

HIV Infected Network Members may facilitate HCV treatment among People Who Inject Drugs

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Introduction

- People who inject drugs (PWID) have high rates of hepatitis C virus (HCV) and HIV infection.
- Oral direct acting agents (DAA) of short duration with minimal side effects lead to HCV cure in over 95% of people.
- However, HCV treatment uptake among PWID remains low; social network members (NMs) have the potential to increase uptake.

Methods

- The AIDS linked to the IntraVenous Experience (ALIVE) cohort follows current & former PWID in Baltimore.
- Egocentric PWID network data was collected using a network inventory.
- HCV/HIV status were determined from antibody results.
- HCV treatment uptake was defined as self-report of treatment initiation and an undetectable HCV RNA after reported HCV treatment
- Logistic regression was used to assess the association between individual/network factors and HCV treatment uptake

Results

Table 1: Study Population

	N (%)
HCV Infected	485
HCV treated	124 (26)
Median age (IQR)	57 (51-61)
Male gender	337 (69)
African-American race	427 (88)
HCV/HIV coinfectd	157 (32)
Injected in prior 6 months	125 (26)
Methadone maintenance	194 (40)
Alcohol use	243 (50)
Depression	
Yes (CES-D Score >=16)	204 (42)
No (CES-D Score <16)	281 (58)
Homeless	46 (9)
Network characteristic median (IQR)	
Number of network members	4 (2-5)
Median number of relatives in network	2 (1-3)
Median age of network members	50 (42-57)
Median time known network members (years)	33 (22-42)

Figure 1: HCV treatment uptake among 485 PWID

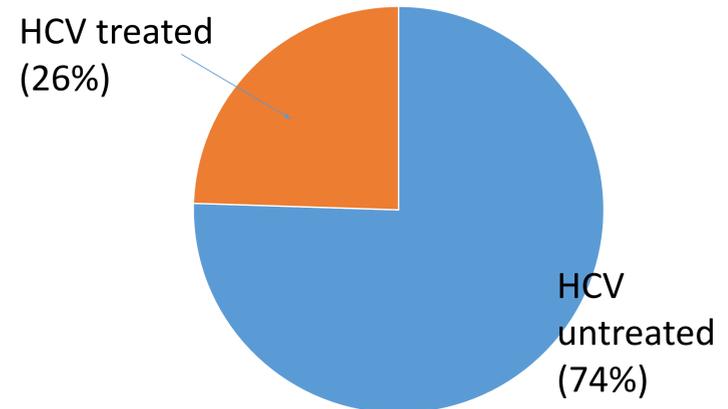


Table 2: Factors Associated with HCV treatment

	Multivariate OR (95% CI)
Individual characteristics	
Age	1.09 (1.05-1.13)
Black vs non-black	0.99 (0.36-2.73)
HIV infected	2.06 (1.16-3.65)
Injected in prior 6 months	0.45 (0.23-0.88)
Engaged in primary care	2.89 (0.92-9.08)
Network characteristics	
HIV infected NM who talks about HIV care	1.90 (1.00-3.59)
NM helps individual understand their HIV	1.32 (1.02-1.70)
HCV infected NM	0.58 (0.35-0.96)
NM helps individual understand their HCV	0.65 (0.53-0.79)
NM who injected in prior 6 months	0.80 (0.30-2.11)

Conclusion

- HCV treatment was associated with increasing age, being HIV infected, having HIV infected NMs who talked about their HIV care or helped the individual understand their HIV better.
- Conversely, HCV treatment was negatively associated with having more HCV infected NMs or NMs who helped the individual understand their HCV; this may reflect networks with higher levels of risk behaviors or lack of penetration of information about improvements in HCV care in networks of HCV monoinfected PWID.
- HCV treatment uptake appeared to be influenced by positive interactions with HIV-infected NMs in care.
- Interventions to improve HIV engagement and support sharing of HIV/HCV-related health information with HIV-infected and uninfected peers may improve HCV treatment uptake among peers.

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