## Global burden and cross-country inequalities in HCV-related liver diseases from 1990 to 2019

Junzhu Bai<sup>1</sup>, Hengliang Lv<sup>1</sup>, Leiliang Zhang<sup>2</sup>, Longhao Wang<sup>3</sup>, Shumeng You<sup>1</sup>, Xin Zhang<sup>1</sup>, Xuan Li<sup>4</sup>, Yong Wang<sup>5</sup>, Yuanyong Xu<sup>5</sup>, and Wenyi Zhang<sup>5</sup>

October 4, 2023

## Abstract

Background & Aims: Acute hepatitis, cirrhosis and other chronic liver diseases, and liver cancer caused by hepatitis C virus (HCV) are have imposed a sever burden at the global. The study aims to describe the burden and inequality analysis of HCV-related liver diseases at the global. Methods: Our study utilized data from the Global Burden of Diseases (GBD) 2019. Age-standardized rate of incidence (ASIR), prevalence (ASPR), death (ASDR), and disability-adjusted life years (DALYs) were employed to describe the burden of HCV-related liver diseases across different populations and regions worldwide. Additionally, we conducted an inequality analysis using the slope index of inequality and concentration index to explore the global disparities associated with HCV-related liver diseases burden. Results: HCV-related diseases caused 542, 316 global deaths in 2019. China (17% of total infections) and India (10% of total infections) had the largest numbers of HCV-related disease, but the ASPR was highest in Mongolia (9, 673.92 per 100, 000) and Cambodia (5, 445.82 per 100, 000). The burden of Acute hepatitis C (AHC) was more common in low socio-demographic index (SDI) regions, while HCV-related liver cancer caused more large burden among the regions with higher SDI. Conclusions: The burden of HCV-related liver diseases was still at a relatively high level worldwide, and SDI was a significant factor for differential distribution of the disease. Countries in the world should take active parts in alleviating the burden of HCV-related liver diseases, and take targeted measures according to their specific circumstances.

## Hosted file

Manuscript.docx available at https://authorea.com/users/671017/articles/670738-global-burden-and-cross-country-inequalities-in-hcv-related-liver-diseases-from-1990-to-2019

<sup>&</sup>lt;sup>1</sup>China Medical University Department of Epidemiology

<sup>&</sup>lt;sup>2</sup>Shandong First Medical University

<sup>&</sup>lt;sup>3</sup>Army Medical University

<sup>&</sup>lt;sup>4</sup>Anhui Medical University Department of Epidemiology and Biostatistics

<sup>&</sup>lt;sup>5</sup>Chinese PLA Center for Disease Control and Prevention





