# **PEER REVIEW HISTORY**

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Labor Room Violence in Uttar Pradesh, India: Evidence from
	Longitudinal Study of Pregnancy and Childbirth
AUTHORS	Goli, Srinivas; Ganguly, Dibyasree; Chakravorty, Swastika;
	Siddiqui, Mohammad; Ram, Harchand; Rammohan, Anu;
	Acharya, Sanghamitra

## **VERSION 1 – REVIEW**

REVIEWER	Sheena Currie Jhpiego, USA
REVIEW RETURNED	30-Jan-2019

GENERAL COMMENTS	<ul> <li>Generally well written and topical manuscript. Some editing of minor issues needed.</li> </ul>
	<ul> <li>Findings are clear though the issues merit deeper and broader</li> </ul>
	discussion – knowing the social context of care in India the drivers
	of mistreatment are beyond addressing 'medical ethics' to really
	look at provider values and behaviours.
	The term 'labour room violence' is controversial. It's not a known
	term in the broader work on mistreatment in childbirth and though
	there are discussions that any form of mistreatment in childbirth is
	a form of 'gender based violence' even in Bohren's 2015 review of
	mistreatment (The Mistreatment of Women during Childbirth in
	Health Facilities Globally: A Mixed-Methods Systematic Review
	PlosOne) the term 'abuse' is used. Using 'violence' may be taken
	very literally which is not the case with the classification used in
	this study. Suggest also review Bohren M et al 2018
	Methodological development of tools to measure how women are
	treated during facility-based childbirth in four countries: labor
	observation and community survey. BMC Medical Research
	Methodology (2018) 18:132 https://doi.org/10.1186/s12874-018-
	0603-x - on measurement issues.
	<ul> <li>Review reference # 6 which is actually from 2014 and has been</li> </ul>
	superseded by a lot more literature on the topic especially from
	WHO.
	Refs to delivery should include labor & suggest to use 'birth' and
	not delivery >overall standardise the terminology throughout
	manuscript
	Please replace 'mothers' with 'women'
	Line 51- birth with SBA does not equate to good Quality of Care.
	Suggest to reframe that the push for institutional birth has not been
	backed by Quality Improvement efforts (especially in India) and
	women often go to poor quality care – which is discussed pg 4
	• Pg 5 lines 15-17 needs reference
	Pg 10 line 'poor medical and public health ethics in health care
	delivery system' is insufficient explanation – what about
	The state of the s

	accountability; systems issues; gender inequality affecting both
	providers and women?
REVIEWER	Dr Thomas Gray
	Sheffield Teaching Hospitals NHS Foundation Trust
REVIEW RETURNED	22-Feb-2019
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GENERAL COMMENTS	This is a timely study. The design is good and the conclusions drawn are useful for practice. This topic is important and this paper is a valuable contribution to the growing body of literature on obstetric violence.
REVIEWER	Katarina Swahnberg Katarina Swahnberg, professor Health Sciences & Global Health Faculty of Health and Life Sciences Linnéuniversitetet Vita 391 82 Kalmar, Sweden
REVIEW RETURNED	05-Mar-2019
GENERAL COMMENTS	Dear Authors and Editor, Thank you for asking me to review your manuscript. I am so happy to see that you engage in this important work. It is very much needed and i look forward to see this publication. However, there are a few things that you need to address before that. I have put several comments in the attached file. Most importantly, I ask you to reconsidder the choise of multivariate statistical analyse and your interpretation of the same.
	- The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.

### **VERSION 1 – AUTHOR RESPONSE**

#### Reviewer 1

Generally, well written and topical manuscript. Some editing of minor issues needed. Findings are clear though the issues merit deeper and broader discussion – knowing the social context of care in India the drivers of mistreatment are beyond addressing 'medical ethics' to really look at provider values and behaviours.

Comment 1: The term 'labour room violence' is controversial. It's not a known term in the broader work on mistreatment in childbirth and though there are discussions that any form of mistreatment in childbirth is a form of 'gender-based violence' even in Bohren's 2015 review of mistreatment (The Mistreatment of Women during Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review PlosOne) the term 'abuse' is used. Using 'violence' may be taken very literally which is not the case with the classification used in this study. Suggest also review Bohren M et al 2018 Methodological development of tools to measure how women are treated during facility-based childbirth in four countries: labor observation and community survey. BMC Medical Research Methodology (2018) 18:132 https://doi.org/10.1186/s12874-018-0603-x - on measurement issues. Response: We realise that the term labour room violence has not been used previously in other studies; however, the term obstetric violence has been used sufficiently in previous literatures (Carvalho & Brito, 2017; Diaz, 2016; Vacaflor, 2016) which basically considers any occurrence of institutional violence against women during pregnancy, childbirth and postpartum period. Thus, following the same definition and since our question only regards the incidence of violence at the time of delivery or during childbirth, we defined and used the term 'labour room violence' as a subset of the

larger issue of obstetric violence. The term "Gender violence" may not be appropriate here as the risk factors is only for female not for male, as the latter is not exposed to the risk of pregnancy and childbirth and thus the term is not applicable to them.

Comment 2: Review reference # 6 which is actually from 2014 and has been superseded by a lot more literature on the topic especially from WHO.

Response: The suggestion is well taken and has been corrected with right reference in the revised manuscript.

Comment 3: Refs to delivery should include labor & suggest to use 'birth' and not delivery > overall standardise the terminology throughout manuscript.

Response: The suggestion is well taken and the necessary changes have been made in the revised manuscript.

Comment 4: Please replace 'mothers' with 'women'.

Response: The suggestion is well taken and 'mothers' have been replaced by 'women' in the revised manuscript.

Comment 5: Line 51- birth with SBA does not equate to good Quality of Care. Suggest to reframe that the push for institutional birth has not been backed by Quality Improvement efforts (especially in India) and women often go to poor quality care – which is discussed pg 4.

Response: In India, under NHM, the government of India has actively committed to ensure universal coverage of all births in the presence of skilled person. There have been nation-wide training programs to provide necessary skills and medical knowledge to individuals in each area. Thus, government organisations have actively endorsed SBA as a 'good' practice in wake of poor quality of health services and limited access to health services which are discussed later in the article. It might not be the best practice but in developing regions with low health care service coverage and utilisation, SBA has been largely promoted as the next best alternative.

Comment 6: Pg 5 lines 15-17 needs reference.

Response: The suggestion is well taken and appropriate reference has been cited in the revised manuscript.

Comment 7: Pg 10 line 'poor medical and public health ethics in health care delivery system' is insufficient explanation – what about accountability; systems issues; gender inequality affecting both providers and women?

Response: Suggestion is well taken and necessary changes have been made in the revised manuscript.

#### Reviewer 2

This is a timely study. The design is good and the conclusions drawn are useful for practice. This topic is important and this paper is a valuable contribution to the growing body of literature on obstetric violence.

#### Reviewer 3

Comment 1: May I suggest a more modest title.

The study is conducted in Uttar Pradesh. Can you generalize your findings to the whole India? Determinants indicates causality. I believe you study prevalence and associated factors.

Response: The suggestion is well taken and necessary changes have been made.

Comment 2: This author is not presented in 'Author contribution'

Response: Comment is well taken and the author's contribution has been added.

Comment 3: "towards achieving the target of less than 70 maternal deaths per 100,000 live births by 2030 would require significant improvements in the quality of delivery care." Worldwide??

Response: Yes, this is the goal for global countries.

Comment 4: I suggest that you follow the more detailed structure in the abstract, and add more detail. And add a section on ethics and safety.

Response: A statement for Ethical Approval and Consent is mentioned in the Abstract as well as the Ethical Approval section of the revised manuscript.

Comment 5: Why first and third wave? Have to be motivated.

Response: The first wave contained the information regarding the socio-economic characteristics of the respondent and the third wave provided information regarding whether the women faced any sort of mistreatment or abuse at the time of giving childbirth. This section is mentioned in the Methods section under Study design and Setting.

Comment 6: This is part of the procedure not the analysis (Referring to the Data Analysis Section). Response: The suggestion is well taken and the section has been renamed as Data collection and analysis.

Comment 7: "At the time of delivery, have the doctor/nurse/other health workers/staff of the hospital shouted/abused/hit you?? Move or Omit.

Response: We felt that it is important to mention the exact question so as to clarify that the data collected on violence was limited to only during the time of delivery and the forms of mistreatment that was considered and thus named as 'Labour Room Violence (LRV)'.

Comment 8: Prevalence and factors associated with labour room violence (N=xxx).

Response: The suggestion is well taken and the sentence has been appropriately re-written.

Comment 9: Referring to Table 1.

- Title: Prevalence and Factors associated with labour room violence (N=xxx)

Response: The suggestion is well taken and the title has been appropriately re-written.

- Move last column here, omit text No of Sample n is enough.

Response: The suggestion is well taken and the column has been moved.

- omit Lower Limit (LL) and Upper Limit (UL) in both tables. CI refers to prevalence, right? and should come in the column directly after the prevalence.

Response: The suggestion is well taken and the column has been moved.

- explain abbreviations in a Note below the table. The table should be possible to read independently from everything else.

Response: The abbreviations of variables have been explained in Appendix table 1.

- I think you need to explain this division, especially what general means

Response: The categorisation of variables have been explained in Appendix table 1.

- omit of the mother Education (years)

occupation also showed", who's mother?

0

1-8

9-

Response: The suggestion is well taken and necessary changes have been made in the revised manuscript.

- Omit age of mother Age (years), how young was the youngest/oldest?

xx-20

21-29

30-xx

Response: The suggestion is well taken and necessary changes have been made.

Comment 10: "Prevalence of LRV is higher for those whose mothers with no education (20%) compared to those whose mothers with few years of schooling. Furthermore, the variable partner's

Response: The suggestion is well taken and 'mothers' have been replaced by 'women'.

Comment 11: Primary/secondary and Tertiary activities has to be explained.

Response: The categorisation of variables has been explained in Appendix table 1.

Comment 12: "with women who have any mass media exposure facing less violence (12.7%)", replace with reported some mass media exposure.

Response: The suggestion is well taken and the sentence has been rephrased appropriately.

Comment 13: "mass media exposure is statistically significant and associated with the prevalence of LRV faced by women, after controlling for other confounders". Are you sure these are real confounders?

Response: The suggestion is well taken and the sentence has been rephrased appropriately.

### Comment 14: For Table 2

- Odds Ratio is meant for case-control studies. In any other design they can cause overestimated OR. There are more suitable regression models for you kind of study design.

Response: Since our response variable is dichotomous and the risk of exposure is limited to a certain group, after careful consideration and discussion with co-authors, we felt that expressing results in odds ratio would not only be appropriate for the given data but also enable us to relay our inferences regarding the important issue of LRV in India in simplistic terms.

- For categories please see table 1 and have a look if you can minimize the text in table further Response: The suggestion is well taken and necessary changes have been made.

Comment 15: Lam sorry but I cannot see how you interpret this table. For me only partners

Comment 15: I am sorry but I cannot see how you interpret this table. For me only partners occupation and Mass media exposure are statistically significant result i.e. not including 1 in the confidence interval.

Response: The categories for which odds ratio have a significant p values have been denoted by \*, it also denotes the level of significance (Refer to Notes, given below each table). Thus, the categories Muslim, General, Partners occupation as Tertiary/Quaternary and exposure to mass media are all significantly associated with the risk of facing LRV.

Comment 16: There are studies showing that abuse in Interesting! In other studies, abuse in health care is associated with higher education. This has been interpreted as a certain level of awareness and position is needed to recognize and identify abuse in health care.

Response: We agree with reviewer. Although, in case of LRV we found declining odds of LRV with increase in education, but it is not statistically significant in multivariate analyses.

Comment 17: This is not a very small study. You have over 5000 observations, right? But is it representative for the region? the country? South Asia? or What?

Response: The sample size of our study was 504 pregnant women from Uttar Pradesh. Since India is a vast country with significant differences in both social, economic and health structure, we believe that any further in-depth studies should be based on a larger sample for generalisation on a nation-wide basis. However, in wake of no prior evidence on any form of obstetric violence in India, this study which is based on Uttar Pradesh which is the largest and most populated state of India and is considered as a microcosm of India, findings may hold true on a nation-wide basis too.

Comment 18: What about the media role here?

Response: The women exposed to mass media are aware of the their entitlements and necessary procedures at the facility, thus, better prepared for the delivery, so there will be less conflict at the facility, while those who are not aware or exposed to process have to encounter greater problems thus depends more on the health workers which might get irritation and agitation from the later.

#### **VERSION 2 - REVIEW**

REVIEWER	Sheena M Currie
	Jhpiego, USA
REVIEW RETURNED	25-Apr-2019
GENERAL COMMENTS	Pg 5 - Prevalence of obstetric violence on women is a shockingly
	common phenomena for developing countries (>70% in Tanzania,
	Brazil) - NEEDS REFERENCES

## **VERSION 2 – AUTHOR RESPONSE**

## Reviewer 1

Comment 1: Please state any competing interests or state 'None declared': None declared

Response: None declared is already added in the manuscript. Please see the line no. 328.

Comment 2: Pg 5 - Prevalence of obstetric violence on women is a shockingly common phenomena for developing countries (>70% in Tanzania, Brazil) - NEEDS REFERENCES

Response: The suggestion is well accepted and necessary references are included in the revised manuscript. Please see the line no. 158.