Reviewer’s report

Title: Improving Local Health through Community Health Workers in Cambodia: Challenges and Solutions

Version: 2 Date: 07 Aug 2017

Reviewer: A N Bazzano

Reviewer's report:

General comments:

The authors provide a useful and relevant contribution to the field of research on community health workers and are to be complimented on a good writing. There is little published research on volunteers in Cambodia, so this is a needed addition. As a small qualitative research study, there are some key elements that need to be addressed in expanding and providing more detail for the Methods section. Additionally, it is crucial to address the specific study sites of Mondulkiri and Kratie which are atypical provinces and have political and economic context that needs to be provided to readers. Finally the VHSG program, which is oddly referred to in the paper as the CHW program, also has a political history which should be described and discussed for appropriate context, and this is missing. Given the complex geo-political issues in Cambodia, these last two points absolutely must be addressed for the paper to be appropriately considering the work of CHWs. The manuscript is unfortunately hampered by major omissions and these must be rectified prior to publication.

Specific comments:

Abstract

- Background only contains a few very vague sentences and could be improved. What has come before that led the researchers to carry out this study? It is not clear enough from the paragraph and should be made so.

- Results paragraph ends in a strange sentence that is totally unclear to the reader: "CHWs suggest realistic practical solutions..."
Introduction

- Add a paragraph about Mondulkiri and Kratie as some of the most under-resourced areas and having the some of the worst health outcomes in the country (the northeast in general being far behind). Serious geographic barriers exist to accessing health services and are likely a major impediment to the work of VHSGs. Furthermore the road and transportation issues are severe! All of this must be discussed, as should the ethnic minority populations, language barriers for ethnic minorities, logging, borders etc. etc.

- Add a sentence about the Pol Pot genocide and how it impacted the entire health system of the country, so that the reader understands more about the context.

- Add a paragraph about the political parties and history of the VHSGs beyond the CPPH. VHSGs may have political party affiliations or be related to village leaders, and this must be mentioned. These volunteers may not be as active. Male and female volunteers, young and old also are related to the activities. It is quite important to understand the different types of VHSGs and not to consider as a homogeneous group.

- Table 1 is incorrectly identified as being "required" for VHSGs, but rather it is potential scope of work. This is an important distinction, and must be made clear.

Methods

- Author needs to use the COREQ checklist and provide much more detail for this section to be acceptable.

- "qualitative methodology" is meaningless unless the author provides the specific school of thought and reference! that was used. It is absolutely required to reference a certain author or methodologist who's work guided this. What theory/theoretical orientation? It is not acceptable to mention coding without stating what Type of coding was used and reference the author of the text/theory that was used.

- Having the Health Center Chief select VHSGs as participants would have undoubtedly biased the work and this possibility must be explicitly described in limitation or method section (why was this done? explain logistic or other rationale)
Tables 2 and 3 are very poorly formatted and severely lacking in required detail. Table 2 how many people were in each focus group? Must include a cell for each participant with exact age of each participant, where were they from what ethnicity, religion etc. Especially as ethnicity is a key factor in this region related to health equity.

- Audio recording? Transcription?

- What are "flip charts" from the focus groups? This whole section is very poorly explained

Results

- Box 1 and Table 4 are very difficult to understand and poorly executed.

- Table 4 appears to be a listing generated by the Focus Groups, which calls into question whether any actual discussions were had by the focus groups, or whether they were directed to make a listing. Furthermore, the author's response to the reviewer that there are no quotes because it was an FGD is extremely confusing and calls into question the authors understand of the methodology which frequently generates useful quotes in research.

Discussion

- Again, the geopolitical situation cannot be omitted from this section, especially in consideration of the results found in the study and the hindrances for CHW work.

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