

SAFETY, EFFECTIVENESS AND POTENTIAL CONTRIBUTION TO HEPATITIS C VIRUS (HCV) ELIMINATION OF A PRISON-BASED NURSE-LED HCV TREATMENT PROGRAM IN NSW, AUSTRALIA

Overton K^{1,2,3}, Clegg J², Pekin F², Wood J², McGrath C², Lloyd AR^{1,2,4} and Post JJ^{1,2,3}

¹ Department of Infectious Diseases, Prince of Wales Hospital, ² Population Health, New South Wales Justice Health and Forensic Mental Health Network, ³ Prince of Wales Clinical School, University of New South Wales, ⁴ The Kirby Institute, University of New South Wales

Introduction: Effective systems are required to treat large numbers of people with HCV infection to achieve elimination. We evaluated the effectiveness of the NSW Justice Health and Forensic Mental Health Network nurse-led HCV treatment service in the direct acting antiviral (DAA) era.

Methods: A retrospective cohort study was conducted across 36 correctional centres (with approximately 13 000 full time inmates) from April 2016 to March 2019. Population Health Nurses conducted initial clinical assessments followed by Hepatitis Clinical Nurse Consultant (CNC) review, including fibrosis assessment. The CNC then discussed the case with an Infectious Diseases physician and DAA therapy was prescribed. The number of patients who commenced and completed treatment, and sustained virological response 12 weeks post treatment completion (SVR 12) were recorded for patients treated in the first year. Treatment commencement data for the subsequent two years were recorded.

Results: During the first 12 months of DAA treatment availability 698 patients commenced HCV treatment. Of those who were tested at the 12-week post treatment completion timepoint the per-protocol SVR12 (cure) rate was 92% (396/430), with 34 patients having a detectable viral load. 52 (7%) patients were released to freedom before completing treatment and a further 211 (30%) were released prior to SVR12 assessment. These outcomes indicate an intention-to-treat SVR 12 cure rate of 57% (396/698). There were no differences in demographic or treatment characteristics between those who underwent SVR12 testing and those released prior. In the subsequent two years 1007 and 1406 people commenced treatment respectively. The latter figure represent approximately 25% of those incarcerated annually with chronic HCV infection.

Conclusion: Treatment for HCV can be delivered safely, efficiently and in high numbers in the prison setting using a nurse-led model of care and is an important component of the strategy to eliminate HCV infection as a public health concern.

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