Reviewer's report

Title: Predictors of microbial agents in dust and respiratory health in the ECRHS.

Version: 2
Date: 16 December 2014

Reviewer: Diogenes S Ferreira

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Major Compulsory Revisions

1. Methods. Study population and mattress dust sample selection (p. 6)
Although the authors refer to previous publications (refs.18-20), it is not clear if participants from the “ECRHS enriched symptomatic sample” were included in the current analyses. Please clarify.

2. Results. Table 1
The percentage of self-reported “current mould in the home” (16%) is higher than “mould ever before” (8%). “Current mould” rate should not be higher than “mould ever” rate (Questions 55 and 55.2 from ECRHS II questionnaire, respectively). Please check if these rates are correct. If the data were entered incorrectly not only in table 1 but also in the models, all analyses which included these variables must be performed again with the correct numbers.

Minor Essential Revisions

3. Results. Study population and home characteristics (p.11)
The authors report that “2% had a score of more than 3 symptoms”. However 3% in Table 1 had more than 3 symptoms. I assume the difference is due to rounding, but I suggest using the same percentage in the text and table for consistent presentation of results.

4. “All measured microbial agents…as shown in table 2.” (p.12) Although the authors mentioned “All” in the text there are two correlations recorded as 0 (zero) in table 2. Please correct the text or table 2.

5. Figure 1A - Please correct the “Maximum” measurement unit of (1,3)-beta-D-glucan.

Figure 1B - Please correct the “Maximum” measurement unit of muramic acid.

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.