Reviewer’s report

Title: The impact of drug resistance on the risk of tuberculosis infection and disease in child household contacts: a cross sectional study

Version: 1 Date: 01 Jul 2017

Reviewer: Sanghyuk Shin

Reviewer’s report:

Thank you for addressing my previous comments. My primary remaining concern is the lack of statistical method used to account for household level clustering. To my knowledge, methods like GEE are now the standard for household contact studies and other similar scenarios. I disagree that your study design adequately controls for this, given that 50% of your households have multiple children enrolled. By assuming independence of observations, your standard error estimate is likely to be too small which would impact the precision of your odds ratios and, possibly, statistical inference. If, for whatever reason, you choose not to use a method to account for within-household clustering, you should indicate your choice to assume that outcomes are independent across individuals in the Methods section and/or the limitations discussion.

One additional minor comment is regarding the discussion of previous relevant studies. You did a great job of identifying and listing the outcomes of previous studies, but seemed to gloss over the possible reasons for discrepant findings. A more thoughtful discussion of why results may be different and how your study strengthens the evidence for lower infection risk / higher disease risk among MDR-TB contacts would strengthen the paper. Perhaps a suggestion for a future study design that could more definitively answer this question might be helpful.

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

No

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

Yes

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

Yes

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.

I am able to assess the statistics

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

Acceptable

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