**Reviewer's report**

**Title:** Study design and the estimation of the size of key populations at risk of HIV: Lessons from Viet Nam

**Version:** 0  **Date:** 28 Jun 2017

**Reviewer:** Beth Rachlis

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Review for BMC International Health and Human Rights

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Choices in Surveillance of HIV: Lessons from Viet Nam

This is an interesting paper that explores the use of key informant interviews with diverse groups of stakeholders when discussing HIV surveillance estimation methods in Vietnam. The paper raises many interesting points but could be strengthened to make it more relevant and unique. Specific comments are included below.

**Introduction:**

1. The HIV context in Vietnam should be stated clearly including the prevalence and incidence, number of deaths, ART coverage and how care is provided.

2. Pg. 4- second paragraph: reference needed for last sentence.

3. Pg. 4- third paragraph: Do the authors have a sense of why there is a gap in terms of including equity in prioritizing HIV programs?

**Methods:**

4. Study Design: The authors make reference to a lack of community perspectives in the framework but then include non-community members as key informants. Did the authors consider just including community members?
5. How was the sample size reached? Was it decided a priori or after when saturation was reached?

6. Data collection: Did participants provide informed consent? If not, why not? Also include statement about REB approval in the main manuscript.

7. Analysis: Was a code book developed for the thematic analysis? Who completed the analysis? How many investigators were involved and how was consensus reached if there were disagreements?

Results:

8. A table 1 describing the 16 participants is needed. How many were women? How many were community people? Program planners? Researchers? Did 8 come from Ho Chi Minh and 8 from Vinh City? What was the age of participants?

9. A table is needed with the criteria developed in this study and how it relates to the AHRQ framework- versus what was newly added versus what existed. This is discussed briefly in the beginning of the discussion but should be stated explicitly as part of the results. Should be added as Table 2 and then the main findings for each criterion could be summarized.

10. For each heading: provide the n (sample size) who noted that this was an issue. I.e., "less than half of all key informants interviewed (n=) mentioned this criterion". In addition, whether it was commented on more by community or researchers etc? This was discussed in the discussion so would be important to highlight in the results as well. i.e., who cared more about cost versus confidentiality.

11. Pg. 10, third paragraph, 2nd sentence: What is meant by "knowledge about the stars"?

12. Pg. 13, first paragraph. Sentence that begins: "Although the latter perspective is about the duration for an individual survey taker…."- this reads more as the authors are interpreting the data rather than what was discussed by key informants. Please clarify.
Discussion:

13. Page 18, 2nd paragraph- As per comment 10, discussion around how the different key informants responded should be included in the results when discussing each criterion.

14. Pg. 19- 2nd paragraph- Around sentence that begins "These findings point out a specific need…". Do the authors have any ideas how this could be addressed to gain better evidence about the strength of ties within the communities?

15. Pg. 19- 3rd paragraph- References are needed for 2nd sentence beginning "In prioritization frameworks, these relative differences are called…."

16. Pg. 19- 3rd paragraph- last sentence: The authors should add more discussion around their comment that differences in criterion being a positive or negative factor and issues in weight or discussion. For example, how would this affect the development of a framework for use that recognizes these findings?

17. Pg. 21- limitations- more should be added- what about issues of generalizability, limitations on who was included and who was not included (other key stakeholders), limitations related to study design

18. pg. 21, 2nd sentence in Conclusions- consider rewording sentence that begins "On the other hand…" as it reads as if inclusion of community is the reason why problems/conflicts occur.

19. pg. 22- the use of "decision-tree" should be discussed earlier on in the discussion before the conclusions, perhaps in the discussion around conflict resolution with diverse groups of stakeholders.

20. Declarations- add whether informed consent was received from participants (see comment 6).

21. Tables and Figures: See comment 9. A table should be added describing the AHRQ framework and as well as a summary of new findings. If space is an issue, the authors should consider removing Table 1.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Needs some language corrections before being published

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