Reviewer's report

Title: The associations between intimate partner violence, childcare practices, and infant health: Findings from Demographic and Health Surveys in Bolivia, Colombia and Peru

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Reviewer: MMH Khan

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Major Compulsory Revisions

The research topic is important from the public health point of view, particularly in Latin American context. They analyzed the Demographic and Health Survey data focusing on three countries namely Bolivia, Colombia and Peru to address this topic. To understand and compare the overall situation in a wider context, such a multi-country study is important. However, the analytical part of the study, the presentation of the data, is not easily understandable. To make the readability and convey the main message of the paper, this paper must be presented in a simpler way. There are 10 tables in the paper. From my point of view, this number of tables are too many (should be maximum 5).

According to Table 1, total number of observed women with IPV data in Bolivia is 10636 and total living children with illness data are 8190. Then suddenly the final sample reduced to 3590. Two other countries have the same situation. Authors should explain why the numbers reduced sharply. Sample section is too short. They should write: why are data sources from different years (2008, 2010 and 2012) used for analyses?

I found severe imbalances in explaining the findings of Tables. For example, Table 2a is explained in the first two paragraphs of the results (page 8, lines 6-16) nicely. But authors completely avoid Table 2b and 2c for explanation. Why?

Similarly, authors explained Table 3a but they did not explain Table 3b and 3c. In table 3a, they presented only the adjusted F value and significance levels by asterisks. But in the text (page 8, lines 18-22) they added more values (e.g. F(1,928) 13.33, p < 0.001)). Authors should explain each value at least once in the text to increase the level of understanding among non-statisticians.

Under the analysis section (page 7), authors briefly mentioned the term regression and bivariate analyses. They should be more specific about their analyses. Actually they used multiple binary logistic regressions. They should explain why this type of model is necessary for their data. They should also explain why adjusted F is necessary. Did they check “multicollinearity” before inserting independent variables into the multivariable logistic regression model?

It is not clear from which Table (3a, 3b and 3c) the text (given under Illness signs
and continuous variables (page 8, line 23 and page 9, lines 1-4)) is extracted. Like before, authors did not explain any important findings from Table 3b and 3c. If they are not explained at all, why are these Tables important for the paper?

Authors should make one table to compare the main findings (prevalence rate/likelihood of illness signs with respect to IPV) for better understanding.

The detailed explanation of the conceptual framework is necessary. What are meanings of several letters, for example, b, c and d in the framework? How are the selected variables associated with the block representing food security resources, maternal resources and infrastructure resources?

Some more references from other parts of the world to explain consistencies and inconstancies of the results might be interesting for readers.

Based on their findings and cultural contexts in these countries, authors may provide some kind of strategies to improve the situation. What could be common strategies in these countries? Do they require different strategies?

Briefly, authors should produce less but simple Tables so that they can convey their main messages without less difficulty. One Table for comparative analyses is also important.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

'I declare that I have no competing interests'