Reviewer’s report

Title: Increasing incidence of pertussis in Brazil: a retrospective study using surveillance data

Version: 0 Date: 05 Aug 2015

Reviewer: Huang Huang

Reviewer’s report:

Pertussis is a highly contagious respiratory disease which commonly affects infants and young children and can be fatal, especially in developing countries. This manuscript presented some precious and comprehensive epidemiology dataset for pertussis in Brazil from 2007 to 2014. It showed a glimpse of pertussis epidemiology in Brazil, which will help prevent this highly contagious in newborn baby. In all, the manuscript is well written in English. The data are mostly well presented. I will recommend acceptance after minor revision.

1. There is no description of statistical analysis in the Method part. Please add accordingly to specify how the statistics are done in this paper.

2. Throughout the manuscript, the authors used different terms for analysis, such as confirmation rate, case fatality rate, incidence rate, vaccine coverage rate (figure 8) and so on. Please clarify how these different terms are defined and calculated, and how many samples are used for each calculation.

3. For table 1, please clarify what the dividend and divisor are. Also please describe how the p value is calculated.

4. In the abstract, the author mentioned "a significant increase in incidence since 2012". Supposedly, this means the "incidence rate". But this important dataset is not shown in the main text, page7, line41. Meanwhile, is Figure 3 based on incidence rate? If so, could it be supportive for that significant increase?

5. In the last paragraph on page7, there are so many numbers that could hardly be tracked on any figure. Could the authors clarify how these numbers are generated? Are they based on Figure3?

6. The authors tried to compare different proportions of cases in different age groups in page8, paragraph2. Is it possible to add incidence rate for such comparison?

7. In general, the figure legend is too brief. Could the authors add some explanation on how the figure is generated in figure legend? Specifically, please explain what the x-axis is in Figure8.

8. On page5, line 54, please correct the unit for blood count.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Unable to assess

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 am able to assess the statistics

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

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal