Author's response to reviews

Title: Household's Perception of Climate Change and Human Health Risks: A community perspective

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Version: 5 Date: 6 December 2011

Author's response to reviews: see over
Reviewer's report

Title: Household's Perception of Climate Change and Human Health Risks: A community perspective

Version: 3 Date: 1 November 2011

Reviewer: Niki Harre

Reviewer's report:

I would like to restate that this is very interesting data and an extremely impressive sampling process. The authors are working with an important population and make a very strong case for how this population is being, and will be, affected by climate change.

A couple of problems (major compulsory revisions) remain – first, I still don’t understand exactly how this information is useful for the development of policy, mitigation and community level interventions. The authors state it is useful at several points in the article but they don’t show how it is useful. As I was re-reading the manuscript it seemed at times they were claiming that it was useful because it revealed “facts” about climate change that were not revealed by scientific information. That is, at times, they appeared to be claiming that these participants can give us “real” information about how the climate is changing and leading to sickness, over and above the information gathered by authorities. I find this claim very difficult, given that it is extremely hard for people to accurately associate cause and effect in this way – I am happy to be proven wrong, but my point is by the end of the article I still wasn’t completely clear if the authors were offering this information for its “factual” value. I suspect they are mostly offering it for another purpose, perhaps to show what mitigation efforts people are ready to accept? I don’t know, so I feel these needs to be clarified throughout.

Response: As a climate vulnerable country Bangladesh needs to adapt, given their vulnerable situation. The country needs to prepare appropriate adaptation and mitigation strategies, region and sector specific programs and interventions. So, the knowledge and opinions of the community are key components for policymakers in their efforts to formulate more appropriate, acceptable, efficient adaptation strategies or interventions. For example, our respondents mentioned that rainfall was a problem, which strongly suggests that policy makers need to consider irrigation as an intervention in the future. We have conducted this study to assess climate vulnerability from the people at the community level, which can then be included in national future adaptation strategies and interventions.

Second, Tables one and two (in particular) are still very difficult to follow. I think they have too much detail and I still don’t understand how the percentages have been calculated as per point 14 below. It is not a problem with rounding. The breakdown by gender in Tables one and two is interesting but there is no gender analysis in the article, so it seems to add redundant detail. The “consequence” column in Table 5 could be shifted to the left or removed. In Tables 4, 5 and 8 there is no need for the columns to be broken down by heat, cold and rainfall – I think this adds complexity.

Response: We included three different themes in Table 2 by gender and by total number of respondents. So we do agree that Table 2 is detailed, yet informative. We have calculated the
percentages by gender and by total of respondents with the appropriate headings. In Table 2, for example, the number of males that responded that the “present intensity of heat during summer in comparison to the last five to ten years” was “very low” was 1. So, we calculated the percentage as $\frac{1}{450}$ (total number of respondents) = 0.002*100 = 0.2%. In Tables 2 and 3 we have added the column total by gender and total as suggested by the other reviewers, so that the table can be read in both ways. As the percentages presented in Table 2 and 3 are very detailed by gender, we did not describe all percentages again in the text. The chi-square values indicate the significance of the differences of the perceptions between male and female. The percentages presented in the other tables (4-8) are the combined perceptions of climate change of both males and females. We do appreciate the comments regarding the structure of the tables 4, 5, and 8 but in restructuring them, we have incorporated the suggestions of other reviewers.

Here are my comments on the responses of the authors to my first review.

1. Comment: I originally commented that the abstract contained very detailed information and some repetition, this problem still remains, in particular the first part of the conclusion repeats the information in the results section.

Response: Thank you for the suggestion. We have edited the conclusion section in the abstract and reduced the amount of overlap.

2. Comment: No response needed

3. Comment: My third point concerned indicating what studies on climate change and health have shown, rather than simply describing the studies that have been conducted. This paragraph has been improved with the addition of a little more detail on studies of climate change perception from other nations, and the placement of this at the end of the paragraph. However, the paragraph could be further improved by stating how people’s perceptions of climate change can inform interventions, rather than just stating this is the case. This remains a problem with the article in my view – as per my opening point in this review.

Response: Please see our response to the reviewer’s first comment. We have made changes in the introduction section and added relevant references.

4. Comment: This leads to my fourth point which raised this concern – the introduction does not fully justify the utility of seeking this information. I suggest this problem remains – perhaps specific examples of how understanding perceptions can aid in policy formation and the like would help.

Response: We have added in the introduction section that how this information will help policy makers.

5. Comment: The authors have now adequately explained the units used for sampling

6. Comment: Although the authors have described the process for creating the survey items in their response, this is not included in the manuscript. I’d still like more information in the manuscript on the testing of validity and reliability.
Response: We have added more detail in the manuscript (in the second paragraph of Methods section)

7. Comment: The authors have responded as hoped to my suggestion about clarifying that the survey went to a single member of households, rather than to the household as a whole.

8. Comment: Probability proportionate sampling has been explained in the authors responses to reviewers, but not in the manuscript. I'll leave it to the editor to decide if this is a well known enough method to not need further elaboration.

Response: No response needed

9. Comment: In point 9 I just meant to refer the reader to the tables within the body of the text.

Response: We have referred to the tables within the body of the text.

10. Comment: The authors have responded adequately to this point

Response: No response needed

11. Comment: The authors have included a little more information on the questions used for the focus groups here, although this is still very sketchy. I’d like to see another couple of statements included as to how these were conducted.

Response: We have given more detail about how the FGD and KII were conducted in the Methods section (last paragraph of the Methods)

12. Comment: The authors still need to clarify in the manuscript which results are being referred to. Perhaps they could insert the explanation they give in the responses to reviewers at the beginning of the method section to clarify. I also suggest inserting “survey” or “focus group” respondents throughout the manuscript as appropriate. This has been done some of the time, but needs to be done all the time for clarity.

Response: We have added the word “survey” or FGD throughout the manuscript where appropriate.

13. Comment: The authors have added “the lower” which solves this problem.

Response: No response needed

14. Comment: The remaining issues with the tables have been discussed above

Response: Above we have commented on the changes to and calculations in the tables of the manuscript. Thank you very much for your suggestions.

15. Comment: The authors have responded nicely to this point. I suggest adding “we assume” to the sentence stating the participants are not familiar with the research on climate change.

Response: We have added “we assume” to the sentence as suggested.

16. Comment: This point has been responded to adequately.
Response: No response needed

17. Comment: The second and third paragraphs in the discussion are still difficult. They make claims – such as the qualitative data adding to the “reliability and validity” – which are not substantiated. These paragraphs are also repetitive.

Response: Thank you very much for highlighting the issue. We have revised the second and third paragraph of the discussion section as suggested.

18. Comment: The repetition I was referring to is mostly in relation to the second and third paragraphs, which I suggest need considerable rethinking as to what novel findings the authors are presenting and how to succinctly describe the good features of their methodology.

Response: Thank you for your valuable suggestions and comments to improve our manuscript. We have revised the second and third paragraphs of the discussion section.

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

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests