Author's response to reviews

Title: Tuberculosis recurrence in cured smear-positive tuberculosis patients in southern Ethiopia: retrospective cohort study

Authors:

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Author's response to reviews: see over
The reviewer’s comment: Major Compulsory Revision

1. Major drawback in this study is the choice of the cohort to study the recurrence rate and mortality rate for TB patients. The cohort of cured and treatment completed TB patients is not the ideal one either for recurrence rate or for mortality rate. The ideal cohort for recurrence is smear positive cured patients. But this study has included in the cohort smear positive completed, smear negative completed and EPTB completed to study the recurrence rate where the recurrence status cannot be certain. This cohort will not give the true recurrence rate among the cured smear positive cases. Therefore I suggest that recurrence rate should be restricted to smear positive cured patients only.

I respond to the reviewer’s comment as follows:

We have removed treatment completed smear-positive, smear-negative and EPTB cases and restricted our report of recurrence to cured smear-positive TB cases only.

The revised part of the findings section of abstract on page 2 paragraph 3 now reads:

368 cured smear-positive TB patients which were followed for 1463 person-years. Of these, 187 patients (50.8 %) were men, 277 patients (75.5 %) were married, 157 (44.2 %) were illiterate, and 152 patients (41.3 %) were farmers. 15 of 368 smear-positive patients had recurrence. The rate of recurrence was 1 per 100 PYO (0.01 per annum). Relapse was not associated with age, sex, occupation, marital status and level of education.

The revised part of the results section on page 7 paragraph 1 now reads: 397 smear-positive TB patients were registered. Valid data was obtained for 368 (92.7 %) cases.

Reviewer #2

Reviewer Name: Asma ElSony

The reviewer’s comment:
1. In page 2, methods section: page 4 data collection you need to add a statement that no HIV result was available.

**I respond to the reviewer’s comment as follows:**

We have added a statement about lack of HIV results in the methods. *The revised part of the methods on page 6 paragraph 1 line 1 now reads:* HIV results were not available for TB patients enrolled in our study.

**The reviewer’s comment:**

2. In southern Ethiopia, the prevalence of HIV infection in the general population and TB patients was 3.8% and 17.5% in southern Ethiopia explains the role of HIV infection," it would have been advisable to include the sero status of your sample population to exclude co morbidity and then survival curves would look different.

**I respond to the reviewer’s comment as follows:**

Cognizant of the importance of including the sero status of our sample population, we have added a sentence about the limitation of the study with the response to the next comment below.

**The reviewer’s comment:**

3. Limitations: add a sentence in discussion area.

**I respond to the reviewer’s comment as follows:**

We have added a sentence about the limitation of the study. *The revised part of discussion on page 8 paragraph 3 line 1 reads:* The limitation of the study were using sputum microscopy for the diagnosis of recurrence in smear-positive patients that may
have underestimated the rates of recurrence and lack of HIV test result to estimate the role of HIV in recurrence.

**The reviewer’s comment:**

4. Page 8 paragraph 3: Of the 725 TB patients followed add which were followed

**I respond to the reviewer’s comment as follows:**

We have added as recommended, however, changed the numbers of cases for smear-positive tuberculosis cases. The revised part of discussion on page 2 paragraph 2 line 1 now reads: Of the 368 smear-positive TB patients which were followed,