Reviewer's report

Title: What He Knows About Her And How It Affects Her? Husband's Knowledge of Pregnancy Complications and Maternal Health Care Utilization Among Tribal Population in Maharashtra, India

Version: 0 Date: 07 Dec 2018

Reviewer: Heidi Preis

Reviewer's report:

Thank you for the opportunity to review your manuscript entitled "What He Knows About Her And How It Affects Her? Husband's Knowledge of Pregnancy Complications and Maternal Health Care Utilization Among Tribal Population in Maharashtra, India". This topic is clinically and theoretically important and I commend the authors for their important work. At the same time, the manuscript has many shortcomings, mainly with unclear data collection methods and missing and confusing analyses. Because of that the discussion seems to not reflect the results and their meaningfulness is lacking. Additionally, copy-editing would be useful to improve readability (including punctuation and spaces). Please see considerations below.

Abstract

Please spell out ANC before using the acronym.

It is not clear what the outcomes variables are and if there is a difference between "all maternal services" and "ANC services". I suggest clearly defining outcome measures and using them consistently.

Line 35: Consider changing "0.22 times less likely" to percentages.

Introduction

Overall, the background is clear and logical, though it is very brief. I would suggest adding information such as: why is it that men's knowledge is so important (sociological insight into Indian tribal culture)? What are the maternal mortality rates in India and specifically in rural populations? What is the availability and accessibility of maternal health services in rural Indian populations?

It would be useful to thicken up the rationale of the study. Why is it important to study the knowledge of these men? How will your findings improve maternal health?
The sentence is convoluted and the subject is unclear. I would expect the women should be the ones seeking care. I suggest rewriting.

It would be beneficial to include a citation of the studies you mention.

Methods

I think it would be more useful to include socio-demographic information regarding: land mass of the region, the population density, birth rates and poverty levels. (perhaps in the background).

What was the inclusion and exclusion criteria to participate in the study? What were the participation rates?

where, when and by whom was the questionnaire pretested?

It is not clear how the complications awareness instrument was developed, what it entails, how it was used and what were its psychometric properties. Please explain how and why these complications were chosen. Please explain how awareness and how knowledge were assessed (what did the questions ask). What were the possible answers (yes or no regarding what’)? Was the questionnaire self-report? What were the possible scores? Also, prolonged labor appears both as a pregnancy and as a delivery complication, premature labor is listed as a delivery complication and excessive bleeding is listed both as a delivery and as a postpartum complication.

In addition, I suggest describing the instrument in one place (Variable Description) instead of two (Data Collection).

Spell out ANC and PNC. Also, how was utilization determined? Was it self-report? What qualifies as adequate utilization? In addition, addressing ANC and PNC utilization as dichotomous categories (that are also unexplained) is a simplification that might miss out on pertinent relevant clinical information.

Consider changing to Independent variables.
Results

It is important to first describe the study sample and their characteristics (both sociodemographic, awareness and utilization). Currently, the manuscript does not present a breakdown of the study sample and the main variables which impeded the ability to fully comprehend the associations between the variables. In addition, Table 1, has only percentages and does not include N's, making it hard to derive information on the sample. Additionally, it would be important to assess the association between the awareness variables and the sociodemographic background, as they may be highly confounded. It is also likely that the three knowledge domains are highly confounded and these should be tested and reported.

In the first Results section, authors describe association, but do not report test results. There is a verbal report on significance but no X square or p values.

It is unclear why there were three regression models. Specifically, assessing the awareness variables without controlling for the background (model 2) seems unnecessary, in the description of the analyses it sounds like it was a hierarchical regression.

The tables, have typos (missing decimal points), missing asterisk and OR. It is unclear how some of the values have an AOR that is significant, but the 95% CI does include a 1 (for example in Table 1 model 1 of the health index). The direction of the coding seems inconsistent. It is not clear how knowledge of complications during pregnancy increase odds of ANC utilization but knowledge of complications during delivery decreases odds. I also suggest that the reference category for the wealth analyses be poor, and not rich.

Discussion

The entire first paragraph of the discussion mentions the awareness levels of the study population and their associations with demographic characteristics, but these are not reported in the Results section.

In the discussion, you use the term knowledge of pregnancy complications while your results mostly indicated the importance awareness of delivery or postpartum complications, and not pregnancy complications.

The third paragraph of the discussion, states that there are no studies assessing the relationship between husband's awareness and maternal health care utilization but this contradicts the studies that are reported in the second paragraph which did study the matter.
It seems like it would be more relevant to your findings to increase the awareness level of perinatal complication (as oppose to the recommendation to increase education in general).

In the last discussion paragraph, please spell out ICE.

Ethics

What were the obtained consents informal?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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.

No

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

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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