



Original research article

Maternal satisfaction with childbirth in selected healthcare facilities in the Moravian-Silesian Region

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Abstract

Objectives: The aim of this article was to determine the level of maternal satisfaction with childbirth in selected healthcare facilities in the Moravian-Silesian Region and to analyze the relationships between childbirth satisfaction and selected sociodemographic and psychosocial factors, including mode of delivery, participation in antenatal education, and overall life satisfaction.

Methods: A cross-sectional quantitative study was conducted among 157 women in the early postpartum period. The Czech version of the Labor and Delivery Satisfaction Index (LADSI-CZ) and the Personal Wellbeing Index – Adult (PWI-CZ) were used for data collection. Descriptive statistics, Spearman's correlation coefficient, and the Kruskal–Wallis test were applied at a significance level of $\alpha = 0.05$.

Results: The overall level of childbirth satisfaction was high (mean LADSI score 1.6; SD = 0.69). A statistically significant but weak association was found between satisfaction and mode of delivery ($r = 0.182$; $p = 0.023$), and between childbirth satisfaction and overall life satisfaction ($r = -0.267$; $p = 0.001$). No significant relationships were observed between satisfaction and age, education, parity, marital status, or antenatal class attendance.

Conclusion: Women demonstrated a high level of satisfaction with their childbirth experience. The results suggest that subjective well-being and mode of delivery play an important role, while sociodemographic factors appear to be less influential. Enhancing psychosocial support, respectful communication, and individualized care during childbirth may further promote positive birth experiences.

Keywords: Childbirth experience; LADSI; Maternal satisfaction; Maternity care; Subjective well-being

Introduction

Satisfaction with childbirth is now regarded as a multifaceted measure of the quality of maternity care, encompassing not only medical outcomes but also the woman's subjective experience – a sense of control, respect for individual preferences, the quality of care provided, and support from both the partner and healthcare professionals (Chabbert et al., 2021; Nagy and Lafarge, 2023; Prosen and Ličen, 2025). The World Health Organization (WHO) emphasizes the importance of respect, continuous support, respectful communication, and minimizing unnecessary interventions. A positive birth experience is closely linked to empathy and a partnership approach, whereas loss of control, inadequate pain management, or feelings of marginalization can have negative consequences for maternal mental health (Shorey et al., 2023; WHO, 2014, 2016, 2018).

Research consistently demonstrates that childbirth satisfaction influences not only a woman's physical and psychological well-being, but also her bonding with her newborn and her future engagement with healthcare services (Prosen and Ličen, 2025; Ratislavová et al., 2024; Vega-Sanz et al., 2025).

Several key dimensions of women's childbirth experience have been described in recent research, including the course of labor (pain, complications, duration), the quality of medical and midwifery support, the clarity and completeness of information provided, the extent to which women participate in decision-making, and aspects of the physical birthing environment (Konieczka et al., 2024; Lochmannová and Martin, 2025).

Interpersonal factors – including women's personal expectations, the level of support provided, the quality of relationships with healthcare professionals, and their participation in decision-making – have been shown to be stronger predictors of satisfaction than demographic factors or medical interventions alone (Drandić et al., 2022; Goldkuhl et al., 2023).

Empirical studies also highlight the role of the birth environment, support systems, and cultural context in shaping the birth experience (Prosen and Ličen, 2025). The main predictors of satisfaction include the availability of professional support, the quality of information provided, the opportunity for early contact with the newborn, pain management, the extent of medical interventions, and the overall birth environment (Prosen and Ličen, 2025). Lower satisfaction has been asso-

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ciated with an increased risk of postpartum stress and symptoms of post-traumatic stress disorder (Swift et al., 2024).

To assess maternal satisfaction with childbirth, validated instruments are used to capture the multidimensional nature of the phenomenon. In the Czech context, the Labor and Delivery Satisfaction Index (LADSI-CZ) has been adapted to evaluate aspects ranging from quality of support and physical environment to the woman's participation in decision-making. In combination with the Czech version of the Personal Wellbeing Index – Adult (PWI-CZ-adult), it is possible to assess not only specific aspects of the childbirth experience but also their relationship with overall subjective well-being (Cummins et al., 2003; International Wellbeing Group, 2006).

Within the Czech healthcare context, assessing maternal satisfaction continues to serve as a key indicator of care quality. It serves not only as a tool for evaluation but also as a basis for improving clinical practice and the organization of maternity services. Regional data make it possible to better identify both strengths and areas for improvement in care, such as the availability of continuous support during labor, the provision of information, opportunities for shared decision-making, and the effectiveness of communication between women and healthcare professionals. These data also reflect the specific characteristics of local maternity services and cultural expectations of women. The results of this research can guide the creation of focused strategies to improve the quality of maternity care and support positive childbirth experiences (Prosen and Ličen, 2025; WHO, 2018).

Aim

The aim was to determine the level of maternal satisfaction with childbirth in selected healthcare facilities in the Moravian-Silesian Region.

Materials and methods

Study design

We adopted a cross-sectional survey design.

Setting and sample

We used a convenience sampling strategy to recruit participants.

The sample consisted of 157 women from selected healthcare facilities in the Moravian-Silesian Region. Inclusion criteria included being over 18 years of age, providing informed consent to participate in the study, and the ability to complete the questionnaire in Czech.

Data were collected through structured questionnaires distributed to mothers in the early postpartum period during their hospital stay. Participation was voluntary and anonymous.

After the training of midwives in the individual healthcare facilities, questionnaires were distributed to women upon obtaining their informed consent. The quantitative research was conducted between July and August 2024 using the Labor and Delivery Satisfaction Index (LADSI), a standardized questionnaire designed to assess overall maternal satisfaction with childbirth. The Personal Wellbeing Index – Adult was the second standardized questionnaire used to evaluate overall life satisfaction.

Instruments

The Labor and Delivery Satisfaction Index (LADSI)

The Labor and Delivery Satisfaction Index (LADSI) was developed by Lomas et al. (1987) and the Czech version of the

instrument (*Index spokojenosti s porodem*) was adapted by Kochánková and Jarošová in 2013. The questionnaire is designed to assess overall maternal satisfaction with childbirth and consists of 38 items: 21 positive and 17 negative statements. The negative statements (items 4, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 23, 27, 32, 33, 34, and 35) are reverse scored. Respondents answer on a 5-point Likert scale, where 1 = “strongly agree”, 2 = “somewhat agree”, 3 = “neutral”, 4 = “somewhat disagree”, and 5 = “strongly disagree”. The minimum value of 1 indicates the highest possible satisfaction, scores between 2 and 3 indicate general satisfaction, scores between 3 and 4 indicate general dissatisfaction, and a score of 5 represents maximum dissatisfaction. Lower overall scores indicate higher satisfaction (Lomas et al., 1987).

Personal Wellbeing Index – Adult (PWI-A)

The Personal Wellbeing Index – Adult was used to assess overall life satisfaction. The questionnaire was developed by Robert A. Cummins and the International Wellbeing Group (2006). In this study, we used the Czech version of the PWI-A, whose psychometric properties were validated by Gurková et al. (2012) in a sample of Czech and Slovak adults. Their study confirmed the structural validity, internal consistency, and applicability of the instrument in Czech-speaking populations.

The index contains a total of nine items covering different areas of life satisfaction. It begins with a general question: “How satisfied are you with your life as a whole?” followed by eight additional domains: standard of living, health, personal achievements, personal relationships, personal safety, community connectedness, and future security.

Responses are recorded on an 11-point Likert scale ranging from 0 to 10, where 0 represents “completely dissatisfied”, 5 is “neutral”, and 10 means “completely satisfied”. Results can be interpreted as raw scores or converted to percentages. A score of 100% represents the maximum level of subjective well-being. According to the International Wellbeing Group (2006), the average subjective well-being score in the general population is approximately 75%; higher values indicate above-average well-being, while lower values are associated with increased dissatisfaction, emotional instability, and a higher risk of depression (International Wellbeing Group, 2006).

Data analysis

The resulting data were processed using Microsoft Excel. Descriptive statistics were used for the basic description of the data. The variables were expressed using absolute (*N*) and relative (%) frequencies, mean, standard deviation (*SD*), median, minimum (*min.*), and maximum (*max.*). Two statistical tests were used to evaluate women's satisfaction with individual variables. One was Spearman's correlation coefficient (variables: intensity of labor pain, life satisfaction, education attained, age, satisfaction with personal relationships) and the other was Kruskal–Wallis's analysis of variance test (variables: method of delivery, completion of prenatal classes). The Shapiro–Wilk test was chosen to verify the normality of the data. All statistical tests were evaluated at a 5% level of statistical significance ($\alpha = 0.05$).

Results

Participant characteristics

The study sample consisted of 157 women with a mean age of 30.2 years. The largest group included women aged 25–34 years (70%), while 10% were aged 18–24 years and 20% were

35 years or older. Most participants had a university education (48%) and were married (59%).

Regarding mode of delivery, spontaneous cephalic birth predominated (80%), followed by caesarean section (13%), assisted delivery (4%), and spontaneous breech birth (3%). With respect to parity, 41% of respondents were primiparas, 43% were second-time mothers, and 16% had three or more births.

Antenatal classes were not attended by 71% of women, 20% completed the full course, and 9% participated partially. The majority of respondents (91%) rated pain intensity during childbirth as high (7–10 points on the VAS), with a mean score of 8.6. Sociodemographic characteristics are presented in Table 1.

Satisfaction with childbirth according to mode of delivery and antenatal class attendance

The mean score on the Labor and Delivery Satisfaction Index (LADSI) was 1.6 (SD = 0.69), indicating a high overall level of satisfaction with childbirth.

When comparing groups according to the mode of delivery, no statistically significant differences were found in LADSI scores ($p = 0.115$). Women who gave birth by spontaneous cephalic delivery reported slightly higher satisfaction (Mean = 1.68; SD = 0.74) compared to women with spontaneous breech (Mean = 1.50; SD = 0.50), assisted delivery (Mean = 1.70; SD = 0.69), and caesarean section (Mean = 1.70; SD = 0.70). Although there were visible differences between the groups, these were not statistically significant (Table 2).

Regarding antenatal class attendance, no significant differences in LADSI scores were observed between groups ($p = 0.314$). The highest mean satisfaction scores were found in the group that attended the full program of antenatal classes (Mean = 1.71; SD = 0.77), while the lowest mean was recorded in the partial attendance group (Mean = 1.41; SD = 0.52). Women who sought information independently or did not participate in antenatal classes reported similar levels of satisfaction. These results suggest that antenatal class attendance did not significantly influence satisfaction with childbirth experience (Table 3).

Table 1. Sociodemographic characteristics of women (N = 157)

Variable and Category	n	%
Age (years)		
18–24	15	10
25–29	52	33
30–34	59	37
≥35	31	20
Education		
Basic	7	4
Apprenticed	20	13
High school	55	35
University	75	48
Marital status		
Single	57	36
Married	92	59
Divorced	8	5
Mode of delivery		
Spontaneous cephalic	125	80
Spontaneous breech	5	3
Assisted	7	4
Caesarean section	20	13
Parity		
First birth	65	41
Second birth	68	43
Third or more	24	16
Antenatal class		
Full program	32	20
Partial	14	9
None	111	71
Pain intensity (VAS)		
1–4	6	4
5–6	8	5
7–10	143	91
Mean VAS score	8.6	

Table 2. LADSI according to mode of delivery

Mode of delivery	n	Mean LADSI	SD	Median	Range	p-value
Spontaneous cephalic	125	1.68	0.74	1.45	1.0–4.5	0.115
Spontaneous breech	5	1.50	0.50	1.40	1.1–2.3	
Assisted	7	1.70	0.69	1.50	1.3–3.1	
Caesarean section	20	1.70	0.70	1.50	1.0–4.9	

Table 3. LADSI according to antenatal class attendance

Group	n	Mean	SD	Median	Range	p-value
Full program	32	1.71	0.77	1.45	1.0–4.5	0.314
Partial	14	1.41	0.52	1.20	1.0–2.8	
No – information seeking	97	1.54	0.68	1.30	1.0–4.9	
No	14	1.51	0.57	1.30	1.0–2.8	

Correlation between satisfaction with childbirth (LADSI) and selected factors

Spearman's correlation analysis showed that satisfaction with childbirth (LADSI) is associated with some of the factors studied. The results indicate a weak positive correlation between the mode of delivery and satisfaction with childbirth

($r = 0.182$; $p = 0.023$), which was statistically significant. This result suggests that a certain mode of delivery may be associated with higher satisfaction among mothers.

Furthermore, a weak negative correlation was found between overall satisfaction (PWI) and satisfaction with childbirth (LADSI) ($r = -0.267$; $p = 0.001$), which was also statistical-

ly significant. Higher overall satisfaction was thus associated with lower LADSI scores, which may reflect complex relationships between personal well-being and perceptions of the birth experience.

The other variables examined did not show statistically significant correlations with satisfaction with childbirth. These results show that while some factors, such as mode of delivery and overall satisfaction, may play a role in the subjective assessment of the childbirth experience, most demographic variables do not show a statistically significant relationship with the level of satisfaction (Table 4).

Table 4. Correlation between satisfaction with childbirth (LADSI) and selected factors

Variable	Spearman <i>r</i>	<i>p</i> -value
Marital status	-0.111	0.166
Mode of delivery	0.182	0.023
Antenatal class attendance	-0.076	0.342
Parity	-0.108	0.176
Age	-0.054	0.499
Education	-0.059	0.466
Pain (VAS)	-0.091	0.256
Overall satisfaction (PWI)	-0.267	0.001

Discussion

Childbirth is a transformative and multidimensional life event. The way women perceive and evaluate their birth experience has profound implications – not only for their immediate postpartum well-being – but also for their long-term mental health, future reproductive decisions and attitudes toward maternity care (Bohren et al., 2025; Prosen and Ličen, 2025). The results of this study add to the expanding evidence on maternal satisfaction with childbirth and indicate that women in the Czech context generally report a high level of satisfaction. Two key factors emerged as significantly associated with maternal satisfaction: the mode of delivery and overall life satisfaction. In contrast, no significant relationships were found between satisfaction and demographic variables such as age, education, parity, marital status, or antenatal class attendance. The findings showed a weak yet statistically significant positive association between the mode of delivery and satisfaction scores, suggesting that spontaneous vaginal delivery is associated with higher levels of satisfaction compared to assisted or operative modes of delivery. Although the differences between individual groups did not reach statistical significance, this finding corresponds with previous research showing that women who experience a spontaneous vaginal birth tend to evaluate their childbirth more positively (Coates et al., 2020; Handelzalts et al., 2017; Kempe and Vikström-Bolin, 2020). At the same time, it is important to recognise that the delivery mode itself is only one element in a broader constellation of factors influencing satisfaction. A growing body of research indicates that what matters most is not the mode of delivery per se, but how women are treated during labor – the quality of communication, respect, shared decision-making and emotional support (Daly et al., 2024; Lazzerini et al., 2022). These findings highlight the need to strengthen person-centred approaches in maternity care, in which respectful and empathetic care plays a central role.

Another key finding of this study is the significant negative correlation between LADSI scores and overall life satisfaction. Women with lower levels of psychological well-being reported lower satisfaction with their birth experience. This result corresponds with previous research that links psychological resilience, mental state during pregnancy, and childbirth satisfaction (Kramer et al., 2025; Lemmens et al., 2021). It suggests that emotional states, expectations, and coping strategies can shape how women perceive and evaluate labor and delivery. Poor psychological well-being, including depression or anxiety during pregnancy, has been shown to heighten the risk of negative birth experiences and challenges in postpartum adjustment (Rahimi et al., 2025; Swift et al., 2024). These findings highlight the crucial role of psychological preparation and antenatal mental health support as integral components of comprehensive maternity care.

Contrary to expectations, antenatal class attendance was not significantly associated with childbirth satisfaction. Although previous studies have often shown positive effects of antenatal education on self-efficacy and preparedness for birth (Diotaiuti et al., 2022; Nikoozad et al., 2024), our findings suggest that mere participation in classes may not be sufficient to increase satisfaction. This may be related to variations in the content and quality of the classes, or to the fact that women who attend antenatal courses may enter labor with higher expectations, which can lead to disappointment if reality does not match their expectations (Mueller et al., 2020; Timmermans et al., 2019). These results highlight the importance of ensuring that antenatal education is realistic, interactive, and addresses not only the medical aspects of childbirth but also psychological and emotional preparation.

No significant associations were found between socio-demographic variables and satisfaction, which is in line with some international studies (Lemmens et al., 2021) but differs from others (Tocchioni et al., 2018). These variables may play only an indirect role, influencing satisfaction through access to information, expectations, or social support, rather than acting as strong predictors in themselves. Interestingly, pain intensity was not significantly correlated with satisfaction, which supports the notion that pain perception is strongly modulated by psychosocial factors. Women who feel supported, respected, and safe can report high satisfaction with their birth experience even if they experience high levels of pain (Bohren et al., 2017; WHO, 2018). This finding further reinforces the idea that interpersonal and environmental factors often outweigh purely physiological or medical elements in shaping satisfaction.

These findings have important implications for practice and policy. They support the need to strengthen person-centred care during labor and birth, with an emphasis on communication, shared decision-making, respect, and emotional support. They also point to the importance of integrating psychosocial care and mental health support into antenatal services, and of critically reviewing the structure and content of antenatal education programs to ensure that they are meaningful and effective. At the policy level, focusing on the quality of interpersonal care is a cost-effective way to enhance birth experiences without increasing medical interventions, and aligns with the WHO Quality of Care Framework for Maternal and Newborn Health (WHO, 2018), which emphasizes respectful, dignified and evidence-based care.

Limitations of the study

This study has several limitations. First, its cross-sectional design provides only a single time-point perspective, preventing

conclusions about causality. Second, the sample was relatively small and recruited from a limited number of healthcare facilities, which may restrict the broader applicability of the results. Third, data were collected through self-reported questionnaires, making the findings vulnerable to recall bias and social desirability bias. Fourth, the study did not account for differences in prenatal education or childbirth preparation classes, which may influence women's expectations and subsequent evaluations of their birth experience. Finally, the research did not include all potentially relevant factors that could shape women's perceptions – such as previous birth experiences, specific clinical interventions, personality traits, or sociodemographic influences – thus limiting the completeness of the explanatory model. Although the LADSI tool is validated, it assesses satisfaction through a specific framework and may not fully capture the multifaceted nature of the childbirth experience.

Future research should focus on longitudinal designs, include larger and more diverse populations, and explore additional factors such as psychological well-being, partner support, and cultural expectations. This would provide a more comprehensive understanding of maternal satisfaction with childbirth and inform quality improvement initiatives in maternity care.

Conclusion

This study examined maternal satisfaction with childbirth in selected healthcare facilities in the Moravian-Silesian Region. The results indicate a generally high level of satisfaction among women, with both the mode of delivery and overall life satisfaction demonstrating a statistically significant relationship with LADSI scores. Conversely, no significant associations were found between satisfaction and sociodemographic factors (age, education, marital status) or participation in antenatal classes.

These results suggest that maternal satisfaction with childbirth is a multidimensional construct that extends beyond demographic factors and is influenced primarily by subjective experiences and perceived well-being. The results also underline the importance of focusing on the quality of perinatal care, respectful communication, and individualized support during labor. Understanding these relationships can help guide improvements in maternity care and the development of targeted interventions that promote positive birth experiences.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy and ethical restrictions.

Ethical considerations

The study respects the Declaration of Helsinki from 1975 (and its revisions from 2004 and 2008). It was conducted with the approval of the clinic management. All participants voluntarily agreed to be included in the research file and to complete the questionnaire.

Conflict of interest

The authors have no conflict of interest to declare.

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