

ORIGINAL RESEARCH

Practice, Knowledge, and Barriers for Screening of Hepatocellular Carcinoma Among High-Risk Chinese Patients



Kerui Xu, MPH, Shinobu Watanabe-Galloway, PhD, Fedja A. Rochling, MB, BCh, Jianjun Zhang, MD, Paraskevi A. Farazi, PhD, Hongyan Peng, MB, BS, Hongmei Wang, PhD, Jiangtao Luo, PhD
Omaha, Nebraska; and Wuhan, China

Abstract

BACKGROUND Hepatocellular carcinoma (HCC) is among the leading causes of cancer deaths in China. Considering its poor prognosis when diagnosed late, Chinese guidelines recommend biannual screening for HCC with abdominal ultrasound and serum α -fetoprotein (AFP) test for high-risk populations.

OBJECTIVES To investigate the practice, knowledge, and self-perceived barriers for HCC screening among high-risk hospital patients in China.

METHODS An interview-based questionnaire was conducted among Chinese patients with chronic hepatitis B and/or chronic hepatitis C infection from outpatient clinics at 2 tertiary medical institutions in Shanghai and Wuhan, China.

FINDINGS Among 352 participating patients, 50.0% had routine screening, 23.3% had irregular screening, and 26.7% had incomplete or no screening. Significant determinants for screening included higher level of education, underlying liver cirrhosis, a family history of HCC, and better knowledge concerning viral hepatitis, HCC, and HCC screening guidelines. Moreover, factors associated with better knowledge were younger age, female gender, urban residency, education level of college or above, annual household income of greater than 150,000 RMB, and longer duration of hepatitis infection. The 3 most common barriers reported for not receiving screening were not aware that screening for HCC exists (41.5%), no symptoms or discomfort (38.3%), and lack of recommendation from physicians (31.9%).

CONCLUSIONS Health care professionals and community leaders should actively inform patients regarding the benefits of HCC screening through design of educational programs. Such interventions are expected to increase knowledge about HCC and HCC screening, as well as improve screening adherence and earlier diagnosis.

KEY WORDS hepatocellular carcinoma, high-risk Chinese patients, screening, knowledge, barriers

All authors have access to the data and had a role in writing the manuscript.

The study was supported by the Cancer Epidemiology Education in Special Populations (CEESP) Program of the University of Nebraska Medical Center from the National Cancer Institute (R25CA112383). The content of this project is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer Institute.

The authors declare that they have no conflict of interests.

From the Department of Epidemiology, College of Public Health, University of Nebraska Medical Center, Omaha, NE (KX, SW-G, PAF); Division of Gastroenterology and Hepatology, Department of Internal Medicine, College of Medicine, University of Nebraska Medical Center, Omaha, NE (FAR); Department of Hepatology, Hubei Third People's Hospital, Wuhan, Hubei, China (JZ, HP); Department of Health Services Research & Administration, College of Public Health, University of Nebraska Medical Center, Omaha, NE (HW); Department of Biostatistics, College of Public Health, University of Nebraska Medical Center, Omaha, NE (JL). Address correspondence to K.X. (kerui.xu@unmc.edu).

INTRODUCTION

Hepatocellular carcinoma (HCC) is a primary malignant neoplasm accounting for 85%–90% of primary liver cancer, which is the sixth most common cancer and the second-leading cause of cancer death worldwide.^{1,2} Liver cancer places a huge burden on the Chinese population. China alone accounts for approximately 50% of the total number of liver cancer cases and deaths globally.² In addition, liver cancer is identified as the second leading cause of cancer death among men and third among women in China.³ In an effort to control and to reduce the detrimental effects of liver cancer in China, guidelines recommend the practice of screening for early cancer detection.⁴ However, unlike in other East Asian regions, such as Japan, Korea, and Taiwan, there is no government-funded nationwide HCC screening program for high-risk populations in China.⁵ In China, the high-risk populations for developing HCC are patients with hepatitis B virus (HBV) infection, hepatitis C virus (HCV) infection, HBV and HCV coinfection, liver cirrhosis, and diabetes mellitus and those with severe alcohol abuse or a family history of HCC.⁶

The detrimental effect of liver cancer is characterized by its poor prognosis, with a 5-year relative survival rate of 10.1% in China.⁷ Currently there is no curative treatment for the intermediate or advanced stage of HCC, and most patients are diagnosed during the advanced stage, which cannot be effectively treated.⁸ Although certain cancers may respond to adjuvant chemotherapy or radiation, neither chemotherapy nor radiation for late-stage HCC reduces mortality rates; nevertheless, treatments are more effective for the early stage of HCC and include surgically removing part of the liver, local ablation of small lesions, and liver transplantation.⁹

Routine screening is the best way to detect early-stage HCC and improve survival and prognosis.⁹ The screening guidelines for HCC developed by the American Association for the Study of Liver Diseases recommend HCC screening every 6 months for high-risk individuals by abdominal ultrasound.¹⁰ On the other hand, screening guidelines published by the Peking University Medical Press and expert consensus established by the Chinese Anti-Cancer Association Society of Liver Cancer, Chinese Society of Clinical Oncology, and Chinese Society of Hepatology Liver Cancer Study Group recommend biannual screening with

a combination of serum α -fetoprotein (AFP) and abdominal ultrasound at 6-month intervals for high-risk populations.^{6,11} The clinical effectiveness of AFP has been reported in 18,816 patients with a history of chronic hepatitis or HBV infection, and findings indicated that biannual screening with AFP and ultrasound reduced mortality by 37%.⁴ In addition, a combination of these 2 screening tests has been suggested as the most effective strategy for detecting HCC at an early stage, and complementary usage improved surveillance in patients with cirrhosis.^{12,13} In spite of a lack of adequate sensitivity of abdominal ultrasound and AFP, this combination is still regarded as the recommended method for HCC surveillance.¹⁴

Although numerous studies have surveyed different populations to understand the knowledge and barriers for cervical, breast, and colorectal cancer screenings, it is difficult to find similar studies conducted for HCC screening in China. Furthermore, although no population-based data have been published about HCC screening rates in China, studies have suggested that screening rate may be low because of a lack of knowledge and awareness among the general Chinese population and even among health care workers.^{15,16} In a study that included Chinese public health workers, 29% were not aware that chronic HBV infection was a major risk factor for cirrhosis and liver cancer, and 30% did not know about the importance of the HBV vaccine.¹⁶ Because health care professionals recommend HCC screening to at-risk patients,^{1,17} it is crucial to identify the barriers that hinder HCC screening so that more effective approaches can be implemented to promote screening. The main objectives of this study were to (i) investigate HCC screening practice among high-risk Chinese patients, (ii) identify the sociodemographic and clinical factors related to HCC screening practice, (iii) examine the association of sociodemographic and clinical factors with HCC screening knowledge, and (iv) identify the barriers to HCC screening.

METHODS

Study Design and Data Collection. This was a cross-sectional questionnaire study conducted from June to August 2016 at the Shanghai Public Health Clinical Center of Shanghai and Hubei Third People's Hospital of Wuhan, China. The source population were patients from outpatient clinics with a high risk of developing HCC, which comprised patients with chronic HBV and/or HCV

Download English Version:

<https://daneshyari.com/en/article/5676855>

Download Persian Version:

<https://daneshyari.com/article/5676855>

[Daneshyari.com](https://daneshyari.com)