Reviewer's report

**Title:** Transition in household's sanitation practices over time in rural Bangladesh: a cross-sectional comparative study

**Version:** 1 **Date:** 29 June 2013

**Reviewer:** Varvara Mouchtouri

**Reviewer's report:**

**Abstract**

The meaning in some sentences is not clear for example: page 2, the first sentence in background section of abstract. In the same section, third line “its continuation” needs to be explained. “BRAC’S” should be written in full letters. The objective of the study could be mentioned more clear in the abstract. Authors should explain that the study assessed the impact of an intervention programme and give some information about the intervention (construction of latrines, hygiene promotion etc.). This will make more clear what baseline, midline and end line status means. Moreover, authors need to mention in the abstract that observations made by interviews were used in addition to the questionnaires completed by the female members, in order to assess the trends in sanitation and hygiene practices. Results section of abstract should include numerators and denominators as well as the statistical results for probability including confidence interval limits.

**Background**

Page 4: The phrase “… fewer people have water supply at home than have basic sanitation.” seems that opposes the meaning of the previous sentence. Add the phrase “at home ” at the end of the sentence and put the content in quotation marks since this part has been directly taken from the article referenced. Add a reference after the phrase “lagging behind water supply”. Maybe it is worth defining the word sanitation in the background section. In page 5 first write in full NGOs and then use abbreviation. Page 6, line 2 change “six month” to “six months”.

**Methods**

Page 7, last sentence: a reference should be provided. The analysis was done using number of households, if authors know the population in the households in total it would be worth mentioning this information, in order to have an indication of the number of population covered in the survey. Include information about data collection on the socioeconomic status of responders.

**Results**

It would be good to explain what “NGO membership means”.

Page 12, line 5: to justify that sanitary latrines use increased significantly, add p values in the text next to percentages.
It is not clear from the manuscript if all households in the study had equal opportunities to use the same types of latrines, or this depended on the location, economic status or other factor? Did all households offered the opportunity to use own latrine and ring-slag with water seal latrine for example?

Discussion

The first line in the second paragraph reports a survey finding which should be mentioned in the results section.

Tables 1, 2, 3: add the denominator in the title of elsewhere.

Table 5: Explain what ORs are analysed. Write in full letters “WASH” programme in a note

• Minor Essential Revisions

The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.

• Discretionary Revisions

These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests