HEPATITIS C SCREENING, DIAGNOSIS, AND TREATMENT SCALE-UP AMONG PEOPLE WHO USE DRUGS: MICRO-ELIMINATION IN AN IRANIAN CITY

Authors: Alavi M^{1,2*}, Poustchi H^{2*}, Hariri S², Hajarizadeh B¹, Esmaeili A³, Nejad-Ghaderi M³, Jamalizadeh A³, Shamsizadeh A³, Talebi N³, Saeidi Z³, Abol-hasani B³, Merat S², Sohrabpour A², Grebely J¹, Dore GJ¹, Malekzadeh R²

The Kirby Institute, UNSW Sydney, Sydney, NSW, Australia¹

Liver and Pancreaticobiliary Disease Research Centre, Digestive Diseases Research Institute, Tehran University of Medical Sciences, Tehran, Iran²

School of Medicine, Rafsanjan University of Medical Sciences, Rafsanjan, Iran³

Background: WHO HCV elimination targets include increased diagnosis (90%) and treatment uptake (80%) by 2030. This study evaluated the impact of a micro-elimination intervention among people who use drugs in Rafsanjan, Iran.

Methods: This observational study is evaluating an intervention to scale-up of direct-acting antiviral (DAA) treatment to reduce HCV RNA prevalence (i.e. micro-elimination) in Rafsanjan, Iran (population 200,000). Between October 2019 and April 2021 (18 months), participants are recruited from one prison, 35 OAT clinics, four residential addiction treatment centers, one HIV clinic, and a newly established HCV clinic (integrated within existing HIV services). All people attending the study sites are invited to participate. Intervention entails on-site rapid HCV antibody testing, venepuncture sampling for HCV RNA testing (if antibody positive), and DAA dispensing for people with HCV. The uptake of HCV diagnosis and treatment and HCV RNA prevalence are compared at baseline and 12 months post-intervention.

Results: During October 2019-March 2020, 3,648 people were enrolled. Median age was 40 years (IQR 33-48), majority were male (95%), and reported a history of drug use (injecting and/or non-injecting, 89%). Overall, 6% reported a history of injecting drug use (IDU); of whom, 8% reported injecting in the past year. HCV antibody prevalence was 7% (241/3,648), including 58% (119/206), 4% (108/2,920), and 3% (14/414) among people with a history of IDU, non-injecting drug use, and no drug use, respectively. Among those with detectable HCV RNA (181/241), 97% initiated DAA therapy, including 98% (94/96), 96% (71/74), and 100% (11/11) among people with a history of IDU, non-injecting drug use, and no drug use, respectively.

Conclusion: This initiative developed a multi-stakeholder collaboration and implemented Rafsanjan's first HCV program within six months. The preliminary findings, including feasibility of recruitment model and high treatment uptake, are encouraging with regard to HCV micro-elimination.

Disclosure of Interest Statement:

JG has received research support and is a consultant for AbbVie, Cepheid, Gilead Sciences and Merck. GD has received research support and is a consultant for Gilead Sciences, Merck, and AbbVie. GD has received research support from Gilead Sciences, Merck, Bristol-Myers Squibb, and AbbVie. GD is on the speaker's bureau for Gilead Sciences, Merck, and AbbVie. GD is a member of advisory board for Gilead Sciences, Merck, and AbbVie. GD has received travel support from Gilead Sciences, Merck, and AbbVie. Other authors have no commercial relationships that might pose a conflict of interest in connection with this manuscript.

^{*}These authors contributed equally to this study