

OVERVIEW OF HUMAN CLONORCHIASIS SINENSIS IN CHINA

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Abstract. The objective of the survey was to determine the current status, trends and transmission factors for *Clonorchis sinensis* infection in China and to provide updated information for development control strategies. This was part of a nationwide survey of major human parasitic diseases carried out during 2000-2002 sampled by the stratified randomized cluster sampling method. Fecal examination was conducted using the Kato-Katz thick smear method and egg count per gram of feces (EPG) was determined for the egg-positive patients. A questionnaire and a case-control study were applied to analyze the transmission factors for *C. sinensis* infection. The overall prevalence rate of *C. sinensis* infection was 0.58% in 356,629 residents from 688 sampled pilot sites in 31 provinces, autonomous regions and municipalities (PAM) of China. The infection rates of *C. sinensis* in Guangdong, Jilin, Guangxi Zhuang autonomous region, Anhui and Heilongjiang were higher than the other PAM, they were 5.35, 4.77, 3.71, 0.67 and 0.48%, respectively. In Guangxi, moderate and heavy infections were found in 29.14% and 11.52%, respectively, of the total infected. Heavy infections were not found in any of the other provinces except for 2 heavily infected cases in Heilongjiang. The prevalence rate increased with age for residents aged <35 years and remained at high levels in those aged 25-60 years. The infection rate in males was 1.64 times that of females. The *C. sinensis* egg positivity rates in fishermen, businessmen, physicians and teachers were higher than others. Among the 38 ethnic groups, the prevalences in the Han (3.20%) and the Zhuang (3.15%) were the highest; no cases were found among the Zang, Miao, Man and other 29 ethnic groups. Significant differences in prevalences were also found among counties of different economic levels. *C. sinensis* infection is prevalent in hilly and plains regions of northeast and southcentral China, representing two highly endemic areas in the North and the South. An increasing trend in prevalence was seen in endemic areas. The infection was mainly detected in young and middle aged males. A higher prevalence was observed in those with a better education and a higher income. Consumption of raw (or under-cooked) fresh water fish or shrimp were the main risk factors responsible for transmission of the parasite.

Keywords: *Clonorchis sinensis*, prevalence, risk factor, PR China

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