**Reviewer's report**

**Title:** Cholera outbreaks (2012) in three districts of Nepal reveal clonal transmission of multi-drug resistant Vibrio cholerae O1

**Version:** 2  
**Date:** 31 October 2013

**Reviewer:** Alexander Rosewell

**Reviewer's report:**

Major compulsory revisions

1. The aim of the study is not clear.

2. A major strength of the study is the laboratory component. This paper would benefit from focusing on the laboratory issues (resistance, clonal transmission etc.), rather than trying to address multiple audiences by providing information about outbreak investigations. The outbreak investigations and field observations do not add to the value of what could be an important laboratory focussed paper.

3. If the authors choose to further explore the spread of clonal strains, more information needs to be provided about how isolates from other settings were accessed and/or compared (eg Bangladesh, Haiti etc) - ie this should be clearly outlined in the methods section. The discussion section should highlight some of the limitations in drawing conclusions about the source of the outbreak and the spread of cholera based on clonal data, when cholera isolates from many settings will never be analysed with comparable methods. It may be relevant to refer to a recent Colwell paper that discusses the evidence relating to the source of cholera in Haiti.

4. It is not clear if these 3 outbreaks were the only 3 outbreaks in Nepal in this year, or whether there were many other cholera isolates that reached laboratories in Nepal that the researchers did not have access to analyse to identify different clones. Ie are 28 isolates collected from 3 districts representative of all cholera in Nepal. This should be discussed further.

5. Some methods and results are mixed together.

6. The significance of identifying clonal transmission of cholera in 3 village level outbreaks with 28 specimens collected in this setting is not clear. As previously stated, it would be useful to clearly state the objective of carrying out this work. The conclusions to the paper may flow more easily once the aim is clearly articulated.

Minor essential revisions

6. It would be useful to clarify whether antimicrobial sensitivity profiles for the 2012 cholera isolates were being compared with an identical cholera clone when comparing with a previous study with different sensitivity profiles?
Level of interest: An article of limited interest

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