Reviewer’s report

Title: Prevalence of child marriage and its impact on fertility outcomes in 34 Sub-Saharan African countries

Version: 1 Date: 22 Nov 2019

Reviewer: Kathryn Yount

Reviewer's report:

Comments to the authors

This paper uses DHS data for more than 30 African countries to assess the relationship between child marriage <18 and several fertility and contraceptive-related outcomes. The paper makes an important conceptual contribution to the field and is appropriately placed in BMC IHHR. The authors have been attentive to prior reviews. I have a few recommendation and questions that the editor may consider discretionary.

1. Some editing of the text still is needed for typos and English grammar.
2. Did the authors consider trichotomizing the exposure variable to <15, 15-17, and 18 plus? If not, then either a strong justification is needed to a sensitivity analysis assess the robustness of the findings would be useful.
3. A stronger justification for use of country weights in the pooled analysis is needed. Did the authors consider a sensitivity analysis without weights?
4. Some of the findings regarding the relationship between child marriage and fertility/contraceptive outcomes seem contradictory (e.g., higher modern contraceptive use and lower unintended pregnancy but high number of births). A more nuanced discussion of these seemingly contradictory findings would strengthen their policy implications.

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.

Yes

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

Declaration of competing interests

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organisation that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests, below.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.