Reply to Wang and Liang

To the Editor—We thank Drs Wang and Liang for their comments. Mass drug administration (MDA) is not sustainable even in the short term and should not be advocated. Numerous epidemiological studies from around the world, dating back to the early 1980s, have shown that the impact of praziquantel on the prevalence, intensity, and morbidity of disease is short-lived and that in highly endemic areas both the prevalence and intensity of infection return to baseline levels within 18–24 months after treatment [1]. To state that the national control strategy in China from the 1980s to 2004 was based primarily on MDA for morbidity control is incorrect. Transmission-blocking control strategies never ceased and, moreover, were financed by the World Bank Loan Program [2]. It is noteworthy that the schistosomiasis transmission period in China is only for 5 months per year, whereas in the Philippines and Africa the transmission period is year-round. The national endemic situation in China (<10% human prevalence) would be considered “light” when compared to that in Africa, which has many regions with a human prevalence >50% for both Schistosoma mansoni and Schistosoma haematobium.

In sum, the success of the MDA program for schistosomiasis in China should be viewed with caution given that transmission is not year-round, alternative control strategies were fully established, and the endemic areas under mass treatment were lightly infected.

As stated in our article, a recent systematic review and meta-analysis of 52 clinical trials showed that, compared with placebo the cure rate of praziquantel at a 40 mg/kg dosage (which is the current dose recommended by the World Health Organization) was 52% (range from 49% to 55%) compared with 91% (range from 88% to 92%) when dosages were increased to 60, 80, 100 mg/kg, divided into 2 or more doses. Both the 40 mg/kg and 60 mg/kg doses are given as a split dose; thus compliance is not an issue. A bovine vaccine against schistosomiasis has been successfully studied in China and is presently being evaluated in the Philippines [3].

Although China is often illustrated as the global success story for schistosomiasis control and elimination, no other country in the world will be able to replicate what they have done. In the last 50 years alone, China has spent close to 1 billion US dollars on controlling the disease through integrated control measures. China currently employs approximately 20,000 full-time staff to work on the disease, with an annual operating budget of $120 million US dollars [4]. What other country in the world has the political commitment, human resources, and the financial capital to duplicate this? Clearly the endemic situation in Africa is quite different from that in China (eg, different Schistosome species, different intermediate hosts, year-round transmission, different environment, different socioeconomic factors, and culture); hence, knowledge transfer from China to the African setting is of limited utility.

Notes

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