

## **Abstract**

**Background:** Globally, the burden of hepatocellular carcinoma (HCC) is increasing; however, due to a lack of reliable epidemiological data, the incidence of HCC and its correlates remains masked in many sub-Saharan African countries, including Ethiopia. There is also a paucity of data in Ethiopia on public awareness of HCC and the infrastructure, education, and financial needs to control HCC. Addressing the aforementioned research gaps in Ethiopia could aid in careful HCC control planning. This is because careful HCC control planning entails, among other things, assessing the current incidence and trend of the disease and its risk factors, assessing public awareness as well as clinicians' perceptions toward measures required to control the disease. Thus, this thesis was carried out to 1) determine the incidence and trend of HCC over eight years (2012–2019) in Addis Ababa; 2) assess the prevalence of hepatitis B virus (HBV) and hepatitis C virus (HCV) infection in HCC patients in Addis Ababa; 3) assess public awareness of cancer and HCC signs, symptoms, and risk factors in Addis Ababa; 4) report the best available evidence on the burden of HCC and its risk factors in Ethiopia; 5) identify the best available evidence on the combined roles of HCV and HBV in the development of HCC; and 6) explore liver cancer clinicians' perceptions of infrastructural, educational, and financial needs to control HCC in Ethiopia. **Methods:** This thesis included six studies: one systematic review and meta-analysis, one systematic review, two retrospective studies, one cross-sectional survey, and a qualitative study comprising in-depth interviews. **Results:** The systematic review found a paucity of data on HCC incidence, HCC risk factors, and public awareness of HCC in Ethiopia. The retrospective study on HCC incidence in Addis Ababa found that between 2012 and 2019, the incidence of HCC was higher in men and those aged 54 and older. The retrospective study on HCV and/or HBV infection among HCC patients found that HBV (32.8%), HCV (17.7%), and HBV and HCV coinfection (10.6%) were present in the majority of HCC patients in Addis Ababa. In Addis Ababa, the majority of HCC patients (54%)

were in stages III and IV, with only a few cases (20.2%) in stage I at diagnosis. In the cross-sectional survey study of HCC and general cancer awareness, those aged 60 and older were found to be less aware of cancer signs and symptoms than those aged 18 to 29, highlighting generational differences in HCC signs and symptoms which need to be considered in public health campaigns. The cross-sectional survey study also found that those with primary, secondary, and tertiary education were more aware of cancer symptoms and signs than those with no formal education. The qualitative study also identified the following needs for HCC control in Ethiopia, among others: increasing public awareness of HCC; improving health professionals' knowledge of HCC through continual training; and improving the budget for HCC diagnosis, treatment, and screening. **Conclusion:** This study found a socio-demographic disparity in HCC incidence and awareness of cancer in Addis Ababa, Ethiopia, and demonstrated the need to increase funding for HCC and improve health professionals' knowledge of HCC in Ethiopia. A careful HCC or national cancer control plan or strategy that addresses sociodemographic disparities in HCC incidence and public awareness of HCC in the country is needed. The control strategy or plan should also emphasise the importance of increasing health professional knowledge of HCC as well as increasing funding for HCC diagnosis, treatment, and screening in the country.