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Prevalence of intestinal parasitic infection among school children in Nepal

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Intestinal parasitosis is endemic in least developed and developing countries including Nepal and is responsible for different types of morbidity and mortality. The objective of the study is to find out the prevalence of intestinal parasitic infection among school children in different districts of Nepal. We carried out a cross-sectional descriptive study of intestinal parasitosis in school children of four districts of Nepal in 2012. A total of 359 school children (boys: 166 and girls: 193) aged 5-16 of Gorkha (Aruchanaute and Aruarbang VDCs) (n=97), Gulmi (Turang and Balithum VDCs) (n=90), Nuwakot (Halde-Kalika VDC) (n=97) and Rupandehi (Padsari VDC) (n=75) were included. Stool samples collected in clean, dry, screw capped plastic container were mixed with 10% formal saline and transported to SICOST laboratory and examined by formal-ether concentration technique. A total of 33.4% (120/359) children were positive for at least one type parasitic infection (boys: 33.1%; girls: 33.6%). Marginally high prevalence was observed in Gorkha (40.2%) followed by Gulmi (33.3%) and others. Altogether 9 types of parasites were detected. Protozoan infection was more common (19.8%) followed by helminth infection (16.4%) and mixed infection (2.8%). Among the helminthes, *Trichuris trichiura* (49.1%) was more common followed by *Ascaris lumricoids* (28.8%) and other whereas among the protozoa *Giardia lamblia* (26.8%) was commonest followed by *Entamoeba coli* (15.5%) and others. Present findings indicated that intestinal parasitosis in Nepal still remains a challenge despite nationwide deworming program together with vitamin A and suggests an effective implementation of sanitation and safe drinking water programs together with basic hygiene practice among school children in these areas.

Keywords: Intestinal parasitosis, School children, Helminth, Protozoa, Nepal.

Biography

Dipendra Pokhrel's first degree for microbiology started with a B.Sc. degree in biological science at Tri-chandra college, Tribhuwan University Kathmandu from which he graduated in 2009 and he continued at Shi-Ghan International Collage, Tribhuwan university Kathmandu Nepal for his M.Sc. microbiology. He currently joined microbiology department Shi-Ghan International College, Kathmandu Nepal. He becomes fascinated with the world of microbiology especially parasite. His research focuses on how parasitic infection occurs, defining and characterizing relation between sanitation and safe drinking water.

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