Reviewer's report

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

Version: 1 Date: 1 October 2012

Reviewer: Victoria Nankabirwa

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Major Compulsory Revisions

Introduction

First paragraph: there is more recent literature that could be cited such as the Lancet stillbirth series etc.

Page 4, first two sentences, last paragraph: In recent years, even though there are some fragmented studies, systematic review and metaanalysis of such studies are limited. The existing very few reviews are limited to the developed countries and compared only planed home births and planed hospital births and focused on perinatal outcomes and less attention on neonatal mortality [17].

There is only one reference cited. This statement should be backed up by other citations.

Methods

Elaborate on what is meant by appropriate sampling methods.

Five studies were excluded because they did not have sufficient information for the meta-analysis. Is it possible to at least attempt to contact those authors and request the required numbers?

Page 6: Second last paragraph, last sentence: The Bangladesh study compared 917 home deliveries with only 17 facility deliveries (under estimated).

Please consider rephrasing this statement.

There were 17 facility deliveries; this could potentially be a fact and not necessarily an underestimate. However, even if it could be a fact, it can be argued that a sample of 17 was insufficient (which is different from saying that is an underestimate) and perhaps consisted of a selection of high risk births and this could have potentially resulted in an over-estimate of the 'true' neonatal mortality risk among facility births.

What was the measure of association chosen?

Results

Indicate the measure of association e.g., odds ratio, prevalence ratio, risk ratio etc
Minor Essential Revisions

Abstract
The objective runs as follows: To determine the effect of health facility delivery on the rate of neonatal mortality.
I suggest you delete the phrase ‘the rate of’ to make the statement epidemiologically correct
Consider including the search period

Methods
Page 7, second sentence: This review intended to measure randomly happening place of delivery regardless of certain interventions based on certain risks.
Please rephrase this statement with a different word, other than ‘randomly’. There are systematic reasons as to why people choose to deliver where they do and the whole process is not entirely random. This is true even for those studies that you included in this meta-analysis. This is a slightly different concept from what you correctly state in the preceding sentences on page 6

Results
Page 5, second paragraph: three were secondary data analysis from DHS data and the rest two studies were cross-sectional studies.
DHS data comes from cross-sectional studies. These three secondary analyses should also be counted as cross-sectional.

Discussion
In areas with low facility delivery uptake, the likelihood that only very high risk deliveries end up at health facilities is quite high. As such, there deliveries at health facilities could represent to a great extent those women that initially attempted to deliver at home and then resorted to a facility when the delivery failed to progress (information bias/misclassification). Because these are extremely high risk, the associated mortality could be exaggerated. Is it possible to take into account (during the analysis) and possibly discuss the proportions of facility delivery in the study areas?

Table 1: the three studies labeled as DHS analysis are in fact cross-sectional studies

Level of interest: An article of importance in its field

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

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