Reviewer's report

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

**Version:** 1  **Date:** 19 March 2007

**Reviewer:** Nicole Crepaz

**Reviewer's report:**

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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.

As the authors indicated, 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.

One of the main issues concerns searching. A comprehensive and reproducible search for all the relevant studies is one of the 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 the Cochrane Collaboration (http://www.cochrane.dk/cochrane/handbook/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. For example, how were data classified and coded (e.g., paired coders)? What are the evaluation procedures? The information will assist the readers in assessing the reliability and validity of the review. 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. For example, “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. Although this is not a meta-analysis of randomized control trials, the authors should consider using the QUOROM statement checklist to guide their reporting.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Abstract: it would be more informative to indicate 12 articles (10 studies) were reviewed.
2. Introduction, 1st paragraph, line 5: Add one space between “to” and “24”.
4. Results, Description of included studies and participants, 2nd paragraph: it indicated “Nine out of ten studies were conducted in Southern Africa”, however, the numbers indicated in (…) add up to 10.
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.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.