



Original research article

Care for women and newborns in South Bohemian obstetrics wards

Romana Belešová¹ * , Alena Machová¹ , Milena Mágrová¹ , Drahomíra Filausová² ¹ University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, Institute of Nursing, Midwifery and Emergency Care, České Budějovice, Czech Republic² České Budějovice Hospital, a. s., Gynecological and Obstetrics Department, České Budějovice, Czech Republic

Abstract

Background: The care provided to women during pregnancy, childbirth, and postpartum contributes to optimising well-being and health. Care for both the woman and the newborn should be individualised, supporting free choice in providing care. An essential part of childbirth is bonding, which supports the relationship between the woman and the newborn.

Goal: This paper aims to inform about partial data and examine mutual connections regarding the experience of childbirth, midwife, and paediatric nurse care for women and newborns in the early postpartum period in South Bohemian obstetrics wards.

Methods: This research used a quantitative method. The data were processed in SPSS and SASD programs. The research group consisted of 361 women; the selection criteria were at least 6 weeks and a maximum of 9 months after childbirth in South Bohemian obstetrics wards.

Results: 73.4% of women perceived support from the midwife during childbirth, and 58.7% perceived childbirth as a natural process. Women with complications during childbirth were more likely to perceive the experience of childbirth as average. Women who had psychological difficulties during pregnancy perceived more fear during childbirth. Women who experienced bonding in the delivery room were most satisfied.

Conclusion: Women should be informed and prepared for labour and delivery to know what to expect. Health professionals need to receive information from women so that they can provide holistic care and thus support their positive motherhood experience.

Keywords: Childbirth; Healthcare personnel; Multidisciplinary care; Newborn; Postpartum; Woman

Introduction

Women's positive experience with obstetric care correlates with the quality of care and is as vital as objectively assessed perinatal outcomes. To improve current obstetric practice, it is essential to recognise existing deficiencies in care and know the crucial parameters of women's satisfaction with maternity care (Wilhelmová et al., 2022).

A woman's psychosomatic health and well-being are affected not only by her lifestyle but also by pregnancy, childbirth, and care for the newborn. All this affects the family and the social structure of society. Similarly, a positive maternal experience strengthens women's balance and supports maternal competence. In contrast, a negative experience associated with stress or trauma harms the well-being of both the woman and the newborn (Redshaw et al., 2019).

The WHO (2018) emphasizes that the birth experience is significant for every woman and can fundamentally influence the future physical and psychological health of the woman and her newborn. Closely related to this is respectful (evidence-based) care from midwives and newborn care staff,

which considers women and babies' real personal needs and preferences. Women's needs include communication and emotional support. From the perspective of women, the care of midwives and newborn care staff is crucial during childbirth and the first year of a child's life (Makarova et al., 2024). Ineffective communication and limited autonomy are often at the core of negative birth experiences for women (Rost et al., 2022).

According to Makarova et al. (2024), current healthcare during labour, postpartum, and early parenthood lacks individualised models of care, emotional support, adequate and professional communication between different healthcare providers, and consistency in care between midwives and healthcare staff caring for the newborn. Bradford et al. (2022) mention that women prefer a personalised experience, building trust through a high level of continuity of multidisciplinary care provided by healthcare professionals.

Within the framework of multidisciplinary care provided to women and newborns in the postpartum period, bonding (skin-to-skin contact) plays an essential role. The Association of Women's Health, Obstetric and Neonatal Nurses (2020) recommends this for full-term or mildly preterm newborns who

* **Corresponding author:** Romana Belešová, University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, Institute of Nursing, Midwifery and Emergency Care, J. Boreckého 1167/27, 370 11 České Budějovice, Czech Republic; e-mail: rbelesova@zsf.jcu.cz; <http://doi.org/10.32725/kont.2025.007>

Submitted: 2024-07-22 • Accepted: 2025-02-05 • Prepublished online: 2025-02-05

KONTAKT 27/1: 15–22 • EISSN 1804-7122 • ISSN 1212-4117

© 2025 The Authors. Published by University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences.

This is an open access article under the CC BY-NC-ND license.

are cardiopulmonary stable after birth, regardless of the mode of delivery. Bonding has several significant positive effects on the woman and the newborn. It reduces stress and anxiety in the newborn, stabilises its body temperature, shortens the crying period, contributes to cardiopulmonary stabilisation and influences the onset of lactation in the woman (Burianová and Macko, 2021). The WHO (2022) recommends starting bonding immediately after birth for at least one hour and postponing other routine procedures in treating the newborn until at least an hour after the first contact with the mother. In connection with bonding, the education of women about safe bonding plays a vital role. We should mention that bonding significantly contributes to the overall birth experience (Davis and Sclafani, 2022).

This paper aims to inform about partial data on the care of women and children during childbirth and the postpartum period in selected South Bohemian hospitals from the perspective of multidisciplinary teams and women and their childbirth experiences.

Materials and methods

Study design

The research had an observational cross-sectional descriptive study design. We chose one non-standardised and one standardised research instrument – the Edinburgh Postnatal Depression Scale (EPDS). The standardised measuring instrument consisted of 10 items assessing the severity of depression symptoms in women after childbirth. The non-standardised questionnaire contained 125 questions focused on women, their experience of the prenatal period, childbirth and the postpartum period, and questions related to physical and mental health and identification data. First, a non-standardised questionnaire was tested as part of the pre-research in January 2024. It aimed to test the understandability of the questions. Based on the data obtained from women, the actual research was carried out between January and March 2024.

The respondents were purposely selected. Participation in the research was voluntary. 394 women were approached, but 33 questionnaires were not included (six were not completed, and 27 were not filled in). The final number of respondents was 361 (91.6%). All respondents were informed about the goal of the study, the research procedure, and the possible use of the research results, and they consented to complete the questionnaire. The respondents were informed about the anonymous use of the obtained data for research purposes and the fact that the personal data would be processed within the research project according to Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 on the protection of individuals concerning the processing of personal data and the free movement of such data, and repealing Directive 95/46/EC. As for the data collection, we preferred the respondents to complete the questionnaire themselves. The women needed 30–40 minutes to fill out the questionnaire.

The women's main criterion was that they gave birth in the South Bohemian obstetrics ward in Tábor, České Budějovice, Písek, Jindřichův Hradec, Strakonice, Český Krumlov, or Prachatice. Another essential criterion was that the period since birth had been at least six weeks and at most nine months. The research group included women whose birth was vaginal, vaginally induced, or operative using obstetric forceps or a vacuum extractor. The research group also included women who underwent a planned or emergency Cesarean section.

Data analysis

Statistical data processing was performed using SASD 1.5.8 (Statistical Analysis of Social Data) and SPSS. We processed the 1st sorting level and contingency tables of selected indicators of the 2nd sorting level. The degree of dependence of selected features was determined based on χ^2 , t -test, independence test and other testing criteria, applied according to the nature of the features and the type of their distribution. The strength of the relationship was measured at three levels of significance, namely $\alpha = 0.05$, 0.01 and 0.001 . Based on the analysis, data interpretation was carried out.

Results

The study included 361 respondents. The largest group of respondents was aged 26–33 (209 women; 57.9%), and the smallest was in the age category 40–48 (16 women; 6.4%). 187 women (51.8%) were married, and the fewest lived alone (4 women; 1.1%). Other demographic data of the respondents (education; city with a maternity hospital where the birth took place) are shown in Table 1. The basic assessment of the research set showed deviations of 4.976 for age, 0.793 for marital status, 1.201 for the highest completed education, and 1.758 for the city with an obstetrics ward where the women gave birth.

Also, data on the parity of women, the type of birth, whether women had a person accompanying them during childbirth and whether they had a birth plan drawn up for the birth were vital for us. These data are represented in Table 2. The results showed that most women (200; 55.4%) had given birth for the first time. The most frequently reported type of birth was

Table 1. Demographic data of respondents

Demographic characteristics of respondents	Absolute frequency	Relative frequency (%)
Age		
19–25	74	20.4
26–33	209	57.9
34–39	62	17.1
40–48	11	3.1
N/A	5	1.4
Marital status		
Single, lives alone	4	1.1
Single, lives with a partner	151	41.8
Married	187	51.8
Divorced, lives alone	2	0.6
Divorced, lives with a partner	12	3.3
N/A	3	0.8
Education		
Basic	8	2.2
Secondary without graduation exam	53	14.7
Secondary with graduation exam	131	36.3
Higher vocational	25	6.9
University	142	39.3
N/A	2	0.6
Obstetrics (city/municipality)		
České Budějovice	144	39.9
Písek	54	15.0
Tábor	55	15.2
Jindřichův Hradec	40	11.1
Strakonice	30	8.3
Český Krumlov	26	7.2
Prachatice	8	2.2
N/A	4	1.1

spontaneous vaginal birth with the head down (231; 64.0%), and the most frequently accompanying person in the delivery room was the husband – 303× (83.9%). The most drawn-up birth plans were found in 32 (8.9%) women, especially those concerning the care of the woman in the delivery room and the care of the woman and newborn at the maternity ward. The above results are presented in Table 2.

Our research also focused on how women perceived the birth, the environment of the delivery room, whether they could move in the first stage of labour, whether they felt that the medical staff provided them with sufficient privacy during childbirth, and whether the respondents perceived the expressed feeling of support and interest in their needs (condition) during the care provided by the midwife. We also investigated how women assessed the time the midwife devoted to them when providing care (Table 3). Childbirth as a natural process (the ability of a woman to give birth without external intervention, conducted without unnecessary interventions and restrictions) was mentioned by 212 (58.7%) women. Most respondents appreciated the cleanliness of the delivery room environment – 249× (69.0%). 166 (46.0%) women ultimately

perceived the feeling of privacy from the medical staff during childbirth. 265 (73.4%) women expressed a 100% feeling of support from the midwife during childbirth, 209 (57.9%) women responded “definitely yes” to the midwife’s interest in their condition and needs, 230 (63.7%) women rated the time devoted to them as sufficient, and 189 (52.4%) women praised the 100% possibility of free choice of position in the first stage of labour.

Table 2. Parity, type of birth, accompanying person during birth, birth plan

Item	Absolute frequency	Relative frequency (%)
Parity		
I.	200	55.4
II.	132	33.6
III.	21	5.8
IV.	6	1.7
V. and more	1	0.3
Did not respond	1	0.3
Type of birth		
Spontaneous vaginal birth with the head down	231	64.0
Spontaneous vaginal birth with breech presentation	6	1.7
Induced with the head down	26	7.2
Induced with breech presentation	3	0.8
Vacuum extractor	3	0.8
Obstetric forceps	2	0.6
Planned Cesarean section	41	11.4
Emergency Cesarean section	47	13.1
Did not respond	2	0.6
Accompanying person during childbirth		
Husband (partner)	303	83.9
Community midwife	7	1.9
Doula	7	1.9
Friend	6	1.7
Mother	13	3.6
Other	6	1.8
Nobody	40	11.1
Did not respond	2	0.6
Birth plan		
Yes, it only concerned my care in the delivery room	23	6.4
Yes, it concerned my care in the delivery room and the six-week postpartum period	11	3.0
Yes, it concerned my care in the delivery room, the postpartum period, and the care of my newborn	32	8.9
None	293	81.2
Did not respond	2	0.6

Table 3. Delivery room environment, feeling of privacy during birth, midwife support during childbirth, choice of position in the first stage of labour

Item	Absolute frequency	Relative frequency (%)
Midwife's support during childbirth		
Yes	265	73.4
Somewhat yes	61	16.9
Somewhat no	8	2.2
No	7	1.9
Cannot say	19	5.3
N/A	1	0.3
Delivery room environment		
Pleasant	213	59.0
Homelike	35	9.7
Clean	249	69.0
Hospital-like (sterile)	141	39.1
Unpleasant	14	3.9
Unclean	1	0.3
Distracting	12	3.3
Soothing	46	12.7
Intimate	79	21.9
Safe	142	39.3
Other	10	3.0
N/A	1	0.3
Time midwife dedicates to a woman in the delivery room		
Sufficient	230	63.7
Somewhat sufficient	77	21.3
Somewhat insufficient	7	1.9
Insufficient	4	1.1
Cannot say	39	10.8
N/A	4	1.1
Feeling of privacy		
Yes	166	46.0
Somewhat yes	121	33.5
Somewhat no	43	11.9
No	28	7.8
N/A	3	0.8
Possibility of moving in the first stage of labour		
Yes	189	52.4
Somewhat yes	70	19.4
Somewhat no	26	7.2
No	36	10.0
Other	21	6.2
N/A	19	5.3
Perception of childbirth		
Natural process	212	58.7
Medical process (requires care and intervention by a doctor, medication, etc.)	148	41.0
N/A	1	0.3
Midwife's interest in the woman's needs		
Definitely yes	209	57.9
Somewhat yes	107	29.6
Somewhat no	30	8.3
Definitely not	6	1.7
N/A	9	2.5

In the research, we also carried out a correlation of mutual connections, such as the connection between childbirth and psychological difficulties during pregnancy, participation in antenatal courses, parity, type of childbirth, respect for the birth plan by health professionals, complications during childbirth, and perception of the delivery room environment for a comprehensive overview of the care provided to women during childbirth in the delivery room and the care of women and newborns at the maternity ward. We also compared the connection between the perception of childbirth and the possibility of choosing a position during childbirth, assistance from a person accompanying the delivery, age, marital status, and highest level of education. The results are shown in Table 4.

A statistically significant connection ($p < 0.05$) was identified between the perception of childbirth and the order of

childbirth. Women who gave birth for the first time perceived the experience of childbirth as somewhat negative to a significantly greater extent.

A statistically significant association ($p < 0.001$) was also identified between the perception of childbirth and whether complications occurred during childbirth. Women who reported no complications during childbirth were significantly more likely to perceive their childbirth experience as positive. Women who had complications during their childbirth were substantially more likely to perceive their childbirth experience as average.

We also demonstrated a statistically significant association ($p < 0.05$) between the perception of childbirth and age. Women aged 26–30 were significantly more likely to rate their childbirth experience as average.

Table 4. Connection between the perception of childbirth and selected characteristics

Perception of childbirth	<i>N</i>	Value χ^2	df	<i>p</i>	Stat. sign.
Psychological difficulties during pregnancy	361	4.018	4	0.404	n. s.
Participation in an antenatal course	361	10.084	8	0.259	n. s.
Parity	361	15.870	8	<0.05	*
The course of childbirth	361	19.685	12	0.073	n. s.
Respecting the birth plan	146	12.450	8	0.132	n. s.
Complications during childbirth	361	34.541	8	<0.001	***
Perception of the delivery room environment	361	49.556	40	0.143	n. s.
Possibility to choose a position during childbirth	361	19.597	16	0.239	n. s.
Assistance of accompanying persons during childbirth	361	17.491	20	0.621	n. s.
Age	361	26.020	12	<0.05	*
Marital status	361	12.560	8	0.128	n. s.
Highest education	361	7.541	8	0.480	n. s.

Note: χ^2 – chi-square; *p* – independence test; df – degree of freedom; stat. sign. – statistical significance; n. s. – statistically insignificant difference; * statistically significant difference for significance level ($\alpha = 0.05$); *** statistically significant difference for significance level $\alpha = 0.001$

We also assessed statistically significant correlations between women's fear and psychological difficulties during pregnancy, participation in antenatal courses, the course of childbirth, women's trust in the medical staff in the delivery room and the midwife's interest in the woman in the delivery room (Table 5).

There is a statistically significant association ($p < 0.05$) between fear during childbirth and psychological difficulties during pregnancy. Women who had psychological problems during pregnancy reported significantly more fear during

childbirth. Women who did not have psychological problems during pregnancy did not report significantly more fear during childbirth.

Furthermore, a statistically significant association ($p < 0.01$) was identified between fear during childbirth and the course of childbirth. Women who gave birth by emergency Cesarean section reported significantly more fear during childbirth. Women who had spontaneous vaginal birth were substantially less likely to experience fear during childbirth.

Table 5. The relationship between fear during childbirth and the observed signs

Fear during childbirth and...	<i>N</i>	Value χ^2	df	<i>p</i>	Stat. sign.
Psychological difficulties during pregnancy	311	4.729	1	<0.05	*
Participation in an antenatal course	327	1.028	2	0.598	n. s.
The course of childbirth	361	15.923	3	<0.01	**
A woman's trust in the medical staff in the delivery room	361	8.634	4	0.071	n. s.
The midwife's interest in the woman in the delivery room	311	5.550	3	0.136	n. s.

Note: χ^2 – chi-square; *p* – independence test; df – degree of freedom; stat. sign. – statistical significance; n. s. – statistically insignificant difference; * statistically significant difference for significance level ($\alpha = 0.05$); ** statistically significant difference for significance level $\alpha = 0.01$

We also tested the association between the occurrence of complications during childbirth and fear during childbirth, and whether medical interventions caused it. In this case, we did not prove a statistically significant association.

We were also interested in how women perceived the bonding during childbirth (Table 6). Regarding bonding duration, 142 women (39.3%) mentioned that bonding lasted throughout their stay in the delivery room. Bonding was performed in 176 women (48.8%) immediately after birth before the umbilical cord was cut. Regarding educating women and their companions about safe bonding by the medical staff, 111 (30.7%) women stated that they were educated about the secure position of the newborn. 80 (22.2%) women were not informed about anything by the medical staff caring for the newborn. 122 (33.8%) women reported the highest-rated bonding (number 5) in the delivery room. 100% respect and esteem shown by medical staff in caring for the newborn was perceived by 242 (67.0%) women.

Table 6. Course of bonding in the delivery room, satisfaction with bonding, perception of respect and esteem

Item	Absolute frequency	Relative frequency (%)
Bonding length		
It lasted throughout the entire stay in the delivery room	142	39.3
Lasted <2 hrs.	38	10.5
Lasted <1 hrs.	77	21.3
Lasted 20 min.	2	0.6
No bonding	71	19.7
Other	22	6.6
Bonding timing		
Immediately after birth, before the umbilical cord is cut	176	48.8
After birth, after the umbilical cord is cut	93	25.8
No bonding occurred	89	24.7
Did not respond	3	0.8
Perception of respect and esteem shown by staff		
Yes	242	67.0
Somewhat yes	90	24.9
Somewhat no	7	1.9
No	14	3.9
Did not respond	8	2.2
Education on bonding in the delivery room		
Yes, about the safe position of the newborn	111	30.7
Yes, about monitoring the colour of a newborn	56	15.5
Yes, about the importance of monitoring the newborn	78	21.6
Yes, about the need to contact medical personnel	86	23.8
Was not educated	80	22.2
Does not remember	70	19.4
Other	6	1.8
Did not respond	5	1.4
Satisfaction with bonding in the delivery room		
1 – lowest rating	23	6.4
2	14	3.9
3	47	13.0
4	62	17.2
5 – highest rating	122	33.8
Did not respond	62	17.2

Regarding bonding, we found a statistically significant association between bonding duration in the delivery room and satisfaction with bonding. Women who had bonding throughout their stay in the delivery room expressed the highest satisfaction. As the duration of bonding in the delivery room decreased, so did the satisfaction of mothers with bonding (Table 7).

Table 7. Relationship between bonding duration and satisfaction with bonding

Duration of bonding in the delivery room	N	Value χ^2	df	p	Stat. sign.
Satisfaction with bonding	290	99.116	16	<0.001	***

Note: χ^2 – chi-square; p – independence test; df – degree of freedom; stat. sign. – statistical significance; n. s. – statistically insignificant difference; *** statistically significant difference for significance level $\alpha = 0.001$

When assessing women's satisfaction with the care of the staff, statistically significant correlations were identified for all examined characteristics (the woman's ability to decide on the care of the newborn independently, the woman's awareness of the care of the newborn, the possibility of the woman's presence during examination of the newborn, the usefulness of the information provided by the medical staff upon discharge, the woman's readiness to care for the newborn based on information from the hospital, the woman's perception of respect and esteem from the medical staff) – Table 8.

Table 8. Association between women's satisfaction with staff care and the monitored characteristics

Women's satisfaction with the staff care and...	N	Value χ^2	df	p	Stat. sign.
The ability of a woman to make independent decisions about the care of her newborn	361	50.851	9	<0.001	***
Women's awareness of newborn care	361	144.938	9	<0.001	***
Possibility of a woman being present at the newborn examination	361	41.580	9	<0.001	***
Usefulness of information provided by medical staff at discharge	361	103.621	12	<0.001	***
A woman's readiness to care for a newborn	361	81.127	9	<0.001	***
Women's perception of respect and esteem from medical personnel	361	258.436	9	<0.001	***

Note: χ^2 – chi-square; p – independence test; df – degree of freedom; stat. sign. – statistical significance; n. s. – statistically insignificant difference; *** statistically significant difference for significance level $\alpha = 0.001$

Discussion

Although childbirth is often described as a physiological event, it is also viewed as a mental and emotional process. Childbirth is experienced through emotions that influence the release of neurohormones that affect the physiology of the woman's body – the neurobiology of childbirth (Hammond et al., 2013). A study by Olza et al. (2018) showed that if childbirth is a positive experience, women evaluate childbirth as a natural process and feel empowered to face the new challenge in their lives, motherhood. In South Bohemian obstetrics wards, 212 (58.7%) women described their childbirth as a natural process, where it is conducted without unnecessary interventions and restrictions, and women can give birth without external intervention by healthcare professionals. When testing the relationship between women's perceptions of childbirth and whether complications occurred during childbirth, it was identified that if women did not experience any complications, they perceived childbirth as a more positive and enjoyable experience.

Conversely, a negative birth experience is associated with postnatal depression and is a risk factor for impaired mother-child bonding (Bell and Andersson, 2016). Grundström et al. (2022) mention that a perceived negative birth experience can cause consequences such as anxiety, fear of childbirth, or a woman's decision to have no more children. When assessing the statistically significant relationship between fear and psychological difficulties during pregnancy and the course of childbirth, we found that women who had psychological problems during pregnancy were substantially more afraid of childbirth, as were women who gave birth by emergency Cesarean section.

In a study conducted in Germany, Makarova et al. (2024) found that women need emotional support, adequate communication, the presence of a midwife in the delivery room, empathy, and a relationship with staff at the obstetrics ward. Women also mentioned that options and needs during childbirth should be discussed in advance, and there should be constant communication about the process and decisions necessary during childbirth. German women also described concerns related to childbirth. They emphasised the need for emotional support (Makarova et al., 2024). For this reason, women also develop a birth plan and discuss it with healthcare professionals before the birth. The birth plan can be seen as pregnant women providing healthcare professionals their expectations of childbirth (Ahmadpour et al., 2022). Our study also confirms this, as most women with a birth plan covered the woman's care in the delivery room and the obstetrics ward and included care of the newborn (32; 8.9%).

Studies show that a midwife's support is significant in cases where the care provided is better than women's expectations. This support depends significantly on the relationship between the midwife and the woman and appears to be the most crucial factor in intrapartum care (Hildingsson et al., 2021). The results of our research clearly show a complete feeling of a midwife's support during childbirth in 265 (73.4%) women. This is also related to the sense of privacy during childbirth in the delivery room, with 166 women (46.0%) expressing a 100% feeling of privacy during childbirth.

In addition to a midwife's support, it is also essential for women to have support from the accompanying women during childbirth and for the staff to communicate and support their partners (Makarova et al., 2024). In our research, women most frequently chose their husband (partner) (303×; 83.9%)

as a companion during childbirth. In addition to a midwife's and the accompanying person's support during childbirth, the environment of the delivery room contributes to a positive birth experience, which provides a sense of security and safety and can effectively reduce fear (Dencker et al., 2019). Mondy et al. (2016) believe the environment during childbirth is essential for the childbirth experience. The conventional environment encourages the woman in labour to be passive and behave like a patient. Currently, proposed environments for childbirth with a focus on the neurobiology of childbirth positively affect women's experience of childbirth (Mondy et al., 2016). Respondents in our study emphasised the cleanliness of the environment the most – 249 times (69.0%). The delivery room was rated as a pleasant environment 213 times (59.0%) and as a safe environment 142 times (39.3%). The calm environment of the delivery room was perceived by 124 women (34.3%), and 141 women (39.1%) assessed the environment as hospital-like (sterile). We can conclude that not all South Bohemian obstetrics wards have a delivery room environment arranged so that most women can assess it as pleasant ("home-like") during the individual assessment.

In recent decades, obstetric care has become a philosophical and pragmatic concept prioritising women's unique individual needs, i.e., organisational and healthcare-related during labour and the postpartum period (Fontein-Kuipers et al., 2018). Childbirth is a significant experience in women's lives with essential impacts on their physical, emotional, mental, and social well-being (Olza et al., 2018). The birth experience can involve familiar and unfamiliar sensations, pain or joy, emotional distress or calm, increased vulnerability or increased personal control, risk of physical injury or death, as well as recognition of individual potential, hope, and role change. In addition to the experience affecting the newborn's life (Power et al., 2019), the mother-partner-child interaction can have a long-term positive or negative impact on women (Eggermont et al., 2017). In caring for women's needs, 230 (female respondents considered the time that the midwife spent in the delivery room providing care and meeting their needs sufficient. In caring for the newborn, 242 (67.0%) women rated 100% respect and esteem shown by medical staff.

Another area that we paid attention to in our research was bonding. In 142 (39.3%) women, bonding lasted throughout their stay in the delivery room and 111 (30.7%) women were educated about the safe position of the newborn during bonding. Women expressed the highest satisfaction with bonding in the delivery room if it took place throughout their stay in the delivery room. Systematic reviews have been conducted on bonding (attachment of the mother to the newborn, skin-to-skin contact) immediately after birth and have demonstrated a relationship between bonding and breastfeeding. However, foreign authors claim that the evidence obtained is mixed. More studies and a larger research group would be necessary to verify this relationship (Linde et al., 2020). Other studies have shown that women more satisfied with clinical care during labour and the early postpartum period perceived their birth experiences as more positive and were more likely to breastfeed their newborns (Hairston et al., 2018). Similarly, Davis and Sclafani (2022) have shown that women who had a better birth experience were more likely to breastfeed their babies, and that those who breastfed their babies for more than 12 months had a more positive birth experience than women who formula-fed.

In relation to caring for women and newborns in the early parenthood period, it is essential to mention interprofessional teamwork, continuum of care by involving more medical pro-

professionals from different professional backgrounds in providing comprehensive services, and improving the quality of care. This multidisciplinary collaboration aims to improve communication and access to care, benefiting from individual professional competence and skills, mutual respect, and the common goal of high-quality care (Makarova et al., 2024).

Conclusion

The perception of the care provided and the experience of childbirth is individual and unique for each woman. Even memories of the birth experience are closely linked to the emotions experienced during childbirth and the postpartum period. A negative birth experience is often associated with negative emotions such as worry, fear, suffering, and loneliness, which contribute to complications. Positive experiences and memories are marked by positive emotions such as peace, satisfaction, and joy, which merge with the first meeting with the newborn, the care and support of healthcare professionals, the support of the partner, a sense of control, and the fulfilment of expectations. In South Bohemian obstetrics wards, 58.7% of women described their birth as a natural process without medical intervention. The positive experience of women during childbirth is also enhanced by the complete feeling of the midwife's support during childbirth (73.4% of women) and the feeling of maintaining privacy during childbirth in the delivery room (100% privacy was expressed by 46.0% of respondents).

For healthcare professionals providing care to women in the prenatal period and to women and newborns in the postnatal period, it is essential to have information and knowledge from women about their attitudes, opinions and subjective experiences in a crucial phase of their lives. Based on these experiences, they can adapt their care (individualised, emotionally supported and supported by adequate, professional information) to the real needs and wishes of women and newborns.

This study was conducted in South Bohemian obstetrics wards, and it mainly demonstrated satisfaction among women with the care provided.

Limitations

The limited number of research subjects who gave birth only in South Bohemian obstetrics wards can be seen as a limitation of our study, restricting the capacity of the obtained results. Data collection can be considered a certain limit of our study in connection with the limited representativeness of the research sample of respondents. If the research and data collection were expanded to include women who gave birth in all obstetrics wards in the Czech Republic, this would undoubtedly improve the relevance of the results and provide a more comprehensive overview of the researched issue.

Acknowledgements

The authors would like to thank all the women who completed the questionnaire and answered the questions.

Funding

The study was conducted with institutional support for the long-term conceptual development of the research organisation of the Faculty of Health and Social Sciences of the University of South Bohemia in České Budějovice within the multidisciplinary research project No. MPŽD2021-001, title: Multidisciplinary Care for Women and Children during Pregnancy, Childbirth, and the Puerperium.

Ethical aspects and conflict of interest

The authors have no conflict of interest to declare.

References

- Ahmadpour P, Moosavi S, Mohammad-Alizadeh-Charandabi S, Jahanfar S, Mirghafourvand M (2022). Effect of implementing a birth plan on maternal and neonatal outcomes: a randomized controlled trial. *BMC Pregnancy Childbirth* 22(1): 862. DOI: 10.1186/s12884-022-05199-5
- Association of Women's Health, Obstetric and Neonatal Nurses (2020). Sudden Unexpected Postnatal Collapse in Healthy Term Newborns: AWHONN Practise Brief Number 8. *J Obstet Gynecol Neonatal Nurs* 49(4): 388–390. DOI: 10.1016/j.jogn.2020.05.002.
- Bell AF, Andersson E (2016). The birth experience and women's postnatal depression: a systematic review. *Midwifery* 39: 112–123. DOI: 10.1016/j.midw.2016.04.014.
- Bradford BF, Wilson AN, Portela A, McConville F, Fernandez Turienzo C, Homer CSE (2022). Midwifery continuity of care: a scoping review of where, how, by whom and for whom? *PLOS Global Public Health* 2(10): e0000935. DOI: 10.1371/journal.pgph.0000935.
- Burianová I, Macko J (2021). Doporučený postup České neonatologické společnosti. Bonding/skin-to-skin kontakt. [online] [2024-06-14]. Available from: https://cneos.cz/wp-content/uploads/2022/08/bonding_skin-to-skin_2021.pdf
- Davis AMB, Sclafani V (2022). Birth Experiences, Breastfeeding, and the Mother-Child Relationship: Evidence from a Large Sample of Mothers. *Can J Nurs Res* 54(4): 518–529. DOI: 10.1177/08445621221089475.
- Dencker A, Nilsson C, Begley C, Jangsten E, Mollberg M, Patel H, et al. (2019). Causes and outcomes in studies of fear of childbirth: a systematic review. *Women Birth* 32(2): 99–111. DOI: 10.1016/j.wombi.2018.07.004.
- Eggermont K, Beeckman D, Van Hecke A, Delbaere I, Verhaeghe S (2017). Needs of fathers during labour and childbirth: a cross-sectional study. *Women Birth* 30(4): e188–e197. DOI: 10.1016/j.wombi.2016.12.001.
- Fontein-Kuipers Y, de Grot R, van Staa A (2018). Woman-centered care 2.0: Bringing the concept into focus. *Eur J Midwifery* 2: 5. DOI: 10.18332/ejm/91492.
- Grundström H, Malmquist A, Ivarsson A, Torbjörnsson E, Walz M, Nieminen K (2022). Fear of childbirth postpartum and its correlation with post-traumatic stress symptoms and quality of life among women with birth complications - a cross-sectional study. *Arch Womens Ment Health* 25(2): 485–491. DOI: 10.1007/s00737-022-01219-7.
- Hairston IS, Handelzalts J, Assis C, Kovo M (2018). Postpartum bonding difficulties and adult attachment styles: The mediating role of postpartum depression and childbirth-related PTSD. *Infant Mental Health J* 39(2): 198–208. DOI: 10.1002/imhj.21695.
- Hammond A, Foureur M, Homer, CSE, Davis D (2013). Space, place and the midwife: exploring the relationship between the birth environment, neurobiology and midwifery practice. *Women Birth* 26(4): 277–281. DOI: 10.1016/j.wombi.2013.09.001.
- Hildingsson I, Karlström A, Rubertsson C, Larsson B (2021). Quality of intrapartum care assessed by women participating in a midwifery model of continuity of care. *Eur J Midwifery* 5: 11. DOI: 10.18332/ejm/134502.
- Linde K, Lehnig F, Nagl M, Kersting A (2020). The association between breastfeeding and attachment: A systematic review. *Midwifery* 81: 102592. DOI: 10.1016/j.midw.2019.102592.
- Makarova N, Janke TM, Schmittinger J, Agricola CJ, Ebinghaus M, Blome C, et al. (2024). Women's expectations, preferences and needs in midwifery care – results from the qualitative Midwifery Care (MiCa) study: Childbirth and

- early parenthood. *Midwifery* 132: 103990. DOI: 10.1016/j.midw.2024.103990.
16. Mondy T, Fenwick J, Leap N, Foureur M (2016). How domesticity dictates behaviour in the birth space: lessons for designing birth environments in institutions wanting to promote a positive experience of birth. *Midwifery* 43: 37–47. DOI: 10.1016/j.midw.2016.10.009.
 17. Olza I, Leahy-Warren P, Benyamini Y, Kazmierczak M, Karlsdottir SI, Spyridou A, et al. (2018). Women's psychological experiences of physiological childbirth: a meta-synthesis. *BMJ Open* 8(10): e020347. DOI: 10.1136/bmjopen-2017-020347.
 18. Power C, Williams C, Brown A (2019). Does childbirth experience affect infant behaviour? Exploring the perceptions of maternity care providers. *Midwifery* 78: 131–139. DOI: 10.1016/j.midw.2019.07.021.
 19. Redshaw M, Martin CR, Savage-McGlynn E, Harrison S (2019). Women's experiences of maternity care in England: preliminary development of a standard measure. *BMC Pregnancy Childbirth* 19(1): 167. DOI: 10.1186/s12884-019-2284-9.
 20. Rost M, Stuermer Z, Niles P, Arnold L (2022). "Real decision-making is hard to find" – Swiss perinatal care providers' perceptions of and attitudes towards decision-making in birth: A qualitative study. *SSM – Qual Res Health* 2: 10007. DOI: 10.1016/j.ssmqr.2022.100077.
 21. Wilhelmová R, Veselá L, Korábová I, Slezáková S, Pokorná A (2022). Determinants of respectful care in midwifery. *Kontakt* 24(4): 302–309. DOI: 10.32725/kont.2022.035.
 22. WHO – World Health Organization (2018). Intrapartum care for a positive childbirth experience. [online] [cit. 2024-06-08]. Available from: <https://www.who.int/publications/i/item/9789241550215>
 23. WHO – World Health Organization (2022). WHO recommendations on maternal and newborn care for a positive postnatal experience. [online] [cit. 2024-06-08]. Available from: <https://www.who.int/publications/i/item/9789240045989>