

KEY WORDS : HOOKWORM, LATRINE, HEALTH EDUCATION.

MICHIKO CHOSA : FACTORS AFFECTING INFECTION OF SOIL-  
TRANSMITTED HELMINTHS AMONG PRIMARY SCHOOL CHILDREN IN  
VIENTIANE, LAO P.D.R. THESIS ADVISORS : SOM-ARCH  
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A comparative study was conducted on factors affecting to soil-transmitted helminthiasis (STH) among primary school children aged 9 - 15 years in Vientiane Municipality of Lao P.D.R. during March 2000. The aim was to identify the prevalence rate of hookworm infection and other STH among school children with and without mass treatment of 500 mg mebendazole single dose, and the determinants affecting hookworm infection.

One hundred and five children of 5 primary schools in Xaisettha District, Vientiane Municipality, and their parents were interviewed. Among them, 72 received treatment for five months earlier and 33 had never received. The stool specimens of the children were examined with Kato-Katz's and polyethylene tube culture methods.

The prevalence of STH and hookworm infection was 84.8% and 33.3% among children "without mass treatment" and 36.1% and 20.8% among children "with mass treatment". Eleven hookworm cases were identified as *Necator americanus* (2), and *Ancylostoma duodenale* (8). One case was mixed both.

There was significant association between hookworm infection and incomes of parents, and occupation of father. There was a significantly difference between knowledge among children with hookworm (positive) and those without (negative). There was significant association between hookworm re-infection and incomes of parents, washing hands after farming, defecating in latrines, cleanliness of school latrines, and health education. There were differences among schools in the prevalence of hookworm infection.

The difference may depend on the ability of school teachers. In this study, it was found that health education and school latrines are effective in preventing re-infection of hookworm. School teachers should be encouraged to act as primary health care leaders in villages.