Reviewer's report

Title: Evaluation of Stepping Stones as a tool for changing knowledge, attitudes and behaviors associated with gender, relationships and HIV risk in Karnataka, India

Version: 3 Date: 17 November 2010

Reviewer: Rachel Jewkes

Reviewer's report:

Thank you for inviting me to review this paper which presents a mixed methods evaluation of the HIV prevention intervention Stepping Stones. Overall the article is of interest as Stepping Stones (SS) is very widely used globally and it is essential that there is a better understanding of its effectiveness and impact in different contexts.

The following are major compulsory revisions:

p. 2 The diffusion of ideas from SS is an important theme of the paper. It would be useful to know what proportion of participants in the workshops were chosen because of their potential as change agents and what proportion were see as ‘high risk’. Readers need to be able to make an assessment of how realistic it was to expect broader change to flow from ~34 people per village being recruited into SS, especially given that ‘high risk’ people in most other settings are usually in other ways very vulnerable and may be particularly poorly suited for becoming change agents.

A further point that is missed in this paper and should be incorporated is that the model which is intended to enable social norm change in communities is one where there are multiple (at least 4) Stepping Stones groups conducted with different ages/genders within on community. This is apparently not the model used by KHPT given that only 34 people on average per community was trained. This is an important limitation for any reasonable expectation that SS would have a broader community impact beyond the immediate participants. Further more, the authors must state the average size of SS village – it is important to get a sense of how reasonable diffusion through a village is from the ratio of SS participants to village population.

What is known about the % of sessions of SS attended by participants? Given that only 61% of SS trainees say they saw a condom demonstration it begs the question as to whether condoms were indeed demonstrated in SS sessions, or whether levels of attendance were less than 100%. This is important for understanding the results.

p.2 – at the end of the page the reference to the RCT of SS has not mentioned that there was a significant reduction in incident herpes infections in female trial participants (not just male).
p.3 – there is a discussion of diffusion of SS training effects in the recently published paper with qualitative findings from the South African trial

p.4 – information about the characteristics of the qualitative research participants should be provided

p.4 – how was the sample selected for the PBS surveys? “using random cluster sampling” is not sufficient as a description
what was the response rate for the PBS survey? For the Stepping Stones sample? Is there information on how responders differed from non-responders?
How were the interviews conducted? Self-completion? Interviewers?

p.5 what was the origin of questions in the PBS – some look like GEM scale questions – were they? If so it must be acknowledged. Were they validated for use in this area? What language was used?

p.5 the data analysis is very poorly described and doesn’t seem to have been appropriately conducted. The sample was clustered and this needs to be taken into account in the data analysis – this cannot be done in Excel. The data from the SS group should not have been adjusted. If the differences in socio-demographic characteristics of the sample are considered to have influenced results this must be taken into account by adjusting for age, marriage and sex variables in a multi-variable regression analysis.

Table 1 – the differences between the three samples should be tested for statistical significance, and only significant differences commented on in para 1 of the results (p.8)

Throughout all tables exact p values should be presented.

Where the attitudes questions are from scales (or where they form scales) then an overall score should be calculated for the 3 groups and the scores presented and compared.

Where questions were not answered by all PBS participants, the N actually asked and the n responding should be given for the item.

Table 4 – the reference to anal sex – was that with a man or a woman partner?

Discussion
In many settings women are so unused to being asked their opinions that they are considered likely to state the social norm as the answer to a gender attitude question even if their own views somewhat differ. I have had recent conversations about this with researchers in Bangladesh and wonder if the problem was considered in this study and whether it may have influenced the results (and their interpretability).

The data analysis needs to be redone using the most appropriate methods and this may influence results. However, on the face of the current results, which are
quite good, it’s unclear to me why paragraph two of the discussion focused on what was not achieved and sustained 3 years after Stepping Stones. What evidence do the authors have that the explanation for not getting overwhelming and sustained change was insufficient factual information? I was under the impression the strength of SS was argued to be its participatory methods and this was perhaps why it worked better than factual information giving based interventions.

Paragraph 3 of the discussion is completely speculative – what evidence do they have that 40 people would be sufficient to galvanise change in a community – who would they have to be? How education? Empowered? Influential? How small a village? I think the authors should focus on the facts which appear to be that there was some dissemination to the social network (shown in the qual research). It’s impossible to know whether the community differences examined are due to SS or due to other factors (problem of attribution – must be discussed). If interventions are intended to be community-transformative they need to be set up in a realistic way and research is needed (or references need to be cited) to indicate what that actually constitutes.

The concluding paragraph of the paper does not sit well with the rest of the discussion. I would suggest that the discussion be extensively revised. It needs to relate back to the hypotheses addressed in designing the study and also to the findings of research on Stepping Stones from other settings – the Gambia evaluation has been published and should be discussed here too.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I distribute the South African version of Stepping Stones from my office but it is on a not for profit basis and charge only for bulk orders. I have no competing interests.