Reviewer's report

Title: Seasonal influenza risk in hospital healthcare workers is determined by household rather than occupational exposures: results from a prospective cohort study in Berlin, Germany.

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Reviewer: Helen C Maltezou

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Seasonal influenza risk in hospital healthcare workers is determined by household rather than occupational exposures: results from a prospective cohort study in Berlin, Germany

Williams et al.

Comments to authors

This is an interesting topic investigated, given the influenza pandemic that emerged the last months. However there are several aspects that need to be addressed:

1. Abstract, page 2, Background, 2nd sentence: please replace “clients” with “patients”.
2. Abstract, page 2, results: Immunization is not a risk factor but a protective factor, that is why the OR is < 0.50.
3. All over the text, when there are more than 1 HCW, please use HCWs.
4. Background: For risk factors for nosocomial influenza and the rational for vaccination of HCWs, please read and include in the reference list the following comprehensive review article on this topic: Maltezou, Nosocomial influenza: new concepts and practice, Curr Opin Infect Dis, 2008.
5. Methods, page 5: It is not clear how and who was enrolled in the study as a non-HCW worker. This is very important, given the fact that non-HCWs have a significant comparable to HCWs) influenza vaccination rate and similar rates of influenza infection. There are mainly elderly? Persons with underlying diseases ? Please clarify their profession (you may present it at the first paragraph of the Results section).
6. Methods, page 5: are there any data regarding the profession category of HCWs? It would be interesting to see if HCWs working in pediatric departments on in the Emergency Departments have higher rates of infection.
7. Methods, page 6, first paragraph: please specify the reference laboratory (name, and city).
8. inclusion and exclusion criteria, page 6: in continuation with the above comments, please provide here a clear definition of a non-HCW.
9. methods, page 9, role of the funding body: please move this paragraph at the end of the text.

10. Results: There are data that are dublicated or overpresented. Please delete appropriately. Also, there is no need to dublicate data already presented in tables (page 11). Most probably you do not need to give, and discuss the findings of the univariate analysis. Overall, you need to decrease the Results section by one third to a half.

11. Discussion: please decrease the number of words by one third to a half.

12. Discussion, page 13: There are various factors that may, partially explain the similar rate of infection among HCWs, compared with non-HCWs: first the fact that 40% of them are vaccinated, which translates to protection (as also found by the statistical analysis), possible use of masks during caring for infected patients, also isolation – cohorting of infected patients. These aspects should be discussed.

13. Discussion: throughout this section there are numbers appearing within the text. Do they represent references? Please correct.

14. Please, in the Discussion refer to the Curr Opin Infect Dise paper mentioned above.

Level of interest: An article whose findings are important to those with closely related research interests

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.