Reviewer’s report

Title: Status and Associated Factors of Birth Registration in Selected Districts of Tigray Region, Ethiopia

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Reviewer: Timothy Adair

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Review of Status and Associated Factors of Birth Registration in Selected Districts of Tigray Region; Ethiopia

This paper addresses the topic area of birth registration, which is under-researched despite its importance to child rights and government statistics. This study of the determinants of birth registration in a district of Ethiopia fills a gap in the literature, especially given the overall low levels of birth registration in the Horn of Africa, however there are a number of critical areas that need to be addressed before it could be deemed to be ready for publication.

Many of the comments relate to the regression.
The dependent variable in the regression assumes that issuance of a birth certificate automatically follows registration. However, this is not true in other countries, especially if there is a fee for a birth certificate. Can the authors provide more detail on how this process is automatic.

Does the respondent have to show that they have a birth certificate or is it simply based on their response? Also, is it just the mother asked this question, or the father as well?
What exactly were the knowledge-related questions specified in page 10, lines 206-207? Are these in Table 2? Please specify.

In Table 2, what were the correct answers for "Do you know where to get birth certificate" and "Do you know the uses of birth registration"? Please specify
Is the source of information in Table 2 the main source or any source - was more than one option allowed?

In Table 3 the title refers to birth registration but the first 2 columns refer to birth certificate - use consistent terminology.

In Table 3 it is unclear why the variable 'mother has birth certificate' is included - is this different from the dependent variable?

Knowledge of birth registration is a confounding variable and would be better to not include in the regression. It seems that it would be appropriate to conduct a separate regression to predict whether the respondent has knowledge of birth registration.
The English could be improved. Some examples include:
- Page 2, line 44 - replace "On top of this" with "Additionally"
- Page 3 line 51 - "So is the case"
- Page 4, line 80 - "Evidences"
- Page 5, line 114 - "Was begun"
- Page 7, line 143 "Got birth certificate"

Page 3, line 56 should mention that the UNICEF data are based on self-reported levels of birth registration, not that in official statistics.

The review of the Ethiopian civil registration system does not give any idea how complete birth registration data are of if any of the data are published as vital statistics. This should be detailed. The manuscript should also mention the utility of other data collected as part of birth registrations that are of much value, such as birth order, birth weight and age of mother, which are detailed in the UN Principles and Recommendations for Vital Statistics Systems, as well as Phillips et al, How useful are registered birth statistics for health and social policy? A global systematic assessment of the availability and quality of birth registration data, Population Health Metrics, 2018.

Page 5, line 116 - why was data collected from 384 mothers? There is not detail as to how this number was calculated.

Page 5, line 199: "lottery method" should just be described as a random sample.
Did the sample design account for the urban or rural status of districts to ensure there was adequate representation of both (especially because birth registration differs so much by this characteristic).

Who were the Key Informants who were interviewed?
In general, there should be more literature cited form academic journals.
Some of the citations are inappropriate - e.g. cite 3 has a link that is inaccessible.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**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

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

Needs some language corrections before being published

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