Long-term outcomes of a nurse-led, statewide model of care for hepatitis C treatment among people in prison in Victoria, Australia

Authors:

<u>Craigie A¹</u>, MacIsaac MB^{1,2}, Papaluca T^{1,2}, McDonald L¹, Pappas A¹, Waldron A¹ Edwards A¹, Layton C¹, Howard KL¹, Gibson A¹, Tonkin A¹, Winter RJ^{1,3,4}, Iyer K¹, Sim A¹, Evans S¹, Kumaragama K¹, Howell J^{1,2, 3, 4}, Desmond P^{1,2}, Iser D^{1,6}, Scott N^{3,4}, Hellard M^{2,3,4,5}, Stoové M^{3,4,5}, Wilson D³, Pedrana A^{3,4,6}, Doyle JS^{3,4,6}, Holmes JA^{1,2}, Thompson AJ^{1,2}

¹Department of Gastroenterology, St Vincent's Hospital Melbourne, Fitzroy, Victoria, Australia, ²Faculty of Medicine, University of Melbourne, Parkville, Victoria, Australia, ³Disease Elimination Program, Burnet Institute, Melbourne, Victoria, Australia, ⁴School of Public Health and Preventive Medicine, Monash University, Melbourne, Victoria, Australia, ⁵Australian Research Centre in Sex, Health and Society, La Trobe University, Melbourne, Victoria, Australia, ⁶Department of Infectious Diseases, The Alfred and Monash University, Melbourne, Victoria, Australia

Background/Approach:

Prisons provide a unique opportunity to screen for and treat hepatitis C (HCV). We evaluated a nurse-led, state-wide model of care for people in prison living with HCV.

Analysis/Argument:

A prison-based, nurse-led, in-reach model of care for HCV treatment was implemented in all prison sites in Victoria, Australia in October 2015. We prospectively evaluated the outcomes of all treatments between 1st November 2015 and 31st December 2021. Data was recorded in a clinical database. The primary endpoint was the number of people commenced on therapy.

Outcome/Results:

In total, 3,133 treatment courses were prescribed to 2,768 people. The program was responsible for 13% of all HCV treatment courses prescribed in Victoria, Australia during the study period and accounted for 18%, 23% and 18% of all Victorian DAA prescriptions in 2019, 2020 and 2021 respectively. The median age was 39 years, 91% were male, 91% self-reported a history of drug use and 9% had cirrhosis. Few people (20%) had engaged in hepatitis C care in the community prior to incarceration. Complete follow up data on treatment outcomes were available for 1,757/2,768 (63%) people, with 1,627/1,757 (93%) achieving SVR12. Both the median time from incarceration to nursing assessment (4.8 months in 2015/2016 v 1.8 months in 2021; p <0.001) and the time from first assessment to treatment commencement (4.4 months in 2015/16 v 0.8 months in 2021; p <0.001) significantly reduced over the course of the program.

Conclusions/Applications:

A nurse-led model of care was highly effective for treating large numbers of people in prison living with hepatitis C. By 2021, the nurse-led program accounted for many of the HCV treatments prescribed in Victoria, Australia. Prison programs with nurses at the centre of care play a critical role in achieving the elimination of hepatitis C.

Disclosure of Interest Statement:

The Statewide Hepatitis Prison Program is operated by St Vincent's Public Hospital's Department of Gastroenterology, in Victoria, Australia. Funding for the Statewide Hepatitis Prison Program was entirely provided by the Victorian State Government's Department of Justice and Community Safety during the study period.