Reviewer’s report

Title: A cross-sectional mixed-methods study of sexual and reproductive health knowledge, experiences and access to services among refugee adolescent girls in the Nakivale refugee settlement, Uganda

Version: 0 Date: 08 Feb 2019

Reviewer: Virginia Savage

Reviewer’s report:

You present interesting findings on a topic that is of critical importance today. I believe more background is needed on certain topics and there is a need for clarification of certain points, but overall, the article is well-written.

Background:

* You present some very compelling data here. However, the manuscript would benefit from the inclusion of a bit more information on the landscape of SRH and other health services that are available in refugee settlements. For example, you mention SRH clinics throughout subsequent sections, so it would be helpful to know more about those clinics, i.e. where are they located, are services free, are they run by aid organizations or the government (similarly are staff generally short-term aid workers or longer-term personnel), how many of them are there, do adolescents need parental consent for services, languages of services provided, etc. Also, it would be helpful background information to have more statistics on HIV and STIs among refugee populations or adolescent girls in Uganda if that data is available.

* In the first sentence of the section, I suggest editing "Till June 2018" which is an unclear timeframe.

* I suggest rephrasing the second to last sentence of that paragraph as it is currently unclear.

Methods:

* I suggest including more information in the Study Setting section about Nakivale and its residents that will give context to the findings you present later. For example, later you describe schools as an important source of SRH information, so I recommend including a brief overview in this section about education rates (you have some information in the discussion section, but I would mention it earlier). Similarly, you might include some brief data on wealth or poverty levels, mobility of residents (will refugees in the
settlements be there and need services long-term), and employment or education opportunities for girls and women.

* In the last sentence of the Study Setting section, it is unclear if the 50.2% is among the total population or just among women and girls.

* In the Quantitative Data Collection and Analysis section, what do you mean by "unaccompanied adolescents"? Are you referring to adolescents who do not live with parents or family members (and if so, is that including partners), or to adolescents who were not able to have an adult present at their interview?

* I suggest briefly listing the topics discussed in the survey tools and explaining whether all the topics you highlight are from the surveys or whether you included topics that seemed relevant to the specific population.

* Is there a reason you used a scale for SRH knowledge based on a sum of scores from the four components instead of average scores? It seems like you are actually more interested in the average scores.

* For your qualitative data, I recommend including a brief description of how you developed your interview guide.

Results:

* I suggest clarifying the four SRH knowledge questions a bit more. For example, for the knowledge of STIs, were you asking about transmission or just for people to name STIs? Also, for the knowledge of contraception, did you only count modern contraceptive methods in your tally?

* In the line, "The knowledge of girls about STIs was limited to HIV and syphilis for a vast proportion." I recommend stating that proportion.

* You use the quotation ("I cannot use family planning methods...") as an example of misconceptions about family planning. However, I recommend explaining that quotation more or giving a longer version, as the quotation as written now does not necessarily support your point about misconceptions. "They are not good" and "They can affect life" might not be misconceptions if the participant suffers negative side effects of a contraceptive method she has tried.

* Can you clarify if SRH information from teachers/school was from a formal sexuality education class/discussion or from advice seeking from teachers or school personnel? If SRH information is instructed in school, are there abstinence-only requirements or norms in schools?
I recommend explaining a bit more participants' reporting of mistreatment in SRH services if you have that information. By mistreatment, are participants referring to stigma and discrimination from health care personnel, or physical or sexual abuse, or something else?

You say "among sexually active girls, some were forced into intercourse between the age of nine and 12." Please specify how many.

With such a large proportion of sexually active girls in the study who had experienced forced intercourse, I would think that an important component of SRH services would be trauma counseling and linking to mental health care. Did your interviews or surveys find any information about care seeking after experiences of sexual violence or about linkages to counseling or other mental health care? In general, it would be good to include some information about care and services available for victims of violence whether in this or the background section.

Discussion:

In the first paragraph, can you clarify the finding of sexual violence as a "rite of passage"? Is that from a quotation a participant said?

I suggest rephrasing the last sentence of the first paragraph.

You recommend improving "linkage of adolescents to a wide range of SRH services." I recommend being more specific on the types of services. It seems like linkages to mental health care, maternal health care, possibly emergency contraception, and education would be particularly important given your findings.

In your discussion, I think it would be worth considering implications not only for SRH services, but also for underlying issues such as gender inequalities and marginalization of refugees. It seems like many of the issues that may be prevalent among adolescent girls - particularly experiences of sexual violence, FGM, and low contraceptive use - stem from girls' social position and low position of power, and so I would encourage more discussion of possible strategies to address those underlying issues.

Are there any areas you identified that need further research?

In your Limitations section, you mention that interviews were orally translated for languages other than English. Was your questionnaire pre-tested in the other languages?

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Please indicate how interesting you found the manuscript:

An article of importance in its field
Quality of written English
Please indicate the quality of language in the manuscript:
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