Reviewer’s report

Title: Why mothers still deliver at home: understanding factors associated with home deliveries and cultural practices in rural coastal Kenya, a cross-section study.

Version: 0 Date: 24 Nov 2015

Reviewer: Nosakhare Orobaton

Reviewer's report:

Page 1. The authors might want to revise the title of the paper to incorporate the cross-sectional design aspect of the study or/and the application of mixed methods. The current version is not sufficiently clear or explicit in these regards. Still on the title of the paper, and throughout the paper, "home delivery" is used as a synonym of "unskilled delivery". While this may have a certain veracity, it is advised that the authors be explicit in the uses and their intentions.

Page 2. Abstract. Line 16 speaks about the "proportion of childbirth(s), might "magnitude" not be more appropriate? Again, please be clear about the "home delivery" versus "unskilled delivery" switch. The latter is suggested as the preferred and more applicable one.

Page 2. Line 33. Consider add a few words to characterize the type of sample—random, etc.

Page 2. Line 42. Reference is made to children whose mothers "stay at least 5 km". Do you mean 0-5 km, greater than 5 km or less than or greater than 10km in Line 55? Please be clear about this criterion/variable. The results section is silent about findings from the qualitative aspect of the mixed method study. Is this intentional? Please make some applicable reference to findings. Do they reinforce the quantitative findings or not?
Page 3. Key words. Consider adding skilled delivery assistance. The term "perceptions," without qualification, is unclear. Revise or delete it.

Page 3. Background. Line 27. Given that the SDG have now replaced MDGs, the authors may consider recasting the paper under the SDG framework.

Page 3. Line 56. No information was provided on trends in skilled delivery assistance in Kilifi unlike in Kenya. Has it remained the same or not?

Page 4. Line 32. A sentence or two about Output Based Approach and how well it is or has worked in Kenya and in Kilifi would be helpful contextual information.

Page 5. Study Area. Please provide more information about the geographic location of Kilifi—east, west? Also provide some indication of population density and road network. Just a few clarifying sentences as this is an important aspect of the research question.

Page 6. Line 1. Suggest that "sufficient" be used a replacement for "enough."

Page 6. Study population. Are these exclusively women who came to attend EPI services or MCH services in general? Please clarify.

Page 6. Data management and Statistical analysis. Please spell out the software make used. Please decide how you want to state the p-value and be consistent with one. Is it an upper case P or a lower case p?

Page 7. Line 52. I suggest you avoid using the phrase "one good finding.." It is used a few times in the paper. It is preferable to state the finding.

Page 7. Line 54-59 is not clear in its message and point. Please revise.

Page 8. Line 5-6 is also unclear. Please rephrase, restate to clarify.

Page 8. Line 34. The "majority" of women who deliver at home assisted by their mother-in-laws amounts to 28%. With an additional 4.9% helped by a skilled attendant at home, we still have a balance of 78% unaccounted for. Please clarify. The 4.9% of
home births that were assisted by skilled attendants is justification enough not to assume that "home delivery" as mentioned earlier ought not be automatically synonymous with unskilled assistance.

Page 10. Line 10-14. Regarding reference made campaign to increase access to care in the slums. The statement is not explicit on whether such a program was also ongoing in Kilifi County in particular or if it was a generalized program across the country. Please be more specific if the authors intend to draw a cause and effect relationship between the observed results and such extraneous programs.

Page 10. Line 25 makes reference to sampling bias. It appears the descriptors provided fit selection bias. Please provide a more thorough discussion on the plausible biases at play in the study.

Page11. Line 24. While "waiting homes" have been advocated, a brief discussion of the unlikely feasibility of emergency transport schemes would be helpful. Also what is the basis for proposing "waiting homes"? Please provide a basis on whey it would be acceptable and be feasible in the Kilifi County context.

General Comments.

The paper dwells some on the state of newborn care in home delivery settings. A sub-section that specifically tackles newborn issues may increase the risk profile of home delivery and potentially increase policy attention. It also draws attention to the mother and newborn as an inseparable dyad.

The paper still requires substantial editing to increase the clarity of the important messages in the paper.

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.

Yes
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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:
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