Reviewer’s report

Title: Seasonal influenza vaccination coverage and its determinants among nursing homes personnel in Western France.

Version: 0 Date: 22 Sep 2016

Reviewer: Maria Alcaide

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Seasonal influenza vaccination coverage and its determinants among nursing homes personnel in Western France

This manuscripts describe the influenza vaccination coverage and predictors of influenza vaccine uptake among workers in Nursing homes in Ille et Vilaine in Brittany, France. The study findings report low coverage of influenza vaccination among NH workers and found that predictors of coverage were: age, occupation, prior severe influenza disease, knowledge of prevention tools, and individual perceptions of vaccination benefits. While the findings should be validated in larger studies including other areas in France, results highlight the importance of improving vaccination campaigns. The study however, is not clearly written and should be significantly revised prior to publication.

The title and the rest of the paper states 'determinants among nursing homes personnel' but do not describe who the personnel are. NH personnel could be health care workers, administrative staff and others, and also residents. Only later in the paper is clear that NH personnel includes health care workers, administrative and logistics but the terms are confusing throughout the paper. Perhaps using NH workers is a better term.

Also, acronyms are not consistent throughout the manuscript. I suggest revision by an English native speaker if not done as there are minor grammatical errors in the document.

Abstract: The abstract does not clearly reflect the findings and conclusions. Please revise according to the comments to the other sections and in order to better state the study and findings. Minor comments:

- Ille et Vilaine administrative district. Western France in the title, Brittany in other sections. The reader unlikely knows where Ille et Vilaine is and what an administrative district in France is.

- Permanent personnel: is this full time personnel? Permanent personnel appears to refer to the residents too.

- Paradoxically? Why paradoxically?
Background: needs to clarify personnel and region. And perhaps mention why it is important to do it in Brittany if the region is relevant.

Methods: lacking of details of study design and assessments
- Why was two step randomization done? Please provide details on the randomization process.
- How were the questionnaire constructed and tested?
- Please provide definitions of IVC, type of personnel and other relevant data presented in the results section.
- Please provide a better description of the assessment tools. Consider including the questionnaires as supplementary data if permitted by the journal.
- Predictors of influenza uptake (Knowledge of prevention tools, information, perceptions,…) are important section in the results but not mentioned in the methods. Describe.
- IV is noted in the data collection section but should say IVC?
- Acronyms mentioned EHESP and IDEA are not used elsewhere and can be omitted.
- Typically, p values are given as 0.2 or 0.05, not in percentages.

Results
- Tables: what are the p values for the multivariable analysis. Only p values are reported for bivariate.
- Table 5 does not include multivariable analysis although all ps are less than 0.05
- I suggest to label better the tables with a more descriptive title.

Discussion
- First paragraph: our study does not show such difference. I assume is by private/public sector but it is not clearly stated.
- Second paragraph: randomized personnel? Is this study participants?
- Third paragraph states that motivated NH directors and doctors had a positive impact but nothing about NH directors or doctors is mentioned in the results.
- I suggest to better organize the discussion according to the findings and then list the limitations.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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

Needs some language corrections before being published

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