Reviewer's report

Title: Childhood TB epidemiology and treatment outcomes in Thailand: a TB Active Surveillance Network, 2004 to 2006

Version: 2 Date: 5 March 2008

Reviewer: Catherine Watt

Reviewer's report:

This is a nicely written analysis contributing to the neglected field of paediatric TB, and to the suprisingly poorly documented area of treatment outcomes in HIV-positive TB patients. The authors clearly acknowledge the main weaknesses of the study: its small size, and the difficulty of diagnosis of TB in children.

I recommend making the following minor essential revisions:

1. Abstract, first sentence. On what basis "at least"? And what is source of 10%?

2. The first number mentioned under "Background" should, in fact, be 9 million. The authors might like to add the word "estimated" to the sentence.

3. The cited paper doesn't give estimates by age. Unpublished estimates can be obtained from WHO/TME (contact me on wattc@who.int).

4. WHO recommendations about recording age have changed. Please check http://www.who.int/tb/dots/r_and_r_forms/en/index.html

5. Page 13, second paragraph. 50% of pulmonary cases had culture. On what basis were these cases chosen, if any?

6. Page 17, second paragraph. Prevalence of HIV of 27% assumes all un-tested children were HIV-negative. What grounds for doing this. If only tested children are included, get prevalence of 43%.

7. Treatment outcomes. These should be presented excluding the 7 with final diagnosis other than TB from denominator.

Also the following discretionary revisions:

8. Second sentence of paper - it is not only high-burden countries which focus on smear-positive cases. Most countries do.

9. Last paragraph of Background: the rank changes from year to year, as some countries' estimated incidences increase and others decrease. Suggest wording "Thailand is among the 22...." or similar

10. Page 13, bottom of page. Suggest dividing 78 HIV+ve by (78+105) cases with known status to give prevalence among those tested of 43%.
11. Suggest presenting cross-tabulation of HIV status vs. type and anatomical site.

12. Suggest comparing outcomes with adults (in discussion - could use either adults in this study, or national statistics)

13. Table 1 - suggest combining information presented under "type and anatomical site" with "Microbiological characteristics"

14. Table 3 - a little unusual to present bacteriologically negative cases first (last 3 rows - suggest reversing order). Also, suggest presenting pulmonary then extrapulmonary.

**What next?**: Accept after minor essential revisions

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

**Quality of written English**: Acceptable

**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