MORBIDITY AND MORTALITY ASSOCIATED WITH VIRAL HEPATITIS IN VICTORIA

Authors:
Brown CR¹, MacLachlan J¹, Allard N¹, Rowe S², Cowie B¹.

¹ WHO Collaborating Centre for Viral Hepatitis, Victorian Infectious Diseases Reference Laboratory, The Doherty Institute
² Communicable Diseases, Epidemiology and Surveillance, Department of Health and Human Services (Vic)

Introduction:
Deaths from liver cancer continue to rise in Australia, and viral hepatitis infection is a key cause. This study aims to provide a comprehensive description of the morbidity and mortality associated with hepatitis B (HBV) and C (HCV) in Victoria, establishing the incidence of liver cancer and liver-related deaths among people living with these infections.

Methods:
All HBV and HCV notifications in Victoria (period 1991-2016) were linked with liver cancer records in the Victorian Cancer Registry (1991-2014), deaths in the National Death Index (1991-2017), and Emergency Department presentations/hospitalisations recorded by the Victorian Department of Health (1999–2016 and 1993-2016, respectively), and the number of notified individuals experiencing each of these adverse outcomes was assessed. Individuals were classified as having a late diagnosis of viral hepatitis where their notification date was later than, equal to or less than six months prior to the date of cancer diagnosis or death.

Results:
Of the 123,805 individuals with notified viral hepatitis there were 75,592 (61.1%) with HCV, 45,103 (36.4%) with HBV and a further 3,110 (2.5%) individuals coinfected with HBV and HCV. There were 1,558 (1.3%) individuals with a notification linked to a liver cancer diagnosis, almost two-thirds (63%) of which were infected with HCV, one-third with HBV (33%) and 4% coinfected. There were 15,601 (12.6%) individuals with a viral hepatitis notification linked to a death, predominantly those infected with HCV (79.3%). Of the 16,007 individuals diagnosed with liver cancer and/or deceased, 3,026 (19%) had a late diagnosis of viral hepatitis.

Conclusion:
This study is the first to ascertain the burden of adverse outcomes of viral hepatitis in Victoria, and demonstrates the substantial number of liver cancer cases and deaths in people affected. Further analysis will provide epidemiological detail regarding trends and at-risk populations within this cohort to help guide prevention initiatives.

Disclosure of Interest Statement:
The authors recognise the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.