Reviewer's report

**Title:** Latent Tuberculosis Infection in a Malaysian Prison: Implications for a Comprehensive Integrated Control Program in Prisons

**Version:** 2  **Date:** 10 September 2013

**Reviewer:** Rudi Coninx

**Reviewer's report:**

This is an interesting study with an interesting finding: the prevalence of LTBI is indeed extraordinarily high in this sample of prisoners in Malaysia.

I have 3 comments:

1. **On the selection of participants.**

   The authors report that 340 subjects were recruited out of a prison population of over 4,000. While 138 out of 189 HIV positive inmates submitted to the study (a participation rate of 73%), it would be useful to provide the same data for the non HIV positive inmates: 148 out of how many? Since they were chosen from one of the 10 subunits of a prison of over 4,000 inmates, one such housing unit could presumably house up to 400 inmates. This would mean a participation rate of 37%. But that information is not given. Since the prevalence of LTBI is so high, it is important to clarify whether the sample is representative or whether there could be a selection bias (e.g. a self-selection bias). It appears the sample was indeed self-selected ("interested prisoners were asked to provide an informed consent") and if this is the case, it would be difficult to extrapolate the results to the entire prison population. Since the prevalence rates are so spectacularly high, this is one of the possible explanations.

2. **On comparing prevalence data.**

   Prevalence rates of LTBI are compared with similar data in Europe and the U.S. where the prevalence of tuberculosis in the general population is very low. It would be useful to compare the data from Malaysia with the prevalence data of LTBI in the general population in Malaysia (authors say these data are not available) or in the region, or with similar data from prisons in the region. The sample of young, female HCWs in the same country showing a positive TST in 52% of the cases indicates that higher rates in an older (mean age 36.59 years), male, and at risk population (prisons) may not be that surprising after all.

3. **On the recommendations.**

   With prevalence rates that high, there surely must be some recommendations that follow. Establishing integrating control programs targeting the co-morbidities is indeed a good start. But the conclusions remain relatively vague; the paper would be stronger if the authors would venture into more specific proposals to deal with the problem.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests