Reviewer's report

Title: Disclosing HIV to partners: results from a mixed-methods study in four African countries

Version: 1 Date: 26 March 2013

Reviewer: Brandon Marshall

Reviewer's report:

This is an informative mixed methods study that investigates various factors associated with partner disclosure of HIV status among couple residing in four African countries. Its use of qualitative and quantitative methods allows the reader to explore the complexities and multiple perspectives and narratives that underlie this important public health issue. Although the cross-sectional design does not permit the authors to examine pertinent cause and effect relationships, the study does help to direct the focus of future studies — possibly involving longitudinal data. This study may also have uncovered a compelling issue of low partner disclosure in Malawi, which may signal that further research is needed there, particularly in this time of ART-scale up amongst discordant couples in this setting. Although the methods employed are relatively simple and straightforward, they are used appropriately and overall the mixed methods approach taken by the authors is rigorous. As some of the comments below indicate, some more precise language regarding the statistical results and models is needed.

Major Compulsory Revisions

1. Greater emphasis should be paid to synthesis of the open-ended responses; although classification of responses may be crude and lose valuable contexts, the readers do not have access to the complete narratives, and would likely appreciate additional summary statements.

2. It would helpful to know the nature of the missing data for the 50 participants that were excluded from the sample of 281. The authors have not provided sufficient information to allows the reader to believe these are missing at random. This (18%) may be an acceptable portion lost (when concerned about selection and information biases), but it's important to know the most common reasons for these missing values, or characteristics of those with missing values. If possible, the authors should consider comparing the socio-demographics of these missing individuals with the eligible sample.

3. As the authors show throughout the paper, the likelihood of disclosure among the Malawian participants is very different from the other three countries; this might make a stratified analysis interesting and useful. Although much precision will be lost from examining the Malawian data separately, it would be very interesting to see if the broad associations are similar in the Malawian data
versus the remainder of the sample.

Minor Essential Revisions:

1. On the beginning of the 8th page, please specify the frequency of the ‘3 most common reasons for disclosing’.

2. The following sentence is confusing: ‘Almost three-quarters of our respondents did not report any symptoms requiring testing or treatment for HIV at the time of their most recent test (71.5%, n=163/228).’ What exactly is this sentence telling us? All of the respondents are HIV positive, so what is meant by their ‘last test,’? Does this refer to the test in which they learned their positive status?

3. In order to avoid reporting a very small risk ratio (RR = 1.01) for the age variable, the authors should transform this variable to represent a 5- or 10-year age increment.

4. The last sentence on page 12 may be misleading. It states that the differences in disclosure are related (and implies only related) to country of recruitment. This should be re-written, unless somehow there are no differences in these indicators (shown to be associated) between countries.

5. The last sentence in the first paragraph of page 13 (‘The differences by gender…’) may be on to something very interesting—if this indeed explains much of the effect seen by gender it would be helpful to show some indicators of health when first tested positive, or when surveyed.

**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 declare that I have no competing interests.