Reviewer’s report

Title: An investigation into mistreatment of women during labour and childbirth in maternity care facilities in Uttar Pradesh, India: a mixed methods study

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Reviewer: Sreeparna Chattopadhyay

Reviewer's report:

General comments

This paper makes an important and timely contribution to the discussion of mistreatment of women during institutional births in India. At a time when institutional births have been expanding at an unprecedented rate in India, it is critical to examine women's experiences of birth in facilities. The use of both quantitative and qualitative methods to describe the nature of mistreatment is also a welcome contribution and one that is absent in several current studies. Although mistreatment, obstetric violence, and dehumanising birthing practices have been documented extensively and for over thirty years, in many other parts of the world, there is relatively little scholarship on this issue in India.

The part on out of pocket expenses or informal payments in the paper is particularly well articulated and it is good to see that the author include this as a form of mistreatment.

Major comments

The overall framing of the paper needs to be made more explicit- intentionality is an important aspect of this discussion and it is good to see that the authors have introduced this issue. However, I am unsure if the distinction between mistreatment and poor quality of care captures this aspect of intentionality as argued by the author in lines 586-593 of the paper. Generally, intentionality has been discussed in the literature using the framing of obstetric violence and several Latin American scholars have suggested that this framing was essential to introduce laws that would criminalise these types of actions. While it is true that fundal pressure or routine episiotomies may be part of health workers' medical training, clubbing these practices, as poor quality of care is contradictory according to the authors' own arguments stated earlier in the paper. The health workers have learnt this is good and appropriate care and therefore they use it. The framing of these arguments needs to be revisited to avoid contradictory arguments. While the literature review is adequate, it is not underpinned by an analytical framework that would help the reader situate mistreatment in the Indian context - for example, the authors find in the quantitative data that women who are SC/ST experience greater mistreatment. This has also been reinforced quantitatively in the work by Diamond-Smith et al. and qualitatively in the work on
Chattopadhyay et al (2017). Given that in the Indian context, both gender and caste (and class) intersect to create health inequities as well as vulnerability to mistreatment, this needs to be foregrounded in the paper.

Lines 604-632: Related to 1, the summary of the global literature also suggests that mistreatment is due to the difference in power between health providers and beneficiaries, a point that is not made explicit in the paper. The work of Jewkes et al. in the context of South Africa, as well as the work of Sriram et al. (2018) on the analysis of power in health systems, may be helpful here.

In the conclusion of the abstract the authors state the following: "The paper contributes to the literature by articulating new constructs of overtreatment and undertreatment that results in mistreatment of women in maternity facilities". This line is awkwardly written and needs to be rephrased. The abstract further states "There are five key implications of this study. First, a systematic and context-specific effort to measure mistreatment in public and private sector facilities in high burden states in India is required. Second, a training initiative to orient all maternity care personnel to the principles of respectful maternity care would be useful. Third, innovative mechanisms to improve accountability towards respectful maternity care are required. Fourth, participatory community and health system interventions to support respectful maternity care would be useful. Lastly, we note that there needs to be a long-term, sustained investment in health systems so that supportive and enabling work-environments are available to frontline health workers". Of these recommendations, I find that the authors have good reason to suggest #1. However, it is not clear whether a single training initiative would succeed in orienting care personnel to respectful maternity care. It has been well-established that not all women are equally or similarly mistreated during birth. Gender along with other aspects of social stratification such as caste/tribe/ethnicity, class, education etc. have a large role to play. In the context of health systems in India - for further discussion see Iyer, Sen and Ostlin (2008). Though the authors in several places use the term "socio-cultural context" there needs to be a deeper discussion of what constitutes the socio-cultural context within health systems that allow for such actions on the part of health workers against pregnant women in India? The third and fourth part of the implications find connections in the rest of the paper, though the question of accountability has not been discussed in the findings of the paper. The fifth is really crucial especially for front-line workers in the developing world, most of whom tend to be largely female and also generally not very privileged women. Also, many scholars have categorised mistreatment during childbirth as a specific kind of violence against women. The paper raises these issues at multiple points but it presents a more benign explanation of mistreatment than current scholarship suggests.

In the methodology section there are three main concerns:
The ways in which mistreatment has been enumerated appears to be based on typologies of mistreatment - for example shaving the perineal area, applying fundal pressure, denying birth companions, routine episiotomies or episiotomies with anaesthesia etc. However, it is not clear to the reader how repeated instances of mistreatment have been incorporated. If the median is based on typologies alone (as seems to be the case), then repeated instances against the same birthing mother which may cause greater harm also need to be incorporated into this indicators. The authors should think about how best to incorporate this information, if it was collected. If it was not collected, then the authors need to explain what is the rationale behind enumerating singular typologies of mistreatment, when repeated instances may indeed cause more harm.

Related to the above is the lack of weighting of types of mistreatment. Since the goal of the paper is to provide insight into the nature and context of mistreatment, the reader may expect that different types of mistreatment should be weighted differently. For example, episiotomies without analgesia where women are screaming in pain (as the comments indicate) can lead to both short-term and long-term harm including PTSD. Perhaps this needs to be given a greater weight than shaving the perineal area given that the harm though present is of a lesser degree. The authors can choose either a medical rationale for assigning weights based on the degree of harm done or some other rationale. Since the authors have collected both quantitative and qualitative data, this type of analysis would be possible and be a major contribution to enumerating mistreatment in a sophisticated manner. This kind of hierarchy would also help prioritise resources to best address health systems interventions in low-resource settings like public health facilities in India.

The role of the observers is an important one - the authors have mentioned that these are health workers. They have also mentioned that younger observers tended to take more detailed notes than older observers. It would be helpful to know how these observers were chosen and what kind of prior qualifications did they possess. Were these former government workers like Anganwadi or ANM or ASHAs? Or were they fresh social science graduates? Given the large numbers of sites where this study was conducted it would be important methodologically to spell out whether this was likely to have impacted the collection of the data.

5. Table 3 - in the list of themes and elucidation of actions, the framing of over-treatment, under treatment and disrespect and abuse needs some rethinking. For example, doing routine episiotomies may be overtreatment but should doing so without analgesia be classified as overtreatment? Bohren et al.’s work already catalogues different types of mistreatment. Would it not be helpful if the authors used that classification? And if there is a reason why they are not using these earlier developed classifications, it would be helpful to explain to the reader why this is the case.
Minor comments

It would be helpful to know why these specific 4 districts were chosen out of 75 districts in U.P.

Lines 89-90 - JSY has undergone some recent changes - the article should incorporate these in the edited version.

Lines 109-123- This paragraph should be made more concise. If the reader needs more information about the work work they can read the paper.

Line 153- Please specify on what basis U.P. is being classified as being most deprived? Is it the number of people who have BPL cards or some other indicator of deprivation?

The paragraph on fundal pressure would benefit from reviewing Iyengar et al's work (2008) in Rajasthan, also in North India. For example, Iyengar found that often relatives and others including male hospital attendants are invited to bear down upon the woman because nurses get tired from applying so much pressure. Was this the case also in this study?

The following sentence "Caste was only associated with episiotomy and women in the so-called "general caste" were found to have greater proportions of routine episiotomies (p=0.04) perhaps because they used public sector facilities more often" is a bit confusing. Wouldn't the general caste category women who tend to be less socioeconomically disadvantaged than the SC/ST group use private facilities more often than public facilities? If this wasn't the case, it needs to be made more explicit in the paper and the reason stated.

Qualified versus unqualified providers- The authors have categorised care by unqualified providers as a form of under-treatment using a rights-based argument that suggests that all women have a right to be treated by qualified personnel. However, this framing contradicts some of their own findings. For example, the authors write (lines 57-573) "Interestingly, we found that total mistreatment scores (mean) were higher for deliveries conducted by qualified attendants (4.9) as compared to unqualified attendants (4.8) which supports the notion of over-treatment by qualified personnel". If this is the case, then isn't it the case that harm that could come to women from mistreatment is not really substantially higher from unqualified versus qualified providers? The authors should rethink how to frame this interesting finding, reading against the grain.

Table 1 suggests that the only two statistically significant relationships are between mistreatment and time of admission and between mistreatment and, the type of facility. The latter has been explained more fully but the former has not been adequately elaborated. Could the authors explain why women who are admitted out of working hours, suffer less mistreatment? Is this related to fewer qualified personnel being present out of hours (a point that the authors have made earlier reporting that the score for mistreatment was lower with unqualified personnel)? Or is there some other reason?
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