

Comparison of Self-Reported Blood-borne Virus Status with Recent Serology Results in a Local Population of People Who Inject Drugs

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Background

- Knowledge of blood-borne virus (BBV) status enables people to engage in preventive behaviours and seek appropriate healthcare. We compare self-reported HIV and hepatitis C (HCV) status with serological markers of infection among people who inject drugs (PWID) recruited from a culturally and ethnically diverse inner-city suburb of Melbourne at the centre of a recent cluster of new HIV notifications.

Methods

Study design

- Cross-sectional bio-behavioural survey conducted in August-September 2014 of 128 PWID known to be regular users of a local fixed needle and syringe program (NSP).
- Recruitment via the fixed NSP and outreach methods.
- Prevalence of HIV and HCV obtained through venous blood serology.
- Self-reported information on current BBV status obtained from surveys.
- Required to be >18 years of age, residing in Victoria and reporting injecting at least once per month during the previous six months.

Study definitions

- Current HCV infection defined as HCV RNA positivity.
- HIV infection defined as HIV antibody sero-positivity with a confirmatory Western Blot.



Results

- Two thirds (67%) of participants were men, 42 (33%) reported being Indigenous Australian and median age was 37 years.
- Five (4%) and eighty (63%) participants were sero-positive for HIV and current HCV infection respectively.
- Among 123 participants previously tested for HCV and who reported perceived sero-status, 38 (31%) self-reported discordant sero-status or were unaware of their current serostatus; 14 falsely reported being HCV-positive, 12 falsely reported being HCV-negative and 12 (six HCV RNA+) reported never having received/being unsure of their previous test result.
- Among 113 participants previously tested for HIV and who reported perceived sero-status, seven (6%) self-reported discordant HIV sero-status or were unaware of their current serostatus; two falsely reported being HIV negative and five reported never having received/being unsure of their previous test result.
- Only one of the HIV positive participants correctly reported being HIV sero-positive.
- Participants who reported discordant HCV sero-status were more likely to identify as Aboriginal and/or Torres Strait Islander, after adjusting for age, sex and time since previous test (AOR 2.40, $p=0.031$).

Results

Limitations

- Small sample size was likely a factor limiting detection of some important differences on multivariate analyses
- Although the sampling frame was not random, given that participants were recruited at the time of NSP visits and via active outreach by community health workers known to the target population, we believe that the study sample is likely to be representative of local NSP users

Conclusions

Implications for policy and practice

- Accurate knowledge of BBV sero-status in this geographically distinct and culturally diverse PWID sample is lower than that found in other Australian studies. Local interventions must be urgently implemented to improve testing uptake and quality of post-test counselling in high risk populations, with particular emphasis on ensuring they are tailored to needs of local communities and cultural groups to prevent future BBV outbreaks.

