A global systematic review of efforts to accelerate the elimination of hepatitis C through microelimination among PWID and other target populations

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BACKGROUND

What we know

- The introduction of hepatitis C virus
 (HCV) all-oral direct-acting antiviral
 therapy in 2013 galvanized WHO to
 define ambitious targets for eliminating
 HCV as a public health threat by 2030.
- Micro-elimination projects help to achieve this goal by targeting small-scale, high-risk populations.
- Through such targeting, microelimination reveals effective strategies and partnerships to guide the scale-up of national elimination efforts.

What we do not know

 What evidence exists globally to support HCV micro-elimination among high-prevalence populations?

METHODS

Search strategy

- Systematic PubMed/Medline and grey literature search from 1/1/2014 to 31/12/2020
- Conference abstract title search of relevant conferences (AASLD, APASL, ILC, INHSU, IVHEM) from 2017 to 2019
- Modelling studies excluded

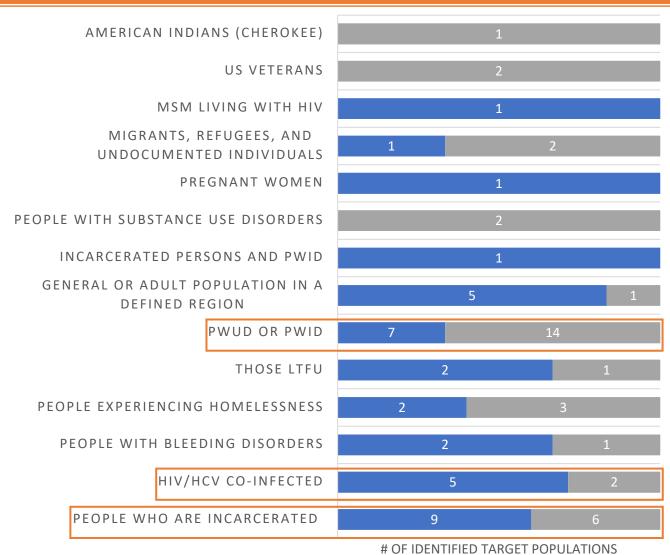
Synthesis

Inclusion of key micro-elimination components:

- Having a plan
- Specific targets
- Multi-stakeholder process
- Monitoring of outcomes

RESULTS

- 957 articles were identified and 32, as well as 28 conference abstracts, fit the inclusion criteria.
- Among the manuscripts, interventions mainly focussed on:
 - Incarcerated people (n=9)
 - People who inject drugs (PWID) (n=7)
 - People with HIV co-infection (n=5)
- Half of the conference abstracts (n=14) were PWID focused.
- Micro-elimination initiatives were reported predominantly in high-income countries (81.2%; 26/32).
- 75% of the manuscripts and conference abstracts reported at least 3 out of 4 of the micro-elimination components.
- Documented sustained virologic response (SVR) rates among included manuscripts: n=13 above 90%, n=7 between 89-80%, n=6 below 79% and n=4 below 50%.



HCV, hepatitis C virus; LTFU, lost to follow-up; MSM, men who have sex with men; PWID, people who inject drugs; PWUD, people who use drugs; US, United States.

CONCLUSION

- HCV micro-elimination is increasingly being employed as a strategy to achieve elimination targets for key sub-populations but is not yet widespread.
- Micro-elimination strategies can result in high SVR rates among those treated and contribute to reaching national elimination goals.
- Micro-elimination strategies should be scaled up and adapted to local contexts and epidemiology, and should be more widely implemented in low- and middle-income countries.

DISCLOSURE OF INTEREST STATEMENT

No funding for this project was received.