Reviewer's report

Title: Designing a handwashing station for low-income communities in Bangladesh using the Integrated Behavioural Model for Water, Sanitation and Hygiene Interventions (IBM-WASH)

Version: 3 Date: 7 May 2013

Reviewer: Rima Habib

Reviewer's report:

Major Compulsory Revisions:

Comment 1: The paper adopts the IBM-WASH model to assess factors influencing hand washing practices yet it focuses mainly on the interpersonal, individual, and habitual levels (a limitation admitted within the text). However, I would like to see a greater discussion of how some of the community and societal/structural issues play a part in determining technology use as the paper is focused on resource poor neighborhoods.

On page 22 the paper “One key determinant of feasibility that varied by location was the physical environment: it affected access to handwashing stations and access to water.”

If the main recommendation for the study was the use of a 40L bucket, would households in rural environments without easy access to water be able to bring in enough water for this and other household needs? Moreover, a discussion about the role of community and regional/national policy water infrastructure development programs and their relationship to the feasibility of these technologies would strengthen the paper by having it address all levels of the theoretical model. Already some of the qualitative data you supply suggests these societal constraints.

Minor Essential Revisions:

Comment 2: On page 4 paragraph 2, the last sentence “and among that 14 percent…” is not complete.

Comment 3: Page 7, five is misspelled as “fiv” in the last sentence of the setting.

Comment 4: On page 10, the following sentence is a little unclear: “Field research officers conducted semi-structured, qualitative interviews with household participants up to five times over the course of 2-9 weeks.”

Comment 5: Please write out the full meaning of the acronym of “icddr,b” as it is the first time you mention it in the paper.

Discretionary Revisions:

Comment 6: Although the paper describes using trials of improved practices (TIPs), there isn’t a clear, concise discussion of what this adds to the
methodology. Perhaps you can describe the TIPs methodology further so the reader can understand what it adds to your study.

Comment 7: On page 9, it might be best to insert Table 3 here and remove the short descriptions of each. I feel that it is easier to understand what each of these technologies are with the picture and a more elaborated description. The short descriptions already provided are not really explanatory enough alone.

**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:**

NONE