#### **ORIGINAL ARTICLE**





# Experiences and Felt Needs of Women During Childbirth in a Tertiary Care Center: a Hospital-Based Cross-Sectional Descriptive Study

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#### Abstract

**Background** Childbirth experience is unique to every woman. Negative experience is detrimental to both mother and child. This study was undertaken to understand the positive and negative experience and felt need of women undergoing labor and the factors affecting them.

**Methodology** This cross-sectional descriptive quantitative study was conducted among women who delivered in JIPMER and consented to participate through a questionnaire that captured four areas of childbirth experience. The study was carried out before the LaQshya guidelines were implemented.

**Results** Three hundred and seventy women completed the study. The mean age of women in this study was 24.5 years and 60% were primipara. Five women (1.3%) experienced physical abuse. Another 47 (12.7%) experienced disrespect in the form of scolding/insult/discrimination or nonconsented care. Three-fourths of the women wanted a relative (majority preferred their mother) with them, and 54% wanted a prayer hall in the labor room. On univariate analysis, no significant determinant was found for negative experience constituting disrespect and abuse. Complete pain relief as a need was found to be significantly higher (X2=11.0783, p < 0.004) in women of lower parity. The women educated beyond scholastic level felt that information given about delivery is inadequate when compared to participants who were illiterate or had primary education only. **Conclusions** In our hospital 12.7% women undergoing labor experienced disrespectful behavior and 1.3% experienced physical abuse. Need for prayer hall, complete pain relief and presence of relative was felt by more than half of the participants. We did not find any specific factor influencing the negative experience.

**Keywords** Intrapartum experience  $\cdot$  Labor experience  $\cdot$  Disrespectful and abusive behavior  $\cdot$  Labor pain  $\cdot$  Birthing experience

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#### Introduction

Childbirth experience is unique for every woman. Institutional deliveries are recommended to reduce maternal mortality [1, 2]. Negative experience is detrimental to both mother and child [3, 4] and may act as a hurdle in achieving institutional delivery for fear of negative experience [5].

It is important to study the experiences of women in labor in institutions to understand the burden of the problem as well as the factors affecting negative and positive experiences. This will help in achieving a respectful maternity care.

Thus, we undertook this study in our hospital. Our hospital is a tertiary care teaching hospital with low- and high-risk patients alike.



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We studied the experiences and the felt needs of women during labor and the factors associated with positive and negative experiences.

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## **Methods**

This is a hospital-based cross-sectional descriptive study. The study was approved by the Institute Ethics Committee (No. JIP/IEC/2019/0152). It was carried out at Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, during July and August 2019. This is a tertiary care teaching hospital of national importance and has about 1500 deliveries every month.

Study participants: These include women 18 years or above of age who have delivered normally in labor room at JIPMER during the study period.

Cases of eclampsia, women delivered by cesarean section, women who delivered still-births, women whose babies were admitted in Neonatal Intensive Care Unit (NICU) were excluded from the study.

Based on the published literature and WHO guidelines on "Respectful maternity care" [6], structured questionnaire was made and used to capture four areas of child birth experience including intranatal sense of security, experience of labor pain, family support, obstetric care and support and felt needs during labor. The questionnaire was filled up by open interview. The questionnaire was pilot tested among ten women in local language, and linguistic validation was done. After the study was approved by institutional ethics committee, women fulfilling selection criteria and consenting to participate were enrolled.

With an expected percentage of women who faced any negative experience as 19% [7] and alpha error 5% and for an 80% power, the sample size needed was 370. We followed systematic random sampling. From the list of all eligible women delivered previous day, every fifth woman was approached. The interview was between 24 and 72 h after childbirth. The participant of the study was asked questions like demographic details such as age, educational status, occupation, income, distance between residence and nearest healthcare center, obstetric history and their experience of childbirth.

Data were entered in EpiData Manager software. Sociodemographic data such as age, education, occupation and socioeconomic status were taken as nominal variables and expressed in terms of frequency and percentage. Each of the positive and negative experience was summarized separately as proportions. Similarly, "felt needs" were expressed as percentages. Univariate analysis for factors affecting positive and negative experiences was carried



A total of 3280 women delivered in the study period. One thousand three hundred and forty-seven women were excluded (as shown in flowchart in Fig. 1). A total of 387 women were approached (every fifth woman), and 370 women completed the study. The response rate was 96%.

out. All analysis was performed in Stata software version

Demographic characteristics of the study population are shown in Table 1. The mean age of the study population was 24.6 years. Around 60% ( $n\!=\!219$ ) of the women in the study group were primipara. Majority had higher secondary level or above level education. Nearly half of the study population belonged to upper middle class. Among those who had a previous delivery ( $N\!=\!151$ ), majority had a previous vaginal delivery  $n\!=\!124$  (82.12%) and 96(63.58%) had previous delivery in JIPMER. Majority of the cohort studied had received antenatal care at JIPMER.

Five patients (1.3%) experienced physical abuse. It was in the form of pinching in three and slap on the thigh in two. Another 47 (12.7%) experienced disrespect in the form of scolding/insult/discrimination or nonconsented care (Table 2). To quote a few examples: "stop screaming. You know this will hurt and why did u come with a third baby?" "You didn't think of this when you were with your husband. ""Why you want caesarean? Why you came with a baby if you can't tolerate this?"

Sixteen among these 52 women had more than one type of negative experience.

Only 5.6% (n=21) of mothers were aware of labor preparedness, breathing exercises, etc.; 98% were happy with

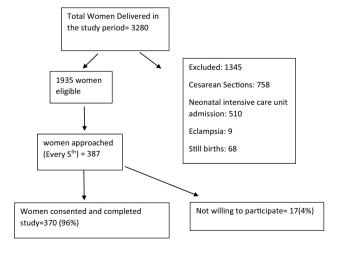


Fig. 1 Flowchart showing recruitment of study population



**Table 1** Clinical and demographic characteristics of the study population

S. No.	Parameter	value	Frequency number (%)
1	Age (years)	19–25	238 (64.32)
		26–30	103 (27.84)
		31–35	25 (6.76)
		>35	4 (1.08)
2	Parity	1	219 (59.2)
		2	118 (31.9)
		>2	33 (8.9)
3	Socioeconomic status	Lower class	17 (4.59)
		Lower middle class	187 (50.54)
		Upper lower class	97 (26.22)
		Upper middle class	69 (18.65)
		Upper class	0 (0)
5	Education	Illiterate	12 (3.24)
		Primary	10 (2.7)
		Middle and high school	82 (22.16)
		Higher secondary	100 (27.03)
		Graduates and above	166 (44.86)
6	Mode of previous delivery $(n=151)$	Vaginal	124 (82.1%)
		Cesarean section	25 (16.55%)
		Instrumental	2 (1.32%)
7	Place of previous delivery $(n=151)$	JIPMER	96 (64%)
		PHC	2 (1%)
		Private hospital	15 (10%)
		Government hospital	38 (25%)

**Table 2** Experience of care during labor

Experience of care during labor $(N=370)$	Response	
	No (%)	Yes (%)
Adequate care and support from nurses?	18 (4.86)	352 (95.14)
Satisfied with the information given about delivery?	13 (3.51)	357 (96.49
Had role in decision making?	29 (7.84)	341 (92.16)
Did somebody respond to your call?	9 (2.43)	361 (97.57)
Abandonment of care during delivery?	306 (83%)	64 (17%)

the cleanliness of labor room and felt that their nourishment requirement was attended to.

As shown in Table 3, 2% felt that they were not attended to when they wanted and 17% felt they were alone at some point of time in labor. Forty-five women (12.16%) felt breach of privacy. Majority (96.5%) were satisfied by the information given at labor and the support from the doctors and nurses. About 8% felt that they had no role in decision making during labor.

On exploring the need perspective, we found that 68% would have opted for complete pain relief if available. Three-fourths of the women wanted a relative (majority preferred their mother) with them, and 54% wanted a prayer hall in the labor room. Only 13% expressed the facility of music, or 10% wanted provision of television.

Factors Affecting Negative experience: We did a univariate analysis of factors such as age, education, socioeconomic status of the woman, parity, place of previous deliveries, previous abortions, place of booking in the index pregnancy, number of antenatal visits in our hospital, duration of admission before labor, any known to staff working in the hospital that could affect the occurrence of negative experience. On univariate analysis, no significant determinant was found for negative experience constituting disrespect and abuse. On analyzing the needs, complete pain relief as a need was found to be significantly higher (X2 = 11.0783, p < 0.004) in women with lower parity (parity 1 or 2 in comparison with parity 3 or above). It is found that participants who were a graduate or above felt that information given about delivery is inadequate



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Table 3 Details of experience of disrespect and abuse among the 52 women

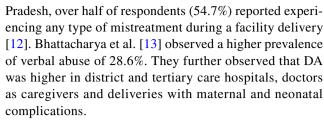
Parameters	Yes. <i>N</i> =52	Percentage of total study population (%)
Nonconsented care	1	0.27
Nondignified care		
Doctor	13	3.5
Nurse	7	1.8
Ancillary	2	0.5
Felt discriminated	4	1
Physical abuse		
Doctor	1	0.27
Nurse	3	0.81
Ancillary	1	0.27
Insulted	4	1
Scolded	12	3.2

when compared to participants who are illiterate or had primary education. Participants belonging to upper middle class were significantly more desirous of communicating to relatives (X2 = 18.7132, p < 0.001).

## **Discussion**

Three hundred seventy women who had a normal vaginal delivery completed our study. Overall, the proportion of negative experience of feeling insulted or scolded or physical abuse [disrespectful and abusive behavior as defined by Freeman 8] was 13.7%, out of which physical abuse was experienced by five (1.3%) women. Disrespect and abuse (DA) in the labor rooms are a global problem. In a recently published study from Ethiopia [7], among the 379 women interviewed, the authors found high rates (72%) of mistreatment with physical abuse in 2% and verbal abuse in 8%. The authors further found that multiparity and high-turnover centers had higher prevalence of mistreatment. Very high rates of at least one form of disrespectful behavior of 98% were reported from a study in Nigeria [9], and 20% was reported from Kenya [10]. In a multicenter study, 11% of women in the rural Kenya, 18% in urban Kenya, 12% in Ghana and 18% in India reported verbal abuse at least once during their time at the facility, but less than 5% across all groups reported any physical abuse. These authors further observed that in India, employed, wealthier, college-educated women and those delivering in health centers reported a higher patient-centered maternity care (PCMC) score than did unemployed, poorer women, those who delivered in hospitals. [11].

Many studies from India have reported about disrespect and abuse in labor room. In a mixed methods study in Uttar



In a longitudinal study from Uttar Pradesh in India, 15.12% of women were found to be facing abuse in labor rooms. The authors found that it was higher among Muslim women relative to Hindu women, lower castes relative to general category and among those women who have no mass media exposure. [14].

In a study done in Aligarh, North India, 84.3% of 305 women reported some form of disrespect and abuse. The most frequent was nonconsented and nonconfidential care. Abandonment/neglect during childbirth was reported by 10.2% women, nondignified care by 9.2%, physical abuse by 5.9%. The authors observed that women who had undergone vaginal birth, delivery at public health facility, given care by providers other than doctors and those who belonged to low socioeconomic status and who did not decide place of delivery themselves were more at risk of DA [15].

Most of these studies are from the north of India. A study from two hospitals of Mumbai also reported that DA are frequent in labor rooms. [16].

Care and support from trusted family members is valued by women and is associated with positive experience [17]. In the Cochrane review of 26 trials involving 15,858 women, the authors concluded that continuous one-on-one support improves vaginal birth rate and reduces negative experience and use of analgesia [18.] Extreme physical discomfort and pain can cause negative birth experience. Birth preparedness classes and teaching sessions on breathing exercises have been found to reduce the perceived pain and improve birth experience [19, 20]. Pain acceptance leads to reduction in likelihood of pain medication use, which was found in the study carried out by Christiaens et al. [21]. In our labor room, every woman receives pain relief with narcotic analgesics but 68% expressed they would opt for complete pain relief if available. We found that higher parity is significantly associated with lower need for pain relief.

We conducted this study before implementing the government of India initiative of LaQshya Guidelines. [22]. LaQshya guidelines are a Government of India initiative to improve the quality of care in labor rooms and include guidelines to provide privacy, birth companion, comfortable position of her choice, use of clinical protocols, labor beds in place of tables, avoiding unnecessary augmentation and induction of labor, placing the baby on mothers abdomen at birth and initiating breast-feeding within half hour of birth. Birth companion during labor has been perceived as a need by 74.59% of women in our study. Following this study and



the LaQshya Guidelines from the government, we have now started allowing a birth companion as per the patients' preference. We have a public health nurse who gives the birth companion orientation and the standard operating protocols for them. Alternate pain relief method like birthing ball [23] has been now introduced in our labor room. In our study, even though only 2% complained of not being attended to by anybody when they called, 17% felt they were left alone at some point of time in labor. Our hospital is also a large tertiary care referral center with nearly 50-60 deliveries a day. The doctor/nurse patient ratio remains poor, and at times when complications occur in a patient, the attention gets focused on that patient and others might feel abandoned. There were few incidences of scolding and physical abuse in our labor room. We could not find a factor associated with DA. We recommend more studies to explore the factors and the interventions to reduce these misbehaviors by caregivers.

The need for prayer hall, music and television was expressed by 54%, 13% and 10% of women, respectively.

The government of India recommendation of Labor delivery recovery units (LDR) [24] for every district should consider these facilities to be provided for improving the positive birth experience.

#### **Conclusion**

Physical abuse was experienced by 1.3% of women. Disrespectful behavior was experienced by 12.7%. We did not find any specific factor influencing the negative experience. Low parity had a significant association with felt need for complete pain relief, and higher education had a significant influence on felt need for more information on labor and childbirth. Need for prayer hall, complete pain relief and presence of relative was felt by more than half of the participants.

## Recommendation

Based on our own study and the government's LaQshya guidelines on respectful maternity care, we recommend birth companion for all, birth preparedness classes for all in the antenatal clinics, alternate pain relief strategies to make birth experience a positive experience. Recruitment of more nurses or midwives for improving the patient to caregiver ratio will further improve the birth experience by reducing abandonment of care.

## Strengths

The strength of our study is that it is representative of a tertiary care postgraduate teaching government hospital with free service with a heavy turnover and delivery rates of 1500–1800 per month. The deliveries are done by the trainee resident doctors.

By systematic random sampling, we have reduced the selection bias.

#### Limitation

The population we have studied has only 6% of patients with less than primary-level scholastic education. So, it may not be applicable to states with higher levels of illiteracy. Our study has explored the experiences within 48 h of delivery. Follow-up study about the experience after 6 weeks or 3 months would give a true birth experience that can affect the future experiences.

Authors' Contribution GD was involved in project development, interpretation and analysis and also in manuscript writing and review and approval. VG was involved in data collection, analysis and interpretation and also in manuscript review and approval. PC supported data analysis, manuscript review and amendment and approval. SB contributed to project development, manuscript review and approval.

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## **Compliance with Ethical Standards**

Conflict of interest None of the authors have any conflict to declare.

**Ethical Statement** The study was approved by the Institute Ethics Board. No. JIP/IEC/2019/0152.

**Informed Consent** Informed consent was obtained from all the participants.

**Study Design** This is a cross-sectional descriptive quantitative study involving humans.

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