Reviewer's report

Title: Prevalence and drug resistance profile of Mycobacterium tuberculosis isolated from pulmonary tuberculosis patients in East Gojam Zone, North-West Ethiopia

Version: 2
Date: 20 March 2015
Reviewer: Eyal Oren

Reviewer's report:

This article examines the prevalence and drug resistance of M.Tb in rural areas of Ethiopia. Overall, the article provides some updated information regarding resistance patterns and fills in a gap regarding prevalence and resistance in non-urban areas.

Major Compulsory Revisions

1. Methods, line 149-150--analytic details are missing for some of your comparisons. For example, please describe the comparison of newly treated vs. retreated resistance outcomes.

2. Results, unclear what your variable selection criteria were for inclusion in the multivariate model. Did you only run model? Please also describe the variables in more detail in the methods. For example, how was age modeled? what were the referent groups?

3. Results--I am guessing the P-value for age for the adjusted model should read P=0.022, not P=0.22.

4. Results, table 3. Do these represent crude or adjusted results? You mention crude in the text, but it is not clear to me if these are then bivariate relationships rather than multivariate? If the latter, please provide detail regarding potential confounders assessed. Also, you should show the 's and OR's in Table 3 itself for the multivariate model (currently only in the results text).

5. Discussion section--please elaborate on genotypic vs. phenotypic methods

Major Essential Revisions

1. Abstract--Only two sets of percentages are provided for resistance among newly diagnosed patients, yet you discuss resistance to SM, TMB and RIF--it is unclear why you are missing one set of percentages.

2. In the background section, you discuss the socioeconomic lifestyle and environmental condition variation across regions (lines 56-57) but do not provide supporting data, nor appear to assess these in your study.

3. Methods, lines 92-93--please provide more details regarding the HIV test type. e.g. is Stat-Pak a confirmatory Western Blot?

4. Methods, line 136--please define and describe MTBDRplus assays in the text
Discretionary Revisions
1. Please provide a % whenever giving numbers. e.g. 50% (6 out of 12) in abstract.
2. Results line 171--how do you know the eight were contaminated?
3. Please proofread and fix grammatical issues throughout

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

None to report