Author’s response to reviews

Title: Lessons from a one-year Hospital-based Surveillance of Acute Respiratory Infections in Berlin- comparing case definitions to monitor influenza

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Author’s response to reviews: see over
Submission of revised manuscript

Dear Editor,

I wish to submit in the name of all authors the revised manuscript entitled “Lessons from a one-year Hospital-based Surveillance of Acute Respiratory Infections in Berlin- comparing case definitions to monitor influenza” for consideration for publication as a research article in BMC Public Health.

We thank the reviewers for their helpful comments. We have revised the manuscript to address the comments as described below, and believe that the changes further improved the manuscript.

Best regards

Matthias Nachtnebel
Minor essential revisions

1. Suggest the first sentence of the introduction be amended to reflect the formal WHO nomenclature for the 2009 pandemic strain as "influenza A(H1N1)pdm09".

*We agreed with the reviewer and adopted the WHO nomenclature. The sentence now reads: “..pandemic caused by influenza A(H1N1)pdm09 (referred to as pH1N1 in the following)..”*

*The same nomenclature has been introduced into the abstract.*

2. I think the aims/objectives described in the last paragraph of the introduction could be modified slightly; perhaps by saying the study monitored/assessed the epidemiology (rather than just "number") of RI cases over time.

*We thank the reviewer also for this suggestion and have therefore replace numbers by epidemiology:*

*“Our objective was to monitor the epidemiology of cases..”*

3. The second sentence of the 'Case definitions' subsection of the Methods isn't quite clear because while describing CD1 it refers to another "CD". It sounds like another CD but I think the authors are still talking about CD1 and the inclusion of a general 'clinical suspicion' criterion.

*CD stood for case definition but we acknowledge that this might be misinterpreted and have changed the wording to make the sentence clearer*

4. In the third paragraph of the Results section it is unclear about what variables comprise the dose-response relationship.

*We have further clarified this sentence to read*

*“..a dose-response relationship between years of age and odds for fulfilling the CD4 definition..”*

*Which hopefully describes the relationship in a understandable way.*

5. In the new text in the fourth paragraph of the Results section, the authors report that patient outcome data was missing for 23% of all included cases. Could the authors indicate (with p value) whether there were any statistically significant differences in the proportion
of missing outcome data by case definition, influenza status, or whether they were in internal medicine or ICU?

We have added a sentence to state that the proportion of cases with missing data on outcome did not differ by pH1N1-status, ICU admission or CD4 versus CD1 (p-values>0.1)

6. In the new second paragraph of the Discussion section, the authors should specify what exactly it is that they suggest the spectrum of pathogens circulating during winter causes a higher proportion of severe cases. I.e. a higher proportion of RI internal medicine/ICU admissions?

We re-worded the two sentences this comment refers to.

7. In the new fourth paragraph of the discussion the authors have inserted new text stating that "The optimal case definition to monitor severe (hospitalized) influenza cases has been subject to repeated discussions..." Do the authors mean a syndromic case definition for influenza-like illness or S(ARI) rather than influenza as is suggested here? The case definition for influenza (by laboratory confirmation methods) is well established.

We appreciate this review and have specified that we are talking about the optimal syndromic case definition of respiratory infection to monitor influenza.

Discretionary revisions

1. In the first sentence of the new second paragraph (I think – hard to tell in track changes) of the Methods section change "asked" to "sought" i.e. "Informed consent for nasopharyngeal swabbing was sought from all RI patients..."

Has been changed.

In addition, we changed the heading Introduction to Background and introduced a Conclusion section.

The script has been repeatedly reviewed by one of the authors who is a native English speaker (WH) and who performed some final minor language editing in this last version.