Reviewer’s report

Title: Perceptions and intervention preferences of Moroccan adolescents, parents, and teachers regarding risks and protective factors for risky sexual behaviors leading to sexually transmitted infections in adolescents: Qualitative findings

Version: 0 Date: 13 Nov 2018

Reviewer: Fariyal Fikree

Reviewer's report:

I commend the authors on conducting this mixed methods study on young adolescents aged 14 - 16 years in a conservative Islamic country. I read the paper with keen interest in addition to reviewing the methodology paper in BMC: Public Health; 2016. Overall, the paper adds to the growing body of evidence on sex education in secondary schools in conservative Islamic societies - and delves deeper by gathering evidence from students, their parents and teachers thereby providing valuable insights on facilitators, barriers and challenges faced by these three participant groups on the parameters for secondary school sex education. I have a few general and specific comments that will strengthen the paper.

General comments:

1. The paper will benefit from editing from a technical editor with a focus on language corrections.

2. The Results section describes the protective factors, risk factors and interventions but largely lacks substantiating these with evidence/quotes. There are a few quotes included in the results text though these are few and far between. The authors instead have included quotes in a table format (Table 2) that reflect the themes across each of the FGD groups; disaggregated by the respondent gender. While this is a commendable approach, the reader is left to go back and forth from the text describing the theme to Table 2 and its content. Suggest either including additional quotes in the results text, or alternatively in tabular format under each thematic area presented in the results section.

3. The Discussion section text is a bit confusing - it is unclear the alignment of the evidence from the study to the literature cited. There are many examples dispersed throughout the discussion section. I have highlighted a couple below. It will be very helpful if a technical editor works with the authors to substantially revise this section.

Page 22, Lines 490-494: "For example, social media within ...... during adolescence [25,45-48]": are the authors elucidating their findings or others per the references 25, 45-48.
Page 23; Lines 511-514: "In addition, those who .... unhealthy sexual behaviors." It is unclear whether the authors are elucidating from their results or from cited references. If the latter, please include.

4. The Discussion Section: A major strength of the study is the FGD groups (students, parents and teachers); however text quite often does not differentiate between these three groups - indicating "participants" rather than elucidating which participant group. There are several instances dispersed throughout the discussion section where it will be very helpful and will strengthen the discussion section if the participants category is also included. A couple of examples include:

Page 20; Lines 438-440: "Many participants viewed ..... with their mothers". Which category were these "many participants" from; were they only students or included others i.e teachers and/or parents.

Page 20; Lines 443-444: "Several participants .... among adolescents". Which category were these "several participants"; were they only students or included others i.e teachers and/or parents.

5. I was expecting to review the quantitative data to substantiate the qualitative findings. However, this paper did not report quantitative findings that was a component of this mixed methods study. Are the authors contemplating a second paper restricted to the quantitative findings? It will be helpful if the authors include appropriate text referencing the quantitative findings - specifically as the authors mention that this is a mixed method study.

Specific Comments:

Introduction: it will be helpful if the authors mention the age groups cited on Page 5 and attempt to focus the literature review on the 14 - 16 year olds - the study group to provide a strong justification for conducting the study on the 14-16 year olds propensity for risky sexual behavior and its negative consequences in the context of STIs and HIV.

Methods:

While the details of the study protocol is elaborated in BMC:Public Health, 2016; it is recommended that the methods section includes a more elaborate description of the methods with "details presented elsewhere" with reference [BMC:Public Health, 2016] cited.

Page 7, Line 137: Please elaborate what the authors meant by "sampling continued until data saturation was achieved". What was the criteria that the authors used to detect "data saturation" for sampling purposes?
Page 8; Lines 149-154: It will be helpful if the authors elaborate the similarities and specifically the differences in the FGD guidelines/questions between the three groups as shown in Table 1. Were the FGDs conducted gender disaggregated i.e parents in mothers FGD and fathers FGD; students as male students and female students, teachers as male teachers and female teachers

Page 9: Data analysis: It will be helpful if the authors elaborate on their analytical framework and the inter-connectedness between the three FGD categories (students, parents and teachers); where does the quantitative findings fit in?

Results:

It will be very helpful if the authors include a table describing the number of FGDs per category; including their ages. In addition, there are several instances where the authors have mentioned "participants" without specifying which category of participants. It will be helpful if the authors include the category.

Page 13, Lines 265-266: "Adolescents in peer groups .... a similar behavior": please include relevant quote/s to substantiate the text

Page 13; Lines 277-281: "Most teachers and parents ..... to make health sexual decisions": what about students; were they asked this question; What question in Table 1 does this finding reflect?

Page 13; Lines 288 - 289: "Furthermore extracurricular ... from parent and teacher discussion": will be helpful if the authors will include relevant text including quotes to substantiate the protective nature of extracurricular activities such as school clubs. Were other extracurricular activities mentioned? Did students not mention extracurricular activities? If not, this is an important finding - suggest highlight in results and in discussion.

Page 15; Lines 324-329: It will be very helpful if the authors include relevant quotes to substantiate the text. Religiosity is a significant influencing factor especially in a conservative Islamic society such as Morocco.

Level of interest
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:

Needs some language corrections before being published
**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal