Prevalance of Diarrhoea and Intestinal Parasites and Possible Factors Affecting Transmission in Children Admitted to Kattankudy Base Hospital

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Kattankudy, with a population comprising of 7.7% of the total population of Batticaloa district is one of the major towns in this district. This study was done to assess the prevalence of intestinal parasites and diarrhea among children who were admitted to Kattankudy Base Hospital.

Children less than twelve years of age who were admitted to the Paediatric ward from April to June 2010 were included in this study. Faecal samples were fixed with 10% formalin and transported in screw capped bottles to the Department of Parasitology, Faculty of Medicine, University of Peradeniya. Samples were processed using the formol-ether concentration technique and modified Ziehl-Neelson stain. Socio-demographic data were collected via an interviewer-administered questionnaire.

A total sample of 96 children with mean age 4.84 years (SD = 2.7) which included 59 males (61.45%), had a prevalence of diarrhoea of 22.9%. Of these, 77% were under six years of age. The prevalence of intestinal parasites was 4.54% (1/22) in diarrhoeal samples and 10.81% (8/74) in solid stools.

One child had cysts of *Entamoeba histolytica / Entamoeba dispar* (1.04%), two had *Entamoeba coli* cysts (2.08%), and two had *Giardia duodenalis* cysts (2.08%). Among those with helminth ova three had *Ascaris lumbricoides* (3.125%) and two had hookworms (2.08%). *Cryptosporidium* species were not found. Of the 60.41% (n=58) who obtained water from wells 24.13% (n=14) had diarrhoea. Incidence of diarrhoea was less among those who used tube wells rather than shallow wells. Of the 83.34% who used a toilet for defecation, 17.5% (n=14) had diarrhoea. However 50% of those who did not use toilets also had diarrhoea. Anthelminthic treatment had been given to 47.29%.

Prevalence of intestinal parasites in Kattankudy was 9.37% (n=9). One fifth of admissions were due to diarrhea. Use of toilets and tube wells was associated with reduced numbers of diarrhoea cases.