods

### Eligibility criteria of included studies

Population:

PWUD or at least 50% of the study sample comprised of PWID or on OST

Intervention to enhance:

- testing for HCV antibodies and/or HCV RNA and/or
- linkage to HCV care, and/or
- HCV treatment uptake (interferon or DAA)

Comparison: control group, historical comparator, convenience sampling

Outcomes:

- proportion tested and/or
- proportion linked to care
- proportion initiating treatment

---

3

## Methods

### Information sources

- Medline (Ovid 1946 – present), Embase, Global Health, Cochrane Central Register for Controlled Trials, PsycINFO, Web of Science

### Risk of bias of individual studies

- Randomised studies: Cochrane Collaboration's risk of bias tool
- Non-randomised: ROBINS-I tool

### Data analysis

- RR (95% CI) generated for each study outcome achieving outcome of interest. Characteristics of included studies summarised using tables and forestplots

---

4

## Results

- 10,116 records - 14 comparative studies were included in analysis
- 57% of studies were RCTs
- Interventions to enhance HCV testing
  - On-site testing with pre-test counselling and education
  - Dried-blood spot testing
- Interventions to enhance linkage to care
  - Facilitated referral to HCV specialist
- Interventions to enhance HCV treatment
  - Integrated care for HCV, mental health and drug use delivered by a multidisciplinary team (with or without non-invasive liver disease assessment)
- No studies in low- and middle-income countries or in the interferon-free era

---

5

## Conclusion/Implications

- A paucity of well-designed, powered RCTs and comparative studies evaluating well-defined interventions
- Integrated, onsite HCV testing and treatment of PWID in the primary care setting will remain vital in the interferon-free era
- Future research should clearly define study population (socio-demographic and injecting risk behaviour)
- Evaluations of interventions for simplified cascade of care in the DAA era are needed (i.e. test and treat)

---

6