

PREVALENCE OF BLOOD-BORNE VIRUSES, HCV TESTING AND TREATMENT, AND IMPLEMENTATION BARRIERS AND FACILITATORS IN A PRISON-BASED SURVEILLANCE SYSTEM IN AUSTRALIA: THE AusHep STUDY

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Background:

Prison-based blood-borne virus (BBV) surveillance is essential for development and evaluation of BBV management programs, but few countries have systems in place. AusHep is a biennial national bio-behavioural survey for BBV surveillance in Australian prisons. In this analysis, we evaluated BBV prevalence (HCV, HBV, HIV) and HCV testing and treatment uptake, and outlined barriers and facilitators to surveillance implementation.

Methods:

Randomly selected participants in 25 representative prisons are offered point-of-care testing for HIV and HCV (anti-HCV) antibodies, HBs antigen, and HCV RNA (if anti-HCV positive). Data regarding prior BBV testing/treatment are collected by interview. Sample size (n=2117) is based on estimating jurisdictional HCV prevalence (5% precision, 95% confidence). This analysis includes preliminary data from three of eight jurisdictions. BBV prevalence estimates were weighted by prisoner population size in each jurisdiction.

Results:

798 participants were recruited from 13 prisons (98% participation, 88% male, median age 35 years, 51% ever injected drugs). Prevalence of anti-HCV, HCV RNA, HBs antigen, and HIV antibody was 30.4%, 6.5%, 0.6%, and 0.7%, respectively. Among anti-HCV negative participants (n=588), 52% had been tested for anti-HCV. Among anti-HCV positive participants (n=210), 95% had been tested for HCV RNA, and 68% had received HCV treatment. Among participants with treatment experience (n=147), 14% were HCV RNA positive. Major implementation barriers include complex jurisdictional ethics/governance requirements, and challenging logistics and access in prison environments. Major facilitators include using point-of-care testing, strong support from jurisdictional stakeholders, and having a flexible timeline/plan.

Conclusion:

High participation indicated feasibility of this prison-based BBV surveillance. HCV RNA prevalence was lower than previous reports, suggesting high treatment uptake and treatment-as-prevention impact. A significant proportion of those treated had active infection (re-infection or treatment failure), highlighting the needs for post-treatment HCV surveillance and access to re-treatment. Strong stakeholder engagement and flexibility facilitate successful implementation of multi-jurisdictional prison-based surveillance.

Disclosure of Interest Statement:

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