Reviewer's report

Title: Schistosomiasis Infection Among Primary School Students in a War Zone, Southern Kordofan State, Sudan

Version: 1 Date: 1 February 2013

Reviewer: Julie Gutman

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Major Compulsory Revisions

1. Table 2: rather than only giving the mean egg count, you should also report the prevalence of mild, moderate, and severe infections.

2. Table 3 – the first 2 columns of values are a repeat of table 1. No need to repeat the percentage of total. Consider combining tables 3 and 4

3. Table 5 should give either sensitivity and specificity or positive and negative predictive values

Minor essential revisions

Abstract

4. Please revise as follows: The prevalence of S. hematobium was 23.7% and S. mansoni was not detected. S. hematobium infection was focally distributed at all levels. S.hematobium infection was associated with existence and distance to open water sources, higher frequency of contact with open water, absence of health advocacy group in the school and also with history of schistosomiasis treatment.

Methods

5. I would recommend rephrasing as follows: This was a cross-sectional study to estimate the prevalence of schistosomiasis. The study was conducted in all 9 localities in Southern Kordofan State (SK) (2 Middle, 4 Western, and 3 Eastern).

6. Use consistent capitalization for Admin Units

7. S. mansoni should be italicized throughout

8. Please revise as follows: The only inclusion criteria was that students needed to be registered in the selected primary school. Students who were severely ill at the time of the survey were excluded.

9. Define the cut off points for age categories in the methods

RESULTS

10. Please revise, as follows, the deleted text was already detailed in methods: In
this survey 2302 students were recruited.

11. Define what is meant by cottages- or if this is really not relevant, remove

12. Please revise, as follows- this is more detail than is needed; if desired, this data could all be shown more simply in a figure:
Prevalence of S. hematobium differed by locality, administrative unit and school, with a range of 0-80% in schools. The highest prevalence was reported in the Western area (34.6%) of the state followed by the eastern (16.1%) then the middle area (13.2%) (Figure 1).

Delete: “Although 2 localities reported as low prevalence as 0.8% yet, some other localities reported 49.6% of students infected. Moreover, distribution of infection varied from 0.0% - 61.7% among the 18 administrative units. Again prevalence in schools was different ranging from 0.0 - 80.0%.”

13. Correct misspelling: Infection was slightly higher among males (24.8% versus 21.2% for females) in a boarder line significant association.

14. Please clarify the following sentence: Maternal work as a farmer (outdoors) was significantly associated with higher infection (26.4%) among their siblings (p=0.035).

15. Do not include in the text all the results of multivariate regression shown in the table- this is unnecessary.

Discussion
16. Unclear what the relevance is that Malawi and Sudan have similar burden estimates?

17. Pg 11- you state that there was no association between parental education and occupation and prevalence of S. hematobium, however, the results show that you did.

18. It is unclear what detection of circulating anodic antigen would add as you have already detected SH eggs in the urine. You could have had staff who were performing the urine collection also record the color of the urine.

19. You did not study the burden in adults, so you cannot say that the burden in school children is higher than the rest of the population without providing a reference for this statement.

20. Disclaimer: none of the authors are affiliated with CDC, thus you should not mention CDC in your disclaimer.

21. Table 3: p-value- use only 2 decimal places except for those values <0.001

22. Figure 1 does not add to the paper- these results are presented in the tables. Remove.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests