Author’s response to reviews

Title: Using the Theory of Planned Behavior to Explain Birth in Health Facility Intention among Expecting Couples in a Rural Setting Rukwa Tanzania: A Cross-sectional Survey

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Author’s response to reviews:

Response to Reviewers' Comments
Reviewer 1
Comment 1
I am not sure 'Birth in health facility intention or birth intention in health facility'. Please be sure that the wording is correct!
Response 1
It is birth in health facility intention; The behavior of interest is use of health facility for child birth, the alternative to it is choice of home childbirth. Therefore the correct wording is birth in health facility intention.

Comment 2

Conclusion (Abstract): The authors state that 'Birth in health facility intention among male partners was lower compared to their female spouses. The reason could be that male partners avoid financial implications associated with health facility childbirth.....' I think this is not conclusion and rather part of the results. This should be deleted from here and in the text. The rest is O.K.
Response 2
The conclusion is re-written to match with the results of the re-analysis

Comment 3

The second part of the questionnaire needs more clarifications. Do authors used scoring or what? and how interpret them?
Response 3
Factor analysis was done to measure the domains of theory of planned behavior; regression score was used to test normality and those scored above the mean were termed as having positive and those scores scored below mean were termed as having negative; this message is added to the manuscript under data processing and analysis
Comment 4
For logistic regression to be on safe side use association and not 'predictors' all through the manuscript.
Response 4
Authors agree with the suggestion and prediction is replaced by association

Comment 5
It is not clear how the authors indicated positive and negative attitude and subjective norms. This should be clearly explained in the Methods
Response 5
Factor analysis was done to measure the domains of theory of planned behavior; regression score was used to test normality and those scored above the mean were termed as having positive and those scores scored below mean were termed as having negative; this message is added to the manuscript under data processing and analysis

Comment 6
There are strange odds both for male and female participants when performed logistic regression. First of all the authors should check the figures. Secondly I think they should adjust the analyses for socioeconomic variables. At present these are not acceptable.
Response 6
Authors agree with the observation and the data set was re-visited and re-analysis was done. We noticed an overlook when we analyzed only the domains of theory of planned behavior without adjusting with socio demographic characteristics.

Reviewer 2
Comment 1
Abstract: The abstract is well-written. In the abstract, it may be helpful to avoid stating that the reason for male partners having lower birth in health facility intention (compared to pregnant women) was due to financial implications associated with health facility childbirth, since this was not described in the abstract results
Response 1
Authors agree with the observation. The statement is avoided

Comment 2
There is some contradictory information in the introduction that could be clarified for readers, such as on page 4 it states that 5 out of 1,000 live births result in maternal mortality in Tanzania, but also states that 1 out of 44 deliveries result in maternal mortality in Tanzania. It would also be helpful for readers if the purpose of the study was made clearer in the introduction. For example, it would be helpful to include information on access and current use of health facilities for childbirth in the Rukwa region. If use is low, this may clarify the reason for investigating expecting couples' intention to use these facilities, so that effective interventions to improve health facility use can be designed.
Response 2
The two statements carry a different message
The first statement is about the maternal mortality trying to explain the maternal mortality ratio of 556/100,000.
The second statement is about the risk of dying in the process of giving birth.

Authors agree with the suggestion of using the numbers instead of low access of maternal health services in Rukwa

Comment 3
It would be helpful to mention more detail about how the survey was developed. For example, was the readability of the survey tested? Was the survey pre-tested or piloted? It may be helpful for readers to see some examples of the survey questions, or to include a table with the survey questions. It would also be helpful to describe if the survey questions in the TPB domains were analyzed using scale scores.
Response 3
Authors agree with the suggestion and a sentence on pre-test is added in the manuscript under the subheading data collection and procedure

Comment 4
The adjusted odds ratio (AOR) for the association of pregnant women's attitudes with birth in health facility intention is large; it's possible the AOR is inflated because the number of women who did not intend to use a health facility was small (<10). This can be mentioned in the limitations section of the Discussion.
Response 4
The re-analysis was done and the socio demographic characteristic variables were added in the logistic regression as confounding variables which created different odds.

Comment 5
Since the intention to use a health facility for childbirth was high among both women and male partners, it would be helpful to discuss what the actual utilization of health facilities for childbirth is in the Rukwa region. If utilization is low despite a high intention to use a health facility, it could be helpful to describe barriers to health facility access in the Rukwa region that may contribute to this discrepancy. Readers may use that information to help inform the design of interventions to improve health facility utilization for childbirth. Also, it would be helpful to add a limitations section in the Discussion that describes study limitations. For example, adding some discussion of how/if social desirability bias may have played a role in the high percentage of respondents who stated an intention to use health facilities for childbirth.
Response 5
Authors agreed with the suggestion and it is incorporated in the discussion

Comment 6
In the Conclusion, it may be helpful to avoid stating that the reason for male partners having lower birth in health facility intention (compared to pregnant women) was due to financial implications associated with health facility childbirth, since this was not described in the Results section, but was part of previous literature described in the Discussion.
Response 6
Authors agree with the observation and the statement is removed.
Reviewer 3
Comment 1
Introduction
However, there is a gap between problematization of maternal and neonatal mortality and insertion of the Theory of Planned Behavior. That is, description about the theory is abruptly introduced - consequently, there is a gap between lines 111 & 112.
It can be improved by adding 2- 3 sentences (between the two lines) attributing maternal and neonatal deaths to limited access to skilled birth attendance. When that is done, application of the Theory of Planned Behavior will be deemed relevant before going to its details.
Response 1
Authors agree with the reviewer’s suggestion and sentences are added to connect maternal and neonatal mortalities with the use of theory.

Comment 2
Sampling techniques
The authors state that two districts (Sumbawanga Rural District and Kalambo District) were conveniently selected from the four districts of Rukwa Region. However, no reason has been provided. Given the focus of the study - "maternal and neonatal health", the two districts would have been selected purposefully and the criterion being high levels of maternal and/or neonatal mortality.
Response 2
Authors agree with the observation and the correction is made; The region was selected due to high maternal and neonatal mortalities in the country. One of the possible reasons for high maternal and neonatal mortalities is due to low use of health facilities for childbirth. The two districts were selected due to lowest use of health facility for childbirth.

Comment 3
Data processing and analysis:

a) Description about application of Descriptive statistics should be more explicit and mention those statistics such as frequency, percentage, mean, etc.

b) Bivariate analysis is missing from the description of data analysis approach. Likewise, there is no description showing transitioning from bivariate to logistic regression.
Response 3
Authors agree with the observation and the description is added under the sub-heading data processing and analysis.

Comment 4
Results:
The results section should be well structured using subheadings. Currently, the only sub-heading is "socio-demographic characteristics".
Authors need to have a sub-heading under which results on attitudes, perceived subjective norms, perceived behavior control towards health facility childbirth intention should appear. Since the study involved pregnant and their spouses, this part of the results presentation may further be reorganized by having separate sub-sections for pregnant women and male spouses.
Response 4
Authors agree with the observation and sub-headings are added in the result section.

The suggestion to separate finding for pregnant women and those of their male partners is taken onboard and the tables which combined both findings is now broken into two.

Comment 5
Minor observation on placement of tables - lack of consistency. Tables 1 & 3 are appearing at the end of the manuscript just before references, while tables 2, 4, & 5 are in the middle.
Response 5
This was the requirements of the journal, any table bigger than a page should come after the references.

Comment 6
Discussion:
Need to have more discussion of the key finding on male spouses. The study found that of the three domains of intention none was a significant predictor of intention to use health facility for childbirth among male respondents.
The discussion here should be more gender contextualized. That is, the discussion needed to go beyond financial implication. Authors need to discuss how masculine norms may limit male spouses' preparedness for childbirth.
Response 5
The discussion is modified and the suggestion is taken care of.

The discussion failed to include gender perspective because the only difference which were included in this study is biological and nothing on gender perspective. In order to be in harmony with people on gender we decide to continue our focus on differences in sex, being either a male or female

Comment 6
This gender perspective may also be highlighted in the conclusion section of the paper.
Response 6
We decided not take the direction of gender in this particular study but rather differences in sex.