

# Utilisation of hepatocellular carcinoma screening in Australians at risk of hepatitis B virus-related carcinoma and prescribed anti-viral therapy.

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## Abstract

### AIMS AND OBJECTIVES:

To investigate hepatocellular carcinoma screening utilisation and factors associated with utilisation among patients prescribed hepatitis B virus anti-viral therapy and at risk of hepatocellular carcinoma.

### BACKGROUND:

The incidence of hepatocellular carcinoma has increased in Australia over the past three decades with chronic hepatitis B virus infection a major contributor. hepatocellular carcinoma surveillance programs aim to detect cancers early enabling curative treatment options, longer survival and longer times to recurrence.

### DESIGN:

Multi-site cross-sectional survey.

### METHODS:

An online study questionnaire was administered to eligible participants attending three Sydney tertiary hospitals. Data were grouped into six mutually exclusive hepatocellular carcinoma risk factor categories as per American Association for the Study of Liver Diseases guidelines. All analyses were undertaken in STATA. Logistic regression was used to assess the associations between covariates and screening utilisation. Multivariate models described were assessed using the Hosmer-Lemeshow goodness of fit.

### RESULTS:

Of the 177 participants, 137 (77.4%) self-reported that US had been performed in the last six months. Awareness that screening should be performed and knowing the correct frequency of US screening were independently associated with screening utilisation. Participants who knew that screening should be undertaken were three times more likely to have had pretreatment education or were prescribed hepatitis B virus anti-viral treatment for >4 years. Participants reporting a family history of hepatocellular carcinoma were less likely to know that screening should be undertaken every 6 months.

**CONCLUSION:**

While utilisation of hepatocellular carcinoma surveillance programs was higher in this study than in previous reports, strategies to further improve surveillance remain necessary.

**RELEVANCE TO CLINICAL PRACTICE:**

Findings from this research form the basis for proposing strategies to improve utilisation of hepatocellular carcinoma screening, inform hepatitis B virus-related clinical practice and for the delivery of care and nursing education to people receiving hepatitis B virus anti-viral therapy and at risk of developing hepatocellular carcinoma.

**KEYWORDS:**

hepatitis B virus; hepatocellular carcinoma; knowledge; nursing education; patient education; screening

[J Clin Nurs.](#) 2018 Jul;27(13-14):2673-2683. DOI:[10.1111/jocn.14367](#)