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ORIGINAL PAPER

Satisfaction with childbirth and level of autonomy of women during the childbirth

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Abstract

Aim: To determine the relationship between perceived satisfaction with childbirth and perceived autonomy in decision making during the childbirth process. *Design:* Cross-sectional study. *Methods:* The study took place within the international INTERSECT project. Data were collected in four hospitals in Slovakia. The research group consisted of 437 female respondents (average age 30.5 ± 4.8). Birth Satisfaction was measured by the Birth Satisfaction Scale – Revised (BSS-R). Level of autonomy in decision making during childbirth was measured by the Mothers' Autonomy in Decision Making Scale (MADM). *Results:* Respondents who perceived a higher level of autonomy in decision making during childbirth perceived higher overall satisfaction with childbirth ($p = 0.001$, $r = 0.416$). Higher age of mothers was also associated with higher birth satisfaction ($p = 0.004$, $r = 0.139$). Almost 17% of respondents perceived their childbirth to be a traumatic event. Respondents described lower levels of satisfaction with childbirth ($p = 0.001$) and lower levels of autonomy in decision making during childbirth ($p = 0.002$) if they subjectively perceived their childbirth as traumatic. Significant associations for the BSS-R score were also demonstrated regarding parity ($p = 0.001$), mode of delivery ($p = 0.001$), and type of delivery ($p = 0.001$). *Conclusion:* The involvement of the mother in the decision-making process of her own birth is a fundamental aspect of healthcare during childbirth and overall satisfaction with the birth.

Keywords: autonomy, birth satisfaction, decision making during childbirth, subjective perception of childbirth, traumatic birth.

Introduction

Pregnancy and childbirth are a unique and complex process. Each pregnant woman has a different combination of physical, mental, social and spiritual features (Backes et al., 2022). Childbirth is a critical moment in the transition to motherhood. This experience can be positive or stressful, as the mother is in a potentially vulnerable state, both physically and emotionally (Širvinskienė et al., 2023). Pregnancy and childbirth involve a mixture of feelings such as pain, fear, anxiety, uncertainty, and joy, and, at the same time, they are centered around the autonomous decisions of the pregnant woman (Backes et al., 2022). A woman's autonomy in making decisions about her own health and the health of her baby is considered to be an essential part of quality healthcare during childbirth. World Health Organization (WHO) recommendations for respectful care during childbirth underline the importance of human autonomy in decision making in the perinatal period, including situations in which complications occur or when medical interventions are necessary (Vogels-Broeke et al., 2023). Childbirth, as a complex and multidimensional healthcare experience, has an impact on the future well-being of both mother and child (Širvinskienė et al., 2023). Ensuring a high level of health care during childbirth is essential to ensure the safety of both mothers and newborns. The WHO defines a high level of care during childbirth as 'appropriate use of effective clinical and non-clinical interventions, strengthened health infrastructure, optimal skills and positive attitude of healthcare providers'. This includes integration of healthcare standards such as effective communication, respectful care, and the maintenance of a woman's dignity throughout the birth process (Mangindin et al., 2023).

All over the world, there is a change in healthcare orientation from basic life-saving actions to an emphasis on patient-centered care, improving

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the health and subjective well-being of the patient. Patients' expectations and experiences of healthcare services are recognized as part of the assessment of healthcare quality and as a reflection of interactions between patients and the healthcare system (Širvinskienė et al., 2023). Global studies indicate that, for women, respectful care means preserving dignity, privacy, confidentiality, ensuring freedom from harm and ill treatment, and enabling informed choice and continuous support during childbirth. Unfortunately, not all women are treated with respect during childbirth, with an increasing number of women alleging disrespectful care and mistreatment during childbirth by medical staff. Ineffective communication, loss of autonomy, and lack of information are the forms of mistreatment most often cited (Minckas et al., 2021).

Studies describe four important elements that determine the level of satisfaction in childbirth. The fulfillment of predetermined expectations and the feeling that the woman herself can control the situation are considered to be the most important determining factors for a positive birth experience. In addition, personal control and perception of pain are also important determinants, and, finally, confident women show greater satisfaction with their birth, especially when they experience adequate support from the midwife and other medical staff during childbirth. The belief is that when a woman can make decisions, the feeling of control is enhanced since she has the opportunity to take responsibility for decisions and be part of the birth process (Deherder et al., 2022).

In addition to increases in the safety of childbirth, the past decades have also seen extensive medicalization of obstetrics. While in the past births took place mainly outside medical facilities and without medical supervision, nowadays they have clearly become a medical event. Births usually take place in hospitals, involving various medical interventions. On the one hand, this brings an advantage in the ability to effectively and immediately solve complications and reduce perinatal mortality and morbidity. On the other hand, the extensive medicalization of obstetrics has been criticized for the risks associated with medical interventions in childbirth, which are not always necessary. Therefore, birthing mothers themselves, and midwives even more so, strive for natural births without interventions in order to re-naturalize births and increase the autonomy of birthing mothers (Rublein & Muschalla, 2022).

Women can experience a variety of feelings during childbirth, from happiness, empowerment, and healing to suffering and trauma. Evidence suggests that globally 5–50% of women experience childbirth as a negative or traumatic event (Kuipers et al., 2024). The subjective experience of childbirth is an important aspect of obstetric care, as it has a direct impact on the health of both the mother and the newborn. In order to provide high quality woman-centered care, it is important that women are actively involved in decisions about their care through a shared decision-making process (Öter et al., 2022). Childbirth is usually associated with pain and sometimes physical and psychological trauma. With modern surgical techniques, physical trauma wounds usually heal quickly, while psychological trauma wounds persist. Psychological birth trauma, also known as traumatic birth, refers to severe psychological harm to the mother caused by events that occur during childbirth (Zhang et al., 2020). Traumatic experience and lack of control over the course of childbirth can cause postpartum depression or post-traumatic stress disorder after childbirth. Women re-experience their birth in nightmares and flashbacks. Traumatic experiences and dissatisfaction negatively affect the success and progression of breastfeeding and also the bond between mother and child (Deherder et al., 2022).

Recent WHO recommendations establish women's experiences of care during childbirth as a critical aspect of high-quality birth care and not just as an addition to the provision of clinical procedures. The recommendations define a positive birth experience as 'one that meets or exceeds a woman's prior personal and sociocultural beliefs and expectations and includes the birth of a healthy baby in a clinically and psychologically safe environment with continuous care and emotional support' (Olza et al., 2020).

Aim

The aim of our study was to establish the level of women's autonomy during childbirth as well as the possibility of their deciding on individual procedures during childbirth. We also focused on the assessment of overall satisfaction with childbirth and on factors that can influence satisfaction with childbirth, either in a positive or negative sense.

Methods

Design

A cross-sectional study.

Sample

A total of 437 female respondents participated in the study (mean age 30.5 ± 4.8; range 18–45). For data collection, we used random selection of the research sample. Table 1 shows the basic sociodemographic and perinatal characteristics of our research.

More than half of respondents had finished university (57.9%); 39.8% respondents had completed secondary education; and 1.8% had completed primary education. Forty percent of respondents stated that they lived in a small town and the same number (40.0%) lived in the countryside, while 19.7% of respondents lived in a larger city. Almost two-thirds (65.2%) of respondents were married; 31.1% lived with their partner in the same household; 1.6% lived in a partnership but did not live with their partner in the same household; 1.1% of respondents were single; 0.7% of respondents were divorced or lived separately with their partner; and 0.2% described their situation as 'other'. Our research group consisted of 53.9% primiparous women and 46.1% multiparous women. Vaginal delivery was the mode for 75.9% of respondents; surgical intervention was necessary during childbirth, using forceps or VEX for 3.4% of respondents; 15.1% had an acute cesarean section; and 7.6% of respondents had a planned cesarean section. In our study, 70.2% of respondents had a spontaneous birth; 29.8% of respondents had induced labor; while for 23.1% of respondents, perinatal loss in the anamnesis was confirmed, either as a result of spontaneous abortion or stillbirth.

Measuring instruments

To collect relevant data, achieve set goals and verify hypotheses, we used a set of standardized questionnaires translated into Slovak. One of the scales used in our questionnaire was the standardized Birth Satisfaction Scale – Revised (BSS-R). It is a reliable tool for measuring birth satisfaction. The questionnaire consists of three subscales that measure different but at the same time related areas such as (1) quality of healthcare during childbirth (environment during childbirth, support from medical staff); (2) the woman's personal attributes (predisposition of women to handle childbirth, sense of control, preparation for childbirth, relationship with the child); (3) perceived subjective stress during childbirth (fear, birth injuries, length of labor, pain, health status of the child, care from medical staff). The BSS-R is evaluated on a Likert scale with which respondents indicate answers on a scale of 0–4 (0 – strongly disagree, 1 – disagree, 2 – neither agree nor disagree; 3 – agree; 4 – definitely agree), while four of its items are reverse coded (Fleming et al., 2016; Hollins Martin & Martin, 2014). The final score of the questionnaire ranges from 0–40 (0 represents the lowest satisfaction with childbirth and 40 the highest satisfaction) (Hollins Martin & Martin, 2014). The reliability (Cronbach's alpha) of the BSS-R scale in our research was 0.83.

An important part of our research was to establish the level of women's autonomy during childbirth and the possibility of their participation in the decision-making process regarding the course of childbirth. We used The Mothers' Autonomy in Decision Making (MADM) scale to determine the level of autonomy in decision making during childbirth. The MADM scale reflects mothers' priorities, reliably assesses interactions with medical staff, and reflects the mother's ability to make decisions related to pregnancy and childbirth. It uniquely allowed us to assess women's ability to make decisions, to find out whether mothers had enough time to consider their options, and whether healthcare providers respected women's choices during childbirth (Vedam et al., 2017). The MADM scale consists of seven items. It uses a 6-point Likert scale, rated from 1 = 'strongly disagree' to 6 = 'strongly agree'. Scores range from 7 to 42 – the higher the score, the greater the ability to make decisions during childbirth. A score of 7–15 is reported as 'very low autonomy', 16–24 as 'low autonomy', 25–33 as 'medium autonomy', and 34–42 as 'high autonomy' (Serpetini et al., 2024). In terms of reliability, Cronbach's alpha of the MADM scale was 0.937 in our study.

In subsequent questions, we asked the respondents how they experienced the birth of their last child, specifically, whether there were any events during the birth or immediately after it that the woman would evaluate as traumatic. Respondents could mark the answer on a scale of 0–10 (0 – not traumatic at all, 5 – moderately traumatic, 10 – extremely traumatic). For the purposes of statistical evaluation of the given question, we divided the respondents' answers into two categories. Answers of 0–5 indicated that women did not perceive their birth to be traumatic. Answers of 6–10 placed the respondents in the second category, meaning that their subjective perception of childbirth was traumatic.

Data collection

Our research, consisted of a set of standardized questionnaires translated into Slovak, containing 60 questions. After finalizing the formal aspects of the documents and preparing informed consent

forms and information for respondents concerning the study, we were able to proceed with obtaining approval from the relevant commissions to conduct the research. Informed consent forms and information for patients were distributed personally by the project managers. The nature of the research and the method of data processing were explained to the respondents. The study was carried out as part of the international INTERSECT project aimed at researching traumatic childbirth and PTSD after birth in an international context The research was carried out in four hospitals in Slovakia: Čadca, Spišská Nová Ves, Ružomberok, and Martin. The research was conducted following approval from the head staff of the Gynecology and Obstetrics Clinics in each hospital and following approval from the Ethical Commission of the Jessenius Faculty of Medicine. The inclusion criterion for our study was completion of the informed consent form on the 2nd to 4th day after the delivery of a live fetus. Following the signing of the informed consent form, a questionnaire was sent to each respondent within a time horizon of six to eight weeks after delivery to the e-mail address specified on the informed consent form. Data were collected from July 2021 to November 2022.

Data analysis

The statistical analysis was carried out using Microsoft Office Excel and the freely available Jamovi statistical software (R Core Team, 2021; The Jamovi project, 2022). To process the results, we used descriptive statistics, analysis of variance – ANOVA and t-test for independent samples.

Results

In Table 2, we present the mean scores of The Mothers' Autonomy in Decision Making (MADM) scale and Birth Satisfaction Scale – Revised (BSS-R), as well as their basic characteristics. The highest score on the MADM scale was 42 (Mean = 23.4, SD ± 9.55, Median 23, Mode = 14), the lowest score was 7. For the BSS-R questionnaire, the highest score was 40 (Mean = 27.1, SD ± 6.83, Median = 27, Modus = 24), the lowest score was 5.

Table 1 Basic sociodemographic and perinatal characteristics of the sample

Characteristics (n = 437)	N	%
Education		
university	253	57.9%
secondary education	174	39.8%
primary education	8	1.8%
Marital status		
married	285	65.2%
living in shared household with partner	136	31.1%
living in partnership, not in the same household	7	1.6%
single	5	1.1%
divorced	3	0.7%
others	1	0.2%
Residence		
bigger city	86	19.7%
smaller city	175	40.0%
countryside	175	40.0%
Parity		
primiparas	234	53.9%
multiparas	200	46.1%
Mode of delivery		
vaginal delivery	332	75.9%
acute cesarean section	57	15.1%
planned cesarean section	33	7.6%
assisted vaginal delivery (VEX, forceps)	15	3.4%
Type of birth		
spontaneous	299	70.2%
induced labor	127	29.8%
Perinatal loss		
yes	101	23.1%
no	336	76.9%

Table 2 Basic characteristics of the BSS-R and MADM scores

	Mean (SD)	Median	Modus	Maximum	Minimum	Missing
MADM scale	23.4 ± 9.55	23	14	42	7	22
BSS-R scale	27.1 ± 6.83	27	24	40	5	8

BSS-R – Birth Satisfaction Scale – Revised; MADM – The Mothers' Autonomy in Decision Making

In the correlation analysis (Table 3), we found significant relationships between the basic variables: age, MADM scale, and BSS-R. We demonstrated a significant statistical association between age and the BSS-R scale (p = 0.004, r = 0.139), meaning that older age of mothers was associated with higher satisfaction with childbirth. We did not find a statistically significant connection between decision making autonomy during childbirth and age. In addition, a significant connection was also confirmed in the case of BSS-R and MADM scores, indicating that women who perceived a higher level of autonomy in decision making during childbirth subjectively perceived higher overall satisfaction with childbirth (p = 0.001, r = 0.416).

As shown in Table 4, statistically significant associations in the MADM scale were confirmed for cases in which the woman subjectively perceived her birth as traumatic. In our research, 16.9% of respondents stated that they subjectively perceived their birth to be a traumatic event. If a woman perceived her birth as traumatic, she also perceived a lower level of autonomy in decision making during childbirth (p = 0.002). A similar result was also demonstrated regarding the BSS-R scale, meaning that women who perceived childbirth as traumatic also described lower overall satisfaction with childbirth (p = 0.001). In addition, significant associations for the BSS-R scale scores were also demonstrated in the case of parity, mode of delivery and type of delivery.

Table 3 Correlation between key variables

Variable	Age	BSS-R	MADM
Age	-	0.139*** p = 0.004	0.085
BSS-R	0.139** p = 0.004	-	0.416*** p = 0.001
MADM	0.085 p = 0.084	0.416*** p = 0.001	-

*BSS-R – Birth Satisfaction Scale – Revised; MADM – The Mothers' Autonomy in Decision Making; **p-value significant at < 0.01; ***p-value significant at < 0.001*

Table 4 Basic characteristics of MADM and BSS-R scale according to sociodemographic and perinatal elements

Variable	MADM score (SD)	p-level	BSS score (SD)	p-level
Education				
university	23.3 (± 9.40)		27.4 (± 6.58)	
secondary	23.5 (± 9.87)	0.953	26.8 (± 7.27)	0.332
primary	23.4 (± 8.58)		24.5 (± 4.96)	
Parity				
primiparas	23.3 (± 9.71)	0.748	25.8 (± 6.86)	0.001
multiparas	23.6 (± 9.42)		28.7 (± 6.46)	
Mode of delivery				
vaginal delivery	23.0 (± 9.59)		27.9 (± 6.69)	
operative delivery (cesarean section, VEX, forceps)	25.0 (± 9.28)	0.066	24.3 (± 6.53)	0.001
Induction of the birth				
no	23.1 (± 9.58)	0.388	27.7 (± 7.00)	0.001
yes	24.0 (± 9.47)		25.7 (± 6.34)	
Subjective perception of birth as a traumatic				
yes	20.3 (± 9.67)	0.002	19.8 (± 5.84)	0.001
no	24.1 (± 9.41)		28.5 (± 6.05)	

BSS-R – Birth Satisfaction Scale – Revised; MADM – The Mothers' Autonomy in Decision Making

Higher satisfaction with the birth was described in multiparous women (p = 0.001), also in women who had a spontaneous vaginal birth (p = 0.001) without the need for surgical intervention (i.e., VEX, forceps), and, additionally, if the birth was not terminated by cesarean section, whether acute or planned. Higher satisfaction with childbirth was described even if the woman had spontaneous labor without induction (p = 0.001).

Discussion

In our study we focused on level of autonomy in decision making during childbirth and the extent to which it affected overall satisfaction with childbirth among mothers. We also tried to examine individual sub-factors that could influence overall satisfaction with childbirth and the level of perceived autonomy in the decision-making process of childbirth by women.

The World Health Organization (WHO) presents a 'positive birth experience' as an important endpoint for all women who have experienced childbirth. It defines a positive birth experience as one that meets or exceeds a woman's personal and sociocultural beliefs and expectations, including the birth of a healthy baby in a clinically and psychologically safe environment with continuity of practical and emotional support and respectful care from medical staff. This statement is based on the assumption that most women want a physiological birth and want to feel a sense of personal success and control through involvement in decision-making, even if medical interventions are necessary or essential during childbirth (Rodríguez-Almagro et al., 2019). The woman's perception of the course of childbirth is a purely subjective parameter, which includes several factors that, in the end, the woman might evaluate as traumatic. This perception does not necessarily correspond to the perception of childbirth of healthcare professionals.

The perception of childbirth as a traumatic event was confirmed in our research by 16.9% of respondents. Respondents who perceived their birth as a traumatic event described an overall lower satisfaction with the birth and felt a lack of autonomy in making decisions during the birth. A study by Taheri et al. (2018) found that approximately 10–34% of women evaluated their birth as traumatic. The phenomenon of perceiving childbirth as traumatic is not unusual in any health system or country, as similar experiences have been described both in high-income countries (e.g., UK, USA, Canada, Australia) and in low- and middle-income countries (Iran, Turkey), with the prevalence rate for women with traumatic birth varying between 20% and 48.3% (Nagle et al., 2022). In an effort to prevent negative and traumatic birth experiences, studies recommend the reduction of related risk factors, which are mainly: insufficient support from medical staff, a high rate of medical intervention during childbirth, emergency cesarean section or instrumental delivery, and feelings of loss of control (Taheri et al., 2018). Studies have also identified unmet needs in areas important to overall satisfaction with childbirth and maternal well-being. In particular, shortcomings were found in mothers' awareness and their participation in decision-making about the course of childbirth. Negative factors affecting satisfaction with childbirth mainly concern interpersonal and technical aspects of care, the environment of the medical facility, access to information, and participation in decision-making (Weeks et al., 2017). In our study, we also confirmed a statistical connection between satisfaction with childbirth and the level of perceived autonomy, meaning that women who perceived a higher degree of autonomy in decision-making during childbirth also described a higher overall satisfaction with childbirth.

The last decade has shown an increase in induced births. There is still some inconsistency in the literature regarding when induction of labor is justified, with some variability between recommendations and clinical practice (Coates et al., 2020). The rate of increase in induced births varies from country to country, but internationally there is an upward trend (Coates et al., 2020). Although induction of labor is considered a relatively common procedure in obstetric practice, there are limited data on the impact of induced labor on the psycho-emotional experience of a woman (Strandberg et al., 2021). As part of our study, we confirmed that a significantly higher level of satisfaction with childbirth was found in respondents without induced labor. A study by Kempe & Vikström-Bolin (2020) also describes reduced satisfaction with childbirth in women whose labor was induced. Similar results are described in a study by Hamm et al. (2019), in which reduced satisfaction with childbirth was associated with induced childbirth. Women often verbalize general dissatisfaction with induced labor, mainly due to lack of information, a feeling of loss of control over the birth process, and the long duration of labor, which leads to the rotation of medical staff and disruption of the continuity of care provided (Lou et al., 2019). However, our research did not confirm an association between the level of perceived autonomy in decision-making and the experience of induced labor.

Another part of our study was to establish whether mode of delivery has an effect on the overall subjective satisfaction with delivery. This assumption was confirmed, since respondents whose birth took place vaginally without the need for surgical interventions expressed higher satisfaction with the birth. The Kempe & Vikström-Bolin (2020) study also described higher satisfaction with childbirth if women gave birth vaginally without surgical interventions. The connection with the perceived level of autonomy in decision-making and the method of childbirth was not confirmed. Although childbirth is a physiological process that usually takes place without complications, changes in the healthcare system (which has become increasingly technical and interventionist) have led to childbirth being characterized as an act of medical responsibility. Although this medicalization of birth has had a positive impact on reducing maternal and newborn mortality rates, it has also led to medical interventions without clear medical indications and also to the loss of women's autonomy in the birth process (Costa et al., 2023). There are different opinions about the way women give birth. One such opinion is that either cesarean section or medically guided vaginal birth (a cascade of interventions that disrupt the physiological course of birth) has a negative impact on overall satisfaction with childbirth. Another opinion is that cesarean section can increase women's overall satisfaction with childbirth, in particular, if it is a cesarean section at the request of the woman herself (An & Sun, 2023). Natural childbirth without medical intervention is a complex yet perfectly coordinated process, highly sensitive to disruption. The only intervention expected from healthcare providers present at birth is to respect this remarkable phenomenon and observe the basic principle of medicine – 'Primum non nocere' (Çalik et al., 2018).

We confirmed the connection between overall satisfaction with childbirth and parity, finding higher satisfaction with childbirth in multiparous women. The birth of the first child as a negative factor in satisfaction with childbirth was also described in a study by Weeks et al. (2017), which presented similar results to our study. A study by Hochman et al. (2023), also found that first-time mothers more often evaluated their birth negatively. This is mainly explained by the fact that for first-time mothers childbirth takes longer, medical interventions are more often needed during childbirth, and there are often misaligned expectations on the part of the mother. Our results also closely mirror those of a study by Henderson & Redshaw (2013), in which multiparous women described higher satisfaction with childbirth. The connection between parity and the degree of perceived autonomy in decision-making during childbirth was not confirmed in our research.

Finally, our study focused on a closer examination of sociodemographic factors, namely age and education and their influence on overall satisfaction with childbirth, and also on the level of perceived autonomy during childbirth. We identified a connection between age and overall satisfaction with childbirth, whereby, older age of the mother was associated with higher satisfaction with childbirth. Almost identical results are described in a study by Steetskamp et al. (2022), in which they found the older a woman is, the lower her risk of a traumatic birth experience. A study by Smarandache et al. (2016), provided contradictory results, i.e., older women reported lower satisfaction with childbirth, while another study, by Colaceci et al. (2020), again found higher satisfaction with childbirth among women older than 25 years.

Meanwhile, a study by Škodová et al. (2019), found higher overall satisfaction among women who had completed higher education. Similar results were also found in a study by Costa et al. (2023), indicating that the higher the education of the woman, the higher her satisfaction with childbirth. However, in our research, the connection between education, satisfaction with childbirth, and autonomy during childbirth was not confirmed.

Limitation of study

We consider the representativeness of the sample to be a limitation of our research (in particular, the small number of respondents with forceps / VEX mode of birth, or with low education), alongside the fact that we did not know the exact study response rate (as we did not record the number of women who were approached for participation in the research but declined).

Conclusion

Providing health care during childbirth that is focused on the woman in order to involve her in the decision-making process, and to thereby create an overall positive experience of childbirth, should be the priority of every health professional who is present during childbirth. In our study, we tried to demonstrate the connection between the subjective experience of childbirth and the level of autonomy of a woman during childbirth and also

the factors that influence these two variables. We focused on sociodemographic and perinatal factors.

Regarding sociodemographic factors, we paid greater attention to age and education. We found higher satisfaction with childbirth in older mothers, but a connection with autonomy in decision-making during childbirth and age was not confirmed. With regard to education, we failed to demonstrate a connection with any key variable. In our study, 16.9% of female respondents rated childbirth as a traumatic event. Women who evaluated their birth as traumatic perceived an overall lower satisfaction with childbirth and a lower level of autonomy in decision-making during childbirth. On the other hand, higher satisfaction with childbirth was found in multiparous women, in cases of spontaneous childbirth without induction, and in cases when childbirth took place vaginally without the need for surgical intervention. Finally, we also identified a connection between key variables – namely a higher level of autonomy in decision-making during childbirth was associated with an overall higher satisfaction with childbirth. A woman is sensitive to all aspects of childbirth care. Childbirth should involve certain basic attributes of health care, namely the involvement of the mother herself in the decision-making process and the creation of conditions that ensure a positive birth experience.

Ethical aspects and conflict of interest

The authors declare that the research was carried out in accordance with the 1964 Helsinki Declaration and its latest revision, published in 2013. Research respondents were informed in advance in writing about the aims of the research, that their participation in the research was voluntary and anonymous, and that all data obtained would remain confidential.

Participants received information about study aims, each participant signed the informed consent letter before administering the questionnaire, study was approved by the Ethics Committee of Jessenius Faculty of Medicine in Martin, Slovakia, no. 30 / 2021.

The authors declare that there are no conflicts of interest in connection with this study.

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Author contributions

Conception and design (BD, ZS), data analysis and interpretation (BD, ZS), manuscript draft (BD), critical revision of the manuscript (BD, ZS, MB), final approval of the manuscript (BD, ZS, MB).

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