Reviewer’s report


Version: 1 Date: 22 April 2013

Reviewer: Heribert Ramroth

Reviewer’s report:

Major Compulsory Revisions

The English language has to be checked carefully!

Title: Trends in neonatal mortality and assessment of associated risk factors in … Ethiopia.

Authors: Gizaw et al.

The authors describe mortality trends over a period of around 20 years, which might not be available so far for Central Ethiopia.

Thus, it is a relevant paper, but the analyses and the paper require some major revision. I attach my scanned comments, too. Main comments are listed below. Minor comments will be found in the text.

Comments:

Background,:
Page 3, 3rd and 4th paragraph: doubled information
Page 3, 5th paragraph: these 31 million death are estimates, based on assumptions to be able to be calculated. So better reformulate this.

Page 4, 2nd para: please give an explanation, why neonatal tetanus deaths are “easily preventable”. However, the sentence has to be reformulated, too.

Page 4, 3rd para: the first part of the 2nd sentence does not casually effect the second. There is no real link between “no civil registration system available” and “essential … to examine factors for mortality”. The one is independent from the other, but clearly necessary.

Results:
Page 7, 2nd para: why ENMIR, better choose ENMR without mentioning “incidence”
Page 7, 4th para: I do not agree with the results of showing an incremental mortality trend!

Page 8, 1st para: based on small numbers, it doesn’t make sense to report all these results. The figure is sufficient.

Page 8, 4th para: 1st sentence not important. Are the numbers (1.67 and 2.9) adjusted IRRs, resulting from a multivariate analysis? How was this analysis done? Do they refer to table 3? Multivariate analyses should be redone, excluding the not significant variables, as they cover effects from the other ones. So, please use some selection process (backward, etc.).

Discussion:

Page 9, 3rd para: why was a moving average of 4 years chosen? Why not 3 or 5?

Same para: what does “weaker data supervision” mean? The data shows so instable patterns, that it is hard to interpret these.

Page 9, 5th para: repetition from 1st para. There are subgroup analyses cited

Page 10, 3rd para: There is no real relevant difference between 41 and 43. How were the factors mentioned validated. Chosen from a factor analysis?

Page 11, last 2 sentences: On what are these conclusions based?

Page 12: please give estimates of percentages how many neonates die on the same die. This might be impossible. Please give a reference.

Please provide some correlation analyses between urban/rented, rural/own house.

Conclusion:

Page 13: Repetition of the results, not a strong conclusion.

Tables and Figures:

Fig. 1: there is no real need to show this figure.

Table 2 seems to repeat the information of figure 2.

Minor points:

Page 1: Affiliation 3 = affiliation 2

Page 3: no linebreak between 4th and 5th paragraph

1. Is the question posed by the authors well defined? Yes

2. Are the methods appropriate and well described? No

3. Are the data sound? yes, but not the methods

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? not fully

5. Are the discussion and conclusions well balanced and adequately supported
by the data? no, not all.
6. Are limitations of the work clearly stated? No, not all.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? yes
8. Do the title and abstract accurately convey what has been found? yes
9. Is the writing acceptable? no

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**
I declare that I have no competing interests