**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:** Virginia Savage

**Reviewer's report:**

This paper offers valuable insight on the interactions between different factors that may influence care-seeking among indigenous women who live in remote areas of Guatemala. A key strength is that the survey includes all women within the 15 villages with a child under the age of 5, and thus is representative of the study population. I also believe that the conceptual framework will be useful for future studies and that the study results offer clear indications for where future research and programmatic initiatives might work to improve maternal health care utilization among the study population. Overall, I think the paper is innovative and informative. My comments are listed below and organized by sections of the paper.

Background.

1.) Throughout this section, I would make sure to clarify that you are discussing women's perceptions of their childbirth experiences and quality of care. Referencing just "client experiences" and "poor quality of care" is a bit vague.

2.) In the first paragraph of the Background section, I find the first and third sentences (page 4, lines 2-5 and 7-12) to be unclear. Are you referencing global statistics and trends, or ones that are specific to Latin America?

3.) In the second paragraph of the Background section, can you specify what you mean with client beliefs (page 4, line 29)? I think the term is a bit vague.

4.) I believe the typology of disrespect and abuse created by Bowser and Hill only has seven categories, whereas this paper lists eight. According to Bowser and Hill, "lack of privacy" is conceptualized as an aspect of non-confidential care. Also, instead of "unfair requests for payment," Bowser and Hill include "detention in facilities." I would include another citation to account for including unfair requests for payment separately, if you are going to include it.

5.) Citations would be useful for the two statements on page 5, lines 29-34.
Setting.

1.) I believe this section and the paper as a whole would benefit from the inclusion of a brief summary that provides more information about the health system and health centers. For example, are maternal health services free? Are there ambulance services to help women arrive at the hospital? Who are the health providers at the facilities - i.e, are they doctors, midwives, medical students, etc? Do the study sites have high or low rates of antenatal care utilization? Are there systems and policies in place to insure intercultural care? More information about the services would be very useful to contextualize the findings about women's perceptions.

2.) Similar to the previous comment, I think it would be helpful to include a sentence that provides a bit more information about home births. If there is information about whether home births are assisted by traditional birth attendants or family members, for example, the addition of that data would also help contextualize perceptions.

3.) You mention briefly that indigenous populations in Guatemala have been historically marginalized. I think it could be useful to provide a bit more information about that, as marginalization and structural discrimination could influence interactions with the health system.

4.) Is cohort the correct term for referring to the two study groups? This does not seem like a longitudinal study.

Measures.

1.) For the independent variable "health facility access," how did you define proximity?

2.) Regarding the "perceptions of quality of care during last birth" (pages 11-12), I am curious about how you chose the disrespect and abuse items for questions for the facility and home birth groups. You noted that a more in-depth description will be shared in a separate publication, but can you elaborate a bit more in this publication? In particular, why did you choose to specify questions on non-dignified care, abandonment, and unfair requests for payment, instead of asking about discrimination, which seems like it would be especially relevant for indigenous women? Is there existing evidence suggesting those forms of discrimination are prevalent in the study setting? If you did not assess discrimination because it is already known as a deterrent to care, I would state that directly.

3.) In discussing maternal language in the "Controls" section (page 12, line 46-54), how did you code for women who were bilingual? I would imagine that there would be women who speak both Spanish and an indigenous language.
Analysis Strategy.

1.) Can you discuss more about how you analyzed and used qualitative findings? It might be useful to state directly when thematic analysis was conducted. Were results of the qualitative analysis used to construct variables for quantitative analysis or to explain the results of quantitative analysis or both? Additionally, findings from the qualitative analysis seem to be scattered throughout various sections of the paper, which is a bit confusing. While you mention at the end of the paper that there is a separate analysis of qualitative findings which is not shown, it still might be useful to state that these findings will be mentioned throughout the paper or maybe create a new subsection in the "Results" section that briefly describes qualitative results.

Discussion.

1.) On page 22 lines 29-34, it is stated that "well-known" factors associated with uptake of services were included in the models, but it is unclear to which factors that comment is referring. I suggest emphasizing which are already known factors earlier in the paper.

2.) Additionally at the end of the paragraph on page 22 (line 49-56), you mention that it would be useful to ask about whether women's birth position preferences were respected. I might mention that some researchers argue that not respecting participants preferences and traditions is a form of mistreatment itself.

3.) A citation is needed on page 23, lines 1-4.

4.) In addition to courtesy bias, I would discuss the possibility of recall bias.

5.) You mention this briefly, but it could be useful to discuss a bit more about the possibility of low expectations for care and normalization of disrespect and abuse, which could be limitations to study results.

Conclusions.

1.) Overall, I think this section could be expanded, as the results identify various areas where more research is needed and where programmatic or policy initiatives might work to improve respectful care.

2.) Also, you could discuss more about the utility of the instrument for future studies.
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