

Relational and Contingent Risk and Harm Reduction: Blood-borne Virus Prevention and Care in an Urban, Culturally Diverse Neighbourhood

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Background

- This study emerged in response to a clustered HIV outbreak among Indigenous people who inject drugs (PWID) in a culturally diverse inner-city suburb of Melbourne, Australia.
- To inform prevention responses sensitive to local cultural diversity and street drug consumption observed by local drug users and service providers as increasingly chaotic, we measured hepatitis C (HCV), hepatitis B (HBV) and HIV sero-prevalence and explored correlates of infections and injecting risk behaviours among PWID in that neighbourhood.

Methods

Study design

- Cross-sectional bio-behavioural survey of 128 PWID known to be regular users of a local fixed needle and syringe program (NSP).
- BBV status measured from venous blood serology.
- BBV risk behaviours obtained from self-reported information through administration of a short survey.
- Recruitment through the fixed-site and via outreach methods over four days in August-September 2014.
- 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

- HCV exposure defined as HCV antibody positivity.
- HBV exposure defined as HBV core antibody positivity and/or detectable HBV surface antigen.

Results

- Two thirds (67%) of participants were men, 42 (33%) reported being Aboriginal/Torres Strait Islander and median age was 37 years.
- HCV and HBV exposure was detected among 118 (93%) and 57 (45%) participants respectively.
- Five (4%) participants were HIV positive, of whom four were Indigenous.
- Sharing needles at least once in the previous three months was reported by 52 (41%) and was independently associated with HBV infection (AOR=5.87, $p=0.021$).
- Age over 37 years was an independent risk factor for HBV (AOR=7.06, $p=0.001$) and HCV infection (AOR=11.84, $p=0.027$) but was protective for sharing needles (AOR=0.31, $p=0.01$).
- Risk factors for needle sharing were; identifying as Indigenous Australian (AOR=6.21, $p<0.001$), attending healthcare for mental health problems (AOR=2.79, $p=0.023$) and seeking yet unable to access drug treatment in the previous six months (AOR=4.34, $p=0.023$).

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

- HCV and HBV prevalence in this sample was much higher than found in other studies of PWID in Australia and world-wide.
- While HIV prevalence was low (consistent with Australian epidemiology), individual and service-related factors associated with risk in the context of a dynamic local urban drug culture and a clustered HIV outbreak suggests an urgent need for targeted harm reduction, tailored to the needs of specific groups and local drivers of risk.