

Peer Review Report

Review Report on Influenza vaccination behaviour of healthcare workers in Switzerland: a cross-sectional study

Original Article, Int J Public Health

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EVALUATION

Q 1 Please summarize the main findings of the study.

This is a cross-sectional survey of health care workers in ambulatory (primary care) settings in Switzerland. The study employs a simple and pragmatic methodology to recruit respondents and asks limited number of focussed questions to measure the proportion of health care workers who took the flu vaccine in 2016 and understand the reasons behind accepting/ not accepting as well as their role as providers in promoting/ not promoting the flu vaccine among their patients. The proportion of health care workers who had vaccinated was around 40% in 2016 - the proportion varying widely between the different cadres, from 78% among doctors to 29% among nurses. Language, age, and professional categories were the significant determinants of vaccination status in the surveyed population. The findings, despite limitations, have importance in a COVID/ post-COVID world in triggering more in-depth studies to address vaccine hesitancy.

Q 2 Please highlight the limitations and strengths.

Strengths - robust methodology - adheres to the STROBE guidelines, excellent presentation of results and discussion of their relevance, excellent manuscript including cited literature.

Limitations - mainly, the very low response rate (1.4%), very high likelihood of selection bias and resulting non-representativeness of the sample - but each of these issues have been addressed well by the authors. They rightly suggest that the current survey "could serve as a pilot study which could be used to develop further research with a larger sample size overall."

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major concerns:

1. You have used variable language in expressing the purpose of logistic regression - it is not to estimate the "probability" or the "likelihood" of being vaccinated or "correlation between the probability of being vaccinated", but to find the significant determinants of positive vaccination status (when your outcome is vaccinated=yes).
 - It is important NOT to use probability/ correlation very loosely in the manuscript, and instead be specific about the purpose of the regression and also express the results in terms the odds of vaccination increasing or decreasing x times or by y%.
2. You mention that you focused on the "Swiss ambulatory setting" and equated it with "primary care". Then again, you mention that the total population size of HCWs was approximately 77,800 - and participants were recruited via participating national professional societies, healthcare leagues and medical networks (HMOs).
 - I think there's some confusion here and it's better to clarify what you mean by "ambulatory setting". When I started reading, I was thinking of outpatient-based settings. But then, I thought that these membership organizations usually enrol all - so how do you know that you were reaching out to only the "ambulatory" setting providers?

Minor concerns:

1. You have mentioned that "Ethical approval was not required as participation in the study was voluntary and obtained data was fully anonymized." I hope this means that a waiver was taken from the IRB – and if so, it's better to mention that in exact language. Any survey that actively asks any questions human participants must have undergone an application process with the IRB. (If not, this may become a major concern)
2. Please explain the following statement in a better way for a global audience to understand – "To calculate the proportion of participants 60 years and older, we assumed that the cut-off age was 70 since the professional organizations sent the mailing with the survey link to their active members and employees; in 2016, the regular retirement age in Switzerland was 65 for men and 64 for women."
– What are you trying to convey here? I noted that your last age group is 61+ years and there are only 79 such participants. You could simply provide the age range captured, if you want – as such this information does not have much significance in your paper, and the language above is pretty confusing.
3. It is better to use past tense consistently while writing about a study that was conducted in 2016.
4. Adding p-values in Table 1 has very limited interpretations; the crude ORs in Table 2 is certainly an overkill – but both up to you to keep or delete
5. Please state 95% CI and not only CI in text
6. You mention that: "One limitation of this study is the unknown sample size due to the recruiting method." Please explain what you mean by this – you had clearly calculated a sample size.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

yes

Q 5 Are the keywords appropriate?

yes

Q 6 Is the English language of sufficient quality?

yes

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

yes

QUALITY ASSESSMENT

Q 9 Originality



Q 10 Rigor



Q 11 Significance to the field



Q 12 Interest to a general audience



Q 13 Quality of the writing



Q 14 Overall scientific quality of the study



REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Minor revisions.