

Reviewer's report

Title: Maternal Mortality in the informal settlements of Nairobi city: What do we know?

Version: 1 **Date:** 14 November 2008

Reviewer: Olufemi Taiwo Oladapo

Reviewer's report:

1. Is the question posed by the authors new and well defined?

This paper describes the burden of maternal mortality as derived by verbal autopsies of all female deaths in an informal settlement in Nairobi, Kenya. The questions posed by the author are not new but the topic is of public health significance and necessary for health policy makers in developing countries in our collective quest towards MDG-5. However, the second question is not well defined as the author compared the data derived from facility-based records with those derived from verbal autopsies within the community as against using the data "to assess maternal health experiences as captured by the facility health information system".

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work? No, see minor essential revisions. The definitions of terms used in the project should be under the "Methods" section rather than the "Results" section.

3. Are the data sound and well controlled? I consider some information unnecessary. Some elements of the "Discussion" section can be found in the "Results" section. e.g. Page 9, last sentence.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes, although some aspects of the discussion found their way into the Results.

5. Are the discussion and conclusions well balanced and adequately supported by the data? No, this is because the data from the health facilities for the period was less than 50%, therefore it might not be too appropriate to conclusively infer from the comparison of the verbal autopsy and facility-based data. I want to assume that the general lack of similarity between the facility and the verbal autopsy data suggests that one of them is completely inaccurate.

6. Do the title and abstract accurately convey what has been found? The title appears appropriate although it is not in the Reproductive Health format. The abstract lacks important details from the findings of the study e.g. the total number of pregnancy-related deaths (early and late). The comparison of facility-based data and DSS verbal autopsy interviews does not support the usefulness of verbal autopsy as the tool to obtain "the much needed data on maternal mortality...in the developing world" as suggested in the concluding part of the abstract.

7. Is the writing acceptable?

Acceptable if the length of the paper can be reduced to provide concise information and make inferences based on available data.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

Abstract

Needs to be shortened particularly the background section. The method should provide more information e.g. about the questionnaire used, the period surveyed, etc

Results: See comments under number 6 above.

Conclusion: See above.

Background

The readers can do without the first paragraph. Authors need to show why it is important in Kenya or why the methodology for maternal mortality measurement may be a better option in that environment. Second aim of the paper needs to be revised.

Methods

Provide information on the background of the study area

Results

Removal of non-maternal deaths from the entire paper is likely to provide a more straightforward information. Providing characteristics for non-maternal death may not be very necessary for readers to understand the content of the paper. Besides, it was not the primary aim of the paper.

Discussion: A bit long. Should not be longer than one-third of the entire manuscript. The first paragraph on page 12 could be deleted completely without losing any important information. Conclusion needs to be revised. It appears there are too many assumptions on the reasons for the discrepancies between the facility records and the verbal autopsies. Should be based on what was found only.

Tables: Data on female maternal deaths should be removed. Table 4: The same cause of maternal deaths for DSS derived data and facility based data should be on the same line to provide room for visual comparison. It is a bit difficult to appreciate the differences noted by the authors as it is.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct). Repetitions with respect to the methods used to assess the cause of maternal death under "verbal autopsy" within the record section of the manuscript. The adapted verbal autopsy questionnaire should be included as appendix for readers to independently assess the internal validity of the study.

Grammatical errors: Kindly note that the most verbs should be written in past tense.

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Level of interest: An article of importance in its field

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.