Reviewer’s report

Title: Treatment outcomes and antiretroviral uptake in Multidrug-Resistant Tuberculosis and HIV coinfected Patients in Sub Saharan Africa. A Systematic Review and Meta-Analysis

Version: 0 Date: 19 Jun 2019

Reviewer: Tendesayi Kufa

Reviewer's report:

Thank you for the opportunity to review this well conducted and written systematic review and meta-analysis. It addresses an important problem in global public health. My main comment is that the authors did a meta-analysis to determine pooled estimates in the face of great heterogeneity. They don't justify why or describe the criteria they used to decide whether or not to pool or not to pool the estimates. I have listed more detailed comments below:

Abstract

- Why only these three databases

Methodology

line 83- why only these three databases

line 103 - state that the studies had to have included HIV positive individuals, although not all participants had to be HIV positive. At the moment it reads as through all participants had to be HIV positive

lines 113- 119- can the authors describe how the retrieved studies were collated and duplicates removed. Was this done manually or a reference management software was used

lines 137- 138: why only 40 studies

lines 149- 159: were descriptive statistics used to describe eligible studies. which parameters were used eg range, median or mean. Also what threshold for heterogeneity was used to determine whether a meta-analysis was necessary or not. Can the authors justify why they through a meta-analysis was necessary
Results

For all the pooled estimates of the outcomes, can the authors report on the levels of heterogeneity found in the text of the results. The value of I-squared and the p-value would do

Lines 213-216: Could the lack of difference in cure by ART status be because the ART coverage was so high in all but one study.

Appendix 2

Shouldn't the column on # and % on ART be labelled as the # and % of HIV positives on ART. At the moment it reads as if the denominator is all participants and not those on ART.

Appendix 3: not clear who is included in this table. All MDR-TB patients or those co-infected with HIV. In the text, it seems this should be all MDRTB patients. What does summary refer to. Perhaps a footnote on the table to explain.

Appendix 4 and 6: the authors show high levels of heterogeneity in the study level outcomes. Justify why you did a meta-analysis in the face of such high levels of heterogeneity.

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.

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.

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