

Abstract

Intestinal schistosomiasis and soil-transmitted helminthiasis are major global public health problems. Preventive chemotherapy is the main control strategy, however in settings with poor access to water, sanitation and hygiene, the reduction in burden and morbidity is followed by rapid reinfection. A longitudinal study was carried out to assess the association between the two infections and access to improved water, sanitation and hygiene between July 2017 and December 2018. 905 household heads were interviewed, and 3292 stool samples collected. The stool samples were screened for infection. Infected participants were treated with praziquantel 40mg/kg for intestinal schistosomiasis and albendazole 400mg for soil transmitted helminthiasis and followed up at 3 and 12 months. Associations were tested for significance using chi-square test (χ^2) or the Fisher exact test for categorical variables. Variables associated with intestinal schistosomiasis infection were analyzed using univariable analysis and the strength of the association measured as odd ratio (OR) using mixed effects logistics regression at 95% confidence interval, with values considered significant at $p < 0.05$. Prevalence of any infection was 20.4%, 0.4%, soil-transmitted helminthiasis and 20.1% intestinal schistosomiasis. 15.9% households had access to an improved water source, and 74.9% improved sanitation. The study recommends inclusion of adult community in mass drug administration, provision of improved water sources, sustained surveillances and hygiene education.