Polyparasitism in two rural communities with endemic Schistosoma mansoni infection in Machakos District, Kenya.

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Abstract:

Formol-ether concentration supplemented by fresh saline smears was used to study intestinal parasites in two communities, Miu and Kitengei, in Machakos District, Kenya. These communities differed markedly in schistosome associated morbidity, in spite of similar prevalence and intensities of infection as revealed by Kato examination, Seven helminth and nine protozoan species were detected among 1011 samples examined. More than 60% of the subjects were infected with more than one parasite: one had nine. Age-prevalence curves were typical for the different species, and overall prevalence of some protozoa, including Entamoeba spp. and Blastocystis hominis, exceeded that of the commonest helminth, Schistosoma mansoni. However, the observed prevalence of S. mansoni was barely 40% of that detected by Kato examinations. Strong associations were found between some pairs of protozoan species, but not with or among the helminths. The differences in the abundance and age-specific distribution of the other intestinal parasites at Miu and Kitengei were so small that it is unlikely that interactions between them and S. mansoni would account for the differences in schistosomal morbidity.