Reviewer's report

Title: The reduction of tuberculosis risks by smoking cessation

Version: 2 Date: 27 March 2010

Reviewer: Kin Bong Hubert Lam

Reviewer's report:

The authors submitted a revised version of the manuscript accompanied by a detailed point-to-point response to the reviewers. Although the quality of the manuscript was increased on several points, there are still concerns that interfere with the publication of this manuscript.

Major Compulsory Revisions

1) My fellow reviewer and myself have pointed out, “aware of TB” is different from “a report of a previously diagnosed/treated TB”. In this revised manuscript, the authors defined self-reported TB history as “being aware of TB infection when the participants were first enrolled in this study”. This is not valid unless the original question in the questionnaire was “Are you aware of (ever) having a TB infection?” Such question is substantially different from “Have you ever had TB” or “Have you ever been diagnosed of TB?” Throughout the manuscript and the cover letter, the authors suggested (or implied) smokers were less aware of TB and hence they “report(ed) less TB history”. I see this as a fundamental error.

2) “One surprising finding…This paradoxical phenomenon, however, confirmed our fear that smokers were less vigilant regarding the potential onset of TB.” (Page 13 2nd paragraph) I am not convinced that one could draw such conclusion based on the information available in this study. Interestingly, the authors stated in the cover letter “if such under-reporting were similar between smokers and never smokers, then the study results would not be altered” (response to reviewer 1’s comment #2), which is contradictory to the statement in the discussion, which implies there exists differential reporting of TB history between smokers and non-smokers.

3) Could the authors clarify how the N numbers in Table 2 could be reconciled? Total TB deaths=77, but never smokers (n=8)+current smokers (n=21)+ex-smokers (n=6)=35. Where are the remaining individuals?

Minor Essential Revisions

4) The HR in Table 4 has been adjusted for age, gender, education, drinking, BMI and DM history, but the latter two variables were not included in the legend.

5) The presentation is still not consistent. For example, TB was sometimes written as Tb. The way 95% CI was presented was not consistent too. In the 2nd paragraph on page 9, it was “0.26 (0.1, 0.9)”, while a few lines further on it became “HR=2.02, 95% CI: 0.7~ 6.0”.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.