Author’s response to reviews

Title: Systematic Review of Effectiveness of School-Based Sexual Health Interventions in Sub-Saharan Africa.

Authors:

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Author’s response to reviews: see over
Dear Editor,

Systematic Review of Effectiveness of School-Based Sexual Health Interventions in Sub-Saharan Africa

Thank you (and the reviewers) very much for the generally positive comments on our paper. Outlined below are the changes that have been made to the initial manuscript:

1. Title and suggested running head have been changed to reflect more on our outcomes of interest- STI/HIV, and studies included in the review (controlled studies only)
2. Justification of review in Introduction, including differences with previous reviews.
3. Elaboration of review process, including incorporating a flow chart for study selection (Figure I), Table I showing search strategy employed in three databases, table of excluded studies and reviews (Table II), and an Appendix of the data extraction and quality assessment used for full text critical appraisal of studies.
4. Elaboration of the findings in results and discussion section of the paper
5. Abstract now reads 12 articles (10 studies)
6. Referencing format has been modified to suit the BMC Public Health style.
7. Paper has been better proof-read, and grammar and essential language corrections made
8. Clarification of scope of review being to studies published between 1986-2006, demographic data and description of included studies and participants have been retained as these make the objective of having a more robust review, while informing on the validity and generalisability of the findings of the review in informing future research and policy
9. Recommendations have been more co-ordinated in the Discussion and Conclusion sections.

In reply to individual reviewers’ comments we have made the following detailed changes:

Reviewer: Nicole Crepaz

Major Compulsory Revisions
Like previously published reviews (e.g., Gallant & Maticka-Tyndale, 2004; Magnussen, Ehiri, Ejere, and Jolly, 2004), this systematic review synthesizes the available literature to evaluate effectiveness of school-based sexual health interventions in sub-Saharan Africa. Such an effort is very welcome as this particular region has been devastatingly impacted by the HIV epidemic. However, there are several issues which warrant further clarification in order to ensure that the review is valid and reliable, and the findings are meaningful. Although having slightly different study selection criteria (e.g., time period included in the synthesis, age restriction, type of trials), this systematic review seems to substantially overlap with Gallant & Maticka-Tyndale’s well-conducted and well-written review. Seven out of 10 studies reviewed in this paper have been carefully evaluated in Gallant & Maticka-Tyndale. The content, the presentation, the discussion, and conclusion are very similar to the ones presented in Gallant & Maticka-Tyndale, but are without in-depth descriptions. The authors should have a paragraph in the introduction to acknowledge the existing work, point out how this review is different from the others, especially Gallant & Maticka-Tyndale 2004, and how these differences can add to the existing literature.

Authors reply: Thank you, this is done as requested in the rewritten ‘introduction’.

1. ... this review has included only RCTs and good quality cohort studies with control groups. However, it is not clear how the authors defined “good quality” and how they use the quality assessment form they developed to assess methodology of selected studies. In addition, a poorly carried out randomized controlled trial is not superior to a non-randomized trial. These issues should be more clearly described.
Authors reply: Table of excluded studies now provided as (Table II). Also provided as an Appendix are data extraction and quality assessment forms documents used in the study.

2. One of the main issues concerns searching. A comprehensive and reproducible search for all relevant studies is essential steps in doing a systematic review because it is a means to minimize bias that may cause a threat to internal and external validity. The handbook published by Cochrane Collaboration (www.cochrane.dk/cochrane/hanbook/hbook.htm) provides helpful guidance in conducting literature search. Listed below are some issues that the authors should elaborate in the paper: 1. Qualifications of searchers; 2. Terms and keywords used in search; 3. List of citations located and those excluded, including justification in a flow chart. In addition, the reporting of the review process should be elaborated. E.g., how were data classified and coded (e.g., paired coders)? What are the evaluation procedures? The information will assist readers in assessing reliability and validity of the review.

Authors reply: Clarification to the different methodological aspects now made, including providing the search strategy used in three databases (Table I).

3. Gallant & Maticka-Tyndale 2004 is a good example for an adequate level of reporting. Most of the statements in the discussion section are fragmented and are made without any support either in the results sections or tables. E.g., “Involvement of all stakeholders... as well as use of multiple media and activities improved effectiveness.” It is not clear to what “effectiveness” the authors are referring. Another example is how the authors concluded interventions involving active participation were more effective than mere didactic knowledge-base interventions. The whole discussion reads as if a whole result section about “successful” school-based interventions is missing and the discussion section is trying to summarize the “missing” result section! In short, the major weakness of this review is a lack of transparent reporting of the review processes and a lack of elaboration on the findings, especially the ones described in the “discussion” section, which make it difficult to determine the reliability and validity of the review and the meaningfulness of the findings.

Authors reply: This section has now been substantially re-written with each point of discussion now linked to the relevant result/outcome under consideration.

4. Although this is not a meta-analysis of randomized control trials, the authors should consider using the QUOROM statement checklist to guide their reporting.

Authors reply: This had been done originally, but as the reviewer outlined our major failure has been in reporting in detail what we have done and how we have done it.

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Minor Essential Revisions

1. Abstract: it would be more informative to indicate 12 articles (10 studies) were reviewed.
   Authors reply: Done.

2. Introduction, 1st paragraph, line 5: Add one space between “to” and “24”.
   Authors reply: As we have rewritten our Introduction in reply to other reviewers’ comments, this now not necessary.

   Authors reply: Done.

4. Results, Description of included studies and participants, 2nd paragraph: it indicated “Nine out of ten studies were conducted ..”, however, the numbers indicated in (…) add up to 10.
   Authors reply: Corrected.

5. Results, Description of interventions: Given that only 4 studies explicitly stated the interventions were theory-based, how did the authors make the statement that “all studies were based on social learning theories”? The rationale should be provided.
   Authors reply: Mention now made only of number of papers in which the authors explicitly stated the theoretical basis of the intervention.
Reviewer: Ademola Ajuwon

Major Compulsory Revisions

1. I suggest change in title to read “A review of effectiveness of school-based interventions to prevent STI/HIV in sub-Saharan Africa”. This title better captures the essence of the paper.
   Authors reply: Title changed as indicated.

2. The paper has no page numbers written in it; this should be done to ensure easy referencing.
   Authors reply: Page numbers added.

3. There is need for clarification with respect to the scope of review; was review conducted during 1986-2006 or that the scope of review was limited to articles published during this period?
   Authors reply: Clarification done as requested- see in first paragraph under ‘Methods’

4. The background information described in the introduction of the paper is weak and needs to be strengthened. For example, there is need to fully describe the impact of HIV among young Africans beyond mere figures. The authors need to fully describe the gap in knowledge that the review seeks to address. A full description of these issues will provide justification for the review and strengthen this component of the paper.
   Authors reply: Done (see our new Introduction)

   • The methodology for conducting this review is not clear. For example, mentioned in abstract that 1,020 articles were scanned, 23 were selected for full critical review but these details are not mentioned at all in the methodology.
   Authors reply: Done, with flow chart provided

   • The authors also stated that the WHO and UNAIDS websites were searched but did not indicate the web addresses.
   Authors reply: Clarification made to browsing of websites and relevant retrieved articles cited in ‘References’.

   • Although the authors developed a data extraction and quality assessment forms for the purpose of the study, the contents of these were not provided.
   Authors reply: In the light of the comments made by both these forms are now provided as an Appendix

6. Authors mentioned in the discussion section of the paper that the studies by Brieger, Okonofua and Shuey were excluded from the review but the basis for their exclusion were not provided. Why were studies conducted in East Africa excluded from the study as mentioned in the discussion section? In revising this section, the authors should clearly state the step-by-step procedures they adopted in conducting the review, the criteria for inclusion, the number of papers identified and the type of information extracted from each paper.
   Authors reply: Clarification of the above methodological issues now made with a table of excluded studies now provided

7. There is inconsistency and confusion in the results section with respect to the actual number of papers reviewed. The authors mentioned that 12 papers from 10 studies were reviewed: this is confusing and it should be clarified to make it clearer.
   Authors reply: Done as requested

   Tanzania is in East Africa and not Southern Africa as the author have stated in the results.
   Authors reply: This statement has now been corrected

7. I do not think a description of the profile of students (age, social-economic status, location of schools) presented under the “description of included studies and participants” add any value to the paper and this should be deleted.
   Authors reply: Reason for description of the above now justified, particularly in first paragraph under ‘discussion’.
The authors should elaborate on component of social learning theories used in developing the interventions described in the studies cited.

Authors reply: Papers stating the underlying psychological theory and activities employed are mentioned instead.

8. The idea of creating Tables that summarize the data extracted from the papers reviewed is good; however no reference is made to the details the reader need to know about the information provided in them. The authors referred to the tables by merely suggesting where they should be inserted in the paper. This is not enough.

Authors reply: More linking of data extracted and description in tables now made under the different results sub-sections.

9. There are several vague sentences in the discussion section of the paper. For example, what does the statement “… but proportionate distribution in location of studies relative to prevalence rate of cases in the epidemic’ mean? Are the authors implying that more intervention studies have been published in Southern Africa because HIV/AIDS has had a stronger foothold in this region than others? This may not be the case as the study is focusing only on published articles and not on intervention activities in the region per se.

Authors reply: we have now only mentioned numbers and excluded this vague sentence

Other vague sentences are 1) “conducting an intervention during school hours promoted the opportunity for interaction between researchers and stakeholders and thus effectiveness …’ who are the stakeholders been referred to here ;

Authors reply: clarification done in fourth paragraph under ‘discussion’.

2) “there is also possibility of publication bias… particularly as this review concentrated on studies undertaken in resource constrained environment that is characteristic of most sub-Saharan Africa’. How does issue of resource constraints affect publication of intervention studies; please clarify.

Authors reply: We have now taken off this statement.

10. The authors should discuss the full implications of why behaviors have been very difficult to change among adolescents. Appropriate recommendations on how to solve this problem in future intervention.

Authors reply: Recommendation to inform the design of future similar studies which are complex interventions is made

programming should be discussed. There is need for fuller discussion of how ‘the findings of this review are in keeping with the attributes of effective interventions as described in the review by Kirby’.

Authors reply: Results of the characteristics of studies in the review and discussion to highlight important attributes employed in studies are now outlined in preceding paragraphs to this statement.

11. Conform to reference style of BMC Public Health. I suggest read the instructions for authors.

Authors reply: Done

12. The authors need to create a separate sub-heading for recommendations arising from the review.

Authors reply: The recommendations have now been re-written in the discussion section, with each recommendation now woven with the particular supporting finding/results leading to it.

Minor Essential Revisions (  

1. Adolescents should be among the keywords.

Authors reply: Thank you very much. This omission has been corrected

13. References should not include initials in the text (see Singhal and Rogers in the introduction).

References should be arranged alphabetically; for example Klepp should precede Kirby.

Authors reply: References have been tidied up and arranged appropriately

14. Adolescents should be listed as a key word in the abstract.
Authors reply: Done.

15. The last sentence “this approach also addresses cultural issues/beliefs of this particular region” in introduction is not clear and should be revised.
Authors reply: Has been revised, and also in justifying the uniqueness of this systematic review.

Thank you very much for your interest in our paper,

Yours sincerely,

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