Reviewer's report

Title: Patient and health service delay in the diagnosis and start of treatment of pulmonary tuberculosis in Ethiopia

Authors:

Meaza Demissie (meazademissie@cih.uib.no)
Bernt Lindtjorn (bernt.lindtjorn@cih.uib.no)
Yemane Berhane (rhr.aau@telecom.net.et)

Version: 1 Date: 19 Jun 2002

Reviewer: Dr N Long

Level of interest: not specified

Advice on publication: Other (see below)

The study deals with TB diagnostic delays, a very important issue in TB control, especially in the settings where passive-case finding is applied. Carefully reading the manuscript, I would like to have the following comments:

1. Page 3/paragraph 1: There should be references for the statement. In addition, introduction part is, in general, still poor and needs further improvements. There are quite a lot of recent publications about TB diagnostic delays as well as reasons for different types of delay (e.g., patient's delay, doctor's delay, system's delay...). These should be more comprehensively reviewed.

2. There is no clear description in the manuscript about how the health care system and TB control system are organized in Ethiopia. What are the different health care providers available? What about the role of private and non-governmental health care providers (if any)? How can a TB suspect seek TB care (e.g., common health seeking pathways)? What about estimated case-detection rate of pulmonary TB? All these factors are closely related to the TB diagnostic delays, but not yet properly mentioned/described in the manuscript.

3. There is an inconsistency between objective of the study and "Operation definitions" as regard definition of the delay. In the objective, "health service delay" is the time interval between first health care visit and the first diagnosis of TB, while in "Operational definitions", "health service delay" is the time interval from the first consultation until the start of treatment, the date at which anti-tuberculosis treatment was initiated.

4. "Patient's delay" is defined as the time interval from the onset of major pulmonary symptoms. Authors should mention clearly here what major symptoms are and how these symptoms were discovered by health care workers. For instance, for the symptom of cough, health workers can either use: (i) open-ended questions (e.g., what symptoms do you suffer from?), and tick if "cough" is self-mentioned by the patient; or (ii) close-ended questions (e.g., do you have a cough?), and tick if patient says "Yes". There is a very big difference in responses between these two ways of asking questions. What was the routine in all 17 health care centers? If different health workers used different approaches to ask...
patients, then this can create biases as regard delays as the start of the symptoms can be identified very differently.

5. This study covered 700 TB cases diagnosed by 17 health care centers (public ones?). What about other cases who are not diagnosed, or diagnosed outside of these 17 centers (e.g., private sector, healers...)? Who are they? Can they be the poor without access to health care services? This should be addressed in the discussion part.

6. Page 7, last para: "There was also a significant association between patient delay and the symptom heamoptysis in both the smear positive and negative patients OR (95% CI), 1.90 (1.1 ,3.12) and 1.91 (1.23, 2.95) respectively". This seems not relevant for the heading "Delay and patient's knowledge".

7. Page 8, second bottom para: "Health service delay had no association with other socio-demographic characteristics". Please change to "Health service delay had no significant association with other socio-demographic characteristics.

8. Health service delay is very low in this study (median 6 days) in comparison with many other studies in low-income countries. I suggest the authors to further discuss this (e.g., how well TB control program functions in Ethiopia).

9. Two major findings of the study include: For smear-negative TB patients, those living in more than an hour walking distance to a health facility have a higher risk of delaying more than 30 days; patients with low knowledge about the treatment of tuberculosis were at risk of delaying more than 30 days. However, knowledge variable is not included in the table 2. As being a key finding of the study, I recommend the authors to describe more clearly (e.g., in the method section) how the knowledge about TB of the patients was explored and analyzed. Further more, multivariate analyses may be needed.

10. Abstract, especially results part, should be further refined.

11. Language should be further refined, including for grammar and spelling mistakes.

In conclusion, the writing does provide some information about TB diagnostic delays in Ethiopia, but not new and attractive. Major revisions as well as language improvement are needed before further reviews can be processed.

Competing interests:

None declared.