Viral hepatitis notifications: an assessment of place-based management in Victoria

Authors:

Inthavong P^{*1}, Beavon E^{*2}, Bohora S², Pe T¹, Clarke N¹, Richmond J^{1,3}, Hussain MA^{1,4}, Titulaer A², Doyle J³, Tai A², Athan E^{1,5}, Wilson A^{2,3}, Wade A^{1,3}

¹Barwon Public Health Unit, Barwon Health, Australia ²Gippsland Regional Public Health Unit, Latrobe Regional Health, Australia, ³Disease Elimination Program, Burnet Institute, Australia, ⁴Deakin University, Institute for Mental and Physical Health and Clinical Translation (IMPACT), School of Medicine, Geelong, Australia, ⁵Centre for Innovation in Infectious Disease and Immunology Research (CIIDIR), Institute for Mental and Physical Health and Clinical Translation (IMPACT) and School of Medicine, Deakin University, Australia *Equal first authors

Background: Australia needs to increase linkage to viral hepatitis care to achieve elimination targets. This study assessed the impact of enhanced local public health unit (LPHU) management of hepatitis B virus (HBV) and hepatitis C virus (HCV) notifications on complete diagnosis of HCV, linkage to care and treatment, compared to standard of care (SOC) in Barwon South-West (BSW) and Gippsland regions.

Methods: This study compared notification outcomes from March – August 2022, SOC; with September 2022 – February 2023, enhanced management at LPHUs. Available epidemiological data were compared by enhanced surveillance forms (ESF) completion. HCV outcomes included complete diagnosis (RNA test), treatment commencement, and for HBV, viral load measurement and referral to care. Prison notifications were excluded.

Results: In BSW, 130/161 (81%) notifications were included (90 HCV, 40 HBV). ESF completion was significantly higher with enhanced management compared to SOC (54/61 (89%); 8/69(12%); p<0.001) as was First Nations status completion (51/61 (84%); 15/69 (22%); p<0.001). There was no significant difference between LPHU and SOC in HCV complete diagnosis (35/41 (85%); 38/49(78%); p>0.05), HCV treatment commencement (14/18 (78%); 20/25 (80%); p>0.05), HBV viral load measurement (18/19 (95%); 14/16 (88%); p>0.05), or referral to HBV care (18/20 (90%); 11/16 (69%); p>0.05).

In Gippsland, 63/77 (82%) notifications were included (57 HCV, six HBV). HCV data is presented. ESF completion was significantly higher for enhanced management compared to SOC (25/29 (86%); 3/28 (11%); p<0.001), as was First Nations status completion (25/29 (86%); 1/28 (4%); p<0.001). The proportion with complete diagnosis was significantly higher with enhanced management compared to SOC (25/29 (86%); 13/27 (46%); p=0.002), but not for treatment commencement (5/6 (63%); 3/5 (38%); p>0.05).

Conclusion: The proportion of notifications with complete diagnosis and commencing treatment in BSW and Gippsland differed - tailoring the care cascade to respond to need informed by local data is key to achieving viral hepatitis elimination.

Disclosure of interest statement: This work is partially funded by NHMRC Investigator grant 2016667.