

EPIDEMIOLOGICAL FEATURES AND CONTROL OF SCHISTOSOMIASIS JAPONICA IN CHINA

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Achievements and successes have been obtained in schistosomiasis control in China. An epidemic survey was carried out and its results analyzed.

Key words: schistosomiasis – control – *Schistosoma japonicum* – epidemiology

In the last three decades, achievements and successes have been obtained in schistosomiasis control in China. Among 378 counties formerly endemic for schistosomiasis japonica, transmission has been interrupted in 150 counties and 110 counties is under control. The vector snail habitats were reduced from 14.8 billion square meters in 1950s to 3.6 billion in 1990. The number of infected persons, and infected cattle was estimated to 11 million and 1.2 million in 1950s compared with the number estimated to 1.5 million and 170,000 respectively in 1990. Most remaining endemic areas are located in the marshlands and lake regions as well as mountainous regions, and the total eradication of schistosomiasis is temporarily impossible in most of these locations. Strategy for reducing the prevalence and mobility of this disease is requested. The present study seeks to identify the epidemiological feature of schistosomiasis in endemic regions, and to make the strategy more proper.

Field study units around the Dong-tin and Po-yang lakes as well as mountainous regions set up. An epidemic survey was carried out for three years and its results analyzed: (1) Based on the ecological and epidemiological features, the endemic areas in lake and mountainous regions can be stratified into different categories. The islanders and inhabitants who live near the marshlands are higher-risk people. On some islets, half of the population is affected; (2) Infection is related to exposure to infected

lake and ditch water. Dose-response relationship has been found. Inhabitants who live on the islets or by the marshlands more frequently contact the infected water for domestic and productive purposes. The common source of infection in lake and mountainous regions has been found; (3) The inhabitants' behavior influences the frequency of water contact. The people in the endemic areas who have had higher level education and the knowledge of prevention of schistosomiasis are less frequently infected than those who have had low level education and do not know the preventive measures; (4) The density of the infected snail is the main index of determining the high risk place in the mountainous and lake regions; (5) It was recognized that domestic animals such as cattle and pigs are the principle reservoirs in the endemic areas; (6) Properly designed chemotherapy annually with praziquantel can decrease the prevalence of human and livestock in 2-3 years and keep the prevalence at lower level for two or three years when the measure was stopped; (7) According to our limited health resources, we have to put stress on villages at islets and near marshlands as well as some high risk mountainous villages in controlling schistosomiasis.

A good characterization followed longitudinally over a period of years is a valuable resource in the development and evaluation of control measures.