Reviewer’s report

Title: Gender-based violence among female youths in educational institutions of Sub-Saharan Africa: A Systematic review and Meta-analyses

Version: 0 Date: 19 Jul 2018

Reviewer: Rami Al-Rifai

Reviewer's report:

Comments to authors

General comment

I am not an expert in gender-based violence and its different types. All my comments and suggestions will be related to the methodology of conducting a systematic review following established guidelines to ensure producing a high quality review and evidence-based findings.

Specific comments:

Title:

Please add the word "meta-analysis or "pooled prevalence estimate"

Abstract:

Background:
Please add to your objectives that also aiming to produce an overall summary estimate on the prevalence of gender-based violence, according to different types, among female youths in Sub-Saharan Africa.

Method:

3ed line, "and other relevant methods", this is unclear. Did you mean "other relevant databases"??

Results:

Please summaries how many studies were reviewed and how many were found eligible and included in your review.
Please report the overall prevalence of gender-based violence in Sub-Saharan Africa to answer your study objective. Then you can report the overall summary prevalence according to different violence types as well as among in different populations, settings,…ect, if estimated.
It is unclear among whom or where was (setting) of the reported pooled prevalence that ranged from 42.3% to 67.7%. Please specify or elaborate more.

Discussion:

Please re-write considering the population and the setting where this review has assessed the overall prevalence of gender-based violence (female youths in educational institutions).

Systematic review registration:

Please add the date when this protocol was registered.

Main body

Introduction:

Line 6, page 2: please add a space before (GBV).
- Line 23-30: please insert a reference for this cited paragraph.
- Line 34: please add the percentage mark (%) to the number 29.4. Also please remove or explain what is the number "24" that mentioned after "31.6%".
- Line 36: please elaborate more on the magnitude of the highest prevalence that found in the African region.
- Line 39: please insert a space after (GBSS).
- Across the manuscript, please be consistent in the number of decimal points and spelling out numbers from 1-10.
- Line 43: please add "year" after "aged 10-17".
- Line 45: please specify whether the reported estimate for the physical abuse was for the prevalence or incidence. The meaning of incidence is different from that of prevalence.
- I would suggest to divide the "introduction" section into subtitles including "background, rationale, and aim and objectives". This would make this section systematically presented and logically followed.
- Please be consistent in reporting study objectives and aims in the body text and in the abstract. It is not mentioned in the abstract that also your review would look at the risk factors for GBV.

Methods:

- Parag #1, line 13: please provide the date of registration in PROSEPRO.
- Line 24-25, page 5: the "Sub-Saharan Africa" appeared in the text before. Please provide the abbreviation "SSA" at first appearance of the "Sub-Saharan Africa" in the introduction section.

Information sources:

- Please specify the exact databases that were searched.
- Please split the sentence talking about contacting experts and searching the reference lists to be a stand alone sentence.
- Please elaborate more on which reference lists where searched. Did you search all the reference lists of all full-text screened studies or only reference lists of eligible studies included in your review?

Search strategy:
- Please provide the full search strategy including search terms, dates of search, as well as filters used, for each database that was searched. Giving an example on the search strategy for only one database is not an enough. I would suggest provide the search strategy for each database in a box or as a supplementary table.
- Please mention if you have considered consulting a librarian in designing search strategy and searching the databases.

Main data items:

- I would think adding the number of those who were with GBV would be one of the main data to that was extracted as you have meta-analyse for the overall prevalence.
- I would suggest providing the full items (variables) that had been extracted as a supplementary table.

Study selection:

- Please elaborate more on which quantitative estimate for the GBV was extracted from each eligible study. In a sense, if a study, for example, reported overall all GBV prevalence as well as age-stratified or school-grade stratified GBV prevalence, which data was extracted and used in meta-analyses, was it the overall or the stratified? If stratified, what was your prioritization algorithm/scheme to extract stratified data?? And why?.

Data synthesis:

- Please elaborate more on which model was used in meta-analyses (fixed or random-effects model).
- Please elaborate more that the pooled estimate of prevalence was reported as an overall for GBV as well as according to the different types of violence (sexual, harassment…ect).
  - Please elaborate more on your additional analyses (sensitivity and meta-regression analyses), if not why??

Results:
- Line 13-147: please cite those two unpublished article. This is also applicable to any reported estimates for specific number of studies, across the manuscript.

Prevalence of GBV:

- "In seven studies, researchers reported the overall prevalence of GBV", please avoid repetition.
- Please elaborate more on where was the lowest prevalence of 42.3% and the highest prevalence of 67.7%.
- Please consider removing space between the "%" mark and the numerical numbers as well as please consider consistency in number of decimal points across the whole manuscript.
- Please italic the "I2" wherever reported across the whole manuscript.

Prevalence of sexual violence:

- Please elaborate more on where was the lifetime, current, and lifetime sexual coercion, lowest and highest prevalence, and whenever applicable in similarly reported estimates.
- Was the pooled estimate prevalence of 29% obtained from the 18 studies regardless of the type of sexual violence??

Prevalence of harassment/Prevalence of physical violence/ Prevalence of emotional violence:

- Please consider all the points mentioned in the previous section.

Table 1:

- Please remove the first column titled "S.no".
- Please edit your table contents to be consistent in removing extra spaces, decimal points…etc.
Table 2:

- Please change the title to reflect the contents. I would suggest using the title "distribution of studies according to the 8 quality assessment criteria used".
- Have you categorized your study as "high", "moderate" or "low" quality according to a sum score of the 8 quality items used?? If so, please report how many of the included studies were of "high", "moderate" or "low" quality.

Risk factors for GBV, sexual violence, physical violence, emotional violence:

- Please apply points raised in previous sections for the "prevalence".
- Please elaborate more, when there were more than three effect estimates reported for a common exposure-outcome pair, why a pooled estimate was not produced??

Discussion:

- No specific comments other than addressing typos and extra/missing spaces.

Figure 1:

- Please address the slanting arrows.
- In the box, please specify what are those other sources.

Figures 1-5:

- Please provide footnote for each figure explains the meaning the figures contents. For example, the box and its size, the diamond and its width.
- Did you compute the prediction interval? I see the diamond has some extra lines on both sides, this not the confidence interval for the pooled estimate. Please elaborate!
Additional files:

Additional file 1:
- Please consider the point mentioned previously about reporting the search terms used for each searched databases with filters and dates of your search.
- No need to provide a detailed search as the one provided here, just report the combination of the final search (arrow 35) and the number of final hits obtained.

PRISMA Checklist:
- Please fill in appropriately by providing a short answer for each point in addition to the exact page number in the manuscript?

Level of interest
Please indicate how interesting you found the manuscript:
An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:
Not suitable for publication unless extensively edited

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?
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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.

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Were you mentored through this peer review?

No