Author’s response to reviews

Title: Current Status of Intestinal Parasitic Infections and Associated Factors among primary school children in Birbir Town, Southern Ethiopia. A Cross Sectional Study

Authors:

Getaneh Alemu (getanehmlt@gmail.com)
Ashenafi Abossie (asabote@yahoo.com)
Zerihun Yohannes (zerihun434@gmail.com)

Version: 2 Date: 30 Jan 2019

Author’s response to reviews:

The explanation for the absence of the association between some factors (wearing habit, consumption of raw/unwashed fruits and vegetables, habit of swimming, family size, cleanness of finger nail and trimming and waste disposal habit) and IPI was not convincing and only deductive. Please give some evidence to support that explanation. Why the frequent contact with their classmate has impact on IPI of SC when those parasites do not transmit directly from person to person.

Comment accepted and we have incorporated evidences in this revised manuscript

Hookworms are expected to be associated with shoe wearing habit as the transmission is via skin penetration. However, it is not associated in the present study with possible reason of frequent contact with soil regardless of shoe wearing habit. Because the area is located at low altitude with average annual temperature of 360c [18], children usually wear shorts (exposing their legs). Hence they have direct leg to soil contact when they play and sit. Washing of fruits and vegetables before consumption reduces the risk of acquiring parasite infection [33]. In the present study, majority of children (86.3%) wash fruits and vegetables just before consumption; this might bring non-significant association with IPI. The school is located near Lake Abaya where majority of the students (92.1%) responded as they wash their legs and hands at least once a week (data not shown). This frequent exposure regardless of swimming habit might be responsible for the absence of significant association between habit of swimming and schistosomiasis.

Overcrowding or communal living condition is a risk for transmission of some intestinal protozoa (E. histolytica and G. lamblia cysts) and helminths (Enterobius vermicularis and Hymenolepis nana) [34]. Example if an infected (with E. histolytica) child contaminates her
hands with her excreta (mature cysts) and feeds her brother without washing her hands; her brother will be infected with E. histolytica. Sharing of toilet materials might also have similar effect….this part (in red) is not included in the revised manuscript

However, data for the present study was collected at school that students have frequent contact with their class children in addition to their family. Hence, family size alone might not have significant role for the transmission of intestinal parasites.