

Social and cultural factors modifying the transmission of Schistosomiasis in Yi communities of Sichuan Province of China

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This study aims to explore the social and cultural factors that modify the transmission of schistosomiasis, a chronic infectious disease undermining the quality of life in Yi communities in Sichuan Province of China. Based on previous studies, the availability of hygiene infrastructure is not the only factor that influences the transmission of schistosomiasis. We expect that social and cultural factors influence human environmental exposure and coverage of sanitation, thus acting as important modifiers for the transmission of schistosomiasis.

In this study, more than 800 villagers from two Yi counties were recruited, including school-age children and adults, 525 of which were retained in the final analysis. Non-participant field observations, individual and household surveys, in-person interviews with five different groups (village leaders, household owners, household wives, school children, and local health center professionals) and focus group discussions with school-age children and adults were conducted to collect data on demographics, psychosocial factors, risk levels, and infection history.

Quantitative and qualitative data were first analyzed separately to generate summaries of the characteristics of the Yi population in the study villages. STATA was used to summarize and test the quantitative data from the surveys. The transcriptions for in-person interviews and focus group discussions were coded in an open process, and resulted in collecting any concept or topic emerging from the conversation. The results were then integrated to understand and explain the observed phenomena in both quantitative and qualitative components.

The Yi people's knowledge of schistosomiasis has improved in recent times and there was a positive association between knowledge and perception of schistosomiasis. Infection history modified this association in that personal experience was a major source of knowledge. However, the knowledge-behavior association was affected by

the long tradition of Yi culture and the limited conditions which impeded the villagers' adopting the protective behaviors. The idea of prevention didn't appeal to Yi people as well as that of treatment. We find that informal communication helped to educate people. Greater benefit would be achieved if the children-parent communication received more attention. The government plays a key role in improving the conditions, which in turn has a great effect on peoples' behavior. But the government needs to be cautious not to make Yi people too dependent on government measures – counting on pills provided by the anti-schistosomiasis stations instead of adopting protective behaviors. Capacity building should be stressed over charity. Currently, the local health centers were mostly not capable of diagnosing or treating schistosomiasis, limiting villagers' access to schistosomiasis control measures at the local level. This indicates an opportunity for community empowerment by building the capacity of the local health centers and improving community education.

There is a sophisticated network of social and cultural factors influencing the transmission of schistosomiasis in Yi communities. This study explored some of the them and tried to provide explanations. More research needs to be done to further examine the relationship between these factors and schistosomiasis. Mixed-methods research which combines quantitative methods with qualitative ones is suggested for further researchers interested in this area.