Reviewer’s report

Title: Drug Resistance Patterns of Mycobacterium Tuberculosis Complex and Associated Factors among Retreatment Cases around Jimma, Southwest Ethiopia

Version: 1  Date: 6 March 2015

Reviewer: Lanfranco Fattorini

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Major compulsory revisions:

The manuscript of Abdella et al is a report on drug resistance pattern of Mycobacterium tuberculosis (Mtb) complex and associated factors among retreatment cases around Jimma, Southwest Ethiopia, in the period March 2012-April 2013.

Overall, the period considered is quite short and the number (70) of sputa culture-positive for Mtb is small so the conclusions, even if statistically obtained, could be affected by these limits. The paper would certainly benefit by addition of more data and prolonging the period of analysis. Furthermore, 6 Tables and 1 Figure are too many, thus the manuscript must be condensed as described below.

Minor essential revisions:

Page and line numbers were not indicated and errors in statistical values were reported in different pages, making corrections laborious.

Abstract

Background, Line 6: The Authors should indicate where the study was performed (Jimma, Southwest Ethiopia) after “….among retreatment cases”.

Results, lines 17-20:

A) “…..(AOR = 3.44, 95% CI = 1.11, 10.60)…..”. The same data were indicated as “…..(AOR = 3.44, 95% CI = 1.12, 10.60)…..” in Results and Table 4.

B) “…..(AOR = 3.00, 95% CI = 1.10, 10.62)…..”. The same data were indicated as “…..(AOR = 3.00, 95% CI = 1.17, 10.67)…..” in Results and “…..(AOR = 3.00, 95% CI = 1.17, 10.69)…..” in Table 4.

C) “…..(AOR = 2.9, 95% CI = 1.01, 8.86)…..”. The same data were indicated as “…..(AOR = 2.99, 95% CI = 1.01, 8.86)…..” in Results and Table 4

D) “…..(AOR = 3.4, 95% CI = 1.14, 10.28)…..”. The same data were indicated as “…..(AOR = 3.43, 95% CI = 1.14, 10.28)…..” in Results and Table 6

Introduction

Line 1: “Tuberculosis (TB)…..” in the place of “Tuberculosis…..”
Lines 4 and 7: indicate the meaning of MDR (multidrug-resistant) and XDR (extensively drug-resistant).

Second page, line 2. Reference [11]: I suggest to indicate the most up-dated WHO TB report 2014, showing the same percentages, 1.6 and 12%.

Methods
Sample size: “…Jimma in 2011 [46].” Reference [46] is out of the Reference section, including 33 references.

Laboratory methods
“….based on para-nitrobenzoic acid…..” in the place of “….based on paranirobenzoic acid…..”.


Results
Lines 1-9. Eliminate Tables 1 and 2 and condense relevant data in the text.

Drug resistance prevalence
Last 3 lines: “…resistance to only one of the four…..”, instead of “…resistance to only of the four…..”

Discussion
Page 2, line 12: indicate the meaning of RHZES here and throughout the manuscript wherever appropriate (for instance at page 3, line 1: “….STP…”

Page 2, line 21: “…[46].” Again, Reference [46] is out of the Reference section, including 33 references.

Page 3, last 4 lines. Indeed 31.4% MDR TB is very high. This value may depend on the short period (14 months) examined.

Page 4, line 16: “…of MDR-TB is mostly due to …..” in the place of “…of MDR-TB is exclusively due to …..” (other mechanisms like efflux pumps are known), and add here Reference 13, Zhang et al.

Tables 1 and 2. Eliminate and condense their content in Results

Tables 4-6: to shorten the paper, I suggest to leave only significant (P <0.05) data and to summarize data of other non-significant categories in Results.

Figure 1: indicate name of drugs in Legend and “Percentage” in Y-axis.

Level of interest: An article of limited interest
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have competing interests