Reviewer's report

Title: The Effect of Health Facility Delivery on Neonatal Mortality: Systematic Review And Meta-Analysis

Version: 1 Date: 3 September 2012

Reviewer: Mats Malqvist

Reviewer's report:

Thank you for letting me review this manuscript. The present manuscript has some good intentions, even though health facility delivery is generally considered to be beneficiary for mothers and newborns and is a strong predictor of neonatal mortality (see argument below). I have some major and minor issues that the authors need to address:

Major compulsory revisions:

1. The first and main thing is the rationale and argumentation for the study provided in the introduction. The authors claim that there is an ongoing debate about the benefits of facility delivery and that the impact of the place of delivery is uncertain. I do not agree. In the concept of "skilled birth attendance" it is not only the proficiency of the birth attendance that matters, but also if there is an "enabling environment" where the delivery takes place (see www.safemotherhood.org for reference). If this enabling environment is in place it might be irrelevant if the delivery occurs at a facility or at home, but it requires the infrastructure and access to EmOC in case of emergency. In high-income settings this can be the case, but in more resource-poor areas of the world this is not the case, and thus facility-delivery is recommended. I would urge the authors to include the concept of enabling environment in the introduction since it is essential for the rationale of the review.

2. In line with previous argument, it is then not valid to refer to an ongoing debate in Australia and England (p 4, second paragraph) in order to justify the impact of facility delivery in low-income settings. I would like to see a clearer distinction and debate about the difference between high and low-income settings. This needs also to be reflected in the search strategy.

3. The authors claim that there are no reviews performed on the topic, but make reference to one in the discussion (ref 46). Please revise argumentation accordingly.

4. The search strings are not completely clear. Should it be "place of delivery and neonatal mortality" (which implies "place AND of AND delivery AND and AND neonatal AND mortality"), or "place of delivery" AND "neonatal mortality". The search results will be quite different, the former resulting in 468 hits and the other in 88 hits in Pubmed.

5. Please elaborate on the flowchart of searches and include number of studies found in different search engines and overlap etc.
6. I do not agree that grey literature is in accessible, there is a lot of information to be found at UN agencies and WHO, SNL etc.

7. How was selection of articles done? One or two independent reviewers?

8. I would suggest the authors to look at the PRISMA statement for systematic reviews in order to adequately describe the methods.

9. The discussion is a bit weak and could do with some further argumentations. I suggest for example to re-connect to the issue of "enabling environment" and discuss the benefits of facility delivery as a, possibly imperfect, guarantor of EmOC. Another issue that can be brought into the discussion is the additional benefits of getting mothers to the health system for further child care, like vaccination coverage, growth monitoring etc.

Minor and discretionary revisions:

1. The first paragraph of the introduction needs to be updated, the references are old and figures are not up to date.

2. I would prefer not to use the term "developing country", which is a bit obsolete, but rather discuss high-, middle- and low-income settings.

3. Some typos on page 7, "planned", not "planed" (first line), "happening" not happing" (second line). In general this section, and others, need language revisions.

**Level of interest:** An article of limited interest

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests