Reviewer's report

Title: Indoor solid fuel use and tuberculosis in China: a matched case-control study

Version: 1 Date: 14 April 2011

Reviewer: Walter Haas

Reviewer's report:

The authors present a study on the topic of indoor solid fuel use and the risk of disease progression to tuberculosis in China. In a setting with predominantly proper ventilation in cooking places the authors find no association of solid fuel use with tuberculosis. The study is well written and adds new information to this field.

Major Comments:

1-Almost 20% of the cases had a history of TB contact within the previous 5 years, but only 1% of controls. Do the results change, when including only cases and controls without known prior TB contact?

2-No association of use of solid fuels with sex was observed by using stratified univariate analysis. However, no information is given about the sex distribution of prior TB contact among the cases that might lead to negative confounding. Did the authors perform a stratified analysis by prior TB contact among women, only? Was there a correlation between sex and prior TB contact supporting the hypothesis of potential negative confounding? In addition, only 27% of cases and 28% of controls were female. Based on the power calculation presented, an association with sex would only have been found at markedly higher ORs than 2.

3-The authors state that they matched for age (+-15 years), as the results show, however, age (being a proxy for TB prevalence) showed a significant association. The authors should mention as a limitation that the cases were “undermatched” for age.

Minor Comments:

3-Results on page 9 are redundant to Table 1 and should be shortened.

4-Please give median age rather than the average.

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.