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BIRTH EXPERIENCE IN FIRST-TIME MOTHERS

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Abstract

Objective: *To determine the frequency of negative birth experience among first-time mothers and assess factors associated with an unfavorable childbirth experience.*

Methodology: *A cross-sectional study was conducted among 255 first-time mothers (Nov 2024 to April 2025). Sociodemographic characteristics, antenatal care, pregnancy-related factors, labour characteristics, mode of delivery, obstetric interventions, childbirth education, birth companionship, and maternal and neonatal outcomes were assessed. Birth experience was categorized as negative or non-negative using the study-defined birth experience assessment.*

Results: *Among 255 first-time mothers, 54 (21.2%) reported a negative birth experience, whereas 201 (78.8%) reported a non-negative experience. Negative birth experience was significantly more frequent among women undergoing cesarean delivery than vaginal delivery (48.5% vs. 3.2%, p<0.001). Labour augmentation was also significantly associated with negative experience (35.7% vs. 12.1%, p<0.001). Women with negative experiences had a longer mean labour duration than those with non-negative experiences (10.05 ± 4.54 vs. 8.19 ± 3.89 hours, p=0.007). Childbirth education was associated with a lower frequency of negative experience (8.2% vs. 24.3%, p=0.022). In multivariable analysis, cesarean delivery and labour augmentation were independent predictors of negative birth experience, whereas childbirth education was protective.*

Conclusion: *Negative birth experience affected approximately one-fifth of first-time mothers. Cesarean delivery, labour augmentation and prolonged labour were important associated factors, while antenatal childbirth education appeared protective.*

INTRODUCTION

Childbirth is a major life event that can have a profound physical, emotional, and psychological impact on a woman. Although birth is generally considered a positive and anticipated experience, the way a woman perceives and remembers childbirth can vary considerably. Birth experience encompasses not only clinical outcomes but also a woman's feelings of safety, control, involvement in decision-making, communication with healthcare professionals, support received during labour, management of pain, and the extent to which her expectations were met. A positive birth experience may contribute to maternal confidence, satisfaction with maternity care, early bonding, breastfeeding, and psychological well-being,

whereas a negative experience may have consequences that extend beyond the immediate postpartum period.

First-time mothers may be particularly vulnerable to an unfavorable birth experience because childbirth is an unfamiliar event and expectations about labour and delivery are often formed through antenatal education, family experiences, social media, and communication with healthcare providers. Uncertainty about the process of labour, fear of pain, fear for maternal or fetal safety, and limited knowledge about obstetric interventions may influence how women interpret events during childbirth. In addition, unexpected changes in the planned course of labour, emergency interventions, operative delivery, prolonged labour, or inadequate emotional support may contribute to dissatisfaction or a perception that the birth was negative. Therefore, assessment of childbirth experience among primiparous women is important for identifying areas of maternity care that can be improved.

The concept of birth experience is multidimensional and cannot be adequately assessed by maternal or neonatal morbidity alone. Two women with similar clinical outcomes may perceive their births very differently depending on the degree of participation, respect, support, communication, and perceived safety they experienced. Validated instruments have consequently been developed to measure childbirth experience in a structured manner. The Childbirth Experience Questionnaire (CEQ) is one such instrument and evaluates several important dimensions of childbirth experience, including women's own capacity, professional support, perceived safety, and participation or control. Use of a validated questionnaire allows the subjective experience of childbirth to be transformed into a reproducible outcome that can be analyzed quantitatively.

Negative birth experience is clinically relevant because an unfavorable perception of childbirth may influence subsequent maternal psychological well-being and future reproductive decisions. Women who perceive their childbirth as traumatic or negative may experience persistent fear, reduced confidence in maternity services, difficulty adapting to motherhood, or reluctance toward a future pregnancy. The consequences may also affect the woman's relationship with healthcare providers and her willingness to seek appropriate care in subsequent pregnancies. Identification of women with negative birth experiences therefore provides an opportunity for maternity services to review communication, labour support, pain management, informed consent, and shared decision-making practices.

The available literature indicates that negative birth experience is not uncommon, although its reported frequency varies substantially according to the population studied, the timing of assessment, and the instrument and threshold used to define a negative experience. Bagherinia et al. conducted a systematic review and meta-analysis and reported an overall pooled prevalence of negative birth experience of 16%, while the pooled prevalence among primiparous women was approximately 21%. The authors also highlighted substantial heterogeneity between studies, emphasizing that the measurement method and definition of negative birth experience can influence reported estimates. This finding is particularly relevant when designing a study focused specifically on first-time mothers.[1]

The experience of childbirth is also influenced by several potentially modifiable obstetric and interpersonal factors. Mode of delivery, induction or augmentation of labour, prolonged labour, analgesia, perineal trauma, operative interventions, maternal or neonatal complications, and the presence or absence of a supportive birth companion may all affect women's perceptions. Likewise, respectful communication and involvement in decisions may mitigate the adverse emotional effects of difficult labour. Evaluating these factors alongside the primary outcome can help identify groups of women who are more likely to report a negative birth experience and may guide targeted improvements in obstetric care.

Despite increasing recognition of respectful and woman-centered maternity care, local evidence regarding the frequency of negative birth experience among first-time mothers remains limited in many healthcare settings. Cultural expectations, family involvement, availability of pain relief, staffing patterns, institutional practices, and access to antenatal childbirth education may influence women's perceptions and may differ between

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healthcare systems. Local assessment is therefore necessary rather than relying exclusively on prevalence estimates from other populations.

This study will assess the birth experience of first-time mothers and determine the frequency of negative birth experience using a validated childbirth-experience assessment instrument. In addition to estimating the frequency of the primary outcome, the study will examine selected maternal and obstetric characteristics associated with negative birth experience. The findings may provide evidence for improving communication, emotional support, labour management, shared decision-making, and overall quality of maternity care. Ultimately, systematic assessment of women's experiences can complement conventional clinical indicators and contribute to more respectful, patient-centered childbirth services.

METHODOLOGY

A hospital-based descriptive cross-sectional study will be conducted to determine the frequency of negative birth experience among first-time mothers (primiparous women) following childbirth.

The study will be conducted in the Department of Obstetrics and Gynecology . The hospital is a tertiary-care healthcare facility providing obstetric services, including antenatal care, labour and delivery services, operative obstetric care, and postnatal care.

The study will be conducted over a period of 6 months (following approval of the study protocol and ethical clearance from the relevant institutional review committee.

The study population will comprise first-time mothers (primiparous women) who have delivered at the study hospital during the study period. For the purpose of this study, a first-time mother will be defined as a woman who has given birth for the first time, irrespective of the mode of delivery.

The sample size will be calculated using the single population proportion formula:

$n = Z^2pq / d^2$

Where: n = required sample size; Z = 1.96 at 95% confidence level; p = anticipated prevalence of negative birth experience = 21%; q = 1 − p = 79%; and d = margin of error = 5%.

The anticipated prevalence of 21% will be based on the systematic review and meta-analysis by Bagherinia et al., which reported a pooled prevalence of negative birth experience of 21% among primiparous women.[1] A consecutive sampling technique will be used. All eligible first-time mothers meeting the predefined inclusion criteria during the study period will be approached consecutively until the required sample size of 284 participants is achieved.

Women fulfilling all of the following criteria will be included: (1) first-time mothers (primiparous women); (2) women who have delivered a live singleton infant at the study hospital; (3) women who have undergone vaginal or cesarean delivery; (4) women who are clinically stable following childbirth; (5) women who are able to understand the study questionnaire; and (6) women who provide informed consent to participate.

Women will be excluded if they: (1) have a previous pregnancy reaching the stage of viability or a previous delivery; (2) have a stillbirth or neonatal death, if this is considered likely to substantially alter assessment of the birth experience; (3) have major postpartum complications requiring intensive care or emergency management at the time of assessment; (4) have significant cognitive, psychiatric, or communication difficulties preventing completion of the questionnaire; (5) decline participation or withdraw consent; or (6) have incomplete responses to the primary birth-experience assessment instrument.

After obtaining ethical approval and informed written consent, eligible women will be identified from the labour ward, operating theatre, and postnatal wards. The researcher will explain the purpose and procedure of the study to each eligible participant. Basic demographic and obstetric information will be obtained through a structured data collection proforma and, where appropriate, verified from the patient's medical record. The participants' birth experience will be assessed using a validated childbirth-experience questionnaire. The questionnaire will be administered after childbirth at a predefined postpartum assessment point, preferably before discharge or within the specified postpartum period according to the validated instrument used. Participants will complete the questionnaire privately, with assistance from the researcher only when

clarification of questionnaire instructions is required. The researcher will avoid influencing participants' responses. Information regarding mode of delivery, induction or augmentation of labour, duration of labour, use of analgesia, obstetric interventions, perineal trauma, and maternal or neonatal complications will also be recorded because these factors may influence women's perception of childbirth.

The primary outcome of the study will be the frequency of negative birth experience among first-time mothers. A validated childbirth-experience assessment instrument will be used to objectively assess women's perceptions of their childbirth experience. The Childbirth Experience Questionnaire (CEQ) or an appropriately validated version of the CEQ will be considered for this purpose. The questionnaire assesses important dimensions of childbirth experience, including women's own capacity, professional support, perceived safety, and participation/control. The questionnaire will be scored according to its published scoring system. A participant will be categorized as having a negative birth experience according to the validated cut-off specified for the selected instrument. The same cut-off will be applied consistently to all participants. The choice of assessment instrument and cut-off will be finalized before data collection because different studies use different instruments and thresholds to define negative childbirth experience. The systematic review by Bagherinia et al. found that the Childbirth Experience Questionnaire was among the most commonly used instruments in the included studies and also demonstrated substantial variation between studies in the reported prevalence of negative childbirth experience.[1]

The primary outcome variable will be negative birth experience (Yes/No). Secondary variables will include maternal age, gestational age, educational status, residence, employment status, socioeconomic status, antenatal care attendance, planned versus unplanned pregnancy, mode of delivery, induction of labour, augmentation of labour, duration of labour, labour analgesia, episiotomy, perineal tear, operative vaginal delivery where applicable, cesarean section indication, maternal complications, neonatal birth weight, neonatal complications, presence of a birth companion/support person, and previous antenatal childbirth education/preparation.

Operational Definitions

Negative birth experience will be defined according to the prespecified validated cut-off score of the selected childbirth-experience questionnaire. Participants whose total score falls within the validated range indicating an unfavorable or negative childbirth experience will be categorized as having a negative birth experience. The definition and scoring threshold will be specified in the final protocol based on the validated version of the questionnaire used in the study.

A standardized data collection proforma will be used. The questionnaire will be administered using uniform instructions to minimize interviewer-related bias. The researcher will review completed questionnaires on the same day to identify missing or inconsistent responses. Data will be entered into a computerized database and checked for completeness and accuracy before statistical analysis.

Data will be entered and analyzed using IBM SPSS Statistics version 26. Continuous variables such as maternal age, gestational age, and duration of labour will be assessed for distribution and presented as mean ± standard deviation or median with interquartile range, as appropriate. Categorical variables will be presented as frequencies and percentages. The primary outcome, frequency of negative birth experience, will be calculated as the proportion of participants classified as having a negative birth experience, together with its 95% confidence interval. For secondary analyses, the frequency of negative birth experience will be compared across relevant maternal and obstetric characteristics. The Chi-square test or Fisher's exact test will be used for categorical variables, as appropriate. For continuous variables, the independent-samples t-test or Mann–Whitney U test will be applied depending on data distribution. Potential factors associated with negative birth experience will initially be assessed using univariate analysis. Variables demonstrating a clinically relevant association or a p-value <0.20 in univariate analysis may be entered into a multivariable binary logistic

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regression model to identify independent factors associated with negative birth experience. Adjusted odds ratios (AORs) with 95% confidence intervals will be reported. A p-value <0.05 will be considered statistically significant.

The primary outcome of this study will be the frequency of negative birth experience among first-time mothers (primiparous women). The result will be expressed as: Number of primiparous women with negative birth experience / Total number of primiparous women assessed × 100. The expected prevalence used for sample-size estimation will be 21%, based on the systematic review and meta-analysis by Bagherinia et al.[1]

RESULTS

A total of 255 first-time mothers were included in the analysis. The mean age of the participants was 26.71 ± 5.23 years, with ages ranging from 18 to 35 years. The mean gestational age at delivery was 38.85 ± 1.37 weeks. The mean duration of labour was 8.59 ± 4.10 hours, while the mean birth weight was 3.08 ± 0.43 kg.

Among the participants, 156 (61.2%) were from urban areas and 99 (38.8%) were from rural areas. Most participants were housewives, accounting for 202 (79.2%), while 53 (20.8%) were employed. Regarding education, 85 (33.3%) participants were graduates, 65 (25.5%) had intermediate education, 54 (21.2%) had secondary education, 27 (10.6%) had primary education, and 24 (9.4%) had postgraduate education. A total of 191 (74.9%) pregnancies were planned, while 64 (25.1%) were unplanned. Adequate antenatal care, defined in the dataset as four or more visits, was reported in 165 (64.7%) women, whereas 90 (35.3%) had fewer than four. Vaginal delivery was recorded in 154 (60.4%) women, while 101 (39.6%) underwent cesarean delivery. Labour induction was performed in 86 (33.7%) participants and augmentation was documented in 98 (38.4%). Labour analgesia was used by 46 (18.0%) women. Among women for whom episiotomy was applicable, 80 (31.4% of the total sample) underwent episiotomy. A birth companion was present for 81 (31.8%) participants, whereas 174 (68.2%) did not have a birth companion. Only 49 (19.2%) women reported receiving antenatal childbirth education, while 206 (80.8%) did not report receiving childbirth education. Maternal complications were documented in 24 (9.4%) participants, while 231 (90.6%) had no recorded maternal complication. Neonatal complications were present in 34 (13.3%) newborns, whereas 221 (86.7%) had no neonatal complication. The mean birth weight was 3.08 ± 0.43 kg, ranging from 1.94 to 4.19 kg. The primary outcome of the study was the frequency of negative birth experience among first-time mothers. Of the 255 participants, 54 (21.2%) experienced a negative birth experience, while 201 (78.8%) reported a non-negative birth experience. Thus, the observed frequency of negative birth experience was 21.2%. The mean birth-experience score in the overall sample was 2.94 ± 0.67. Participants classified as having a negative birth experience had a substantially lower mean score compared with those classified as having a non-negative experience. The mean score among women with a negative birth experience was 1.87 ± 0.36 compared with 3.22 ± 0.37 among women with a non-negative birth experience (p<0.001).

Women with a negative birth experience were older on average than those with a non-negative birth experience. The mean age was 28.07 ± 4.75 years among women with a negative experience compared with 26.34 ± 5.31 years among those with a non-negative experience. This difference was statistically significant (p=0.023). Age-group analysis also demonstrated a statistically significant association with birth experience (p=0.010). Negative birth experience was observed in 11 (11.5%) women aged 18–24 years, 20 (29.9%) women aged 25–29 years, and 23 (25.0%) women aged ≥30 years. Education showed a borderline association with birth experience (p=0.059). Residence, employment status, number of antenatal visits, and pregnancy planning were not significantly associated with negative birth experience. A strong association was observed between mode of delivery and negative birth experience. Among women who underwent cesarean delivery, 49 (48.5%) had a negative birth experience compared with only 5 (3.2%) women who had vaginal delivery. Conversely, 149 (96.8%) women with vaginal delivery had a non-negative birth experience compared with 52 (51.5%) women who underwent cesarean delivery. This association was statistically

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highly significant (χ^2 test, $p<0.001$). Augmentation of labour was significantly associated with negative birth experience. Among women who underwent augmentation, 35 (35.7%) experienced a negative birth experience compared with 19 (12.1%) among those who did not undergo augmentation ($p<0.001$). Duration of labour was also significantly associated with birth experience. The mean labour duration was 10.05 ± 4.54 hours among women with a negative birth experience compared with 8.19 ± 3.89 hours among women with a non-negative experience ($p=0.007$).

When labour duration was categorized, negative birth experience occurred in 25 women with labour duration >12 hours compared with 28 women with labour duration ≤12 hours. The overall association between labour-duration category and birth experience was statistically significant ($p<0.001$). Induction of labour and use of labour analgesia were not statistically significantly associated with negative birth experience. A statistically significant association was observed between antenatal childbirth education and birth experience. Among women who received childbirth education, only 4 (8.2%) reported a negative birth experience, compared with 50 (24.3%) among women who did not receive childbirth education ($p=0.022$). Although women without a birth companion had a higher proportion of negative birth experiences than those with a companion, this difference was not statistically significant ($p=0.229$). Maternal complications were more frequent among women with a negative birth experience, occurring in 8 (14.8%) women compared with 16 (8.0%) women with a non-negative birth experience. However, the difference was not statistically significant ($p=0.204$). Neonatal complications were observed in 12 (22.2%) women with a negative birth experience compared with 22 (10.9%) women with a non-negative experience. This difference approached but did not reach statistical significance ($p=0.053$). Mean birth weight was 3.15 ± 0.46 kg among women with a negative experience compared with 3.06 ± 0.43 kg among women with a non-negative experience ($p=0.193$). Women with negative birth experience had a significantly higher mean age and longer mean labour duration than women with a non-negative experience. Gestational age and birth weight did not differ significantly between the two groups. Variables demonstrating potential association with negative birth experience were assessed using binary logistic regression. After adjustment, cesarean delivery, labour augmentation, childbirth education, and longer labour duration remained important predictors of negative birth experience. Cesarean delivery showed the strongest association, with women undergoing cesarean delivery having substantially higher odds of negative birth experience than those delivering vaginally (adjusted OR approximately 34.78, 95% CI approximately 11.63–103.95; $p<0.001$) Labour augmentation was also independently associated with negative birth experience (adjusted OR approximately 5.87, 95% CI approximately 2.43–14.18; $p<0.001$). Childbirth education was associated with lower odds of negative birth experience (adjusted OR approximately 0.16, 95% CI approximately 0.04–0.57; $p=0.005$). Each additional hour of labour was associated with increased odds of negative birth experience (adjusted OR approximately 1.18, 95% CI approximately 1.07–1.31; $p=0.002$).

In this simulated cohort of 255 first-time mothers, 21.2% experienced a negative birth experience. Negative birth experience was significantly associated with older maternal age, cesarean delivery, labour augmentation, longer labour duration, and absence of childbirth education.

The strongest crude association was observed with mode of delivery, with negative birth experience occurring in nearly half of women undergoing cesarean delivery compared with a small proportion of women having vaginal delivery. In multivariable analysis, cesarean delivery remained the strongest independent predictor of negative birth experience, followed by labour augmentation. Conversely, receipt of childbirth education was associated with substantially lower odds of a negative birth experience.

These results should be treated as simulated/example findings generated from the previously created dataset, rather than actual study results. The Excel file itself identifies the birth-experience score as synthetic/CEQ-like and the primary outcome as negative birth experience.

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Table 1: Baseline Characteristics and Bivariate Analysis with Birth Experience (N = 255)

Variable	Total n (%)	Negative Experience n (%)	Non-negative Experience n (%)	p-value
Overall Experience	255 (100.0)	54 (21.2)	201 (78.8)	—
Sociodemographic Factors				
Age group				0.010
18–24 years	96 (37.6)	11 (11.5)	85 (88.5)	
25–29 years	67 (26.3)	20 (29.9)	47 (70.1)	
$\ge$30 years	92 (36.1)	23 (25.0)	69 (75.0)	
Education				0.059
Primary	27 (10.6)	5 (18.5)	22 (81.5)	
Secondary	54 (21.2)	5 (9.3)	49 (90.7)	
Intermediate	65 (25.5)	16 (24.6)	49 (75.4)	
Graduate	85 (33.3)	19 (22.4)	66 (77.6)	
Postgraduate	24 (9.4)	9 (37.5)	15 (62.5)	
Residence				0.160
Urban	156 (61.2)	38 (24.4)	118 (75.6)	
Rural	99 (38.8)	16 (16.2)	83 (83.8)	
Employment				1.000
Employed	53 (20.8)	11 (20.8)	42 (79.2)	
Housewife	202 (79.2)	43 (21.3)	159 (78.7)	
Obstetric & Delivery Factors				
ANC visits				0.081
<4	90 (35.3)	25 (27.8)	65 (72.2)	
>4	165 (64.7)	29 (17.6)	136 (82.4)	
Pregnancy planned				0.297
Yes	191 (74.9)	37 (19.4)	154 (80.6)	
No	64 (25.1)	17 (26.6)	47 (73.4)	
Mode of delivery				<0.001
Vaginal	154 (60.4)	5 (3.2)	149 (96.8)	
Cesarean	101 (39.6)	49 (48.5)	52 (51.5)	
Induction of labour				0.676
Yes	86 (33.7)	20 (23.3)	66 (76.7)	
No	169 (66.3)	34 (20.1)	135 (79.9)	
Labour augmentation				<0.001
Yes	98 (38.4)	35 (35.7)	63 (64.3)	
No	157 (61.6)	19 (12.1)	138 (87.9)	
Labour analgesia				0.196
Yes	46 (18.0)	6 (13.0)	40 (87.0)	
No	209 (82.0)	48 (23.0)	161 (77.0)	
Support & Education				
Birth companion				0.229
Yes	81 (31.8)	13 (16.0)	68 (84.0)	

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No	174 (68.2)	41 (23.6)	133 (76.4)	
Childbirth education				0.022
Yes	49 (19.2)	4 (8.2)	45 (91.8)	
No	206 (80.8)	50 (24.3)	156 (75.7)	
Complications				
Maternal complication				0.204
Yes	24 (9.4)	8 (33.3)	16 (66.7)	
No	231 (90.6)	46 (19.9)	185 (80.1)	
Neonatal complication				0.053
Yes	34 (13.3)	12 (35.3)	22 (64.7)	
No	221 (86.7)	42 (19.0)	179 (81.0)	

Table 2: Continuous Variables by Birth Experience

Variable	Negative Experience (Mean ± SD)	Non-negative Experience (Mean ± SD)	p-value
Age (years)	28.07 ± 4.75	26.34 ± 5.31	0.023
Gestational age (weeks)	38.76 ± 1.23	38.87 ± 1.41	0.600
Labour duration (hours)	10.05 ± 4.54	8.19 ± 3.89	0.007
Birth weight (kg)	3.15 ± 0.46	3.06 ± 0.43	0.193
Birth-experience score	1.87 ± 0.36	3.22 ± 0.37	<0.001

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Table 3: Multivariable Logistic Regression for Factors Associated with Negative Birth Experience

Predictor	Adjusted OR	95% CI	p-value
Cesarean delivery	34.78	11.63–103.95	<0.001
Labour augmentation	5.87	2.43–14.18	<0.001
Labour duration, per hour	1.18	1.07–1.31	0.002
Childbirth education	0.16	0.04–0.57	0.005
Age, per year	1.08	1.00–1.18	0.053
Neonatal complication	1.77	0.61–5.14	0.295

DISCUSSION

The present study assessed the frequency of negative birth experience among first-time mothers and examined associated factors. Among 255 participants, 54 (21.2%) reported a negative birth experience, while 201 (78.8%) reported a non-negative

experience. Thus, approximately one in five first-time mothers experienced childbirth negatively. This finding is clinically important because childbirth experience is influenced not only by maternal and neonatal outcomes but also by perceived control, communication, support, preparedness, pain, interventions and mode of delivery. The observed frequency of 21.2% is comparable to the pooled prevalence reported by Bagherinia et al. among primiparous women.[1] However, comparisons should be interpreted cautiously because studies differ in their assessment tools, timing of evaluation and definitions of negative experience. Nevertheless, the similarity suggests that negative childbirth experience is a common concern among first-time mothers and should be considered an important outcome of maternity care Mode of delivery was the strongest factor associated with birth experience. Negative experience occurred in 49 (48.5%) women who underwent cesarean delivery compared with 5 (3.2%) women who had vaginal delivery ($p<0.001$). Cesarean delivery also remained the strongest predictor in multivariable analysis. This finding agrees with Carlhäll et al., who reported that cesarean delivery was associated with poorer perceptions of safety and personal capacity among first-time mothers.[6] Viirman et al. similarly identified operative vaginal delivery and unplanned cesarean section as important risk factors for negative childbirth experience.[7] The association between cesarean delivery and negative experience may be explained by several factors. First-time mothers may expect a vaginal birth and perceive an unexpected cesarean section as a loss of control or failure to achieve their birth plan. Emergency surgery may involve fear, rapid decision-making, separation from companions, postoperative pain and delayed recovery. Women may also feel excluded from decisions when urgent intervention is required. Therefore, the negative perception may result not only from surgery itself but also from the circumstances, communication and emotional support surrounding the procedure. Labour augmentation was also significantly associated with negative birth experience. Negative experience was reported by 35 (35.7%) women who underwent augmentation compared with 19 (12.1%) who did not ($p<0.001$), and augmentation remained independently associated after adjustment. This finding is consistent with Alòs-Pereñíguez et al., who reported that women often associated synthetic oxytocin with increased pain and negative childbirth experiences.[9] Inadequate explanation and insufficient informed consent were also identified as important concerns. Augmentation may increase contraction intensity, pain, monitoring requirements and feelings of reduced autonomy. Women who are not adequately informed may perceive augmentation as unexpected or imposed. These effects may be particularly important for first-time mothers, who may have limited knowledge of labour progression. Clear explanations regarding the indication, expected effects and available pain-relief options may improve acceptance and reduce anxiety. Involving women in decisions whenever clinically possible may also strengthen their sense of control. Longer labour duration was another significant factor. Women with a negative experience had a mean labour duration of 10.05 ± 4.54 hours compared with 8.19 ± 3.89 hours among those with a non-negative experience ($p=0.007$). Each additional hour of labour was associated with increased odds of negative experience. Carlhäll et al. reported similar findings, showing that prolonged labour was associated with substantially higher odds of negative childbirth experience among primiparous women.[6] Lukasse et al. also found that labour lasting more than 12 hours was associated with lower perceptions of personal capacity and safety.[10] Prolonged labour may cause exhaustion, pain, uncertainty and anxiety, while reducing the woman's perception of progress and control. Induction of labour was not significantly associated with negative birth experience. Negative experience occurred in 20 (23.3%) induced women compared with 34 (20.1%) women who were not induced ($p=0.676$). This differs from some previous studies that identified induction as a possible contributor to negative experience.[7],[11] The lack of significance may reflect the sample size or the possibility that induction affects experience indirectly through augmentation, prolonged labour or cesarean delivery. Thus, the effect of induction may depend on the woman's preparation, the indication, the duration of labour and the quality of communication. Antenatal childbirth education appeared to be protective. Only 4 (8.2%) women who

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received childbirth education reported a negative experience compared with 50 (24.3%) who did not (p=0.022). This association remained significant in multivariable analysis. Ghanbari-Homaie et al. emphasized antenatal education as an important strategy for improving childbirth experience among primiparous women.[12] Education may reduce fear of the unknown, promote realistic expectations, explain possible interventions and help women participate in decisions. Antenatal preparation should therefore include information about labour progression, pain management, augmentation, operative delivery and postpartum recovery. Women with a birth companion had fewer negative experiences than those without a companion, although the association was not statistically significant. Negative experience occurred in 16.0% of women with a companion compared with 23.6% without one (p=0.229). This trend suggests that emotional support may be beneficial, but the presence of a companion alone may not be sufficient. The quality of support, communication from healthcare professionals and the woman's involvement in decisions may be more important than companionship alone. Maternal and neonatal complications were not significantly associated with negative experience. However, negative experience was more frequent among women with complications, particularly neonatal complications, suggesting a possible clinical relationship that may not have reached statistical significance because of the small numbers. The effect of complications may depend on their severity, the woman's understanding of the event and the communication provided by staff. Larger studies with detailed classification of complications are needed. Older maternal age was associated with negative experience in the unadjusted analysis, but its effect became borderline after adjustment. This suggests that age may be influenced by other factors, particularly mode of delivery and labour characteristics. The mean birth-experience score was also lower among women classified as having a negative experience. Use of validated multidimensional tools is valuable because childbirth experience includes personal capacity, perceived safety, professional support and participation, rather than representing a single emotional response.

CONCLUSION

Women undergoing cesarean delivery should receive clear explanations, emotional support and opportunities to discuss the birth afterwards. Maternity services should provide structured antenatal education, respectful communication and continuous emotional support. Women should be informed before augmentation and, when possible, involved in decisions regarding interventions. Prolonged labour should be managed with attention to pain, fatigue, anxiety and information needs

REFERENCES

1. Bagherinia M, Haseli A, Bagherinia E, Mansouri N, Dolatian M, Mahmoodi Z. Prevalence of negative birth experience: a systematic review and meta-analysis. BMC Pregnancy Childbirth. 2025;25(1):157. doi:10.1186/s12884-025-07269-w.
2. Dencker A, Taft C, Bergqvist L, Lilja H, Berg M. Childbirth experience questionnaire (CEQ): development and evaluation of a multidimensional instrument. BMC Pregnancy Childbirth. 2010;10:81.
3. Nilsson C, Bondas T, Lundgren I. Previous birth experience in women with intense fear of childbirth. J Obstet Gynecol Neonatal Nurs. 2010;39(3):298-309.
4. Aune I, Torvik HM, Selboe ST, Skogheim G, Persen J, Dahlberg U. Promoting a normal birth and a positive birth experience—Norwegian women's perspectives. Midwifery. 2015;31(7):721-727.
5. Hollins Martin CJ, Martin CR. Development and psychometric properties of the Birth Satisfaction Scale-Revised (BSS-R). Midwifery. 2014;30(6):610-619.
6. Carlhäll S, Nelson M, Svenvik M, Axelsson D, Blomberg M. Maternal childbirth experience and time in labor: a population-based cohort study. Sci Rep. 2022;12(1):11930. doi:10.1038/s41598-022-14711-y.

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7.Viirman F, Hesselman S, Wikström AK, Skoog Svanberg A, Skalkidou A, Sundström Poromaa I, et al. Negative childbirth experience—what matters most? A register-based study of risk factors in three time periods during pregnancy. Sex Reprod Healthc. 2022;34:100779. doi:10.1016/j.srhc.2022.100779.
8. First-time mothers' experiences of a planned cesarean birth. [Study discussing fear, failure, lack of control and mistrust among first-time mothers undergoing planned cesarean birth].
9.Alòs-Pereñíguez S, O'Malley D, Daly D. Women's views and experiences of augmentation of labour with synthetic oxytocin infusion: a qualitative evidence synthesis. Midwifery. 2023;116:103512. doi:10.1016/j.midw.2022.103512.
10. Lukasse M, et al. Does prolonged labor affect the birth experience and subsequent wish for cesarean section among first-time mothers? A quantitative and qualitative analysis of a survey from Norway. BMC Pregnancy Childbirth. 2020. doi:10.1186/s12884-020-03196-0.
11. Place K, Adler K, Heinonen S, Kruit H, Rahkonen L. Childbirth experience in induced labor: a prospective study using a validated childbirth experience questionnaire (CEQ) with a focus on the first birth. PLoS One. 2022;17(10):e0274949. doi:10.1371/journal.pone.0274949.
12. Ghanbari-Homaie S, Meedya S, Mohammad-Alizadeh-Charandabi S, Jafarabadi MA, Mohammadi E, Mirghafourvand M. Recommendations for improving primiparous women's childbirth experience: results from a multiphase study in Iran. Reprod Health. 2021;18(1):146. doi:10.1186/s12978-021-01196-7.

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