



An intervention to improve HCV testing, linkage to care, and treatment among people who use drugs in Tehran, Iran: the ENHANCE study

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Iran is in the Golden Crescent region of South Asia



1. Farooq SA, et al. Opium trade and the spread of HIV in the Golden Crescent. Harm reduction journal. 2017 Dec;14(1):47.

Drug use and harm reduction in Iran

- In 2015, ~5.6 million people had recently used drugs¹
- ~340,000 individuals had a history of injecting drug use¹
- Opium, heroin, and crystal methamphetamine were among the most commonly used drugs¹
- OST and NSP are available in more than 5,000 clinics and nearly 500 centres, respectively²

1. Hamid Sharifi, personal communication, Sep 2019

2. Alam-mehrjerdi Z, Abdollahi M, Higgs P, Dolan K. Drug use treatment and harm reduction programs in Iran: A unique model of health in the most populated Persian Gulf country. Asian journal of psychiatry. 2015;16:78-83.

Hepatitis C is a public health issue

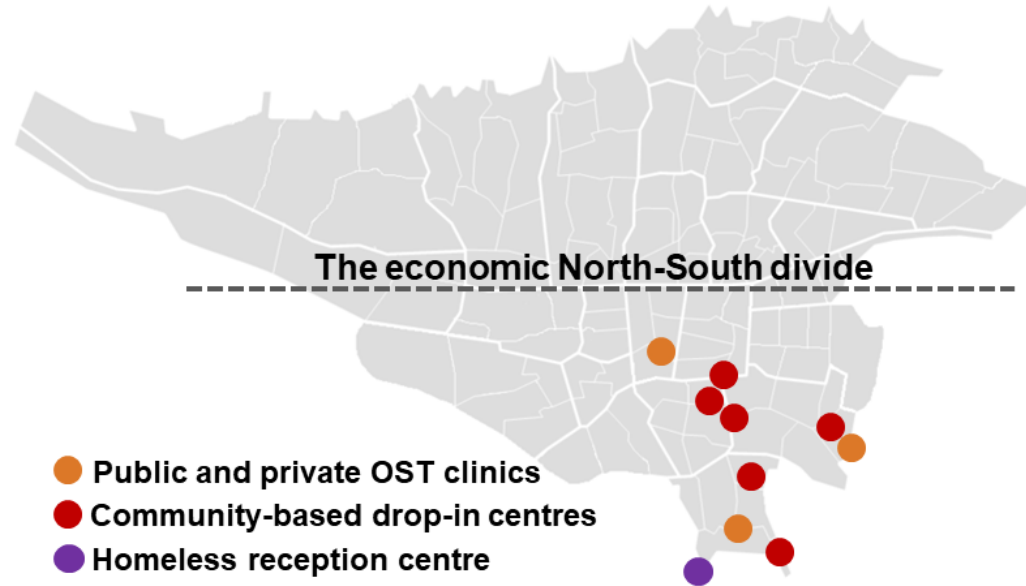
- ~186,000 people are living with HCV infection¹
- 35% are diagnosed and <5% received interferon-based treatment/year¹
- HCV diagnosis and treatment slightly increased in the DAA era
- What would be the impact of an intervention including simplified and adapted HCV management, on testing, linkage to care, and treatment uptake among people who use drugs?

1. Hajarizadeh B, et al. Liver disease burden of hepatitis C virus infection in Iran and the potential impact of various treatment strategies on the disease burden. Hepatitis monthly. 2016;16(7):e37234.



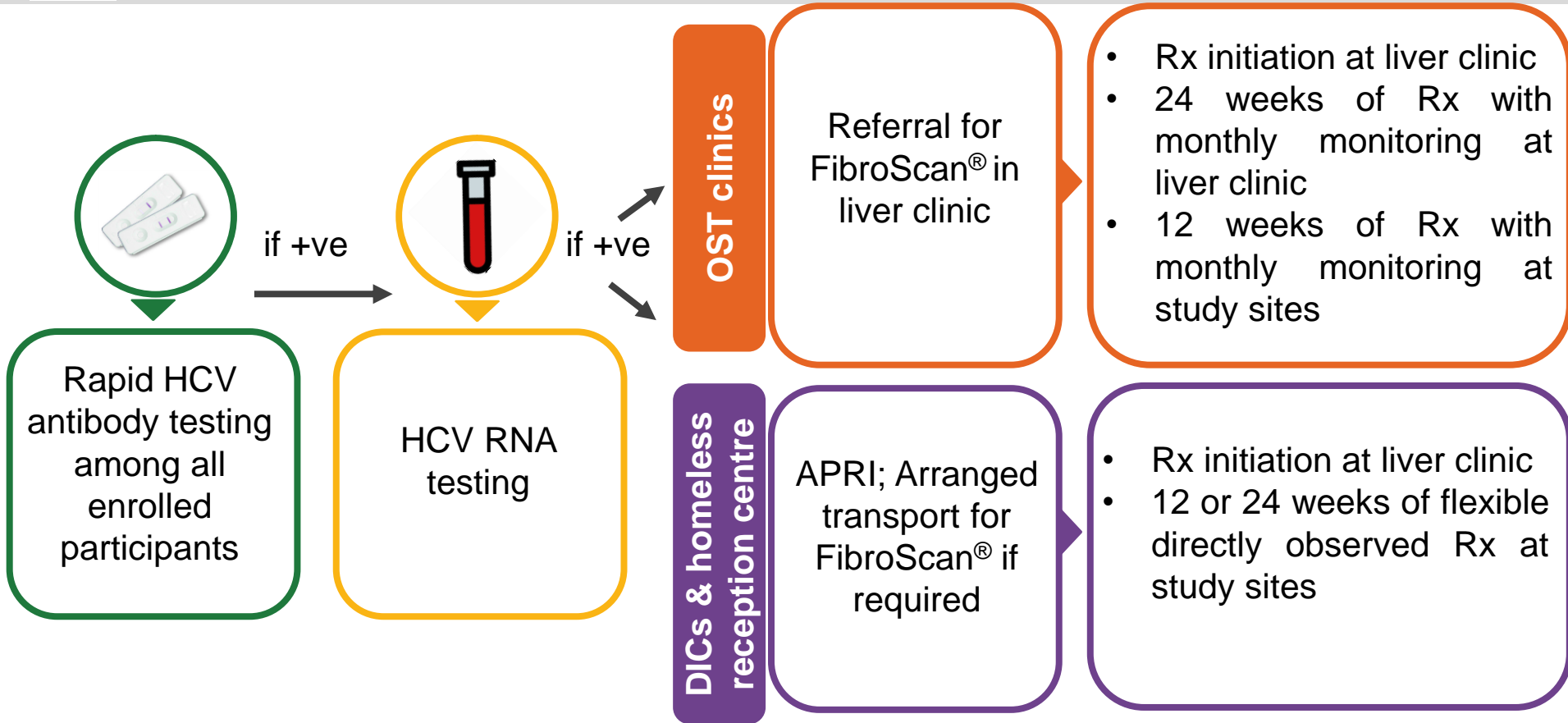
Enhancing Hepatitis C Linkage to Care (ENHANCE)*

- Collaborative study between Kirby Institute and Digestive Diseases Research Institute
- Recruitment commenced: April 2018-ongoing
- Inclusion criteria: ≥ 18 years and history of drug use



* Alavi M, et al. An intervention to improve HCV testing, linkage to care, and treatment among people who use drugs in Tehran, Iran: the ENHANCE study. International Journal of Drug Policy 2019 [in press]

ENHANCE methods: HCV diagnosis and treatment



ENHANCE results: demographic characteristics

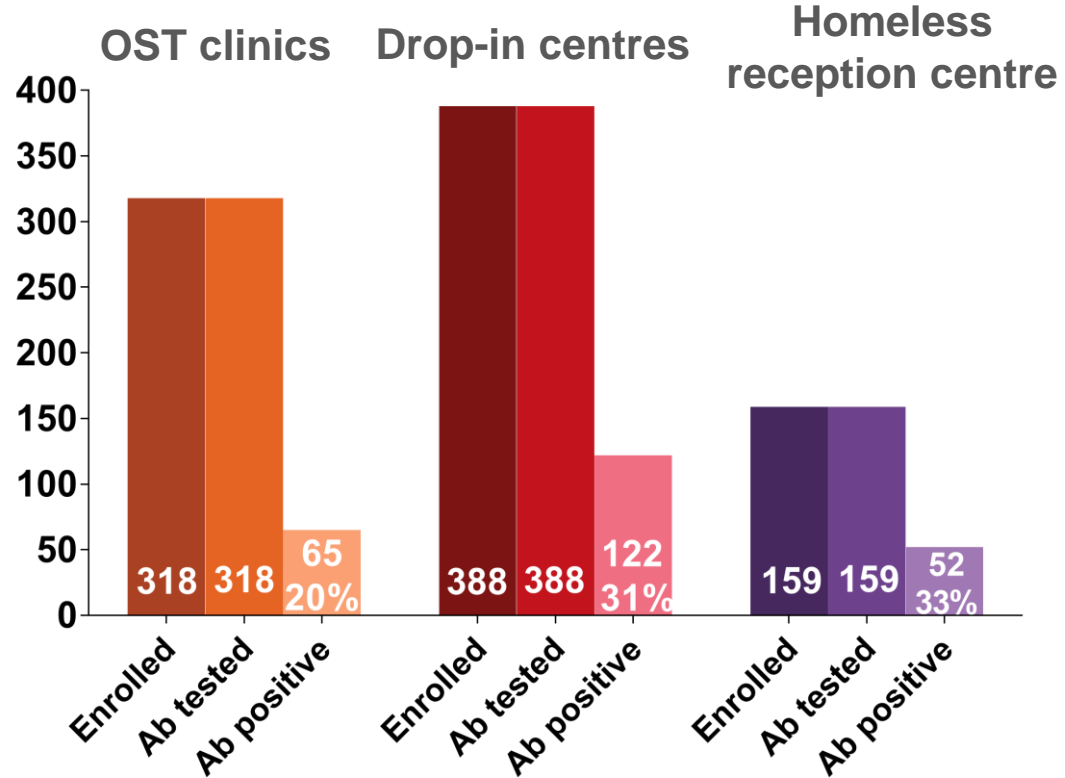
Characteristics, n(%)	Total n=865	OST clinics n=318	Community- based drop-in centres n=388	Homeless reception centre n=159
Age, median (IQR)	45 (38, 55)	43 (34, 53)	46 (38, 54)	49 (40, 61)
Homelessness	432 (50)	2 (1)	272 (70)	159 (100)
Imprisoned, ever	432 (50)	95 (30)	261 (67)	76 (48)
Drug use, past year	492 (59)	119 (40)	239 (62)	134 (84)
most frequently used	heroin 184 (37)	opium 43 (36)	heroin 109 (46)	heroin 53 (40)
Injecting drug use, ever	265 (31)	80 (25)	159 (41)	26 (17)
Heavy alcohol use, current	67 (70)	20 (74)	40 (68)	7 (70)

ENHANCE results: HCV testing

Ab
positive
among
PWUD,
28%

among
non-
PWID,
14%

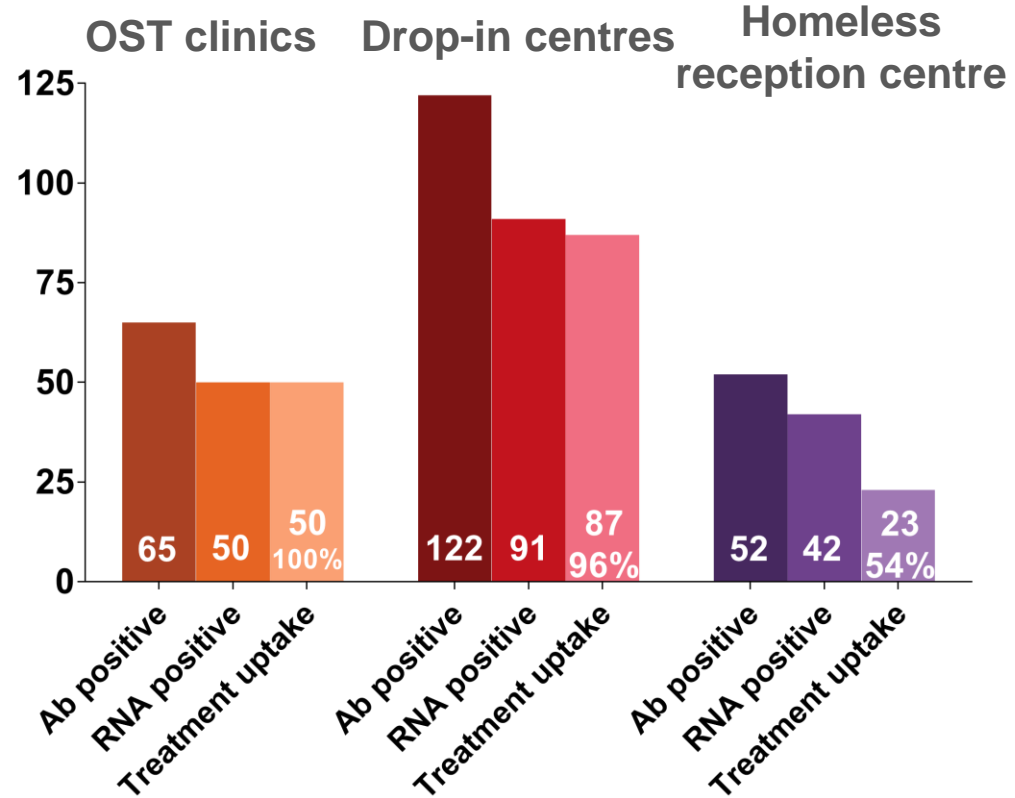
among
PWID,
60%



ENHANCE results: HCV treatment uptake

Treatment uptake, 84%

Treatment uptake among recent PWID (n=13) 100%

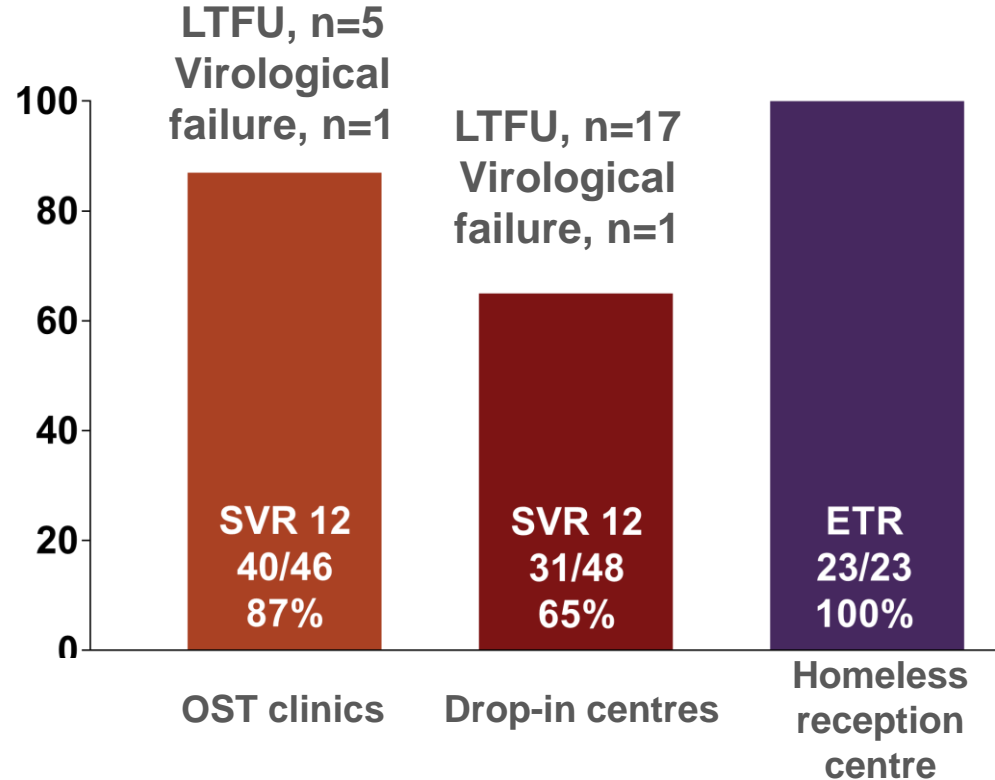




ENHANCE results: HCV treatment response by July 31

21/117
treated for
24 weeks.
SVR 12:
(20/21)
95%

SVR 12
among
recent
PWID
(n=9): 69%





Conclusions

- Integration of HCV care within drug treatment and harm reduction services increased HCV diagnosis and treatment uptake among marginalised PWUD
- In the context of social marginalization and ongoing drug use, a community-based, supportive model of HCV care promoted high levels of adherence to treatment and virological cure
- Supportive strategies are needed to improve post-treatment engagement with HCV care
- Scaling up treatment models for different PWUD populations and optimising treatment outcomes are crucial for battling the HCV epidemic in Iran and elsewhere

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