Reviewer's report

Title: The influence of caregiver depression on adolescent mental health outcomes: Findings from refugee settlements in Uganda

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Reviewer: Herbert Ainamani

Reviewer's report:

Title: The influence of caregiver's mental health on adolescents' depression and anxiety: Findings from refugee settlements in Uganda

The authors conducted a study aimed at understanding how the caregiver's mental health status specifically depression is associated with Depression and anxiety among the refugee adolescents living in the two refugee settlements of (Adjuman, Kiryandongo) in Uganda. They employed quantitative methods with a number of standardized tools to achieve this aim. Understanding this concept would be very helpful to mental health practitioners dealing with refugees. The authors are therefore commended for trying to understand this concept in post conflict communities where almost all individuals have been exposed to sorts of violence. However, the study has a number of challenges that need to be addressed and cannot be published in its current form.

The concept of caregiver's mental health is broad especially in a refugee setting where both caregivers and children have been exposed to a number of traumatic events. In the present study, the authors only investigated depression among the caregivers; I personally find it not fair to have depression represent the general mental health status of the caregivers in a refugee setting. I therefore recommend that the title be re-formatted. If not, the authors should explain their choice of assessing depression not any other mental health disorder.

Page 2 abstract,: I find the opening paragraph that ends with outcomes in line three flawed. The authors would rather delete it and have the second paragraph introduce the abstract.
Results:  In this section of the abstract and with in the entire manuscript, the authors do not report the real results, they talk about for example a one unit increase in care givers depression score more than tripled the odds that the adolescents' would have high levels of anxiety symptoms but the results are not any where. The authors should therefore revise the manuscript and include results.

Background:  In the second paragraph page 3, line 2 that ends with the word care givers, end of line 5 and 9, the authors should provide relevant citations.

On page 5, specific objectives, research questions or hypotheses are not clear and this makes it difficult for the readers to follow.

The whole structure under the methods section doesn't have a clear order. The authors begin with "methods, study site and sampling, instruments, measures statistical analysis, interviewing training, Data collection procedure and ethical approval. I suggest that a clear structure be put in place.

On page 6 Inclusion for participants: the authors don't indicate what was done to adolescents and caregivers who were screened with severe depression and anxiety.

Sampling: In this study, systematic random sampling was employed. Can the authors provide the procedure that was used in employing this sampling technique?

Methods: Although it is mentioned that exposure to violence was assessed on adolescents as co-founding variable, it is not clear in the methods, and I also think that its role should have gone beyond acting as a cofounder. In the same way, caregivers were assessed on their social economic status but it's not very clear why this was done

Data analysis: The authors do not clearly indicate why gender, social economic status were factored in the model. Can the authors also indicate how gender was coded in their data?

Interviewer training: The authors trained the interviewers, in observing confidentiality, recognizing and addressing protection risks and providing referral and support. However, on page 8 line 7 under caregivers instrument (depression), the authors indicate that some questions
in the tool were dropped because mental health providers in the settlement didn't have capacity for referral. This brings up a few concerns

1) It is indicated that this research was cleared by Columbia university medical Centre (IRB). As a collaborative study in Uganda, it would have been wise to also have a research ethics committee within Uganda provide clearance for purposes of helping out in referral structures and cultural issues.

2) The language used by the interviewers should come out clearly and whether the tools were translated into the same language or not.

3) Still under instrument the authors indicate that the original depression scale consist of 15 questions scored on the scale of 1-4 with 1 being never and 4 being all the time. How about 2&3.? In the same paragraph, it's shown that poor translation of the questions necessitated their drop out. Can the authors provide reasons why there was poor translation?

4) What were the health benefits of this study to the participants? Were the participants compensated for their time?

5) On page 7 under anxiety, the authors indicate that the tool consisting 5 items was measured on a 3-point scale ranging from 0-10. I find this confusing. Can the authors throw more light on this calculation?

Finally while discussing the results, it would be good if the authors emphasized more on comparison and contrast between the available studies and the current results.

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

Yes

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

Unable to assess

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

Unable to assess
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I am able to assess the statistics

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