Reviewer's report

**Title:** Viral etiology and seasonality of influenza-like illness in Gabon, March 2010 to June 2011

**Version:** 1

**Date:** 16 April 2014

**Reviewer:** Adam Meijer

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There are no page numbers and line numbers to refer to, therefore page numbers are taken as the pages appear in the downloaded manuscript and lines are not mentioned.

Major Compulsory Revisions

1. In the results section frequently most of table contents are repeated. If the information is included in a table limit the text to the most important results in the table without listing the data again in the text.

2. Page 2, Abstract: clarify whether the PCR was one multiplex PCR for all pathogens or whether multiple single target PCR assay were used.

3. Page 2, Abstract and page 7, Laboratory analysis: clarify what exactly the targets were for the influenza virus PCR assays. From the references they are: influenza H1pdm09 (hemagglutinin gene) and generic influenza type A (matrix gene). The generic will detect any influenza type A influenza virus and not just A(H1N1) and A(H3N2). Specimens positive for H1pdm09 should also be positive in the matrix PCR. Should be corrected throughout the manuscript.

4. Throughout manuscript use the WHO naming for the pandemic influenza virus: A(H1N1)pdm09 or if only the H1, use H1pdm09.

5. Page 2 Abstract, and Discussion: In specimens from ILI patients less than 5 years old multiple pathogens can be detected. However, there are many publication showing that in specimens from symptomless persons of the same age also one or more of these viruses can be detected. Although the paper is not on causality, this issue should be discussed as this is especially an issue in young children.

6. Page 4, case definition ILI. As it reads all symptoms should be present. Should it be fever and one or more of the other symptoms?

7. Page 4, Background and Discussion. There are large overlaps in these sections as similar items are reviewed in these parts of the manuscript. The Background part could benefit of shortening and only mentioning that what is needed to explain why this study was performed. In the Discussion section it could be made more clear how the results described for Gabon correlate to the results achieved elsewhere and what this means for the situation in Gabon.
situation in Gabon unique or roughly similar to other parts in the world with similar or other climate etc.

8. Page 13. Do the authors have an explanation for the far higher AdV prevalence in Gabon and Kenya compared to the other studies? This is a general limitation of the manuscript. The discussion often mentions the results for Gabon, the results from elsewhere (comprehensive!), but stops there. E.g. here, what does it mean that results are similar to Kenya and different from many other studies. Another example on the same page: why is only Peru mentioned to illustrate the influenza A/B proportion distribution? WHO FLUNET would give you much more regional and global information. So why Peru?

9. Figure 1 should illustrate rates. Therefore it would be better to have proportions positive by months.

Minor Essential Revisions

1. Page 2, Abstract: abbreviation CIRMF can be removed

2. Page 4, SRAS-CoV should read SARS-CoV; in addition explain abbreviations SARS and CoV.

3. Page 10, ...no cases of SIA. Looking at the PCR characteristics all influenza type A viruses should have been positive in the H1pdm09 and generic type A PCR. Therefore no other influenza A virus subtypes were detected. The authors should more precisely describe the characteristics of the influenza virus PCRs and reflect that in their description of the results.

4. Page 12, EV/HRV 24 (134.8%): how sure are the authors about co-infection? The HRV PCR targets the 5′-NCR, which is known to have high similarity with certain enteroviruses and hence can generate a positive signal with enterovirus. Have the authors thought about this when analysis the presumed EV/HRV co-infections?

5. Page 15, ILI symptoms should read ILI diagnoses. The authors did not collect symptoms. In addition, the conclusion is wrong that the highest prevalence of ILI diagnoses was found among children under 5 years of age. Most specimens have been collected from children with ILI under 5 years of age.

6. Tables 1 and 2 can easily be merged. Both tables: square brackets around age group 0-5 should be switched.

7. Figures 1 and 2, mark the months with outside tick marks on the X-axis, rotate the label vertical to allow each month name being plotted. In Figure 2 the X-axis month labels could only be plotted in the lowest graph, similar to the year scale.

8. Figure 1: what is special with the Nov 10 results for Koulamoutou? High number of specimens and low number of positives compared to the other cities and also months of Koulamoutou. Was the ILI case definition not correctly applied?
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