Reviewer's report

Title: The impact of smoking on adherence to latent tuberculosis infection treatment

Version: 1 Date: 1 December 2005

Reviewer: Mark Lobato

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General
The association between smoking and tuberculosis has been noted in various settings. This paper is important because it links interventions that may improve health behaviors with adherence to preventive treatment for preventing progression of LTBI to TB disease.

Major Compulsory Revisions
I. METHODS
1. The authors need to clarify and more fully describe the patients from the convenience sample. Were all consecutive patients asked to enroll in the study? The self-administered questionnaire was in English and French. Were patients who were not literate in either of the two languages not enrolled? Were translators included? Although the clinic where enrollment took place was new immigrants and refugees, if only English and French literate patients were enrolled, a selection bias may be at work favoring enrollment of persons from higher socioeconomic strata. Please clarify.

2. It is not clear what approach was used for the multiple logistic regression analysis. Was a step-wise approach used? How were variables removed from the model? What level of significance was used to determine the variables that should be included in the model?

3. Adherence was tested for an association with country of birth. Were the individual countries used in the model or regions as reported in the Table? Was the analysis stratified by regions?

II. RESULTS
1. 87% of the study population was foreign born. What were the most common countries that patients came from?

III. DISCUSSION
In the second paragraph, the discussion regarding why males are less adherent to LTBI treatment is speculative. No data are offered to support this discussion. A more plausible reason for the association between poor adherence and gender is that males are less likely to adhere to healthy behaviors and prevention messages such as smoking cessation and adherence to treatment.

Minor Essential Revisions
I. ABSTRACT - Conclusions
The study outcome is adherence to treatment for LTBI. I think the latter clause should be reversed unless some other meaning is meant, i.e. "...smoking cessation interventions for patients with LTBI may be an opportunity to study and improve adherence to treatment for LTBI among patients with tobacco dependence."

II. METHODS
1. Change "poor" adherence to "non" adherence.
2. Need to restate the sentence that the level of LTBI treatment was "tested for associations with ..." (delete "contrasted").

III. RESULTS
What percentage of patients was tobacco dependent?

IV. DISCUSSION
The second and third sentences should not compare the study population to Canadians. The comparable comparison groups are persons in Africa and Asia.

Discretionary Revisions
I. TITLE
Consider changing to "The impact of smoking on adherence to treatment for latent tuberculosis infection"

II. METHODS
1. Change "non-ex" smokers to "non- and ex-"

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
'I declare that I have no competing interests.