**AN INTERVENTION TO IMPROVE HCV TESTING, LINKAGE TO CARE, AND TREATMENT AMONG PEOPLE WHO USE DRUGS IN TEHRAN, IRAN: THE ENHANCE STUDY**

Alavi, M[1,2,*], Poustchi, H[2,*], Merat, S[2], Kaveh-ei, S[2], Rahimi-Movaghar, A[3], Shadloo, B[3], Hajarizadeh, B[1], Grebely, J[1], Dore, GJ[1], Malekzadeh, R[2]

[1]The Kirby Institute, UNSW Sydney, Sydney, NSW, Australia; [2]Liver and Pancreaticobiliary Disease Research Centre, Digestive Diseases Research Institute, Tehran University of Medical Sciences, Tehran, Iran; [3]Iranian National Centre for Addiction Studies, Tehran University of Medical Sciences, Tehran, Iran

[*]These authors contributed equally to this study

**Background:** Globally, HCV testing, linkage to care and treatment is sub-optimal among people who use drugs (PWUD). This study aimed to evaluate the impact of an innovative intervention to enhance HCV testing, linkage to care and treatment among PWUD in Tehran, Iran.

**Methods:** ENHANCE is a non-randomized trial evaluating the effect of on-site rapid HCV antibody testing, venepuncture for HCV RNA testing (HCV antibody positive only), liver fibrosis assessment, and linkage to care to enhance direct-acting antiviral (DAA) therapy (sofosbuvir/daclatasvir) uptake for HCV among people with a history of drug use. Recruitment was from April 2018 and will continue to July 2019, through three opioid substitution treatment (OST) clinics, five community-based drop-in centres, and one homeless reception centre. Participants initiated DAA therapy at a specialist clinic (OST clinics) or on-site (other sites), with monitoring provided on-site or at the specialist clinic (for those with cirrhosis attending OST clinics).

**Results:** Among 632 participants enrolled (median age, 44 years), 97% were male, 28% had a history of injecting drug use, and 58% had used drugs within the previous year. HCV antibody prevalence was 27%; 62% and 15% among those with and without a history of injecting drug use. Among 170 HCV antibody positive participants, 168 had HCV RNA testing (99%), of whom 134 (80%) were positive. Among HCV RNA positive participants, treatment uptake was 84%: 100% (45/45), 96% (46/48) and 54% (22/41) in OST clinics, drop-in centres, and homeless reception settings, respectively.

**Conclusion:** Following on-site HCV testing and linkage to care, HCV treatment uptake was extremely high among PWUD, apart from the homeless reception population. This intervention could be explored in other settings globally to enhance HCV scale-up and elimination efforts.

**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.