Enhancing treatment uptake for hepatitis C virus (HCV) infection through point-of-care HCV testing "blitzes" in prisons in Queensland, Australia

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Background: Elimination of HCV among people in prison, necessitates phlebotomy and pathology pathways often requiring multiple visits with loss to follow-up. Overcoming these challenges, high intensity onsite point-of-care testing campaigns or "blitzes" were initiated. This study evaluated treatment uptake following HCV point-of-care testing 'blitzes' at six prisons in Queensland, Australia.

Methods: HCV testing campaigns included male and female people in prison receiving point-of-care HCV RNA testing across six prisons in Queensland, Australia, including one revisited prison. Between March 2022 and February 2023 testing occurred over a total of 36 days. Project was conducted through partnership with the Queensland Health, Queensland Corrections, Kombi Clinic, community-based organisations, point-of-care quality management providers and research institutions. Participants received onsite point-of-care HCV RNA testing (Xpert HCV Viral Load Fingerstick assay with six Cepheid GeneXpert IV platforms), linkage to nursing/physician care, and HCV treatment. Primary outcome was HCV treatment uptake within four weeks of testing.

Results: Between 28 March 2022 and 10 February 2023, 2,629 people received point-of-care RNA testing, representing 57% (range, 37%-90%) of all people in the prisons at the time. This included 2,301 males (median age, 35 years; 39% Aboriginal and/or Torres Strait Islander; 66% history of injecting drug use) and 328 females (median age 35 years; 50% Aboriginal and/or Torres Strait Islander; 69% history of injecting drug use). HCV RNA prevalence differed between males (22%, 512/2301) and females (4%, 12/328; $p<0.001$). HCV treatment uptake was similar between males (91%, 464/512) and females (92%, 11/12; $p=0.902$).

Conclusions: GeneXpert HCV point-of-care testing through large-scale testing "blitzes" within prisons led to high HCV treatment uptake. These campaigns can achieve high coverage rates within correctional environments, facilitating a significant proportion of people to be rapidly tested and coupled with timely delivery of treatment. Collaboration with partners and stakeholders is critical to the success of these campaigns.

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