## Changing trends of neglected tropical diseases in China

In The Lancet Infectious Diseases, Shiqui Yang and colleagues<sup>1</sup> analysed the epidemiological profiles and trends of 45 infectious diseases in China and found ten diseases substantially increasing from 2004 to 2013. Notably, two neglected tropical diseases, namely echinococcosis and schistosomiasis, had large increases, with echinococcosis increasing most, with an annual percentage change of 24.0%, and schistosomiasis increasing by the sixth largest amount, at 10.5%. However, caution is warranted as the incidence of the reported cases of these two diseases from the national notifiable infectious disease report system could not be deduced.2

Three approaches are adopted to capture the epidemiology of schistosomiasis in China, namely the national sampling survey, active sentinel surveillance, and the passive routine report. Three national surveys were implemented in 1989, 1995, and 2004; in 1989, an infection proportion of 10.20% occurred in endemic areas, in 1995, it was 4.89%, and in 2004, it was 2.50% (figure).<sup>3,4</sup> Active sentinel surveillance was initiated in 1990, and high coverage has been achieved since 2005, with 81 sentinel spots.3 The infection proportion has generally decreased, from 2.06% in 2005 to 0.22% in 2013. The third approach is passive routine report, namely the national notifiable infectious disease report system<sup>2</sup> from which Yang and colleagues<sup>1</sup> extracted data. In this system, the reported cases with schistosomiasis have increased from 1275 in 2004 to 5699 in 2013. However, the included cases in this passive report system were predominately acute schistosomiasis cases at the beginning, allowing rapid detection and subsequent response.5

Later, more chronic schistosomiasis cases were also included because of the rapid decrease of acute cases owing to successful adoption of an integrated control strategy against schistosomiasis in 2004.<sup>5</sup> The apparent increase in schistosomiasis according to this system is only attributable to improvements in the report system rather than an actual change in incidence.

Similarly, increasing echinococcosis according to this system resulted from the improvement of disease control. Owing to increasing awareness of echinococcosis in China, an increasing number of patients with echinococcosis are supported by the government to receive treatment in hospitals, which has led to the drastic increase of reported cases in this passive system, from 602 in 2004 to 3841 in 2013.2 Between 2001 and 2004, a national survey of important parasitic diseases including echinococcosis was carried out in China.<sup>6</sup> In 2012, another special survey of echinococcosis was also implemented in endemic areas.7 Comparing 29 counties included in both surveys, the prevalence of echinococcosis has decreased from 1.37% in 2001-04 to 0.71% in 2012.

Schistosomiasis has been a high priority for health since the establishment of a new government in 1949. A substantial decrease in schistosomiasis, especially after adoption of an integrated control strategy in 2004, has led to China aiming to eliminate schistosomiasis by 2025. Echinococcosis is also a high priority for public health in China, with substantial control activities implemented in western endemic areas.

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Shi-Zhu Li, Men-Bao Qian, Li-Juan Zhang, \*Xiao-Nong Zhou ipdzhouxn@sh163.net

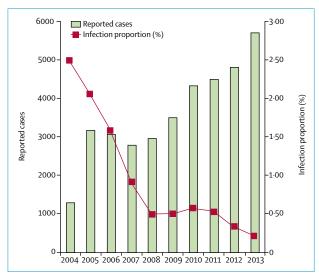


Figure: Epidemiology of schistosomiasis in China between 2004 and 2013
Reported cases were collected through the national notifiable infectious disease report system. The infection proportion was collected from national active sentinel surveillance, except for 2004, which was from a national sampling survey.

Key Laboratory on Biology of Parasite and Vector, Ministry of Health, Shanghai, China; National Center for International Research on Tropical Diseases, Shanghai, China; World Health Organization Collaborating Center for Tropical Diseases, Shanghai, China; and National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention, Shanghai 200025, China

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