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Trends in mortality of cirrhosis in China: An analysis of the China death surveillance database from 2008 to 2020

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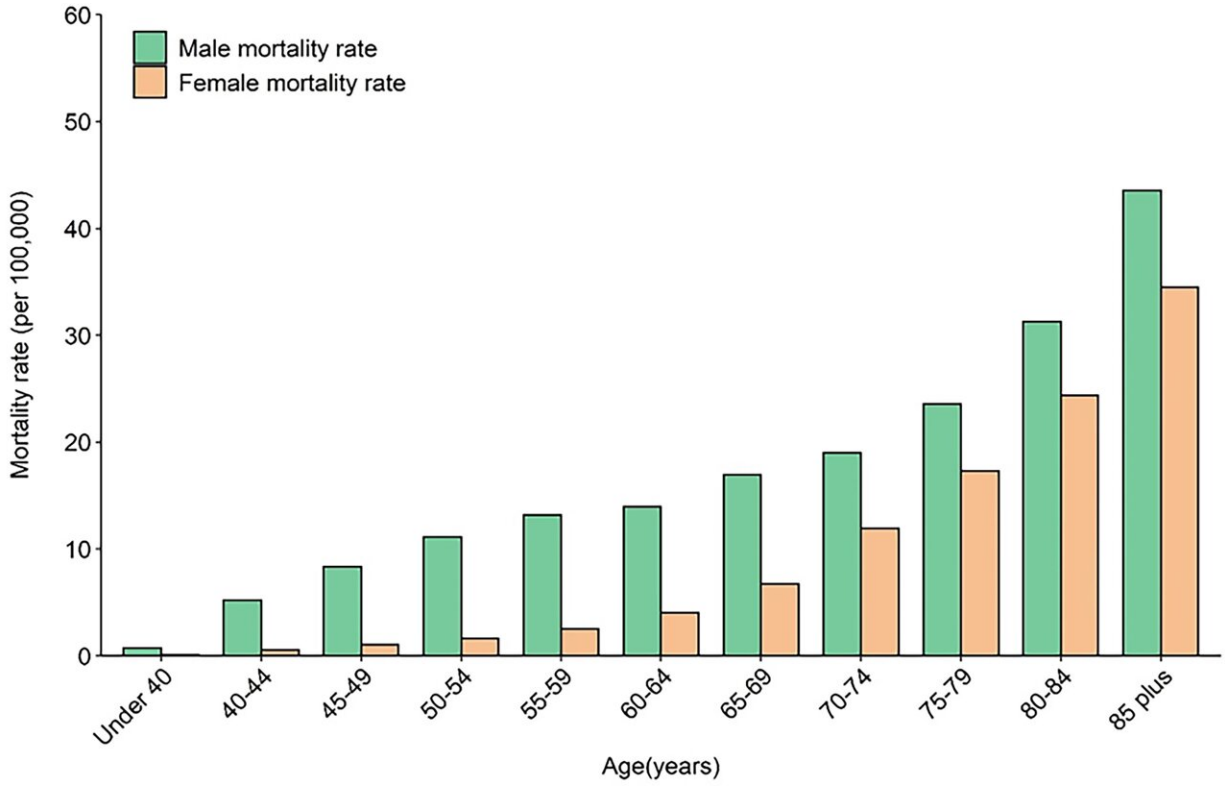

Mortality rates of cirrhosis by age group and sex in 2020. Credit: *Journal of Clinical and Translational Hepatology* (2024). DOI: 10.14218/JCTH.2023.00454

Cirrhosis is the terminal stage of various chronic liver diseases and seriously affects the quality of life and lifespan of patients. China has an

important role in the global burden of cirrhosis and other chronic liver diseases, accounting for 14.9% of the total cases in the world.

Thus, the mortality of patients with cirrhosis in China has a greater effect on the global burden of cirrhosis and other chronic liver diseases. It was necessary for us to analyze the current mortality rate of patients with cirrhosis and its changing trends in recent decades in China to establish strategies for intervention and to decrease the mortality burden of patients with cirrhosis worldwide.

In this study, using data from the Disease Surveillance Points system (DSPs) of the Chinese Center for Disease Control and Prevention (CDC), we analyzed the mortality profile of cirrhosis in 2020 and the trend in mortality from 2008 to 2020 stratified by sex, residential location, region, province, and age group.

Mortality data from 2008 to 2020 were retrieved from the Disease Surveillance Point System (DSP) of the Chinese Center for Disease Control and Prevention. The crude mortality rates and age-standardized mortality rates (mortality caused by cirrhosis/100,000 people, 1/100,000) were reported by sex, age (85 years), residential location (urban and rural areas), and region (Eastern China, Central China, and Western China).

Age-standardized mortality rates were calculated using two age structures: the 2010 census population of China (ASMRC) and Segi's world population (ASMRW). We also analyzed the changing trend of cirrhosis mortality from 2008 to 2020 by sex, residential location, and region by estimating the average annual percentage change (AAPC) of the ASMRC and its 95% confidence interval (CI).

The crude mortality rate of cirrhosis was 4.57 per 100,000 people in 2020. Compared with females and individuals living in urban areas,

males and people living in rural areas had greater age-standardized mortality. The crude mortality rate and age-standardized mortality rate in provinces in Southwest China (Guangxi, Yunnan, Guizhou, and Qinghai) were greater than those in other provinces. Moreover, with increasing age, the age-specific mortality rate increased significantly. From 2008 to 2020, the mortality rate of cirrhosis in China decreased except for in males aged 50–59 years, females aged 45–49 years and females aged 80–84 years.

We analyzed mortality data of cirrhosis between 2008 and 2020 in China using data extracted from the CDC-DSPs. In those consecutive 13 years, the mortality of cirrhosis decreased in China, except for males 50–59 and females 45–49 and 80–84 years of age. A greater cirrhosis mortality burden was observed in males, older individuals, and people living in rural areas and provinces in Southwest China. In the future, health care providers should pay more attention to those people during the intervention and control of cirrhosis mortality.

The work is published in the *Journal of Clinical and Translational Hepatology*.

More information: Xiaoxiao Wang et al, Trends in Mortality of Cirrhosis in China: An Analysis of the China Death Surveillance Database from 2008 to 2020, *Journal of Clinical and Translational Hepatology* (2024). DOI: 10.14218/JCTH.2023.00454

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