Reviewer’s report

Title: Drug susceptibility pattern and genotypic diversity of Mycobacterium tuberculosis isolate collected from community-based survey in Ethiopia

Version: 2
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Reviewer: Lanfranco Fattorini

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Major comment:
The manuscript of Getahun et al reports drug susceptibility pattern and &
genotypic diversity of Mycobacterium tuberculosis isolates collected from a
community-based survey in Ethiopia. Overall, the manuscript is not clear enough
also because data (percentages and numbers) are not accurately shown
throughout the manuscript.

Other comments:
Title.
“….isolates collected from a community-based survey in Ethiopia”, not “….isolate
collected from community-based survey” (written in the printed manuscript)

Abstract
Page 1, line 14: “…in 2010 to 2011”. Some results (and a Reference) of this
National survey should be indicated in Background and Study site.

Page 1, line 19: “ 92 isolates…” not “ 92 isolate…”. Other plurals are lacking
throughout the manuscript.

Page 1, line 23: “…area…”, it is better than “…kebele…”

Background.
Page 3, line 59: “…patterns…”, not “…Patterns…”.

Page 3, lines 64-67: “…in Ethiopia (7-12)…”. Actually these are several, not few,
studies. Thus, which is the novelty of the information provided by the Authors ?
Again, the results of the National Tuberculosis prevalence survey should be
briefly described here and in the Study site.

Methods
Page 3, line 78: which is the period covered by the present study ? How the
Authors calculated the required sample size of 51,667 ?

Page 4, line 87: “Identification” not “A-deletion typing”. This section should be
extended by describing microbiological techniques such as sample processing,
culture media (since Löwenstein-Jensen is mentioned at line 107) etc ....
Page 4, line 94: “…M. canettii”, not “…M. canattii”

Page 4, line 96: “Spoligotyping”, not “B-Spligotyping”

Page 4, line 103: define SIT (Shared International Types or Spoligotyping International Numbers ?)

Page 5, line 123: indicate the period covered by the study. Actually, 46,514 is lower than the required sample size of 51,667 indicated in previous line 78.

Page 5, lines 123-124: explain the meaning of “suspected/suspects”

Page 5, line 129: “….significantly…”. No explanation/comment was given here and in Discussion for P values <0.05 shown in Table 1.

Page 6, line 132: “…Capilia TB…” this identification assay should be mentioned and briefly explained in Methods, not here.

Page 6, line 136: “…M. canettii”, not “…M. canattii”

Page 6, lines 143-151: This part is confused. I do not understand why in Abstract (line 24) and Conclusions (lines 199-200) the Authors indicated 26.4% and 81.8% while different percentages 27/91 (corresponding to 29.7%) and 64/91 (corresponding to 70.3%) are shown here. Carefully re-write this part, also considering Table 2.

Also, the sum of the numbers of isolates indicated in the sentence “The cluster formation….SIT289 each” is 53. How 64 was obtained ? And also, the numbers of Orphans (Figure 2) were not indicated and single strains (not stains!) (The ones with empty circles) were at least 37. Overall, this part should be more carefully and clearly presented. Finally, explain the meaning of GIS (line 150).

Page 7, lines 160-161: “…was 2.5%...(P=0.287)”. Again, a reference should be added.

Page 7, lines 175-176: “…M. bovis….”, not “…M. Bovis….”,

Page 8, lines 185-186: “….was 30% ….and 82%...”. These values (from Table 2) should be shown in Results.

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 no competing interests