

Prevalence of Soil transmitted helminths and protozoa in school going children and schools' environment at Kibera slums, Kenya.

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Abstract

This study identified all the helminths and protozoa in 580 stool samples obtained in the month of August, 2016 from asymptomatic school going children and their school environment in one of the biggest urban slums in Kenya. Ten primary schools were randomly sampled and 40 to 80 stool samples collected from each school depending on the school population. Both gender and age were considered when sampling. Data obtained was analysed using single factor ANOVA to test association between school location and levels of infection or contamination. A total of 191(33%) samples had soil transmitted helminths (STH), of these 117 (20%) were *Ascaris lumbricoides* while 74 (13%) were *Trichuris trichiura*. Protozoa including *Entamoeba histolytica* was isolated in 163 (28%) samples. Others were *Entamoeba coli* (34%), *Balantidium coli* (3.4%) and *Hymenolepis nana* (1.9%). Out of the tested samples 14 (2.4%) had *Cryptosporidium* spp by both acid fast staining microscopy and direct immunofluorescence. There was an association between school location and the prevalence of STH infection as well as at the school environment. Key words: geo-helminths, protozoa, school-going-children, environment, multi-infection