Reviewer's report

Title: Voluntary HIV counselling and testing among men in rural western Uganda: implications for HIV prevention

Version: 1 Date: 23 January 2008

Reviewer: Gavin John G Churchyard

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Note: Dr James Lewis (LSHTM) assisted with the review

- Major Compulsory Revisions
  NONE

- Minor Essential Revisions

1. I think more background on the ARV situation in the sub-district at the time of the study would be helpful, as this may be expected to impact the level of VCT uptake in the sub-district.

2. The sample size estimation says that a prevalence of 50% would give the largest sample size. I think this is incorrect. A prevalence of 50% gives you the highest power possible and hence, needs the lowest sample size.

3. If the sizes of households vary, which I assume they do, then the sampling strategy is biased towards men in households with fewer eligible members. For example, imagine two households, one with one eligible member and one with two eligible members. The probability of being picked for a member of the house of 2 is half that for the member of the house of 1. This could be dealt with by weighting by number of eligible members in the household. Alternatively, assess if VCT uptake is correlated with number of eligible members in the household and if it is not, then you can probably ignore this in the analysis. I'm not clear if this was done already as the authors say under "Data Analysis" that they used "...analysis that adjusted for the design effect". If household size was not recorded, then it should be discussed as a limitation in the discussion. I do not think this is likely to be a major limitation of the study though.

4. Bivariate analysis usually means one outcome and two independent variables, whereas univariate analysis usually means one outcome and one independent variable. If you dislike the term "univariate", can I suggest "unadjusted"?

5. What criteria was used for the backward elimination model (i.e. p-value > what)?

6. A description of the selection method used for focus group discussions and key informant interviews is essential to help in the interpretation of this. In fact, I wonder if the quantitative and qualitative research should not be in separate papers as I do not think there is enough space here to discuss the qualitative research in the depth it deserves.
7. I did not understand the paragraph on socio-cultural beliefs (p12). How does male superiority prompt VCT?

8. The paragraph starting "Of the 202 men who had ever undergone VCT..." (p13) is followed by a series of percentages that do not add up to 100%. Is there an error?

9. In the first paragraph of the discussion, you state that your findings confirm VCT uptake is low and this is probably responsible for low VCT uptake in Africa. How is low VCT uptake in Uganda responsible for low VCT uptake across Africa?

10. Oversampling will not reduce your non-response bias (as stated in "Limitations of the study") as the percentage who did not participate will be the same. It will increase your sample size though.

11. Your conclusions state that "...the VCT programme needs to address HIV stigma and improve access, confidentiality and quality of VCT services in Kasese district". I agree with your conclusion, but given your expertise in this area, I think you need to go beyond this and offer ideas as to how this can happen. In particular, can this passive model of VCT be improved substantially or is it doomed to fail three-quarters of men? You mention home based VCT testing and I agree this could be interesting. What other ideas do you have?

12. Poor quality of VCT is cited as an important reason for not seeking VCT in the conclusion but this is not supported by the qualitative data.

13. Table 3 and 2 can be combined. Please ensure that percentages add up to 100%.

- Discretionary Revisions

1. These results are interesting but may be easier to interpret if a conceptual framework of VCT was devised and analysed here.

2. I would be interested to know how the results clustered by village and whether this affects the analysis. I assume that some of the barriers mentioned to VCT uptake (particularly health service barriers) vary a lot by village.

3. Do you have data on time since last VCT? This would be interesting as there is a large difference between a quarter of the male population regularly going for VCT and a quarter of the male population having ever been for VCT. This is particularly interesting, given the lack of association between recent sexual behaviour and VCT - this may well be an issue of causality i.e. does risky sexual behaviour lead to higher/lower chance of VCT or does VCT lead to a increase/decrease in risky sexual behaviour?

4. I don't think Table 1 adds much value and would rather see a "total" column in Table 2.

5. When reporting the percentage who would be willing to go for VCT in the future, can you split this into those who have already had VCT and those who have not had VCT?

6. Although the majority would be willing to pay for VCT, I would rather phrase this as "44.7% would be unwilling to pay for VCT".
7. It appears as if this study is part of a larger study. If so this should be described in the methods.

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

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

Declaration of competing interests:
I Dr GJ Churchyard declare that I have no competing interests
I Dr JLewis declare that I have no competing interests