Reviewer’s report

Title: Maternal socio-demographic and psychological predictors for risk of developmental delays among young children in Mongolia

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Reviewer: Antony Opwora

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BMC Review

Title: Maternal socio-demographic and psychological predictors for risk of developmental delays among young children in Mongolia

Authors: Amarjargal Dagvadorj, Duurenbayar Ganbaatar, Olukunmi Balogun, Naohiro Yonemoto, Bayasgalantai Bavuusuren, Kenji Takehara, Rintaro Mori, Moe AkahiraAzuma

This study aimed at assessing factors that put children at risk for developmental delay in a hospital cohort in Mongolia. Dagvadorj et al confirmed existing data on some well documented maternal and childhood factors that predisposed a child to delayed milestones. The paper could be improved if the following issues could be addressed:

1. Methods - Exposure and outcome - 3rd paragraph:

It appears that information on jaundice was collected for siblings at baseline and also the transcutaneous bilirubin level was measured in the index child for the first six days. At follow-up however, information on the history of jaundice is obtained through a questionnaire administered to the mother. It is not clear whether this information at follow up is specific to the index child or any child in the family. The mother could recall presence of jaundice in any of her children. Also, if this information is obtained a year or 2 later, there is a risk that the mother may not remember. Furthermore, the importance of this question in the maternal questionnaire is doubtful as it could be obtained more reliably from the baseline data (and therefore avoids recall bias). Kindly clarify this information.

2. Methods - Exposure and outcome - 4th paragraph:

Was the information on asset ownership collected at baseline or at follow-up? Was there any accounting for the possibility in change of economic status between baseline and follow-up? This information, though not perceived by the child could affect their risk for developmental delay.
3. Methods - Statistical analysis - 2nd paragraph:

The authors state that they compared the characteristics of the children enrolled in the follow-up study to those of the "rest of the cohort". I find this comparison disturbing because first, it implies the "rest of the cohort" was under study for data presented in this paper. Secondly, if comparison is to be made, the study will need to change its name and methodology to incorporate the comparative aspect. However, no data was collected at follow-up for the "rest of the cohort" to make that comparison meaningful. Authors need to either cut out this part of the information or incorporate new data to justify the mention of this in the methods. The authors are nevertheless advised that there is a possibility of mentioning this information in the discussion section to prove or make a point about the strength (or weakness) of the study.

4. Results - 2nd paragraph:

Please refer to comment #3 above. The information needs to be edited accordingly. Additionally, reference is made to Table 1, which should also be edited accordingly.

5. Results - 3rd paragraph:

Please include the lower limit for the definition of "moderate hyperbilirubinemia".

6. Results - 5th paragraph:

Please clarify the direction and significance of age as a risk factor for developmental delay (i.e. is it maternal or child's age and was the association related to increasing or decreasing age?)

7. Discussion - 3rd paragraph:

Please correct the typo in sentence 2.

8. Discussion - 3rd paragraph, last sentence:

It would be interesting to read about the authors' postulations about preventive interventions for maternal depression that "may enhance not only improvement in young child development, but also influence school achievement during adolescence."
9. Table 1

Please edit based on comment #3 above. Also, the Title label could be more specific, thus "Characteristics of child and mother at birth", and similarly for Table 2.

Thank you.

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 am able to assess the statistics

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