Reviewer’s report

Title: Vitamin D deficiency among newly diagnosed tuberculosis patients and their household contacts: a comparative cross-sectional study

Version: 1 Date: 03 Mar 2017

Reviewer: Chalotte Beaudart

Reviewer's report:

The authors have responded to most of the comments dressed by the reviewers. However, there are still some weaknesses in this manuscript that should be resolved.

Abstract:

- Please add unit to all values. This is valuable for the abstract, the entire text and all tables.

- There is confusion between household contacts, community controls and healthy blood donors. Please keep the same terminology all across the abstract and the manuscript.

- (Presence or absence of TB): it is not clear if it is the presence or the absence of TB who is a predictor of severe vitamin D deficiency.

Methods:

- Page 7, line 143: revise the sentence

- Data collection: this paragraph should be revised. Indeed it is still not clear which data were collected in which of the groups. If data were not collected for one type of group, authors should give a reason to argue this missing information.

- Authors should precise they checked the normality of their data and precise the statistical test used for.

- Which statistical test has been used for bivariate analysis?
Authors should group all information regarding univariate analyses (Chi² for categorical data and ... for continuous data).

**Results**

- All over the results part, as well as in the abstract, results regarding household contact are missing.

- Additional information of table 1 should be explained in the manuscript.

- Some of values presented in table 2 do not correspond to what is written in the text.

- The presentation of table 2 is confusing. The reviewer does not understand the presentation of the two first column and associated values. Moreover, 95% CI do not correspond to mean values. Please remove standard error and 95% CI from the table for a better understanding.

- Please change Figure 1 by Table 3 in the text.

- Results of the multivariate analyse are not correctly presented in the text. Please revise this.

- Table 4:
  - Please add % for each number.
  - Authors wrote that a* indicates p<0.05 but no * is given for COR
  - P-values should be reported for COR
  - Footnotes should explain why only 3 data were included in multivariate model.

**Discussion**

- Please report the strengths and weaknesses of this study
Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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