**Reviewer's report**

**Title:** Tuberculosis burden in China: a cross-sectional analysis in the household contacts of tuberculosis patients

**Version:** 3  **Date:** 2 October 2013

**Reviewer:** Sarman Singh

**Reviewer's report:**

Though it is very important that TB high burden countries must attempt to active case finding (as reported recently by Singh et al, 2013 from India) the present study is poorly designed and wrongly titled.

1. Indeed the title should have been "Active TB cases detection in ............" rather than titling it in case contacts.

2. The authors have not used the standard definition and criteria for household contacts. The authors are advised to refer ATS/ CDC guidelines.

3. The authors themselves mention that Index case was first to be diagnosed but not necessarily diseased first. That means several of the so-called contacts were indeed cases, but did not go to clinic. There are several reasons for not going to DOTS/ DMCs in Asian countries, that include gender, age, social background, approximity to health services etc. These issue are not studied by the authors. This is further confirmed from their results that exactly 50% so-called contact were symptomatic and many had cavitary lesions. Hence this study design with this title is unacceptable.

4. In this study socio-demographic factors like type of building, ventilation etc should have been considered. Because these are very important factors related with occurrence of tuberculosis in household contacts.

5. A significant proportion of the index cases had a history of TB; yet there is no comment made in the manuscript about drug resistance and the threat it could cause.

6. Positive case detection in household contacts was done on the basis of smear positivity. The standard method would have been the liquid culture.

7. For a diagnosis of sputum smear negative TB, the X-ray, PPD and clinical symptoms were considered. But details of these analyses of the parameters.

8. The authors are advised to read a study titled "prevalence and incidence of tuberculosis in household contact from India has been published in PLoS ONE as Singh J, Sankar MM, Kumar S, Gopinath K, Singh N, et al. (2013) Incidence and Prevalence of Tuberculosis among Household Contacts of Pulmonary Tuberculosis Patients in a Peri-Urban Population of South Delhi, India. PLoS ONE 8(7): e69730. doi:10.1371/journal.pone.0069730". This study will provide information how the contacts are defined and studied.
Level of interest: An article of limited interest

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

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

Declaration of competing interests:

None