

Significant gaps in the cascade of care contribute to poor liver cancer outcomes among people with hepatitis B: a retrospective-prospective longitudinal cohort study.

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Background: Hepatitis B (HBV) is a major cause of hepatocellular carcinoma (HCC) in Australia, despite availability of subsidised treatment that reduces HCC risk. We aimed to describe the cascade of care and clinical characteristics among people with HBV-related HCC.

Methods: We conducted a retrospective and prospective cohort study of all HCC cases diagnosed across six tertiary health networks in Melbourne. Bi-variable analysis was performed using chi square test. Multivariable logistic regression modelling was used to determine variables associated with HBV treatment and surveillance uptake. Cox proportional hazards modelling was used to identify variables associated with survival from HCC diagnosis.

Results: 1203 incident HCC cases were identified, of which 219 were due to HBV. Most people with incident HBV-HCC were male(89%) and of Asian ethnicity(60%). Compared to people with HCC due to other aetiologies, people with HBV-related HCC were more likely to have a family history of HCC. 60% of people with HBV-HCC were eligible for HBV treatment at the time of HCC diagnosis, yet 27% were not on treatment. 85% of those referred by specialist hepatology services were enrolled in surveillance compared to 16% among those referred by primary care and non-liver specialists. Median survival from time of HCC diagnosis was longer among those with HBV compared to non-HBV HCC. On multivariable analysis, factors associated with greater mortality were low performance status, alcohol misuse and advanced BCLC stage at diagnosis. Attending a liver specialist service, being enrolled in surveillance and being on HBV treatment were all associated with early BCLC stage HCC at diagnosis.

Conclusion: HBV-related HCC incidence is reducing in Australia, however a significant proportion of people with HBV-related HCC are not receiving guideline-based care. Greater investment in non-specialist health-worker education and training in HBV care, coupled with a national registry approach to HCC surveillance are urgently needed.

Disclosure of Interest Statement: None to declare