

More Intensive HCV-Care Promotes Adherence Among People Who Inject Drugs With Recent Drug Use

PREVAIL STUDY

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Disclosures

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Research presented today does not necessarily represent the views NIH/NIDA

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Background

- Hepatitis C infection is a significant health burden not only in the world-wide general public but particularly among people who inject drugs
- Promoting adherence to treatment regimen is critical for people living with HCV to achieve cure
- Ongoing drug use may interfere with adherence
- Optimal models of care for promoting adherence to direct-acting antivirals in active PWID have not been studied

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Prevent Resistance Eliminate Virus and Improve Life: PREVAIL Study

- NIDA-funded randomized controlled trial (NCT01857245; PI: Litwin):
 - 3 Opioid Treatment Programs (OTPs) in Bronx, NY

Participants

- **PWID** receiving treatment for opioid use disorder (buprenorphine/methadone)
- Inclusion criteria:
 - ≥18 years old
 - Speak English or Spanish
 - HCV genotype 1
 - Psychiatrically stable
 - Willing to receive HCV tx on site their OAT
 - HCV treatment naïve

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PREVAIL Study: Design and Methodology

Study Design:

- Prospective randomized controlled trial

Groups:

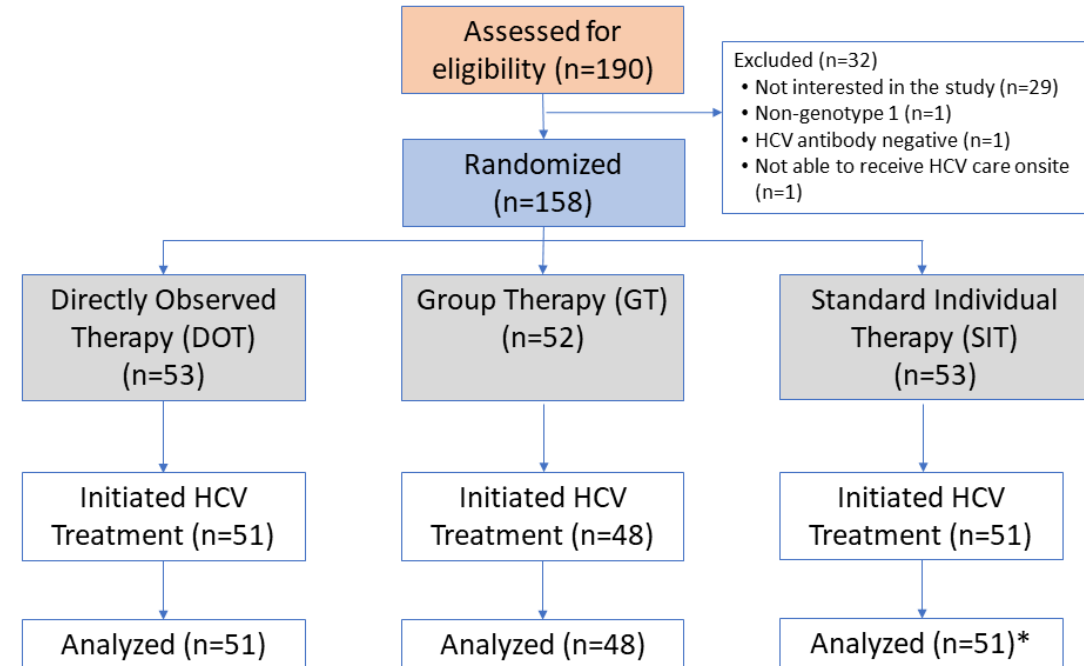
- **Directly Observed Therapy**
- **Group Therapy**
- **Standard Individual Treatment**

Medication

- ***Interferon and ribavirin- based treatments:*** TVR/PEG/RBV, SOF/PEG/RBV), SOF/RBV
- ***DAAs:*** SOF/LDV, SOF/SIM

Study Outcome Measures:

- Sustained virologic response (primary)
- Initiation, adherence, completion (secondary)



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Methods

Measures

- Adherence to DAAs : electronic blister packs
- Drug use: urine toxicology test at baseline (benzodiazepine, cocaine, opiate, or oxycodone)

Statistical Analyses

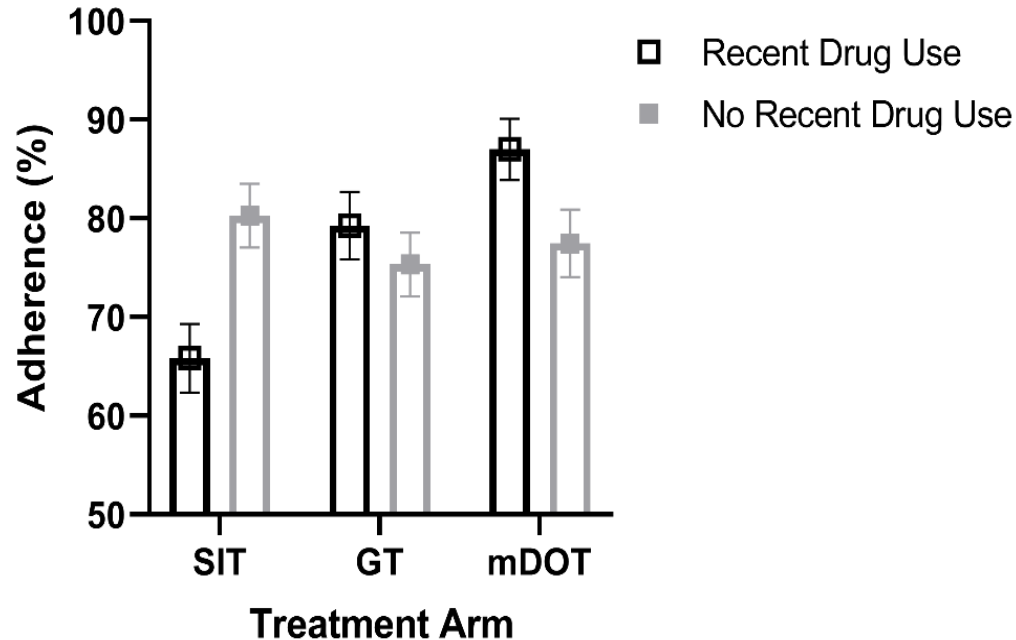
- Mixed-effect linear models were applied to compare adherence levels between those with and without recent drug use by treatment arm

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Results

Fig 1. Adherence by baseline drug use and treatment arm



- Participants with recent drug use in the DOT arm had significantly higher adherence compared to those assigned to SIT and GT
- Participants without recent drug use had similar adherence levels across the three models

Note: the adherence level was estimated after adjusting for IL28b, HIV status, Cirrhosis, psychiatric illness, and alcohol intoxication.

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Discussion

- Recent drug use does not impede adherence to DAAs among PWID compared to those without recent drug use.
- Nevertheless, the DOT model of care resulted in the highest adherence among PWID with recent drug use .
- More intensive care models should be implemented to promote adherence and treat HCV among PWID with recent drug use as they might eliminate the negative impact of active drug use on adherence.

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