Reviewer’s report

Title: The impact of single versus mixed schistosome species infections on liver, spleen and bladder morbidity within Malian children pre- and post-Praziquantel treatment

Version: 2 Date: 23 April 2010

Reviewer: Takafira Mduluza

Reviewer’s report:

Introduction:
This article covers and adds important insights into neglected but important re-emerging mixed infections. The methods are clearly presented and appropriate. The authors attempted to present the difficult set of data at multilevel logistic regression from different morbidity assessment methods. Discussion of findings is warranted (ie. single or mixed infections). However, some of the implications mentioned in the manuscript appear deficient and unwarranted given the study results. Finally, some revision of basic sentence structure and word choice for sake of clarity is recommended. I think more discussion on the significance of single and/or mixed schistosomes infection morbidity needs to be made, particularly in view of the previously published data on mechanisms of schistosomiasis pathology.

Major compulsory revisions:

1. Abstract:
Under the methods there is need to state the age and age range of the children considered and also the numbers. While in the results section a little of the major outcome on the statistics of the differences on morbidity should be given.

2. Background:
This part is rather too long and gives a lot of repetition of already known material while too much is expressed of the work done by Cunin et al., (2003). Suggestion is to eliminate much of the background paragraphs other than the first paragraph, first sentences of 3rd/ and 4th paragraph, first half of the 5th paragraph and the last paragraph.

3. Methods:
The authors should make effort to condense the several headed segments under this section. Some of the paragraphs are a mere 2 sentences which could be presented together with another relevant part in a continuous paragraph. Much of the study follow-up numbers can easily be presented in a table or figure, if possible.

4. Results:
Similar to methods sections, this part contains several segments and is too long taking into account that much is represented in the given tables. This part should be redrafted and reduced in length avoiding repetition.

5. Discussion:
The authors should have discussed more their results, including the possible causes of morbidity during single, mixed and the occurrence post treatment and during single infection only. At least the authors should utilize their findings to make more inferences where the age group examined is before the known age where peak transmission is reported according to age-intensity range relative to the population considered here and any possibility of extrapolation.

Minor Essential Revisions
The following terminologies should be revised accordingly throughout the manuscript:
1. - Light-intensity infections should be light infection intensity
2. - Change >= to # in all tables or where appropriate
3. - Type of intensity of schistosomiasis infection related variables - to - Type of schistosomiasis infection intensity related variables ….. in all tables
4. - WHO classes of intensity for both schistosomiasis species - to - WHO classes of schistosomiasis infection intensity for both species.

Discretionary Revisions
1. Background:
Paragraph 1 line 4: soil-transmitted helminthes chemotherapy treatments being initiated; is chemotherapy not treatment?
2. Methods:
Generally should be summarized and shortened.
3. Ethics statement
Require reduction in length, and 2nd para line 6: informed about the pathology in the children.
4. Statistical methods
This part needs summarizing and condensing; instead of separate headings. Alternatively the subheadings should be as follows:
Analysis pre-chemotherapy
Analysis post-chemotherapy
5. Results:
i. Too much repetition on subheadings and further more subheadings are used.
e.g. results of pre-chemotherapeutic treatment should be changed and consolidated with the following heading,
Univariate analysis for the association between schistosomiasis infection status and pathological manifestations at baseline

ii. Clear headings for each table should be given example being Figure 1. The title should be outside the figure and below.

iii. All Tables should have clear headings/titles on top instead of the headings inside the Table or not given at all.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**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