Current Status of Soil-transmitted Nematode Infection in China

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Objective To carry out national surveys for ascertaining the current status and trends of soil-transmitted nematode infections in China, providing scientific basis for further developing control strategies.

Methods In 1988-1992 (hereinafter abbreviated as “survey in 1990”), a stratified cluster random sampling method was used in the survey. In 2001-2004 (hereinafter abbreviated as “survey in 2003”), in order to compare with the survey in 1990, two-characteristic stratified cluster random sampling method was used and 687 investigation spots were sampled from the 2848 spots selected in the survey in 1990. Kato-Katz thick smear method was used to examine the eggs of soil-transmitted nematodes in fecal samples.

Results The prevalence rates were 53.6% and 19.6% for soil-transmitted nematodes, 14.6% and 6.120% for hookworms, 44.6% and 12.7% for Ascaris lumbricoides, 17.4% and 4.630% for Trichuris trichiura in survey 1990 and survey 2003, respectively. The prevalence rates of soil-transmitted nematodes were higher in 13 provinces than the average level in China in the survey in 1990, and higher in 8 provinces than the average level in the survey in 2003. The prevalence of hookworms, Ascaris lumbricoides, Trichuris trichiura and the overall prevalence of soil-transmitted nematodes were higher in females than in males. It is estimated from the results of survey in 2003 that the number of persons with soil-transmitted nematode infections in the country is about 129 million, less than that in the survey in 1990.

Conclusion The prevalence of soil-transmitted nematodes has declined considerably but is still relatively high in some provinces and autonomous regions. Control activities and socioeconomic development may have contributed to the decreased prevalence.

Key words: Soil-transmitted nematodes; Survey; Prevalence

REFERENCES


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