Reviewer’s report

Title: Characterization of Non-Tuberculous Mycobacterium from Humans and Water in an Agro pastoral area in Zambia

Version: 1 Date: 01 Nov 2017

Reviewer: Sae Woong Park

Reviewer’s report:

In this study, Monde and colleagues characterized the non-tuberculous Mycobacterium from Humans and Water samples in Zambia. Overall, this is the first study in Zambia to isolate and characterize NTM from humans and water simultaneously. However, it is needed to be improved before accepting manuscript.

Major points

1. In the Results part in Abstract, authors described "Based on morphological characteristics, acid fastness by the ZN method and 16S RNA analysis, 20 mycobacterial species were isolated from humans and 32 from water samples". However, only 7 and 23 species were identified to the species level from humans and water samples, respectively. What is the reason for not identifying the remained species?

2. In the Conclusion part in Abstract, authors described "The isolation of similar NTM from humans and water in Namwala district has highlighted the public health significance of these Mycobacteria species". However, the only common NTM species from humans and water were M. fortuitum and M. avium even though the major species from humans and water sample were M. arupense and M. gordonae, respectively. Please let us know why authors concluded that isolates from humans and water had a similar NTM.

Minor points

1. Please follow the journal’s submission guidelines for reference format, unit format, etc, …

The reference format for BMC Infectious Diseases in the main manuscript is a numbering. Please change all the references formatted with author name and published year to numbers.

2. Figure 1. Please provide a high quality figure.

3. Page 3. There are two Malama et al, 2014. Authors should distinguish two references. In the reference, there are Malama et al, 2014 and Malama et al, 2014c. One should be (a) and the other should be (b), not (c).
4. Page 6. Period is need after "AFB" in Collection and processing of Sputum Samples.

5. Page 8. In the Typo in Isolation of NTM in Human Sputum Samples: while


In References


11. Jarzembowski, 2008. Pages were missed.

12. LeDantec et al, 2002. In the main manuscript, it was 2013. Please confirm it.

13. Malama et al, 2014c. Journal name and pages were missed.


16. Petroff, 1915. Please use capitalized letter for author name. Issue # is not needed.

17. Primm et al, 2004. Please write all authors instead of et al. Pages were missed. Issue # is not needed.


21. There are two Thomson et al, 2013. Please distinguish each other by (a) or (b).


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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