Author’s response to reviews

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

Authors:

Addisu Beyene (addisushunu@gmail.com)
Deborah Loxton (Deborah.loxton@newcastle.edu.au)
Catherine Chojenta (Catherine.chojenta@newcastle.edu.au)
Hirbo Roba (hamakiya@gmail.com)
Alemu Melka (alemumelka.sufa@uon.edu.au)

Version: 1 Date: 24 Oct 2018

Author’s response to reviews:

Please kindly find the attached response to reviewers under attachments.

Thursday, October 2018

Areti Angeliki Veroniki

Systematic reviews

BMC Journal

RE: Gender-based violence among female youths in educational institutions of Sub-Saharan Africa: Systematic review and Meta-analysis

Dear Areti Angeliki Veroniki

Thank you for considering our recent manuscript. In response to your letter received August 2018 regarding the manuscript for the above mentioned systematic review, we would like to provide the following clarifications and amendments.

<table>
<thead>
<tr>
<th>Reviewers comment</th>
<th>Response to comments</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reviewer’s #1</td>
<td></td>
</tr>
</tbody>
</table>
Title: Please add the word "meta-analysis or "pooled prevalence estimate" Comment is accepted and corrected.

We added the word “Meta-analysis” to title. See under ”Titles”

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.

Comment is accepted and corrected

We added this objective under Background and Abstract.

See under ”Background”

Method:

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

Comment is accepted and corrected.

Yes, It means the other relevant databases.  See under “Method”

Results:

- Please summarise how many studies were reviewed and how many were found eligible and included in your review. Comment is accepted and corrected.

We added the numbers of studies reviewed and included in the review under Result  See under “Result”

- 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
We have reported the overall prevalence of GBV and according to different type of GBV as well as different settings. See under “Result”

- 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.

Comment is accepted and corrected.

The report is from 7 studies, which report on the overall prevalence of GBV. The lowest and highest prevalence was in Nigeria and Ethiopia respectively. See under “Result” and “Prevalence of GBV”

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).

Comment is accepted and the text corrected.

We have rewritten the conclusions considering the setting and type of GBV. See under “Conclusion”

Systematic review registration:

- Please add the date when this protocol was registered.

Comment is accepted and corrected.

The protocol was registered on Nov 2, 2017. See under “Systematic review registration”

Main body

Introduction:

- Line 6, page 2: please add a space before (GBV).
Comment is accepted and corrected.

We added a space before (GBV)

See under “Introduction” line 6, page 2
- Line 23-30: please insert a reference for this cited paragraph. Comment is accepted and corrected.

We inserted a reference for this cited paragraph See under “Introduction” line 23-30
- Line 34: please add the percentage mark (%) to the number 29.4. Comment is accepted and corrected

We added the percentage mark (%) See under “Introduction” line 34

Also please remove or explain what is the number "24" that mentioned after "31.6%". Comment is accepted and corrected

We removed the number “24” See under “Introduction” line 34

- Line 36: please elaborate more on the magnitude of the highest prevalence that found in the African region. Comment is accepted and corrected

We reported the magnitude of the highest prevalence. See under “Introduction” line 36
- Line 39: please insert a space after (GBSS). Comment is accepted and corrected.

We inserted a space after (GBSS). See under “Introduction” line 39

- Across the manuscript, please be consistent in the number of decimal points and spelling out numbers from 1-10. Comment is accepted and corrected.

We made the number of decimal points consistent See under “Introduction” and see across manuscript
- Line 43: please add "year" after "aged 10-17". Comment is accepted and corrected.

We added “year” after “aged 10-17”. See under “Introduction” line 43
- 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. Comment is accepted and corrected.

The reported estimate for physical abuse was the prevalence or incident. See under “Introduction” line 45

- 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. We have included background, rationale and aims and objectives under the Introduction. We didn’t mention their titles because most of the published articles were global and followed this protocol. Under Introduction, we have included the background, rationale, and objectives of this review.

- 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 your review would look at the risk factors for GBV.

Comment is accepted and the text corrected.

The objectives and aims are included in the body text and in the Abstract. See under body text and “Abstract”

Methods:
- Parag #1, line 13: please provide the date of registration in PROSPERO. Comment is accepted and the text corrected.

We added the date of registration in PROSPERO (Nov 2, 2017) See under “Methods” para. 1, line 13

- 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. Comment is accepted and corrected. See under “Methods” line 24-25, page 5

Information sources:
- Please specify the exact databases that were searched. Comment is accepted and corrected.

We searched the Medline, Embase, Psych Info, Pubmed, CINAHL databases and Google Scholar. See under “Information sources”
Please split the sentence talking about contacting experts and searching the reference lists to be a standalone sentence. Comment is accepted and the text corrected.

We separated the sentences. See under “Information sources”

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? Comment is accepted and the text corrected.

The reference lists of the included studies were retrieved to include additional eligible articles. See under “Information sources”

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.

Comment is accepted and corrected.

We added the search terms, dates searches, and filters used.

The search dates were from 22-29th June 2017.

See under “Search strategy” and “Additional file 1”

Please mention if you have considered consulting a librarian in designing search strategy and searching the databases.

Yes, We designed the search strategy and searched databases in consultation with Senior Librarian Mrs. Debbie booth. See under “Acknowledgements” and search strategy.

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. Comment is accepted and the text corrected.

We extracted the data from studies that reported overall GBV, sexual violence, physical violence and emotional violence. We included the overall GBV and type of GBV into the meta-analyses separately, to produce a pooled estimate.
I would suggest providing the full items (variables) that had been extracted as a supplementary table. Table 1 includes all the variables such as authors and year, study setting, sample size, sampling techniques, type of educational institution, outcomes, tools used to measure outcomes, and risk factors for specific studies. See under “Table 1”

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?

Quantitative estimate for GBV was extracted from studies which reported the overall prevalence of all GBV. Sexual violence, physical violence and emotional violence were also extracted from studies which reported the overall prevalence of sexual, physical and emotional violence. The data extracted for overall GBV prevalence were used in meta-analyses. We didn’t perform stratified analysis because we didn’t obtain sufficient data.

Data synthesis:

Please elaborate more on which model was used in meta-analyses (fixed or random-effects model). We used random-effects model to pooled estimate of prevalence. See under “Data synthesis”

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…etc.). Pooled estimate of prevalence was computed for studies which reported the overall lifetime prevalence of GBV, sexual, physical, and emotional violence. See under “Data synthesis”

Please elaborate more on your additional analyses (sensitivity and meta-regression analyses), if not why? We have carried out additional analyses such as meta-regression analyses, subgroup analyses and publication bias. See under “Data synthesis”

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.

The two unpublished articles were cited.

See under “Descriptions of results”

Prevalence of GBV:

- "In seven studies, researchers reported the overall prevalence of GBV", please avoid repetition.

The finding of the study was written according to anthropomorphism.

- Please elaborate more on where was the lowest prevalence of 42.3% and the highest prevalence of 67.7%. The lowest prevalence (42.3%) was in Nigeria and the highest (67.7%) in Ethiopia. See under “Prevalence of GBV”

- 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. Comment is accepted and corrected.

We removed the space between the “%” mark and numerical numbers as well as considered consistency in the number of decimal points across the whole manuscript.

See across the whole manuscript

- Please italic the "I2" wherever reported across the whole manuscript.

Comment is accepted and the text corrected.

We italicised “I2” across the whole manuscript See 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. We have done separately for lifetime and current prevalence of sexual violence, lowest and highest. We pooled the estimate of prevalence for the studies that reported the lifetime prevalence of sexual violence and we described the current prevalence qualitatively. See under “Prevalence of sexual violence” and “Data synthesis”

- Was the pooled estimate prevalence of 29% obtained from the 18 studies regardless of the type os sexual violence??

Comment is accepted and the text corrected.
We pooled estimate prevalence of 26% from the 23 studies, which reported the lifetime sexual violence. See under “Prevalence of sexual violence”

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

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

Comment is accepted and the text corrected

We have done pooled estimate for lifetime prevalence of physical, emotional and prevalence of harassment was described qualitatively. See under “Prevalence of Physical violence,” “Emotional violence,” and “Harassment”

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.

Comment is accepted and corrected

We edited the table contents to be consistent.

See under “Table 1”

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".

Comment is accepted and the text corrected

We have amended the title as follows: "Distribution of studies according to the 8 quality assessment criteria used".

See under “Table 5”

- Have you categorized your study as "high (4)", "moderate" or "low" quality according to a sum score of the 8 quality items used?? If so, pleas report how many of the included studies where of "high", "moderate" or "low" quality. Yes, we have categorized the study as high, moderate or low. This is described in the results. See under “Description of results” and “Table 6”
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?? We didn’t perform meta-analysis for risk factors due to the factors being varied among the studies and settings. We described the results qualitatively. See under “Data synthesis” and “Risk factors”

Discussion:

- No specific comments other than addressing typos and extra/missing spaces. Comment is accepted and text corrected

We addressed typos and extra/missing spaces See under “Discussion”

Figure 1:

- Please address the slanting arrows. Comment is accepted and corrected. See under “Figure 1”
- In the box, please specify what those other sources are.

Comment is accepted and corrected.

The other sources were specified as Google Scholar See under “Figure 1”

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.

Comment is accepted and text corrected

We added the meaning under the footnote. See under “Figures 1-5”

- 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!

Comment is accepted and text corrected

We have computed prediction interval using STATA version 14 for each figure. See under “Figures 1-5”
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.

Comment is accepted and text corrected
We added the search terms, filters and search dates.

See under “Additional file 1”

- 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. Comment is accepted and text corrected
We reported the combination of the final search and number of final hits obtained.

See under “Additional file 1”

PRISMA Checklist:

- Please fill in appropriately by providing a short answer for each point in addition to the exact page number in the manuscript? Comment is accepted and text corrected
We added the exact page number. See under “PRISMA checklist”

Reviewers 2

What is the definition of GBV according to this SR?
The definition of GBV according to this review was those studies which report the overall prevalence of GBV.

2 Is the focus of GBV, according to this review, on an individual, societal, community or relationship/family level? No, we didn’t perform the review based on the levels; rather, we used the data extracted from the studies. It focused on the experience of GBV among female youths in educational institutions.

3 How can the results of this review be used to inform or advocate for policy changes or GBV prevention and management national plans across SSA?

All Sub-Saharan countries should develop educational institution based prevention strategies and effective interventions to mitigate and prevent GBV across SSA. The findings of this review contribute to the development of policy briefs to feed directly into national and local policies for program development, and to assist those who are working on preventing and responding to gender-based violence.

4 Research recommendations should be informed from the study limitations i.e. it is important to indicate that due to the high heterogeneity of the included studies, future GBV studies undertaken across SSA should utilize a standardized methodology which could allow for comparisons to be made over time. Comment is accepted and text corrected

We included this under research recommendations. See under “Conclusion,” last sentence