Impact of a filariasis control program on intestinal helminthic infections; a pilot study in Narathiwat Province, Thailand

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Abstract

This study was conducted in 9 villages located in endemic areas for brugian filariasis in Narathiwat Province, Thailand. Parasitological and anthropometric examinations were cross-sectionally performed to assess the prevalence of intestinal parasitic infections of 539 villagers. Paired stool samples were collected before and after mass treatment for the filariasis control program in 150 participants in order to study the impact of the filariasis control program on intestinal helminthiasis. The results found that 50.3\% of the villagers were infected with one or more types of intestinal parasites. Double and triple infections were found in 10.9\% and 1.6\% of infected individuals respectively. The prevalence of intestinal parasitic infections peaked in the 1-10 year old age-group, which are pre-school and young school-age children. A significant reduction of intestinal helminthic infections in the post-treatment stool sample was observed in the 150 participants who were examined six months after mass treatment. Integrating an intestinal helminthic control program along side the existing filariasis control program would be an appropriate and cost-effective strategy in the control of intestinal helminths. However, reinfection of parasites was observed.