High Proportion of Undiagnosed Hepatitis C Virus (HCV) Infection Among Persons Who Inject Drugs: A Community-Based Safety-Net Hospital Experience

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BACKGROUND

- ❑ Hepatitis C virus (HCV) is a major cause of chronic liver disease in the United States.
- ❑ Despite high risk and prevalence among persons who inject drugs (PWID), routine screening or treatment for HCV infection is sub-optimal. Thus, many remain undiagnosed and unaware of their HCV status.
- ❑ Understanding prior screening rates and HCV status can help improve management and treatment strategies.
- ❑ Safety-net hospitals are enriched in high-risk and immigrant populations, and outpatient endoscopy units provide opportunities for effective HCV testing and linkage to care.

AIMS

To analyze the following differences between PWID and non-PWID:

- Rates of prior HCV screening
- HCV antibody positive (HCV Ab+) prevalence
- Test completion outcomes

METHODS

- ❑ **Study Design:** Cross-sectional Study
- ❑ **Study Population:**
  - Consecutive adults undergoing outpatient endoscopy from July 2015-February 2018.
  - HCV screening eligibility determined using U.S. Preventative Services Task Force guidelines.
- ❑ **Statistical Analyses**:
  - Patients were categorized based on self-reported previous or current injection drug use.
  - Prior screening rates, and HCV Ab+ prevalence among those previously screened were analyzed.
  - HCV testing was offered to patients who had not been previously screened. Patients were prospectively followed to analyze test completion outcomes.
  - Between group comparisons conducted using two-tailed t-test (continuous variables) or chi-squared testing (binary and categorical variables).

CONCLUSION

- ❑ Overall, HCV Ab+ prevalence was significantly higher among PWID compared to non-PWID, with nearly 40% of PWID newly diagnosed as HCV Ab+.
- ❑ Despite the high risk of HCV among PWID, a large proportion had not received prior HCV screening, and among those previously screened, PWID had five times the proportion of HCV Ab+ relative to non-PWID.
- ❑ Typically, patients are less likely to report injection drug use and thus, HCV Ab+ prevalence among PWID may have been underestimated in this study.
- ❑ More targeted efforts are needed to screen these high-risk vulnerable populations, and ensure successful linkage to care for those with confirmed chronic HCV.

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CONTACT INFORMAITON

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Table 1. Characteristics of HCV Eligible Participants (N = 1,623)*

Characteristic	PWID (N = 71 [4.37%]) N or Mean (% or SD)	Non-PWID (N = 1,552 [95.6%]) N or Mean (% or SD)	p-value
Age, y	58.5 ± 9.42	58.3 ± 8.17	0.809
Male sex	43 (60.6)	751 (48.4)	0.045
Race			
White	20 (28.2)	181 (11.7)	<0.001
Black/African American	30 (42.3)	412 (26.6)	
Asian	3 (4.23)	307 (19.8)	
Hispanic/Latino	14 (19.7)	559 (36.0)	
Other	4 (5.63)	93 (5.99)	
U.S.-Born	52 (73.2)	579 (37.3)	<0.001
1945-1965 Birth Cohort	55 (77.5)	1,384 (89.2)	0.002
English Speaker	60 (84.5)	817 (52.6)	<0.001
Employed	6 (8.45)	265 (17.1)	0.057
Insured	33 (46.5)	808 (52.1)	0.357
Known Risk Factors			
HIV Positive	5 (7.04)	39 (2.51)	0.022
Chronic Hepatitis B Infection	1 (1.41)	56 (3.61)	0.325
Previous Incarceration	38 (53.5)	252 (16.2)	<0.001
Blood Transfusion Prior to 1992	9 (12.7)	100 (6.44)	0.040
Known HCV Infection	24 (33.8)	88 (5.67)	<0.001
HCV Status Awareness	18 (75.0)	57 (64.8)	0.227

* Column totals may not sum to 100% due to rounding error or missing observations.

Figure 1. Prior HCV Screening Outcomes

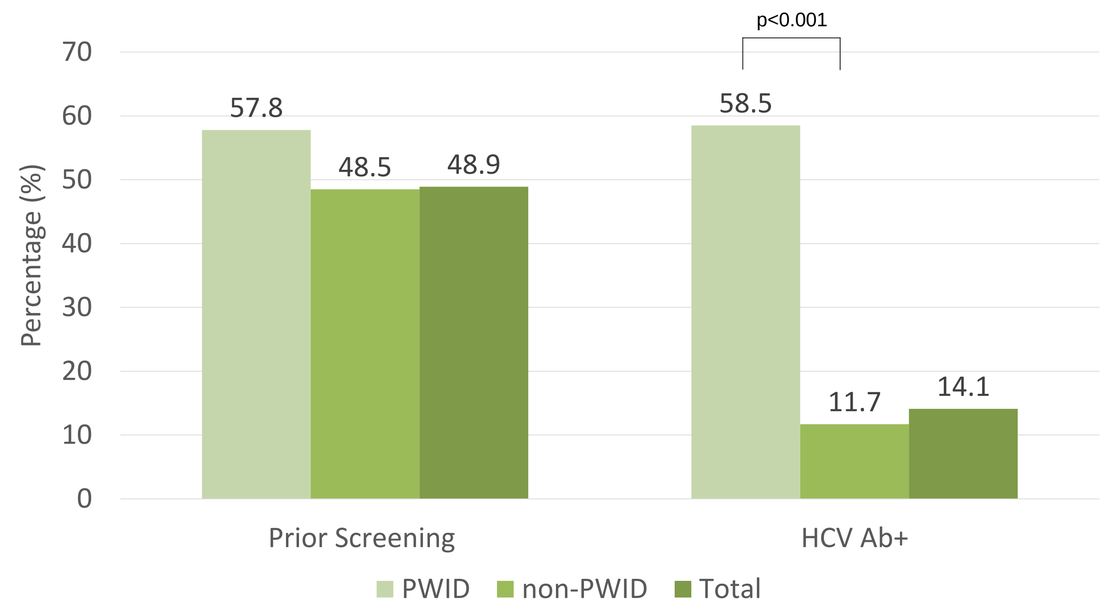
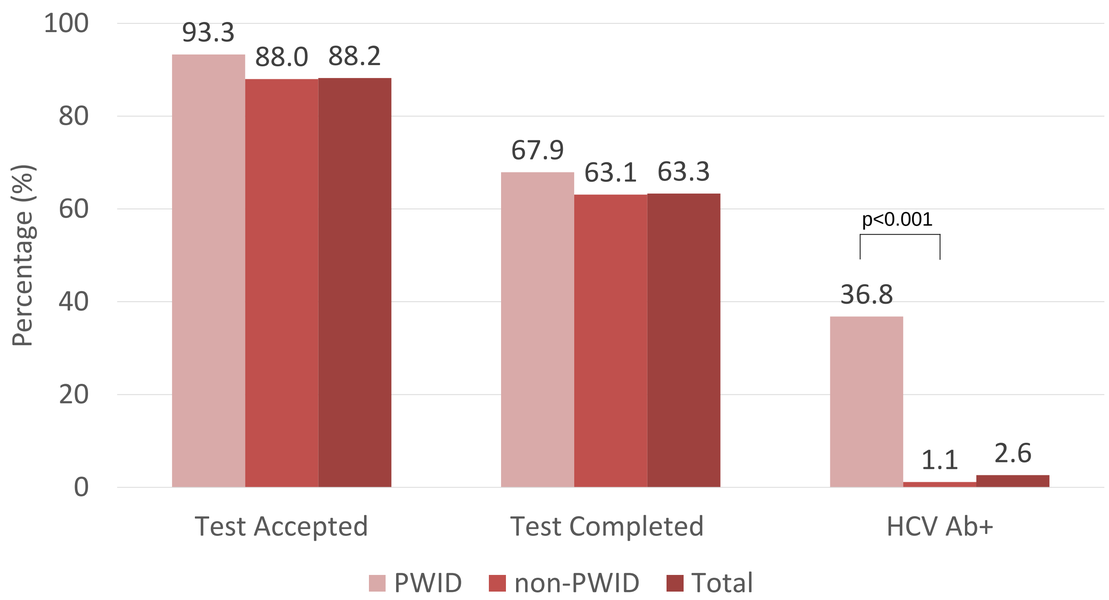


Figure 2. Test Completion Outcomes



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