

Abstract

Parasite control among school children is an important issue of public health. From 1972 to 2001, a national-wide control program against common intestinal parasites such as *Ascaris lumbricoides*, hookworm, *Trichuris trichiura* and *Enterobius vermicularis* had been carried out among school children. The object of this research is to realize the effectiveness and the present situation of these parasites since the control program had been stopped in 2001. A cross-sectional study was performed. A total of 60 primary schools was randomly selected as the study subject. For the parasitological examination, a two-consecutive-day adhesive cellophane paper perianal swabs to detect *Enterobius* eggs and a direct thick smear of fecal materials to detect common intestinal nematode eggs were used. Among 60 schools, one school rejected to submit the fecal materials due to the SARS epidemic. Of 12,166 children in 59 schools, 11,906 samples for *Enterobius* examination and 11,011 stool samples were collected. The result of examination showed that 371 or 3.12% of children were infected with *Enterobius*, and 3 children infected with one species of *Taenia saginata asiatica*, *Trichuris trichiura* and *Clonorchis sinensis* respectively. The prevalence rate of *Enterobius* according to the localities of geographical feature, the rate of schools located in urban areas was 2.73%, 4.18% in rural areas, 3.87% in remote areas, 3.42% in mountainous areas and 3.88% in the off-shore islands, respectively. Of 371 positives, 213 boys (57.4%) were significantly more children infected than that of 158 girls (43.6%). There is a decreasing tendency in infection rates in counties and cities where the examination and treatment were performed by the governmental health authorities. A follow-up examination for positive children revealed that 30 of 343 children remained positive for *Enterobius*, and among them, only 9 (30%) had been treated with anthelmintics before the follow-up examination. Totally, 168 or 49% children of 343 positives had visited local clinics or hospitals for deworming. It is obviously indicated that about a half of parents concerned the health of their children. Health education to both children and parents is to be emphasized.

The common intestinal nematodiasis such as ascariasis, hookworm infection and trichuriasis have been effectively under controlled in Taiwan. However, enterobiasis among children is still remained an important parasitic disease. It is recommended that more efforts on control of this parasite should be taken.

Keyword : School children ; Intestinal parasites ; Control