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Labour room violence in Uttar Pradesh, India: evidence from longitudinal study of pregnancy and childbirth

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ABSTRACT

Objectives The major objective of this study was to investigate the prevalence of labour room violence (LRV) (one of the forms of obstetric violence) faced by the women during the time of delivery in Uttar Pradesh (UP) (the largest populous state of India which is also considered to be a microcosm of India). Furthermore, this study also analyses the association between prevalence of obstetric violence and socioeconomic characteristics of the respondents.

Design The study was longitudinal in design with the first visit to women made at the time of first trimester. The second visit was made at the time of second trimester and the last visit was made after the delivery. However, we have continuously tracked women over phone to keep record of developments and adverse consequences.

Settings Urban and rural areas of UP, India.

Participants Sample of 504 pregnant women was systematically selected from the Integrated Child Development Scheme Register of pregnant women.

Outcome We aimed to assess the levels and determinants of LRV using data collected from 504 pregnant women in a longitudinal survey conducted in UP, India. The dataset comprised three waves of survey from the inception of pregnancy to childbirth and postnatal care. Logistic regression model has been used to assess the association between prevalence of LRV faced by the women at the time of delivery and their background characteristics.

Result About 15.12% of women are facing LRV in UP, India. Results from logistic regression model (OR) show that LRV is higher among Muslim women (OR 1.8, 95% CI 0.7 to 4.3) relative to Hindu women (OR 1). The prevalence of LRV is higher among lower castes relative to general category, and is higher among those women who have no mass media exposure (OR 4.7, 95% CI 1.7 to 12.8) compared with those who have (OR 1).

Conclusion In comparison with global evidence, the level of LRV in India is high. Women from socially disadvantaged communities are facing higher LRV than their counterparts.

Strengths and limitations of this study

- For the first time, the study measures labour room violence (LRV) experienced by women in health facilities in India and factors associated with it.
- In comparison with global evidence, the level of LRV in India is high.
- Women from socially disadvantaged communities are facing higher LRV than their counterparts.
- The estimated LRV in the survey setting may be lower than actual because of under-reporting due to lack of awareness about forms of obstetric violence.
- However, in the absence of information on LRV in existing large-scale surveys, the contribution of this study is significant.

INTRODUCTION

One of the major targets of the Sustainable Development Goals (SDGs) is to reduce maternal mortality to 70 per 100 000 live births by 2030[1]. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality, but working towards achieving the target of <70 maternal deaths per 100 000 live births by 2030 would require significant improvements in the quality of delivery care. Skilled birth attendance (SBA) has been a cornerstone of international efforts to reduce maternal mortality and is often measured by the indicators such as institutional deliveries or deliveries with SBA. Recently, Unesco, in its Universal Declaration of Bioethics and Human Rights, declared that 'health does not depend solely on scientific and technological research developments, but also on psychosocial and cultural factors'.[2] Thus, a tacit effort has been made worldwide (including in India) to encourage institutional deliveries and SBA to ensure good quality of care during childbirth. Yet despite this, India still continues to contribute disproportionally to the global estimates of maternal morbidity and mortality. Globally, about 800 women die every day of preventable causes related to pregnancy and childbirth, 20% of these women are from India.[3] The figures for institutional deliveries (78.9) and SBA deliveries

(81.4) in 2015–16 are also much lower than 100% as envisioned by SDGs. India has also failed to meet the MDG targets related to institutional deliveries and SBA by 2015. There is increasing attention and wide recognition that many women are deterred from facility-based delivery because the intrapartum care provided in the facilities does not satisfy the interpersonal and emotional aspects of this biosocial event. Others believe that the differences in quality of intrapartum care, which arise from social, cultural and economic discrimination and exclusion, are important for maternal health outcomes.[4 5]

Poor quality of care includes disrespectful and abusive care, patient-blaming, purposeful neglect, verbal or physical abuse, disregard for traditional beliefs and the non-use of indigenous languages for patient communication.[6 7] This type of behaviour has been classified as obstetric/labour room violence (LRV).[8] Worldwide, many women experience disrespectful and abusive treatment during childbirth in facilities, although evidence is limited in low-income and middle-income countries like India. Furthermore, according to WHO reports 'such conduct not only violates the rights of women to respectful care, but can also threaten their rights to life, health, bodily integrity and freedom from discrimination'.[9] This statement invites greater action, dialogue, research and advocacy on this important public health and human rights problem, especially in terms of providing respectful maternity care. According to recent recommendation suggested by WHO, 'Respectful maternity care – which refers to care for and provided to all women in a manner that maintains their dignity, privacy and confidentiality, ensures freedom from harm and mistreatment and enables informed choice and continuous support during labour and childbirth'.[10]

LRV: global evidence

Prevalence of obstetric violence on women is a shockingly common phenomena for low-income and middle-income countries (>70% in Tanzania, Brazil).[11 12] Increasingly, a number of studies on obstetric violence have focused widely on defining the term obstetric violence and the mistreatment associated with it. This involves determining forms of obstetric violence, measurement of different forms of obstetric violence, identifying challenges to maternity care, the emergent of laws to combat this problem and identifying systematic failures at the health system level and providing health facility.[6 7 13–19] LRV is often associated with adverse effects on pregnancy outcome. For instance, LRV may lead to issues such as maternal postpartum depression and post-traumatic stress disorders, particularly if the abuse is extreme. It is the most cited reason in Latin American countries for women to not return to health facilities for subsequent pregnancies, which consequently leads to an increase in maternal and child mortality and morbidities. A body of research mainly concentrated in Latin America and Europe specifically discusses obstetric violence, its determinants and forms.[13 20–24] However, it is critical to generate data relating to disrespectful and abusive care practices over the pregnancy period and at the time of childbirth, particularly in low-income and middle-income countries such as India.

METHODS

Study design and setting

This study is based on a unique survey conducted under the project 'Understanding pregnancy nutrition and healthcare among women in rural and urban slums of Uttar Pradesh: a longitudinal study'. Data were collected during the period June 2016 to July 2017 from a systematically selected sample of 504 pregnant women from the Integrated Child Development Scheme (ICDS) Register of pregnant women in selected villages. The study adopted a two-stage sampling design for both urban and rural areas. In the first stage, Primary Sampling Units (PSUs) were selected from the chosen blocks in two districts of survey based on the number of pregnant women in the villages, where importance was given to villages with the largest number of pregnant women from diverse social groups. In the identified village, pregnant women were selected from the register, maintained by the Accredited Social Health Activist (the community health workers instituted by the Government of India's Ministry of Health and Family Welfare as part of the National Rural Health Mission and Anganwadi workers—appointed as functionaries to support health, education and rural development under ICDS of Ministry of Women and Child Development).

The sample size (n=504) is calculated using parameters such as the total number of pregnancies (n) obtained in each district through Annual Health Survey (2014) and Z values for getting the estimates representative at 95% CI and design effect at 2%. The sample is self-weighted where each woman has the equal chance of getting selected. This study used the information from the first and third wave of the above-mentioned longitudinal survey. We used the socioeconomic and demographic characteristics of women collected in the first wave and LRV information from the third wave which was conducted after childbirth for all 504 women.

Definitions

The definition and coding of both outcome and predictor variables are given in online supplementary appendix table 1.

Data collection and analysis

The interview schedule comprised structured questions in both in Hindi (local language) and English for the purpose of data collection. The respondents were asked the following question regarding labour room violence: "At the time of childbirth, have the doctor/nurse/other health workers/staff of the hospital shouted/abused/hit you?" We have used bivariate tables to analyse the prevalence of LRV with socioeconomic characteristics of the respondents. Furthermore, logistic regression models were performed to assess the association between incidence of LRV faced by women at the time of childbirth

Table 1 Bivariate analysis: prevalence and factors associated with labour room violence (LRV)

Background characteristics	n	LRV prevalence (%)	95% CI		X^2 value
			LL	UL	
Place of residence					
Rural	344	15.87	11.29	21.86	0.3779
Urban	160	19.11	11.28	30.53	
Religion					
Hindu	363	16.23	11.62	22.22	0.1341
Islam	141	18.18	10.47	29.70	
Social Group					
SC/ST	190	20.62	13.60	29.99	1.8627
OBC	227	15.18	9.58	23.21	
General	87	12.50	5.56	25.76	
Years of schooling of women					
0	183	20.0	12.87	29.74	1.1504
1–8	209	15.6	9.85	23.81	
9 and above	112	13.79	6.90	25.67	
Age of the women (years)					
Youngest–20	69	12.0	3.60	33.27	0.5610
21–29	368	17.62	12.83	23.71	
30–oldest	67	15.38	6.82	31.12	
Partner's occupation					
Primary/Secondary	330	20.12	14.69	26.91	4.0636*
Tertiary/Quaternary	174	10.23	5.34	18.71	
Any mass media exposure					
Yes	330	12.72	8.49	18.63	6.1235**
No	174	25.0	16.76	35.56	
Wealth index					
Poor	168	16.88	9.94	27.21	0.0063
Middle	168	16.84	10.49	25.93	
Rich	168	16.47	9.90	26.14	

*P<0.05, **P<0.01
LL, lower limit; OBC, Other Backward Class; SC, Scheduled Castes; ST, Scheduled Tribes; UL, upper limit.

and their background characteristics, which includes place of residence, religion, caste, years of schooling of the women, age of the women, partner's occupation, any mass media exposure and wealth index. The statistical analyses have been performed in STATA V.14.0 software.

Patient and public involvement

No patients were involved in the research design, and no patients were directly involved in the study.

RESULTS

Prevalence

Despite the known under-reporting of violence against women in India, about 15.12% of women reported LRV in our sample (table 1).

The prevalence of LRV is more pronounced in urban areas (19%) as relative to rural (16%). Similarly, the prevalence of LRV is more among Muslim (18%) as compared with Hindu (16%) women. Furthermore, there is significant variation in prevalence of LRV among different caste groups, that is, Scheduled Castes (SCs) (20.6%), Other Backward Class (OBC) (15.2%) and general category (12.5%). The educational status of the women also plays a significant role in determining the prevalence of LRV. Prevalence of LRV is higher for those women with no education (20%) compared with those women with few years of schooling. Furthermore, the variable partner's occupation also showed some variation in the prevalence of LRV. Specifically, LRV is more common among women whose husband is employed in primary/secondary activities (20.1%) compared with those involved in tertiary activities (10.2%). The wealth gradient is also important in assessing the prevalence of LRV. The most significant predictor of LRV is mass

Table 2 Logistic regression estimates: factors affecting labour room violence

	OR	95% CI LL	95% CI UL
Place of residence			
Urban	1		
Rural	1.126	0.464	2.732
Religion			
Hindu	1		
Islam	1.753*	0.722	4.255
Social Group			
SC/ST	1		
OBC	0.619	0.262	1.462
General	0.473*	0.149	1.504
Years of schooling of women			
0	1		
1–8	0.817	0.358	1.866
9 and above	0.661	0.217	2.016
Age of the women (years)			
Youngest–20	1		
21–29	1.303	0.345	4.923
30–oldest	0.970	0.197	4.782
Partner's occupation			
Primary/Secondary	1		
Tertiary/Quaternary	0.402**	0.169	0.959
Any mass media exposure			
Yes	1		
No	4.688***	1.713	12.831
Wealth index			
Poor	1		
Middle	0.923	0.356	2.395
Rich	0.654	0.165	2.598

*P<0.05, **p<0.01, ***p<0.001.
LL, lower limit; OBC, Other Backward Class; SC, Scheduled Castes; ST, Scheduled Tribes; UL, upper limit.

media exposure, with women who have some mass media exposure facing less violence (12.7%) as compared with women who have no mass media exposure (25%).

Correlates

Logistic regression model (table 2) shows that the variables like religion, caste, partner's occupation and mass media exposure are statistically significant and associated with the prevalence of LRV faced by women, after controlling for other correlates.

The odds of the occurrence of LRV is higher among Muslim women (OR 1.8, 95% CI 0.7 to 4.3) relative to Hindu women (OR 1). Among social groups, with reference to SCs (OR 1), the odds of occurrence of violence faced by women is half among general category (OR 0.5, 95% CI 0.1 to 1.5) and OBC (OR 0.6, 95% CI 0.3 to 1.5). In terms of partner's occupation, the odds of violence is less than half for women those partners were engaged in tertiary activities (OR 0.4, 95% CI 0.2 to 1) in comparison to primary/secondary activities (OR 1). The occurrence of violence for the women those who have no mass media exposure (OR 4.7, 95% CI 1.7 to 12.8) is about five times higher than those who have mass media exposure (OR 1).

DISCUSSION

Main findings of this study

Given the context of the WHO pledge that every woman has the right to the highest attainable standard of health which also includes the right to dignified, respectful healthcare. This paper, for the first time, empirically reports the occurrence of LRV and its socioeconomic correlates in India. The findings are important in the Indian context where healthcare delivery is dominated by the social hierarchies, and disadvantaged communities struggle to have a place in the health system and receive appropriate healthcare with dignity. Therefore, the findings of this study underpin the need to explore more on the issue of LRV with more in-depth and large-scale studies. Despite significant under-reporting of violence in India, the estimate of LRV in this study is high and varies according to the socioeconomic characteristics of the female respondent. Although caste, religion, place of residence and partner's occupation emerged as significant factors associated with LRV, it is the exposure to mass media which shows the highest disparity in the occurrence of LRV. Thus, it particularly highlights the importance of awareness and knowledge about reproductive rights and entitlements of women in the health system. This can play significant role in determining the rate of LRV.

Limitations of the study

Although the results of the survey indicate a high prevalence of LRV relative to studies from other high-income countries,[13] this study suffers from the issue of under-reporting due to lack of awareness about forms and nature of obstetric violence in the survey setting. Furthermore, as with other micro studies, the study suffers from the shortcoming of small sample size. However, in the absence of information on LRV in existing large-scale surveys, the contribution of this study is significant.

What is already known on this topic

In low-income and middle-income countries like India where maternal and child health indicators are far from satisfactory with poor medical and public health ethics in healthcare delivery system, coupled with other barriers such as gender and social inequality, lack of accountability by the service providers and health system inefficiencies, the high prevalence of LRV raises an important policy question. To date, the major concern for policy makers has been to increase the demand for healthcare services, so less attention is paid to the supply side barriers

including the quality of healthcare services and related ethical standards. Due to the lack of availability of data, in-depth studies on LRV are absent for India.

In India, given the hierarchical nature of the society, it is imperative to study the access to health facilities and women's experience of receiving healthcare with dignity within a socioeconomic framework. Studies based on experiences of Latin American women of indigenous origin insist that women from poor, indigenous or socially backward classes receive 'triple discrimination' that is, by being female, being an ethnic minority and of lower socioeconomic status.[19] Even in egalitarian European societies, women facing economic hardships and negative life events with the least social support have higher chance of experiencing LRV than their counterparts.[25 26]

What this study adds

Although obstetric violence on women has received increasing global attention, low-income and middle-income countries have yet to address deficiencies in this area. The Government of India has already implemented several policies and interventions aimed towards providing adequate maternal healthcare services to all. The quality of maternal healthcare services is one of the major components integral to the improvement of maternal and child health, a long neglected area for policy makers. With the emergence of various government interventions, the number of service providers has increased, but assuring quality and dignity in healthcare delivery remains a major concern. However, contemporary studies in India[27–29] with regard to maternal healthcare are mainly based on large population-level datasets focusing on availability and accessibility of maternal healthcare services. However, there is a research gap in the assessment of quality of those services and evaluating the nature of treatment provided by the healthcare workers, which is critically needed to improve public healthcare delivery system. Given this context, our study fills a critical knowledge gap by providing robust quantitative evidence on LRV experienced by pregnant women at health facilities. Issues such as LRV raise concerns on medical or hospital ethical standards in India and on the violation of the reproductive rights of women.

CONCLUSIONS

In comparison to global evidence, the level of LRV in India is high. Women from socially disadvantaged communities are facing higher LRV than their counterparts. For any further progress in pregnancy outcomes in India, policy makers should focus on the availability and accessibility of services, and on ensuring quality of care and dignity of the receivers. Countries such as India must improve its ethical standards in healthcare delivery where people from all sections of society, especially those from marginalised communities receive quality services with dignity.

Contributors SG and AR generated the idea for the survey and the paper, SG, MZS and HR prepared an analytical plan along with conducting all data analyses. DG and SC worked on drafting the paper. SG, DG and SC prepared the first draft of the manuscript on which AR and SSA provided critical comments after careful review.

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Competing interests None declared.

Patient consent for publication Not required.

Ethics approval The study was approved by expert body of Indian Council for Social Science Research. The pretesting and instrument were duly processed through Fatima Hospital, Dr Ram Manohar Lohia Institute of Medical Sciences and King George's Medical University. Furthermore, written and verbal consent was taken from respondents and guardians.

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Data sharing statement Data can be made available on reasonable request. For any further queries regarding data availability, kindly contact Dr Srinivas Goli, sirispeaks2u@gmail.com.

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