Reviewer’s report

Title: Incidence of Viral Respiratory Infections among Outpatient and Hospitalized Children Aged [less than or equal to]5 Years and Its Associated Cost in Buenos Aires, Argentina

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Reviewer: Taro Kamigaki

Reviewer’s report:

This paper provide the estimation of incidences of influenza and other respiratory viruses in children with respiratory symptoms in the particular cohort population of the specific health insurance plan in Buenos Aires, Argentina. Recently the knowledge about viral etiology in pneumonia population is expanding while the disease burden prospectives remains limited. In this sense, this study add the data about incidences of influenza and other respiratory viruses. However, there are several issues to be addressed prior to the decision of the publication.

Major Compulsory Revisions
1. This study conducted with children cohort belonged to CEMIC who are primarily in middle-income families. I’m not familiar to the economical structure of households in Argentina, however, there must be a low and high income households. The economical environment in families must affect the study outcome. Authors need to state this effect in methods and limitation. I assume it is hard to generalise the findings in the study to others.

2. Authors used the paediatric population belonged to CEMIC as denominators, however, enrolling ER children included children belonged to other insurance plans. I’m not familiar to the status of health insurance in that country, however am afraid this combination leads any bias. Authors need to clarify this and provide the justification to use this combination figure to estimate the incidence.

2. P6; Authors need to clarify the meaning of convenience sample in both ER children and asymptomatic children.

3. P9 and p11; We could not see the data presenting respiratory samples and positives between CEMIC and other health plans since appendix does not exist.

4. P9; there is no description about statistical tests conducted in this study.

5. P10; Are asymptomatic children belonged to CEMIC?

6. P12; I cannot understand the statement that timely information of RSV can improve the utilisation of palivizumab since 8/12 months in 2009 and 5/12 months had somehow RSV positives.

7. P13; In related with #1 comment, the average monthly net household income may shift to higher values in the country if you have such as outlier incomes. You may use the median income.
8. P13; I cannot understand the description about influenza vaccine coverage (line 293-298). Although the positive proportion of influenza in 2009 was extremely low in spite of limited availability of influenza vaccination, why could you state the benefit of influenza vaccination?

9. P15; One of major limitation was the mixture of ER children across health insurance groups in spite of setting the CEMIC population as denominator.

10. P16; which result support the second sentence in conclusion?

11. P16, I cannot understand which data derive the last sentence in conclusion. Table 3 provided the incidence of influenza was quite proportional to the severity, i.e. hospitalised > sARI > sALRI. Authors need to clarify this sentence.

Minor Essential Revisions

1. P11; why did you not have any positives in the last column of Figure 1?
2. Table 2 is hard to read. 37% of hospitalised children aged less than 6mos were positive to RSV? Need to revise the format of table.
3. Figure 1; you need to have 1.0 if you used the percentage.
4. Figure 2; some of word could not see. Need to revise this figure.
5. The order of contribution is different from the list of authors.

Level of interest: An article whose findings are important to those with closely related research interests

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