

Assessment of the impact of periodic treatment of soil-transmitted helminth infections on the health status of primary school children in Muheza district

Dr. Tom Kimwerimtoi (MD)

Master Of Public Health (MPH)

University Of Dar Es Salaam, University of Dar e salaam School of Health Sciences, 2003

A cross-sectional study was carried out in mid-June 2003, in Muheza district. The main objective of the study was to assess the impact of periodic treatment of Soil-Transmitted Helminth (STH) infections on the health status of the school children in the district after four years of intervention of school-based deworming project. The main focus was on the reduction of the prevalence and intensity and improvement of the health status as well as knowledge on disease transmission and prevention and compares it with the data from the baseline survey done in 1996. A simple random sampling method was used to select four primary schools, whereby all pupils from class V to VII totaling 339 were investigated. Prevalence and intensity of STH (geohelminths) was assessed by stool examination using Kato-Katz technique. Nutritional status was measured for wasting, stunting and underweight by using Weighing scale and Stadiometer. Knowledge, attitude and practices regarding geohelminthiasis were explored by using semistructured interviews using questionnaires.

The findings of the study are as follows:-

The overall prevalence dropped from 70% during the baseline to 47.1%, intensity of infection dropped from moderate during the baseline to light for hookworm, *Ascaris lumbricoides* and *Trichuris trichiura*. Children's understanding of STH improved and there was improvement of anthropometrical nutritional indices. Stunting dropped from 66% to 43.1%, underweight dropped from 50.5% to 26.5% and wasting dropped significantly from 1.8% to 0.6%. Therefore it is recommended that more research should be carried out to determine the prevalence of STH and the worm burden among the school children in rural and urban areas in order to assist policy makers in rational planning for control of STH. Relevant authorities should upscale the deworming programme throughout the country by involving various sectors like the government, NGOs and the community in the control of Soil-Transmitted Helminthiasis.