Reviewer’s report

Title: Barriers to pandemic influenza vaccination and uptake of seasonal influenza vaccine in the post-pandemic season in Germany

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Reviewer: Fortunato D’Ancona

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The article "Barriers to pandemic influenza vaccination and uptake of seasonal influenza vaccine in the post-pandemic season in Germany" is an interesting article on the result of surveys in Germany to assess seasonal influenza vaccination coverage for seasons 2008/09 to 2010/11, to assess pandemic influenza vaccination coverage to identify predictors of and barriers to pandemic vaccine uptake, and to detect the potential impact of pandemic situation on seasonal influenza vaccine uptake the first post-pandemic season.

The article is clear and it can contribute to the discussion about new strategies to increase flu vaccination uptake at national and international level.

The results are not surprising because in line with results in other European countries were vaccination for pandemic flu was not optimal. However the opportunity to put together information about the vaccine uptake a the reason for not uptake is good.

The methods are appropriate and the manuscript is relevant. The main limitations are listed

The article should be published but few minor essential revisions are needed to improve the readable and make clearer the text.

Discretionary Revisions
1) In background the sentence
"According to the results of a cross-sectional survey conducted during the pandemic, only 8.1% of the general population aged #14 years living in Germany received a pandemic influenza vaccination [6]."
s should clarify that this is a different kind of survey (NOT GEDA) . It could be useful to mention briefly what kind of method/sample.

2) In the back ground the sentence
"Since Germany has no central immunization registry, information on vaccination coverage (and factors influencing coverage) is only available from telephone and household surveys as well as from billing data of the statutory health insurance companies[12-16]"

Could be moved before the sentence mentioned at point 1
3) In the discussion the sentence "It can be assumed that both reasons will not be barriers to high pandemic vaccine uptake in a future pandemic setting if the mortality is much higher than during the 2009/10 pandemic" could include a comment also to other novel vaccines for the future. Not only for terrible future pandemias.

4) In discussion, the sentence "It is therefore very likely that the point estimates for seasonal influenza vaccination coverage for the 2010/11 season were overestimated in our subsample" should include also "because based both on the same follow-up survey population".

A comment if ICs are overlapping could be also added.

MINOR ESSENTIAL REVISIONS

1) In the Abstract/results the sentence "Seasonal influenza vaccine uptake was approximately 50% among persons aged ≥60 years, 40% among chronically ill persons, and 30% among HCW in seasons 2008/09-2010/11." This value are not an average and they seems to be referred only to season 2008/2009 (i.e. HCW). This figures does not describe the decrease. I suggest to change this sentence and summarise the difference between pre and post pandemia.

2) In result/seasonal vaccination coverage section, the sentence "A significant decrease in seasonal influenza vaccination coverage between seasons 2009/10 and 2010/11 was observed for persons with underlying chronic conditions (p=0.04), HCWs, and persons not targeted for seasonal influenza vaccination (both p<0.001), but not for persons ≥60 years of age" is not totally clear looking the data for persons ≥60yy were a decrease exist. In Figure 2 observing the follow up survey data, there is a decrease. Is this not significant? Please clarify in the text.

3) In the last paragraph of section RESULTS /Pandemic influenza vaccination coverage there is a very worrying "(4) ‘reject vaccinations in general’ (8.5%; 95% CI: 7.8-9.2)."

This should be commented in discussion. It means that 8.5% of the person is against vaccination. Is the same result that you have with the main children vaccination in Germany (i.e. DTP) ?

**Level of interest:** An article of importance in its field

**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