MORE INTENSIVE HCV-CARE PROMOTES ADHERENCE AMONG PEOPLE WHO INJECT DRUGS WITH RECENT DRUG USE

<u>Pericot-Valverde I</u>, ¹ Heo M, ¹ Niu J, ¹ Norton BL, ² Akiyama MJ, ² Nahvi S, ² Gormley MA, ¹ Arnsten JH, ² Litwin AH^{1,3,4}

^{1.} Clemson University, ^{2.} Montefiore Medical Center, Albert Einstein College of Medicine, ^{3.} Prisma Health, ^{4.} School of Medicine, University of South Carolina at Greenville

Background:

Promoting adherence to treatment regimen is critical for Hepatitis C (HCV)-infected individuals to achieve sustained virologic response. Ongoing drug use may interfere with adherence. We examined whether more intensive care models would increase adherence among people who inject drugs (PWID) with recent drug use compared to those with non-recent use.

Method:

The PREVAIL study (N=150) compared three care models with varying intensity to promote adherence among HCV-infected PWID: standard individual therapy (SIT), group therapy (GT), and modified directly observed therapy (mDOT). We compared adherence levels over a 12-week treatment period between PWID with and without recent drug use at baseline. Daily time frame adherence was measured by electronic blister packs. Recent drug use was declared if urine toxicology was positive for any of benzodiazepine, cocaine, opiate, or oxycodone at baseline. Mixed-effect linear models were applied to compare adherence levels between those with and without recent drug use by treatment arm adjusting for covariates.

Results:

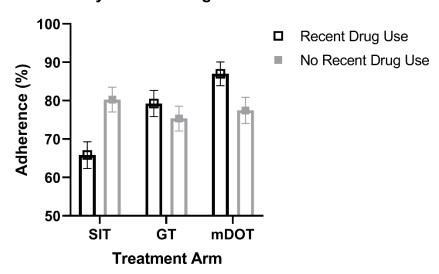
While adherence was significantly higher among PWID with recent drug use compared to those with non-recent use in mDOT ($86.6 \pm 3.9 \text{ vs.} 76.8 \pm 4.3 \text{, p=.035}$), it was significantly lower for SIT ($64.7 \pm 4.1 \text{ vs.} 79.1 \pm 4.2 \text{, p=.003}$) (Figure 1). GT was neutral in adherence between PWID with and without recent drug use. PWID with non-recent drug use had similar adherence across the three models. Those with recent cocaine use in SIT had significantly lower adherence compared to their counterparts ($60.7 \pm 4.8 \text{ vs.} 77.5 \pm 3.9 \text{, p=.002}$), but not in GT or mDOT. No other recent drug use was associated with lower adherence in any treatment arm.

Conclusion:

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.

Disclosure of Interest Statement. A.H.L. reports grant support from Gilead Sciences during the conduct of this study and grants and personal fees from Gilead Sciences and Merck Pharmaceuticals.

Fig 1. Adherence by baseline drug use and treament arm



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