Reviewer's report

Title: Time to first consultation, diagnosis and treatment of TB among patients attending a referral hospital in Bahir Dar, Ethiopia

Version: 1 Date: 29 July 2013

Reviewer: Matthew Arentz

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Major Compulsory Revisions:

Overall this paper brings up many important issues that adversely affect TB control in high burden/low GDP countries. However there are some issues related to the approach and statistics that could be improved upon to strengthen the paper.

Abstract

1. A better clarification of the meaning of total delay is needed (presuming this is not the patient delay + the systems delay). Perhaps ‘total delay in time to initiating treatment’.

Introduction

2. Please either write out or use numerical numbers, not both (see line 1).

Methods

Data analysis

3. In the data analysis section you comment on a 30 day cutoff as being an acceptable patient delay. Why is this considered acceptable? Why not 14 days (HIV positive) or 21 days (HIV negative). Why is the system delay set at 14 days? Please clarify. Please also expand on what you considered patient delays (i.e. delay in evaluation, delay in follow up, ect.) and system delays (i.e. diagnostic delay, delays in referred to clinic for treatment initiation… especially in smear negative cases). This is not intuitive to the reader and is ambiguous in the text.

4. When analyzing the relative importance of factors in delay, why not use time delay as a continuous variable (as opposed to a dichotomous variable)? You say that longer delays may be associated with more transmission and worse outcomes. Yet you use time cutoffs (i.e. 30 days, 21 days and the median total delay) as your division.

Definition of variables

5. This needs some clarification for me. Couldn’t patient factors (i.e. slow to follow up, failure to promptly present for diagnostic work up following initial
presentation) be important in what you define as “health systems delay”. Could health care factors (i.e. number of clinics, distance from clinic) be important in your definition of “patient delays”? How to patient and system delays factor into the time from evaluation for diagnosis to initiation of treatment (i.e. your total delays)? Please clarify why you chose these definitions as your conclusions/discussions are largely based on these/

Results

TB Symptoms

6. Where there significant differences in TB symptoms among your patient groups? If so, it would be useful to highlight them.

Length of delay

7. Did length of health systems delay increase for smear negative cases? Some national guideline recommend a trial of antibiotics in smear negative, HIV negative TB suspects with low/intermediate suspicion of TB. This could be an appropriate reason for delay in some smear negative cases.

Discussion

8. Can you clarify if your HIV positive patients were more often smear negative? Either way, provider education on the importance of TB in HIV could explain why they experienced no delay in diagnosis.

9. There are a number of other important issues raised here, but there are two major points that I believe need to be addressed.

a. When one discusses patient and health care delays in TB diagnosis and treatment, the most important question is, “What can we fix?”. Many of the delays you highlight (i.e. rural vs. urban setting, pulmonary vs. extrapulmonary TB) are not alterable. How might you intervene to decrease delays (other than point of care testing)? Strengthening health care systems is not specific enough. Where and how might you strengthen those systems?

b. It is important to note that while you observed relatively short patient delay times, both recall bias and attrition bias (i.e. only patients who seek out care and follow up in clinic are included in your cohort).

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

Quality of written English: Not suitable for publication unless extensively edited

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