Reviewer’s report

Title: Respiratory compromise in children presenting to an urban emergency department of a tertiary hospital in Tanzania: A descriptive cohort study

Version: 1 Date: 27 Sep 2018

Reviewer: Andreas Schibler

Reviewer's report:

Thank you for having the opportunity to review this paper.

This observational study from Tanzania in a emergency department is an interesting read for somebody working in a well-resourced environment. I do believe that these type of reports are important to highlight the difficulties that occur in these settings.

Interview to fully understand the dataset that deep posters are presenting some additional information may be required.

First, a definition of respiratory distress and respiratory failure is required and not just referenced. Second, since almost one third of the patients do present with a cardiac condition it would be good to know what the underlying congenital defect is, if known.

Then for the data analysis I believe that the three categories of patients, which are no pneumonia, cardiac disease and sepsis, need to be used to model the outcome. Only in their second step the presenting clinical features should go in the modelling as they only described the severity of the underlying disease. This would help to make a better decision model for the emergency department.

I fully understand that the underlying cardiac condition in these settings often it is not known and hence transcutaneous measured oxygen saturation lower than 90% could be simply due to right to left shunt. But it looks like that hypoxemia and decreased level of conscience is the greatest predictor of death.

I also suggest that within the text and the results more clarity is achieved in combination with the tables. Both sections are repetitive.

Do the authors have as well the overall mortality of all children in the hospital after presented through the emergency department as a comparison?

Minor comments. The references are not within the style of recommended and I have spelling errors of authors so need to be carefully checked.

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 recommend additional statistical review

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

Needs some language corrections before being published

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