Reviewer’s report

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

Version: 0 Date: 23 Jan 2017

Reviewer: Mary Lyons

Reviewer's report:

This is an interesting paper about an emerging issue of importance in many low and middle income countries.

Page 2 line 26/27. Poor language use. A drive is not answered. Reword

Page 2, line 48. Need to clarify whether this is a national government policy or local policy or what?

Page 3, lines 1-3. The sentence about health inequalities needs re-consideration. Health inequalities are not caused by poverty, poor sanitation, malnutrition and lack of rural health infrastructure per se, but rather the unfair distribution of resources, services or access to services.

Page 3, lines 5-8. Needs rewording. Poorer than what or who? Need to be clear whether authors are comparing rural with urban or Cambodia on average compared to other parts of the world?

Page 3, lines 22-27. Some comparative examples and references would be useful to help understand why this work requires a high level of public health skill and knowledge. Or just simply say that Box 1 describes the knowledge and skill required and avoid words like 'high' that require comparison - high compared to what?

Pages 3 & 4, Box 1. Inconsistent use of capitalisation. Please review all the terms in this box such as Oral and oral, the word zinc does not need to be capitalised.

Pages 4 & 5 final paragraph, line 50 onwards - needs reworking to make it clearer exactly what the evidence says and which study is being referred to in relation to what is being claimed.
Terms such as 'evidence also suggests that...' need to be avoided. What is the quality of this evidence? Is this just one small qualitative study or what? Several unsupported statements have been made in this paragraph that need to be reviewed and clarified. The authors say the CHWs are active in communities. Does this mean all communities? A few? Most?

General point - a couple of sentences in the introduction to give an overview of the CHW programme in Cambodia, including how it is organised and funded are needed to contextualise the research.

Page 5, lines 22 - 24. This is not logical. Take care with language. CHWs are certainly not 'critical' to achievement of the SDGs, nor is critical appraisal of the programme.

Page 5. Need to say which ethics committee(s) gave approval for this study somewhere here, rather than later.

Page 5. Before discussing the focus groups and interview methods, need a bit of a brief overview of the rationale for the methodology chosen. Why focus groups? Why interviews? Why both?

What do the authors hope to gain by doing both?
Page 6 - fist line in section on interviews. 'What it is like to be a CHW?' Is not a question.

Reword

Pages 5 & 6. Details of the sampling process should all come before discussion of the interviews. Remove reference to this from that section, and put into separate section. In this section explain how participants for focus groups and interviews were selected in each case. Purposive sampling, is non representative, so remove any suggestion that it is. Not clear why this is called generic purposive sampling. This needs to be better supported or removed.

Page 6, line 29. Reference to transferability rather than representativeness might be more appropriate with qualitative research

Page 6, line 33. What is the purpose of the notes that were taken? Why take notes during the translation process? How were notes used?
Page 6, What language were the interviews conducted in? Not clear at what point translation was required or used. How were translators trained? Quality assurance of training?

Pages 7 onwards. Need more in-depth analysis of the data, with quotes used to support the analysis. The reader should not have to find the meaning in the quotes. Not clear how these five themes emerged? Did they come from the format of the questions, or emerge directly from the data?

Page 8, lines 47 - 52. Sentence does not make sense, reword.

Page 8, line 56. Did all CHWs attend all training mentioned? Links back to previous comment about the need for an overview of the CHW programme somewhere in the introduction and this should include reference to training.

Page 12, lines 2-3. Refers to 'lack of a professional title and uniform further disempowers them in the eyes of the community'. No evidence provided to support this. Should be reported as something that the CHWs feel rather than fact. It has not come from the 'eyes of the community' so should not be reported as if it has.

Page 12, Box 2. Similar to above. This is presented as if it comes from the voice of community members, but this is not really correct.

Page 14. discussion section. Reword first sentence, as doesn't make sense. Next few sentences contain lots of unsubstantiated comments. Need much clearer reference back to literature.

Page 14 lines 40 onwards. Disappointing to see that what the CHWs say has been treated as if it is fact. Yes, indeed the challenges and solutions reported by the CHWs are interesting and they appear to demonstrate some insight into possible ways to improve their own effectiveness, but to suggest that this lead to behaviour change and could improve health outcomes is a step too far. What the CHWs have reported needs to be discussed in light of evidence from literature. It does represent evidence, but only evidence of what the CHWs believe or have said. This does not represent evidence of what works and it is dangerous to suggest that it does or should be accepted as if it does. If the findings about challenges are similar to those found in other studies, that is good, but that provides evidence of what the CHWs think and should be presented in that way. The challenges presented at the bottom of page 14, do not reflect those given in Box 2, so where do they come from?
Page 15, first paragraph. The research appears to support the WHO policy brief. Use of the word However, (line 3) suggests that the findings here oppose that view, but they do not. They appear to support it! This section is not clear. A section in the introduction to explain the nature of CHW programmes in Cambodia would help.

Page 15, second paragraph starting on line 24, reads more like an essay about primary health care and it is not clear how it relates to the specific findings from this study. Needs to be more clearly linked back to the findings and not go beyond them.

Page 16, second paragraph. Some of this should be in the introductory section and then in this section refer back and discuss the impact of a lack of training on ability to undertake CHW duties.

Page 17, section on participation. Need to refer more clearly back to theory. Clearly CHW opinions need to be considered, especially in relation to the practical aspects of any suggested solutions, but CHWs are not the experts in developing the evidence about what works. The difference between the professional role in finding the evidence, setting priorities and those of the CHW needs to be a lot clearer.

Page 17, section on conclusions. First sentence refers to CHWs being at risk, but at risk of what? The authors suggest that the current system leaves them vulnerable, but has not provided evidence that this is indeed the case. This final section is very muddled and reads more like the authors opinions rather than based on research findings. The authors refer to being better aligned, but why? Was this identified as a major problem? The conclusions need to be much more closely aligned with the research.

General point - inconsistent capitalisation used throughout. This needs to be consistent. Also need consistent use of tense. At times, this changes.

Also, what is the overarching aim of this paper? This needs greater clarity at the beginning and then ensure conclusions are written in the same terms as the aims.

Also results are provided together, was there any difference between findings from the interviews and the focus groups? Why do both?
Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal