Reviewer’s report

Title: Trends in TB Case Notification over Fifteen Years: The case notification of 25 Districts of Arsi Zone of Oromia Regional State, Ethiopia

Version: 2  Date: 23 January 2014

Reviewer: Gemeda Abebe

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Major

Study settings
1. The authors indicated that “About 89% of the population live in the rural areas and only 70% of them were residing within two hours walking distance from a public health facility”. Since there were dynamic expansion of health facilities in the country it is not clear to which time line does the above information referring to.

Definition of terms
2. Different categories of TB were defined following the different guidelines a country adopts. During the DOTS era there were different WHO guidelines that were adopted by Ethiopia. For instance WHO guideline 2003 and 2007. There are some differences in the definitions taking into account different patient populations specifically HIV sero-positive cases. The definition that was provided by the authors is consistent with the WHO 2003 guideline but not to that of the 2007. However, Ethiopia started to implement the 2007 guideline since 2009. The authors need to re-phrase their definitions (smear positive, smear negative and extrapulmonary TB) according to the time line.

Measurements
3. What were the assumptions for dichotomizing the TB notification rate as below and above 120 (why 120 was taken as cut-off value)?

Discussion
4. The authors discuss that the trend in TB case notification did not increase steadily during the later years in the study period. They indicated it may be the effect of passive case finding. How do the authors discuss their data in line with the current declining trend in TB cases in Ethiopia to which Arsi zone is not exceptional?

5. The authors indicated that “The case detection rate (CDR), as estimated by the proportion of smear positive expected TB incident cases notified, showed an increase from 6.4% in 1997 to 58.7% in 2011”. However, the definition that the authors used and the figures did not coincide. Arsi Zone is one of the zones known to have very low smear positive TB case detection rate which is less than the figure that the authors reported.

Minor revisions
6. Indicate the cities where the institutions to which the authors are affiliated are located.

Abstract

Methods

7. About 41,956---- The authors need to re-write this section since the authors analyzed exactly 41,956 Tb patients data.

8. Epic-info- Is that to say Epi-info?

Background

9. The authors indicate that to the best of their knowledge no study has evaluated how the DOTS strategy was implemented across districts in the country. But their result doesn’t indicate the details of the implementation except that it was done in phased approach.

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests