Non-Risk Based HCV Screening Among Baby Boomers in HIV Surveillance-Identified Risk Areas

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Introduction

- Despite advances in HCV testing and care, non-risk based HCV screening of baby boomers has not yet been fully explored.

- HIV surveillance data have been used to identify potential targeted areas for HIV screening and linkage to care.

- However, viral hepatitis surveillance data are often incomplete and lack critical information about the characteristics of HCV infection in the community.

- Given shared risk factors between HIV and HCV, we examined the feasibility and utility of using a novel method of identifying high HIV risk census tracts (CTs) using **HIV surveillance data** to target non-risk based community HCV testing.

Methods

- *Selecting targeted testing areas*
  - A statistical algorithm was developed using routinely reported DC Department of Health HIV surveillance data using the following indicators at the census tract-level: monitored HIV viral load, proportion of persons out of HIV care, and proportion of persons never in HIV care.
  - Among census tracts (CTs) with a HIV prevalence of ≥1%, we identified 12 census tracts that had the highest levels of these indicators for community-based HCV screening of baby boomers.

- *Recruitment and community-based HCV screening*
  - We partnered with a local community-based organization (Community Education Group) to conduct street-based community HCV screening equally across the 12 CTs between Aug-Sept 2014.
  - Eligibility included: 1) born between 1945-65 ("baby boomer"); and 2) not currently receiving care for HCV.
  - Individuals consented to HCV screening (OraQuick Rapid HCV Antibody Test, Bethlehem, PA), a blood draw (if positive) for HCV RNA testing, and a behavioral interviewer-administered survey.

Methods (cont'd)

- *HCV seroprevalence and correlates*
  - HCV seroprevalence was calculated as the number HCV Ab-positive divided by the number of people screened.
    - HCV RNA testing is ongoing and seropositive participants will be followed prospectively for 3 months to assess linkage to HCV evaluation and care.
  - Demographic and behavioral characteristics were examined by serostatus to identify potential correlates of HCV exposure using chi-square, Fisher's exact and t-tests.

Results

Table 1: Characteristics of baby boomer individuals (born 1945-1965) who were screened for HCV in high HIV risk census tracts in Washington, DC

Characteristic	Total N=196 (%)	HCV Ab-negative n=138 (%)	HCV Ab-positive n=58 (%)	P-value
Race – black	184 (93.9)	129 (93.5)	55 (94.8)	0.70
Mean age (±SD)	56 (±4.9)	55.5 (±4.8)	57.0 (±4.9)	*0.05*
Male gender	145 (73.6)	101 (73.2)	44 (75.9)	0.07
Public insurance	143 (73.0)	98 (71.0)	45 (77.6)	0.62

Figure 1: Comparison of HCV Risk Characteristics and Testing History Between HCV Ab-Positive and HCV Ab-Negative Individuals

* <0.0001; ** 0.001
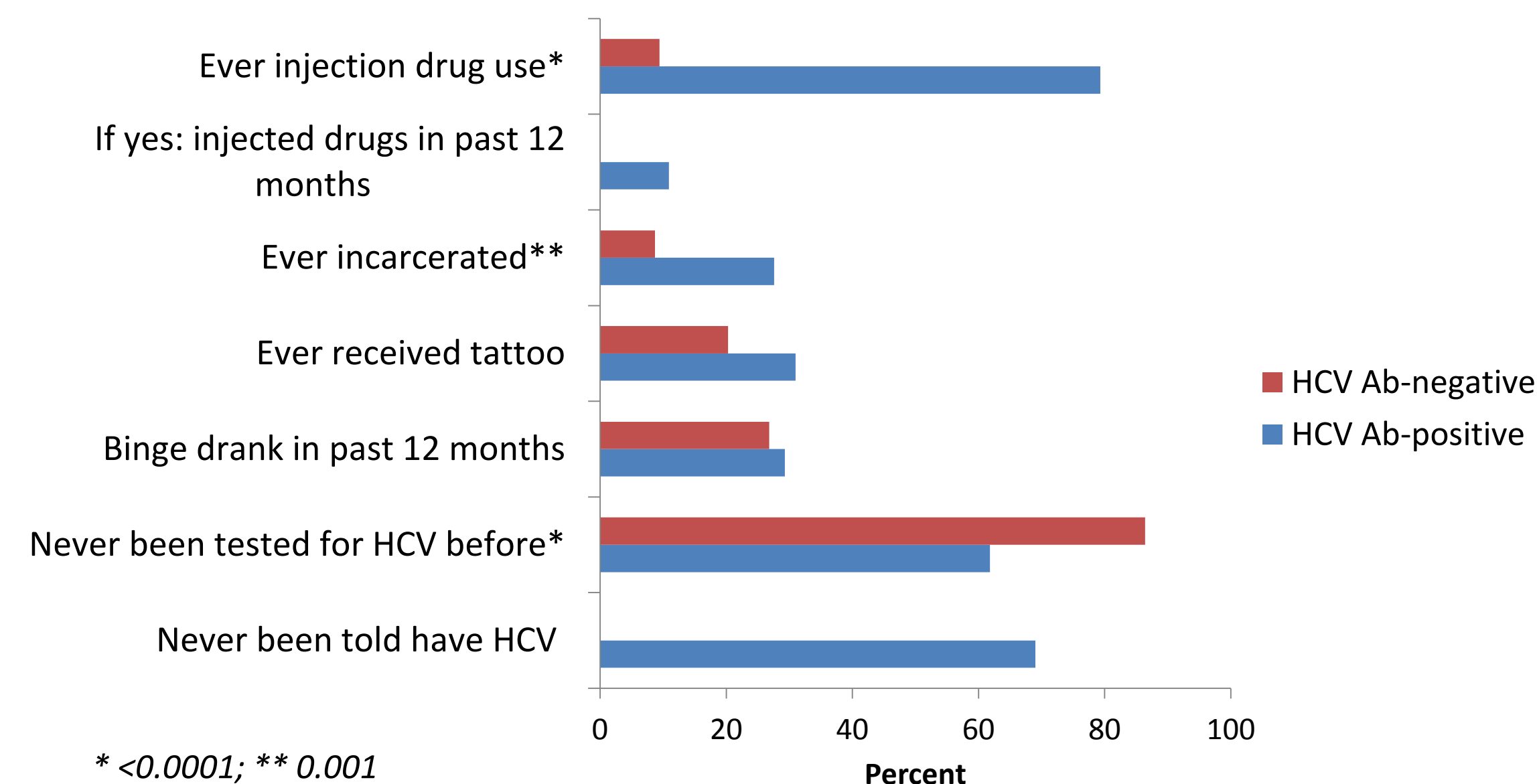
Results (cont'd)

- Of 196 persons screened, 58 (30%) were HCV Ab-positive.
  - Of those 58 persons, 62% had never been tested for HCV before and 69% were newly identified as being HCV seropositive, of whom 51% had never tested for HCV before (data not shown).
  - 31% already knew their HCV-positive status but were not receiving care.
- Initial non-adjusted correlates of being HCV Ab-positive included:
  - Older age, ever injecting drugs, having ever been incarcerated
  - Of note, only 5 of 46 individuals who ever injected drugs were currently injecting (within the past 12 months)
- Of 58 HCV Ab-positive individuals, confirmatory testing has been conducted on 31 (53%). Of those, 29 (94%) were confirmed HCV RNA-positive.

Conclusions

- Targeted, non-risk-based community HCV testing using HIV surveillance data was feasible and yielded a high HCV seroprevalence and large number of newly identified/out of care baby boomers.

- A high proportion had never been HCV tested, suggesting this testing paradigm may be effective in reaching individuals potentially at high risk for HCV in a community-based setting.

- Of those confirmed, nearly all were actively infected, underscoring the need for an effective referral mechanism to HCV evaluation and care

Acknowledgments