Reviewer's report

Title: Prevalence of behavioral disorders and Attention deficit Hyperactive disorder among school going children in Southwestern Uganda

Version: 1 Date: 17 Oct 2018

Reviewer: Douglas MacInnes

Reviewer's report:

I think this is an interesting paper that looks at an important topic. The study team have also managed to collect data on a large number (2434) of participants. I have a few comments that I hope will be of value to the authors.

My main query about the paper is in relation to the limited analysis documented by the authors when presenting their findings. The paper looks at the scores on the DBD rating scale, the Iowa Connors Scale and the Impairment Rating Scale with the location of the school and childrens gender also noted. The results presented were primarily descriptive with some inferential analysis examining "reported/observable behavioral disorders“ and differences in gender. Are there further analyses that could be reported or further analysis of the data noted in the paper? This could include some analysis of the following:

The location of the school was noted but no analysis undertaken to see if there were differences between the different locations.

No information was reported on the different age groups assessed by the team.

It was also noted by the team that there were high rates of HIV in this area and also high levels of poverty yet these do not seem to have been examined.

All of the measures are caregiver reported assessments. Were there any self-report measures undertaken by the children? If so, how does these correlate with the caregivers' assessments? Is there information that could be provided about the caregivers? How many caregivers were approached but did not participate? Are there differences between different groups of caregivers? How many caregivers reported more than 1 child as scoring positively on the scales? Were there any consistencies between the caregivers in the impairment domains where concern was expressed?

Additional comments and questions:

It is mentioned that there is a dearth of epidemiological studies looking at the prevalence of behavioural disorders within sub-Saharan Africa (pg 3 L32) yet it appears that a number of studies have reported prevalence rates on Pg 3 L36-43 and Pg 6 L13-33.
Setting - It would be helpful if more information could be given about the Greater Masaka area as many readers will not know this area. Some further information about the education system would also be useful (i.e. what do Grades 2 to 7 represent in terms of educational level).

I was not sure why the caregivers "gave consent for their children to participate" (Pg 5 L6) when the caregivers were the participants.

I was also unsure what "basic screening" was done as noted on Pg 5 L7.

In the main, the writing is clear and the paper easy to read though there are a few clerical errors so some proofreading is required.

Results - When detailing the inferential statistics, it would be helpful to detail the statistical test score, degrees of freedom and probability value. For the t-test scores, reporting confidence intervals would also be useful.

Impairment scale results - how was the scoring assessed to determine that there were concerns in relation to a mentioned domain.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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