Reviewer's report

Title: Modeling the relationship between women's perceptions and future intention to use institutional maternity care in the Western Highlands of Guatemala

Version: 0 Date: 25 Jul 2017

Reviewer: Arachu Castro

Reviewer's report:

Dear authors,

The aim of your study is of relevance to the increasing number of researchers working on the mistreatment of women in labor. The manuscript has the potential to provide some new information on the implications of mistreatment in the avoidance of health care seeking. However, the manuscript in its current form needs major revisions before it can be considered for publication:

1. Quality of written English and use of terms:

- The manuscript would benefit from editing for clarity. Some examples of sentences that should be rewritten are: "Increasing utilization of EmOC relies on understanding why uptake of services is low" (p. 4), "The analysis draws on quantitative and qualitative community-based survey data from the Western Highlands of Guatemala to conduct two separate analyses" (p. 5).

- Instead of using the concept of "evaluation" of care by study participants, I suggest to use a different term, given that "evaluation" usually implies a systematic or formal process that does not seem to apply to your study participants.

- It is not clear nor specific to write "developing country context." If you refer to low income countries according to the World Bank definitions, please say so. Otherwise, please explain.

- Please use the active voice. The use of the passive voice does not allow to identify who did what. For example, when you write in p. 9 "A census and accompanying household survey were conducted in 15 villages in Ixil", it is not clear if the authors were involved in the survey.

- Your use of "client" to refer to study participants is not justified. Why are they clients and of whom, particularly when referring to women who gave birth at home? How about if you refer to them as women or study participants?
- In p. 8 you wrote "non-indigenous populations (referred to as ladinos)", but in Guatemala there are other ethnic groups in addition to indigenous and ladinos.

- Please define "remote" (p. 9).

2. Structure of manuscript:

- Please follow the structure outlined by the journal. There are several subheadings that should be merged with other sections or that are out of order.

3. Conceptual framework:

- You mention in p. 7 that "A conceptual model was developed to underpin the analysis and guide interpretation of results." But a conceptual framework is also the basis to develop the study methodology. Therefore, your conceptual framework should appear before your methods and should help justify, for example, how you have established the key independent variables that you list in p. 6. Without a justification, your key independent variables seem random or superficial.

- The conceptual framework should also include the "structural and cultural factors" that you mention in p. 6.

- In p 7, when you say "And finally, since intention is the outcome of interest, the conceptual model is influenced by the theory of reasoned action and theory of planned behavior [19]…", please make it more clear that you have used this theory to build your framework.

- In p. 7, you mention that Figure 1 is "… operationalized by variables from the dataset". This is very confusing. Do you mean that you used the study data to develop your conceptual framework, when it should have been the opposite?

- In p. 7, when you say "The combination of these factors contributes to future intention to deliver in a health facility", if this your hypothesis or are you anticipating your findings?

4. Methodology:

- In the background paragraph of the "Plain English Summary", you seem to take for granted the hypothesis that you test in your study, which is confusing.

- In your "Methods" section you need to add your methods for data collection and they should go before explaining the methods for data analysis.
- When you refer to your two groups of study participants, your use of "cohorts" is confusing because it implies that you're following them over time, which you do not mention in your manuscript.

- In p. 8, the first two sentences of the first paragraph belong to the methods section. Please rephrase the third sentence so that it does not seem like interpretation of findings.

- You have studied women who gave birth within the last five years. Have you considered taking into account any recall bias by comparing women who gave birth in the past few months to others?

- In p. 9, you mention that women completed questionnaires. Please provide more information about the questionnaires. In which language or languages were they written? Anyone administered them or where women asked to complete them on their own? How did you manage potential bias if women had to complete them on their own?

- In p. 9, when you mention "524 observations," what do you mean by observations? If you refer to questionnaires, please say so. Observations require a different methodology.

- In p. 10, "Open-ended survey responses followed quantitative questions related to client perceptions" should go in the methods section.

5. Sources:

- In page 4, when you write "Those at highest risk of not receiving adequate care are the geographically isolated, rural poor, residing in certain low- and middle income countries [2]," you are not being specific to Latin America. I suggest this reference for Latin America [http://www.apromiserenewedamericas.org/e/publication/health-equity-report-2016-full/] (I disclaim that I was the lead author of the report) and the 2017 Guatemala DHS to bring even more specificity.

- In page 5, these two sentences need references: "Satisfaction and willingness to recommend have been shown to have varying degrees of correlation. However, high satisfaction with a hospital does not always translate into high willingness to recommend."

- In p. 8, you wrote "Guatemala has one of the highest maternal mortality ratios in Latin America, second only to Bolivia [1]." First, there is a newer version of your reference. Second, Guatemala has the 12th worse MMR in Latin America and the Caribbean and the 10th worse if you only consider Latin America.

- Your reference 21 is incomplete.
- In p. 8, you wrote "In Guatemala, the low demand for institutional care (particularly among rural indigenous populations) stems from a lack of perceived need for and acceptability of institutional childbirth care [26]". Please note that you are making a statement that is based on a single study published in 2003. Additionally, there are several recent articles based on studies conducted on this topic in Guatemala that you have not included in your review.

6. Results:

- After revising the previous sections, you should rewrite the findings and interpretation. Please make sure you do not conflate the hypotheses with the results.
Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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

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