Reviewer's report

Title: Failures in the quality, quantity, and reliability of water provided through an informal distribution system in a slum in Mumbai, India

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Reviewer: Alan Kolok

Reviewer's report:

I read with some interest the publication entitled, "Failures in the quality, quantity and reliability of water provided through an informal distribution system in Mumbai, India".

The manuscript is of interest in that it details the lack of clean and abundant drinking water through an informal drinking water system.

With that said however, the manuscript is not ready for publication in its present form. I will detail below the most egregious problems associated with the manuscript.

General: The authors need to consider the primary hypotheses or questions that they are addressing, then definitively answer them. As it is currently written, the manuscript reads like an annual report, that provides a great deal of relatively unsophisticated and unanalyzed data, but does little to synthesize the data into any meaningful information that other might use.

Abstract: Results There are no real results here, but only a list of proportions and percentages. What do these data actually tell us with respect to the overall question being addressed (which has not been addressed previously in the abstract)?

Conclusions: "A large proportion" is not quantitative, and as heart-wrenching as the problem is, there is little to no concrete statistically validated data presented here to support anything.

Format of paper: While there is a background statement as well as a Methods, there is no introduction per se, nor are there any hypotheses or objective statements. As such, I have no idea what the authors are trying to say. Given that the water is being delivered in an informal distribution system within a slum, it seems logical and likely (though heart-wrenching) that the water quality and possibly also the expense would be inadequate or prohibitive. So what is your question or point? How does this transcend simply being a report on an injustice rather than a scientific treatise?

The study design for the BNA and the SWA are too brief and do not present enough detail. For example it is stated that water quality measurements were taken, but there are not enough details regarding what was measured or why. (This is briefly mentioned in the results and it is stated that none of the common
chemical parameters were in excess of internationally accepted limits (which are not given). If so, then why mention this at all? Furthermore, if it is important to mention, QA/QC or at least quantification methods have to be given in the paper.

The results is written primarily as a list of percentages of households in excess of limitations, however this is not an appropriate way to approach these data.

It is interesting that the water quality (and microbe load) changes seasonally, but why isn't the data presented in the results (Figures) in that fashion? The Tables that do represent these data are confusing and difficult to read. The data can be presented in a much more approachable fashion.

Because the results are not presented in a strongly persuasive manner, the discussion is not adequate. There is actually much more to be said favorably about these studies and these data, however the presentation of the data in this paper does not do the data justice.

The authors have done very little to make these data accessible to the reader and as such this paper is in need of a complete and total rewrite based upon the suggestions above.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have no competing interests with this manuscript.