Reviewer’s report

Title: Quality of Midwife-Provided Intrapartum Care in Amhara Regional State, Ethiopia

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Reviewer: Jeanine Young

Reviewer's report:

Review:

Quality of Intrapartum Care by Midwives in Amhara Regional State, Ethiopia: Mixed Methods Study

Author: Yigzaw et al

This was an interesting cross sectional study of 56 health facilities in one regional state of Ethiopia which used mixed methods incorporating, direct observation, interview and inventory assessment to determine the quality of midwifery care and the availability of resources available to midwives in caring for women during the intrapartum and immediate postpartum period.

1. Is the question posed by the authors well defined?
   * The study purpose was clearly defined in the abstract: 'The purpose of this study was to assess the quality of midwifery care during labor, delivery and immediate postpartum period.'

   * In the main study manuscript the purpose was described clearly and broadly to assess the quality of intrapartum care; and was addressed specifically in three parts: Specifically, to assess competence of midwives in provision of care during labor, childbirth, and immediate postpartum period including routine and emergency care through direct observation. Secondly, we sought to evaluate availability of essential resources for provision of quality labor, delivery, and immediate postpartum care. Thirdly, we assessed perceived availability of opportunities for continuous quality improvement of labor, delivery and immediate postpartum care.

2. Are the methods appropriate and well described?

   * The study was clearly defined as a cross-sectional study using a 2-stage cluster sampling technique.
* Appropriate information was provided to provide context for the region chosen in relation to the rest of the nation.

* Sample size calculation was provided however it was not clear of the target sample size of 150 was inclusive of the 10% non-response rate or the 'n' (sample number) required to meet assumptions. Please make this clear.

* Please state how the 37 health centres were chosen from the 360 which met the eligibility criteria.

* Please describe the inter-rate and intra-rater reliability testing that was performed for the 12 midwives who conducted the observational assessments and determined 'competence' of midwives they were observing.

* The interviews appear to have provided quantitative data in response to close-ended questions and not midwives' perceptions of barriers and facilitators to providing quality care as thematic analysis and findings were not described or included although the study was described as a mixed methods design. There was no triangulation of qualitative and quantitative results so technically this study is not a true 'mixed methods' design, but rather a multi-method or mixture of methods study using different data collection approaches to essentially answer different research questions.

* Please make this clear (this may require thought to editing title also)

* Reference made to Donabedian framework (P6, lines 86-90) and systematic review (page 6, Lines 91-94) however it was not clear how this was linked to this study as it was not made explicit; and remained ambiguous. Please clearly link as to the relevance for this specific study ie if data collection tools were based on this. Eg For the purposes of this study, the Donabedian Framework was used: structure encompasses the physical environment...etc'

3. Are the data sound?

The data have been clearly presented, however as noted above, inter-rater (consistency of application of the tool) and intra-rater reliability (a rater will change their rating behaviour over a 3 week period based on cumulative exposure to what they are measuring particularly across several more subjective domains eg what they deem as professional/caring) should not stated, or lack thereof should be noted as a limitation. Education was stated as being provided for each of the observers however it was not clear if this included checking of ratings.
Nonuse of a partograph was determined as a midwife being less incompetent. Please refer to the literature that highlights the arbitrary use of partographs in determining 'stage of labour' for women and the limitation of partographs which need to be considered before using this domain as an indicator of midwifery competence, eg


The authors should provide evidence to support use of the partogram (eg WHO supported currently); and also state which partograms were in use; and were they consistent across all facilities before interpreting that non-use is an indicator of incompetence; as non-use of a poor/inconsistent tool may also indicate appropriate clinical judgement. In addition was non-use of the partogram associated with facilities in which there was suboptimal provision of record documentation.

4. Do the figures appear to be genuine, i.e. without evidence of manipulation?

Clearly and simply presented data.

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?

The manuscript does adhere to relevant standards and appears to use appropriate ordering of headings.

6. Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion and conclusions demonstrated synthesis of key findings and were appropriately supported by the data presented.

7. Are limitations of the work clearly stated?

Limitations were clearly stated in this document under a separate heading. However I would strongly recommend mention conduct of inter-rater and intra-rate reliability being noted here, given the study results rely heavily on this observational data as a measure of competence.
8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

References used appropriately including source of data, acknowledgements and a conflict of interest declaration.

9. Do the title and abstract accurately convey what has been found?

The title is appropriately descriptive of this quantitative study and its content of interest. I would suggest that the abstract includes that the study uses a mixed method design and incorporates the 2 stage cluster sampling; as currently only described as cross sectional. Specific suggestions for abstract edits are made below.

10. Is the writing acceptable?

Overall the level of writing is acceptable; I have made several suggestions for improvements listed below. An edit of manuscript and reference list is recommended.

Recommendations: Minor Essential Revisions

Minor typographical corrections

Aim for scholarly writing throughout - ie replace 'biggest' with 'largest'.

% can be linked to number without a space - throughout manuscript, eg 10% not 10 %

P5 Line 80: utmost important should be utmost importance.

Line 207: a higher percent

Line 215: We were able (remove And)

Line 315: practising (verb) not practicing.

Line 340-345L inconsistent use of EMOC and EMONC?
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.

Yes

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:

Needs some language corrections before being published

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

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