**Reviewer's report**

**Title:** Quality Medicines in maternal health: Results of Oxytocin, Misoprostol, Magnesium Sulfate and Calcium Gluconate Quality Audits

**Version:** 0  **Date:** 16 Sep 2017

**Reviewer:** Edward T. Dassah

**Reviewer's report:**
Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format. Please overwrite this text when adding your comments to the authors.

The manuscript in its current form would require some revisions to improve its quality

1. Topic: The topic in its current form is suggestive of an assessment of child birth and quality of medicines. However, the study did not assess any component of child birth; this should be taken out of the topic and the topic rephrased to reflect the current study.

   **Methods**
   Apart from the sample size estimations, the methods section does not include a statistical analysis section describing how the data was analysed to obtain the stated results. This should be included.

   **Results**
   On page 8 (line 7), the authors state that; "Table 3 shows the sample distribution". However in the subsequent write ups for the 4 drugs, the number of samples analysed is at variance with what is stated in Table 3; oxytocin (159), misoprostol (166), magnesium sulfate (163) and calcium gluconate (148). This difference has only been explained for magnesium sulfate. The authors should give reasons for the difference in the remaining 3 drugs.
On page 10, data in Table 4 is repeated in Figure 4. The authors should use either the table or the figure, but not both.

On page 13, data in Table 5 is repeated in Figure 8. The authors should use either the table or the figure, but not both.

On pages 15 and 16, data in Table 6 is repeated in Figure 11. The authors should use either the table or the figure, but not both.

Discussion

The authors did not compare their findings to any existing literature in the field, making it difficult to put the findings in context.

Page 17 lines 28-30, the authors think that the high failure rate of first line PPH treatment may be contributing to the high maternal mortality rates in different parts of the country. Comparing the failure rates in different parts (eg southeastern and northeastern) with their respective maternal mortality rates to support their claims would be beneficial.

Page 17 lines 50-51, the authors make a categorical statement that "...private health facilities are more frequented than the public facilities" without any supporting reference. They should provide the necessary reference.

The authors should highlight the limitations of the study more clearly.

The stated conclusions are not related to the current study findings. The authors should ensure that the conclusions emanate from the study findings.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?

If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?

If not, please explain in your comments to the authors.

No
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:
Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments
which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal