Reviewer's report

Title: Health systems performance in sub-Saharan Africa: governance, outcome and equity.

Version: 1 Date: 22 September 2010

Reviewer: Jose Luis Alvarez

Reviewer's report:

This manuscript represents an ambitious effort to identify how governance influence health and health equity. The methods are intriguing and the attempt to summarize data is certainly impressive. The article adds up to the increasing body of evidence about factor associated to health outcomes and it definitively represents an original contribution to our understanding of health systems performance in Africa. Despite some confounding factors are not accounted for and a wider critically comments of the results on the discusión, the manuscript represents undoubtedly an interesting piece of work.

Below I provided some suggestions following BioMed reviewer’s structure:

Major Compulsory Revisions

The abstract conclusion’s should comment about the indicators used and not just point out a conclusion that is based on background information.

Though limitations in ecological studies that are well explained, it would interesting to talk about why you have chosen this two governance indicators and not others, or other indicator for health inequalities since this one has shown some intriguing results. Also the aspects of very powerful confounders should be commented in the discussion section.

Minor Essential Revisions

- I think it would be very interesting to write down at the beginning of the methods’ section the names of every country you have included in you study since it is vital to interpret the results. Or if you have chosen every country in the WHO sub-Sharan region, or just the medium and low developed countries in that region, say so clearly

- In the methods section you spend some time explaining well-known indicators (“U5MR quintile ratio approaching 1” etc) but when writing about the less known Governance Indicators you don’t explain too much. It would be interesting for example to show the range values of this indicators so as to better understand table 1.

- Further on the link in the reference 25 about The Ibrahim Index of African Governance is not working, please check it up
- In the sixth paragraph of the Results’ section you write “increases in GNI per capita were associated with increases in U5MR”. this is kind of unexpected and should be address in the discussion.

- In the sixth paragraph of the Results’ the term “approached significance” does not seem right to me, just mentioned that their p values is <0.1 seems better.

- In the second paragraph of the discussion the sentence “the analysis showed that governance… was significantly associated with health outcome” does not seems right since health inequalities is also a health outcome and your data showed no significance with this indicator, it just showed significance with the U5MR.

Discretionary Revisions

- I believe your second model has been introduced so we can see the difference when introducing governance in the model if so it would be good to estate it clearly since this model has been reproduced in other studies and is not in your objective.

- Please check this sentence “the parameter estimate (# coefficient) is the same as Pearson's product moment correlation”. I am not statistician myself, and though the # coefficient and Pearson coefficient can have similar meanings its values are different. Since you only show # coefficient this can lead to confusion

- The tables could be improved by including explanations for the used abbreviations in the footnote, to enable the reader to read the table separate from the main article.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests