SATISFACTION OF WOMEN WITH CHILDBIRTH

Erika Maskálová, Lucia Mazúchová, Simona Kelčíková, Júlia Samselyová, Lucia Kukučiarová

Department of Midwifery, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Slovakia

Received February 10, 2021; Accepted October 3, 2021. Copyright: This is an open access article under the CC BY-NC-4.0 license.

Abstract

Aim: The study aimed to determine childbirth experience and the overall satisfaction of women with childbirth and its related socio-demographic and obstetric factors. Design: A cross-sectional study. Methods: We used the Childbirth Experience Questionnaire (CEQ) on a sample of 161 primiparous women. Results: Total mean CEQ score was 49.78 (SD = 6.02). The best-rated domain was the Perceived safety domain at 2.66 (± 1.90). The worst-rated domain was the Professional support domain at 1.66 (± 1.30). Regarding childbirth satisfaction, the mode of delivery proved to be a related factor, with the highest level of childbirth satisfaction in women after surgical delivery. Conclusion: Providing quality care and creating a positive experience that can contribute to overall birth satisfaction should be a common target of healthcare professionals in caring for parturient women. In order to create a positive childbirth experience, it is necessary to pay increased attention to the management of labor pain relief, to improving the professional support provided by midwives (i.e., through a more sensitive approach to mothers), to promoting the active participation of the mother during childbirth, and to supporting spontaneous vaginal delivery.

Keywords: childbirth, Childbirth Experience Questionnaire, experience, satisfaction.

Introduction

Providing quality care and creating a positive childbirth experience should be the common target of healthcare professionals caring for parturient women (Iravani et al., 2015; World Health Organisation, 2018). Experience of childbirth depends on a woman’s expectations, the meeting of her needs during childbirth, the support she receives from medical staff, and her involvement in the decision-making process (Dencker et al., 2010). The psychological experience and reactions of a woman during childbirth are highly individual (Škodová, 2018). Subjective assessment of women’s satisfaction with childbirth is currently considered one of the parameters for measuring the quality of healthcare. Childbirth experience and overall satisfaction with childbirth can impact the health of both the mother and baby. A negative childbirth experience contributes to a higher risk of postpartum depression, endangers child development, and worsens a woman’s quality of life (Bell & Anderson, 2016). The importance of subjective childbirth experience and satisfaction with childbirth has been evaluated in many studies (Conesa Ferrer et al., 2016; Fenaroli et al., 2019; Jafari et al., 2017). However, studies aimed at determining women’s childbirth experiences and overall satisfaction with childbirth using an objective measurement tool are quite limited in Slovakia.

Aim

This study aimed to determine childbirth experience and overall satisfaction of women with childbirth, and related socio-demographic and obstetric factors.

Methods

Design

The study was designed as a cross-sectional study.

Sample

The research sample consisted of 161 women with an average age of 29.27 (SD = 4.99) years (min. = 18; max. = 42). There was a deliberate selection of respondents. The group consisted of women who met the inclusion criteria: postpartum condition, primiparity, willingness to cooperate, and willingness to provide written informed consent to participation in the study. The sample characteristics with respect to the research variables (age, education, mode of delivery, gestational week,
labor duration, Oxytocin augmentation during labor, childbirth injury) are presented in Table 1.

Data collection

In order to collect the relevant data, and thus achieve the stated aim of the study, we used the Childbirth Experience Questionnaire (CEQ) (Dencker et al., 2010), with the author’s consent. The CEQ is a self-assessment scale aimed at evaluating the quality of a woman’s subjective childbirth experience and overall satisfaction with childbirth. The questionnaire measures four main domains of the childbirth experience: Own capacity, Professional support, Perceived safety, and Participation (relating to the involvement of women in decision-making during childbirth). It consists of 22 items. The response format of the first 19 statements is a four-point Likert scale ranging from 1 (totally disagree); 2 (mostly disagree); 3 (mostly agree); and 4 (totally agree). Questions no. 20, 21 and 22 are assessed using a visual analogue scale (VAS) ranging from 0 to 100 points; the scores from the VAS are then converted as follows: 0–40 points = 1 point; 41–60 points = 2 points; 61–80 points = 3 points and 81–100 points = 4 points. Using this scale, women expressed the degree of pain, control over childbirth, how safe they felt during childbirth, and their degree of control and involvement in decision-making during childbirth. Before calculating the total score of the questionnaire, items no. 3, 5, 8, 9, and 20 were re-coded. Higher total CEQ scores reflected higher satisfaction with childbirth. The questionnaire was supplemented by questions focusing on basic demographic data and other variables, which represented the examined related factors such as age, education, mode of delivery, gestational week, labor duration, Oxytocin augmentation during delivery, and childbirth injury.

The CEQ was translated into Slovak using the reverse translation method, in cooperation with English language experts. We developed several versions of the translation (mutually independent), which were mostly identical, and led to the creation of a final version of the questionnaire by Slovak language experts. The validity and reliability of the translated questionnaire in our socio-cultural environment have not been verified. The Cronbach’s alpha coefficient was 0.88. The questionnaire has been validated in several countries and language versions. Previous validation studies have indicated good psychometric properties for the CEQ.

We chose maternity hospitals according to their availability and willingness to cooperate with the study. Of three Slovak hospitals approached, two (with an average birth rate of approximately 1,500 births per annum) consented to participation in the research. The questionnaires were then distributed

| Table 1 Basic characteristics of participants (n = 161) |
|-----------------------------------------------|-----------------|
| **Characteristic**                           | **n (%)**       |
| Age                                          |                 |
| 18–30 years                                  | 96 (59.63)      |
| 31 years and more                            | 65 (40.37)      |
| **Education level**                          |                 |
| with secondary and primary school education  | 65 (40.37)      |
| with university education                    | 96 (59.63)      |
| **Mode of delivery**                         |                 |
| spontaneous vaginal delivery                 | 131 (81.37)     |
| operative (Instrumental vaginal delivery and Cesarean delivery) | 29 (18.01) |
| missing data                                 | 1               |
| **Gestational week**                         |                 |
| until 37th week                              | 31 (19.26)      |
| 38th – 40th weeks                            | 101 (62.73)     |
| 41st week and more                           | 29 (18.01)      |
| **Labor duration**                           |                 |
| less than 12 hours                           | 130 (80.75)     |
| more than 12 hours                           | 31 (19.25)      |
| **Oxytocin augmentation during labor**       |                 |
| yes                                          | 91 (56.52)      |
| no                                           | 70 (43.48)      |
| **Maternal childbirth injuries**             |                 |
| no                                           |                 |
| episiotomy, perineal rupture                  | 35 (21.74)      |
| Cesarean – section wound                     | 106 (65.84)     |
| Cesarean – section wound                     | 20 (12.42)      |

© 2021 Central European Journal of Nursing and Midwifery 538
in these two hospitals. We conducted the research from December 2017 to January 2019. The questionnaire was distributed in printed form to women in the puerperium ward on the second – fourth day after delivery. All participants received information about the aims of the study and instructions on how to complete the questionnaire; and each participant signed an informed consent form before completing it. From the 210 distributed questionnaires, we received 161 completed forms, representing a response rate of 76.66%.

Data analysis

The results were analyzed using the statistical program of the freely available statistical program PSPP, version 18.0. Descriptive statistics (frequency, mean, and standard deviation) were used to characterize demographic and obstetric variables. The normality of data distribution was tested and found satisfactory, making possible the use of parametric statistical tests of significance. In order to test the significance of differences in the rate of satisfaction with childbirth identified by the CEQ questionnaire, we used Student’s t-test for two independent selections and the ANOVA tool (analysis of variance). We considered results with a p-value ≤ 0.05 to be statistically significant.

Results

Table 1 provides an overview of the essential characteristics of the research sample. The largest age group was composed of women aged between 18 to 30 years (59.63%); and the majority of women were university educated (59.63%). Women who gave birth spontaneously vaginally predominated (81.37%). The majority of women delivered on their due date (62.73%). For 80.75% of women, childbirth lasted less than 12 hours. Oxytocin augmentation was provided to 56.52% of women; and childbirth injury in terms of episiotomy was present in 65.84% of women. The total mean score for the CEQ was 49.78 (SD = 6.02).

Table 2 provides an analysis of the individual items of the CEQ questionnaire. In the Own capacity domain, the lowest mean score was for the item: “As a whole, how painful did you feel childbirth was?” at 2.76 (± 1.01). In the Professional support domain, the lowest mean score was given for the item: “I felt very well cared for by my midwife”

| Table 2 Childbirth experience questionnaire (CEQ) item description |
|-----------------------------------------------|-----------------|--------|--------|--------|
| **Domain: Own capacity**                      | mean (SD)       | min.   | max.   | median |
| 1. Labor and birth went as I had expected.    | 2.07 (0.91)     | 1      | 4      | 2      |
| 2. I felt strong during labor and birth.      | 2.34 (0.77)     | 1      | 4      | 2      |
| 4. I felt capable during labor and birth.     | 2.15 (0.71)     | 1      | 4      | 2      |
| 5. I was tired during labor and birth.         | 1.96 (0.81)     | 1      | 4      | 2      |
| 6. I felt happy during labor and birth.        | 2.45 (0.95)     | 1      | 4      | 2      |
| 19. I felt that I handled the situation well.  | 1.79 (0.63)     | 1      | 4      | 2      |
| 20. As a whole, how painful did you feel childbirth was? | 2.76 (1.01) | 1 | 4 | 3 |
| 21. As a whole, how much control did you feel you had during childbirth? | 2.43 (0.72) | 1 | 4 | 2 |

| **Domain: Professional support**               |                  |        |        |        |
| 13. My midwife devoted enough time to me.     | 1.57 (0.74)      | 1      | 4      | 1      |
| 14. My midwife also devoted enough time to my partner. | 2.10 (1.04) | 0 | 4 | 2 |
| 15. My midwife kept me informed about what was happening during labor and birth. | 1.58 (0.77) | 1 | 4 | 1 |
| 16. My midwife understood my needs.           | 1.60 (0.71)      | 1      | 4      | 1      |
| 17. I felt very well taken care of by the midwife. | 1.47 (0.70) | 1 | 4 | 1 |

| **Domain: Perceived safety**                  |                  |        |        |        |
| 3. I felt scared during labor and birth.      | 2.41 (0.97)      | 1      | 4      | 2      |
| 7. I have many positive memories from childbirth. | 2.30 (0.86) | 1  | 4  | 2 |
| 8. I have many negative memories from childbirth. | 3.02 (0.80) | 1 | 4 | 3 |
| 9. Some of my memories from childbirth make me feel depressed. | 3.57 (0.67) | 1 | 4 | 4 |
| 18. My impression of the team’s medical skills made me feel secure. | 1.48 (0.61) | 1 | 4 | 1 |
| 19. I felt that I handled the situation well.  | 3.18 (0.92)      | 1      | 4      | 3      |

| **Domain: Participation**                     |                  |        |        |        |
| 10. I felt I could have a say whether I could be up and about or lie down. | 2.11 (1.04) | 1 | 4 | 2 |
| 11. I felt I could have a say in deciding my birthing position. | 2.89 (0.88) | 1 | 4 | 3 |
| 12. I felt I could have a say in the choice of pain relief. | 2.55 (1.01) | 1 | 4 | 3 |

R – ratings of negatively worded statements are reversed (questions 3, 5, 8, 9, 20); Item 20–22 assessed on a VAS – scores were recoded to categorical values, 0–40 = 1, 41–60 = 2, 61–80 = 3 and 81–100 = 4 (item 20 is reversed); SD – standard deviation; min. – minimum; max. – maximum
at 1.47 (± 0.70). In the Perceived safety domain, the lowest score was for: “Some of my memories from childbirth make me feel depressed” at 3.57 (± 0.67). Finally, in the Participation domain, the lowest mean score was awarded for the statement: “I felt I could have a say whether I could be up and about or lie down” (during the onset of labor) at 2.11 (± 1.04). The highest item score was for the Perceived safety domain at 2.66 (± 1.90), and the lowest for the Professional midwifery support domain at 1.66 (± 1.30) (Table 2).

Regarding the Own capacity domain, the variable of childbirth duration was indicated as statistically significant; women whose childbirth lasted for more than 12 hours proved to be more satisfied (p = 0.034). With regard to the Professional support domain, the final mode of delivery was indicated as statistically significant; women after undergoing cesarean section (p = 0.024). In terms of Participation, variables such as the final mode of delivery and childbirth injuries proved to be statistically significant; women gave higher satisfaction scores for this domain after surgical delivery (p = 0.001); as did women with a wound after undergoing cesarean section (p = 0.000). Regarding overall satisfaction with childbirth, the final mode of delivery variable was indicated as statistically significant; thus, women after surgical delivery demonstrated a higher degree of satisfaction with childbirth (p = 0.020) (Table 3). We found that education, gestational week, and Oxytocin augmentation did not prove significant in either CEQ domains or total CEQ scores (Table 3).

Discussion

Using the CEQ questionnaire, we examined the experience and the overall satisfaction of women with childbirth in four domains, along with related socio-demographic and obstetric factors. In terms of overall satisfaction with childbirth, the level

| Table 3 Domains of CEQ, overall score of CEQ and its related variables (n = 161) |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Characteristics | Own capacity | Professional support | Perceived safety | Participation | CEQ score |
| Age             | x    | p-value | x    | p-value | x    | p-value | x    | p-value |
| 18 to 30 years  | 2.28 | 0.158<sup>a</sup> | 1.70 | 0.394<sup>a</sup> | 2.60 | 0.004<sup>a</sup> | 2.57 | 0.276<sup>a</sup> | 2.27 | 0.533<sup>a</sup> |
| 31 years and more | 2.19 | 1.60 | 2.75 | 2.45 | 2.25 |
| Education       | x    | p-value | x    | p-value | x    | p-value | x    | p-value |
| with secondary and primary school education | 2.27 | 0.428<sup>a</sup> | 1.69 | 0.614<sup>a</sup> | 2.61 | 0.099<sup>a</sup> | 2.60 | 0.233<sup>a</sup> | 2.28 | 0.585<sup>a</sup> |
| with university education | 2.22 | 1.64 | 2.69 | 2.46 | 2.52 |
| Mode of delivery | x    | p-value | x    | p-value | x    | p-value |
| spontaneous vaginal delivery | 2.23 | 0.437<sup>a</sup> | 1.59 | 0.002<sup>a</sup> | 2.70 | 0.006<sup>a</sup> | 2.43 | 0.001<sup>a</sup> | 2.23 | 0.020<sup>a</sup> |
| operative (Instrumental vaginal delivery and Cesarean delivery) | 2.28 | 2.00 | 2.52 | 2.91 | 2.37 |
| Gestational week | x    | p-value | x    | p-value | x    | p-value | x    | p-value |
| until 37th week | 2.22 | 0.563<sup>b</sup> | 1.62 | 0.940| 2.62 | 0.626<sup>b</sup> | 2.70 | 0.148<sup>b</sup> | 2.26 | 0.763<sup>b</sup> |
| 38th–40th weeks | 2.23 | 1.67 | 2.68 | 2.44 | 2.25 |
| 41st week and more | 2.30 | 1.68 | 2.64 | 2.61 | 2.30 |
| Labor duration | x    | p-value | x    | p-value | x    | p-value |
| less than 12 hours | 2.21 | 0.034<sup>a</sup> | 1.64 | 0.462<sup>a</sup> | 2.67 | 0.474<sup>a</sup> | 2.53 | 0.826<sup>a</sup> | 2.25 | 0.276<sup>a</sup> |
| more than 12 hours | 2.36 | 1.74 | 2.62 | 2.49 | 2.31 |
| Oxytocin augmentation during labor | x    | p-value | x    | p-value | x    | p-value |
| yes | 2.25 | 0.641<sup>a</sup> | 1.67 | 0.892<sup>a</sup> | 2.65 | 0.715<sup>a</sup> | 2.58 | 0.372<sup>a</sup> | 2.27 | 0.624<sup>a</sup> |
| no | 2.24 | 1.65 | 2.67 | 2.47 | 2.25 |
| Maternal childbirth injuries | x    | p-value | x    | p-value | x    | p-value |
| no | 2.34 | 0.091<sup>b</sup> | 1.66 | 0.285<sup>b</sup> | 2.62 | 0.024<sup>b</sup> | 2.46 | 0.000<sup>b</sup> | 2.27 | 0.650<sup>b</sup> |
| episiotomy, perineal rupture | 2.22 | 1.62 | 2.51 | 2.37 | 2.25 |
| caesarean – section wound | 2.14 | 1.88 | 2.71 | 3.10 | 2.31 |

x – mean scale score; <sup>a</sup>Student’s t-test; <sup>b</sup>ANOVA; p-value – significance p ≤ 0.05
of overall satisfaction with childbirth was 56.56%, which is lower than in a study carried out in Spain (Coll et al., 2021).

One aspect of satisfaction with childbirth is satisfaction with one’s own behavior during the process (Kodyššová, 2013). Satisfaction with one’s own behavior depends on how much a woman retains control over her behavior. This control mainly refers to the management of labor pain. Many women report concerns about uncontrollable reactions during childbirth, particularly in response to pain. The degree to which a woman can manage different degrees of pain during childbirth can ultimately affect a woman’s self-confidence, self-control over childbirth, and overall satisfaction with childbirth (Bertucci et al., 2012; Dencker et al., 2010; Nilsson et al., 2013). Some studies have shown that women’s satisfaction with childbirth increases as the intensity of labor pain decreases (Jafari et al., 2017; Mohammad et al., 2014; Schytt et al., 2008; Waldenström et al., 2006). In our study, women reported high intensity of labor pains (Table 2).

The professional approach of the midwife is an important factor influencing how a woman experiences childbirth (Larkin et al., 2009; Škodová, 2018), and can be the cause of negatively perceived childbirth in women (Nilsson et al., 2010). Our results demonstrate that the women did not feel sufficiently cared for by the midwife. This may be influenced by the fact that midwives typically spend more time with women in Slovakia than, for example, doctors, and are thus more likely to be monitored and criticized. Likewise, the level of autonomy of midwives in Slovakia is low (Maskálová et al., 2020). Our study did not specify the concept of good care; however, it would be helpful to particularize it in further research.

In a study by Mazúchová et al. (2020), women reported feeling distrust towards midwives, criticizing their impersonal approach and failure to provide sufficient emotional support. Our results from Slovakia do not correspond to the findings of other studies in which midwives provided adequate support for mothers during childbirth (Nilsson et al., 2013; Rijnders et al., 2008).

Childbirth is a highly intimate matter, and it is important that women are accompanied by familiar people whom they fully trust, and with whom they feel safe (Uherková, 2016). Many factors influence perceived safety during childbirth. In a study, Iravani et al. (2015) point to high levels of fear about the child’s health, which can significantly disrupt the feeling of safety. In some countries, perceptions of safety are also influenced by the place of childbirth, with births outside medical facilities becoming more common. In a study in Scotland, women explicitly opted for a hospital as the safest place for childbirth. On the other hand, a survey conducted in the USA found that a feeling of safety was cited as one of the main reasons for choosing a home birth (Hadjigeorgiou et al., 2012). In our study, item 9: “Some of my memories from childbirth make me feel depressed” received the lowest score in the Perceived safety domain, a finding consistent with the study by Coll et al. (2021).

Studies indicate that freedom of movement throughout labor is an attribute that can be used for assessing care during childbirth and women’s satisfaction with childbirth (Lawrence et al., 2009; Shilling et al., 2007). In our results, women reported dissatisfaction with the choice of position during childbirth within the Participation domain. Similar results were reported by Takács and Seidlerová (2013). Midwives have a unique opportunity to provide evidence-based care, such as advice on maternal positions during labor to support natural delivery (Mazúchová et al., 2020). In their literature review, Ondeck et al. (2014) state that no studies have yet proved maternal movement to be detrimental to physiological childbirth; thus supporting the concept of freedom of movement and self-choice of birth position during labor (Ondeck et al., 2014). According to Nieuwenhuijze et al. (2014), the possibility of free movement and choice of different positions during labor help support the physiological processes of childbirth. Moreover, it is also a significant predictor of women’s satisfaction with childbirth. Kongnyuy et al. (2008) found a significant improvement in mothers’ overall satisfaction with childbirth when they were informed of different positions during childbirth and were able to decide which position was best for themselves.

Our study also focused on socio-demographic and obstetric factors affecting overall satisfaction with childbirth. Studies indicate that older mothers are associated with higher birth satisfaction (Kabo et al., 2019; Srivastava et al., 2015; Waldenström et al., 2006). However, Aston et al. (2010) and Tocchioni et al. (2018) found that younger women reported higher satisfaction with childbirth. Our research demonstrated age as significant only in the Perceived safety domain, in which younger women reported lower satisfaction scores compared to older women. Satisfaction with childbirth may also depend on the final mode of delivery. Some studies report that cesarean or instrumental delivery contribute to a negative birth experience and thus lower childbirth satisfaction (Fleming et al., 2016; Hollins et al., 2015; Hildingsson et al., 2013; Karlström et al., 2013).
On the other hand, some studies suggest that women undergoing instrumental or cesarean delivery may receive more support from medical staff, and therefore their experience of childbirth is more positive, which also contributes to overall childbirth satisfaction (Fenaroli et al., 2019). In our results, the final mode of delivery proved to be significant in the domains of Professional support, Perceived safety, Participation, and overall CEQ score. Women with spontaneous vaginal delivery reported lower satisfaction, which differs from the results of Boie et al. (2020), and Dencker et al. (2010), who found that women with spontaneous delivery were more satisfied with childbirth. In our study, the final mode of childbirth was significant in the Perceived safety domain in women after surgical delivery, who reported lower satisfaction with childbirth. Our results are consistent with the study by Walker et al. (2015).

The relationship between spontaneous onset / induction of labor and satisfaction with childbirth is unclear. Some studies report that women who have undergone labor induction are less satisfied, while other studies indicate that women are satisfied and have a positive experience of childbirth if they have had an induced labor. Induction of labor is associated with stronger contractions and a higher need for labor pain relief. On the other hand, during induced labor, a woman may experience more support from medical staff, which may be more important to her than the pain itself. In our study, spontaneous onset of labor and oxytocin-induced labor did not differ significantly in any domain, or in the total CEQ scores.

Kempe & Vikström-Bolin (2020) found that women whose childbirth lasted a shorter time reported significantly higher satisfaction with the childbirth experience. In our research, the duration of childbirth in relation to overall satisfaction with childbirth did not prove significant, although we found a significant difference in the Own capacity domain, in which higher satisfaction was reported by women with childbirth duration of more than 12 hours. Our results are consistent with a Danish study (Boie et al., 2020). In contrast, in a Spanish study by Soriano-Vidal et al. (2016), an English study by Walker et al. (2015), and a Swedish study by Dencker et al. (2010), women with shorter childbirth duration (less than 12 hours) demonstrated higher satisfaction scores.

Some maternal childbirth injuries are childbirth complications occurring in 85% of childbirths (Frohlich & Kettle, 2015). They are associated with pain, which can negatively affect the childbirth experience and overall satisfaction with childbirth (Crookal et al., 2018). In our study, we observed significant differences in the CEQ scores in the Perceived safety domain and in the Participation domain, in which women after episiotomy reported lower satisfaction compared to other groups (Table 3).

Limitation of study

A methodological weak point of the study was the opportunistic method of selecting the research sample and the non-representativeness of the sample in terms of the number of respondents participating in the research. Another limit is that the validity and reliability of the translated questionnaire have not been verified in our socio-cultural environment. Therefore, we cannot be certain that the tool was used as the author of the questionnaire intended or whether it was sufficiently accurate and reliable in the Slovakian context. The modified version of the questionnaire was used only for the purposes of our pilot study. We aim to validate the questionnaire in the near future. Finally, in the study, women completed the questionnaire almost immediately after delivery; however, it would also be appropriate for women to complete the questionnaire a longer time postpartum (e.g., six weeks), as certain attributes may be perceived differently after the passage of time.

Despite its limitations, we believe that the study emphasizes the importance of investigating women’s childbirth experiences, and that the continuation of this partial research may make possible the identification of further, undiscovered factors influencing women’s experience of childbirth.

Conclusion

The overall level of women’s satisfaction with childbirth in our research was relatively low at 56.56%. In terms of overall satisfaction with childbirth, the mode of delivery proved to be a related factor, with women demonstrating significantly higher degrees of satisfaction following surgical delivery. Based on the results in the given domains of the CEQ questionnaire, we found that in order to create a positive experience, and thus overall satisfaction with childbirth, it is necessary to raise awareness of the importance of the management of labor pain relief, of improving professional support provided by midwives (i.e., through a more sensitive approach to mothers), of promoting the active participation of the mother during childbirth, and of supporting spontaneous vaginal delivery. It is also necessary to conduct further research to determine women’s experiences.
and overall satisfaction with childbirth, and any related factors that can contribute to the development of evidence-based maternal care which can be implemented in the Slovakian healthcare system.

Ethical aspects and conflict of interest

The study was approved by the Ethics Committees of both hospitals. The authors declare no potential conflicts of interest – financial or otherwise.

Funding

This study was supported by the VEGA project (research grant agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic) under contract no. VEGA-1/0211/19, and by the KEGA 016UK-4/2021 Standardised Patient in Midwifery project.

Author contributions

The concept and study design (EM, JS, LK), data analysis and interpretation (EM, JS, LK), processing the draft of the manuscript (EM, LM), critical revision of the manuscript (EM, LM, SK), article finalization (EM, LM).

References

Aston, M., Saulnier, C., & Robb, K. (2010). Not just another delivery: women’s maternity care experiences of provider client relationships. Women’s Health and Urban Life, 9(1), 32–49.

Bell, A. F., & Andersson, E. (2016). The birth experience and women’s postnatal depression: a systematic review. Midwifery, 39, 112–123. https://doi.org/10.1016/j.midw.2016.04.014

Bertucci, V., Bozzo, M., Mannarini, S., Serena, A., Saccardi, C., Cosmi, E., Andrisani, A., & Ambrosini, G. (2012). Assessing the perception of the childbirth experience in Italian women: a contribution to the adaptation of the Childbirth Perception Questionnaire. Midwifery, 28(2), 265–274. https://www.ncbi.nlm.nih.gov/pubmed/21489665

Boie, S., Lauridsen, H. H., Glavind, J., Smed, M. K., Uldbjerg, N., & Bor, P. (2020) The Childbirth Experience Questionnaire (CEQ) – validation of its use in a Danish-speaking population of new mothers stimulated with oxytocin during labour. PLOS ONE, 15(5), e0233122. https://doi.org/10.1371/journal.pone.0233122

Coll, R. P., Casañas, R., Palomares, C. A., Aubian, M. G., Muñoz, D. F., Trespalacios, E. X., Martinez, R. A., & Peiro, E. R. (2021). Women’s childbirth satisfaction and obstetric outcomes comparison between two birth hospitals in Barcelona with different level of assistance and complexity. Central European Journal of Nursing and Midwifery, 12(1), 235–244. https://cejnm.oscu.org/pdfs/cnj/2021/01/09.pdf

Conesa Ferrer, M. B., Canteras Jordana, M., Ballesteros Meseguer, C., Garcia, C. C., & Martinez Roche, M. E. (2016). Comparative study analysing women’s childbirth satisfaction and obstetric outcomes across two different models of maternity care. BMJ Open, 6, e011362. https://bmjopen.bmj.com/content/6/8/e011362.long

Crookall, L., Fowler, G., Wood, C., & Slade, P. (2018). A systematic mixed studies review of women’s experiences of perineal trauma sustained during childbirth. Journal of Advanced Nursing, 74(9), 2038–2052. https://doi.org/10.1111/jan.13724

Dencker, A., Taft, C., Bergqvist, L., Lilja, H., & Berg, M. (2010). Childbirth experience questionnaire (CEQ): development and evaluation of a multidimensional instrument. BMC Pregnancy and Childbirth, 10, 81. https://doi.org/10.1186/1471-2393-10-81

Fenaroli, V., Molgara, S., Dodaro, S., Svelato, A., Gesi, L., Molidoro, G., Saita, E., & Ragusa, A. (2019). The childbirth experience: obstetric and psychological predictors in Italian primiparous women. BMC Pregnancy Childbirth, 19, 419. https://doi.org/10.1186/s12884-019-2561-7

Fleming, S. E., Donovan-Batson, C., Burduli, E., Barbosa-Leiker, C., Hollins Martin, C. J., & Martin Colín, R. (2016). Birth Satisfaction Scale / Birth Satisfaction Scale-Revised (BSS / BSS-R): a large scale United States planned home birth and birth centre survey. Midwifery, 41, 9. https://doi.org/10.1016/j.midw.2016.07.008

Frohlich, J., & Kettle, C. (2015). Perineal care. BMJ Clinical Evidence, 10, 1401.

Hadjiigeorgiou, E., Kouta, C., Papastavrou, E., Papadopoulos, I., & Mårtensson, L.B. (2012). Women’s perceptions of their right to choose the place of childbirth: an integrative review. Midwifery, 28(3), 380–390. https://doi.org/10.1016/j.midw.2011.05.006

Hildingsson, I., Johansson, M., Karlström, A. & Fenwick, J. (2013). Factors associated with a positive birth experience: an exploration of Swedish women’s experiences. International Journal of Childbirth, 3(3), 153–164.

Hollins, M., Caroline J., & Martin Colín, R. (2015). A survey of women’s birth experiences in Scotland using the Birth Satisfaction Scale (BSS). European Journal for Person Centered Healthcare, 3(4), 478–486. http://dx.doi.org/10.5750/epch.v3i4.1019

Iravani, M., Zarean, E., Jiangborani, M., & Bahrami, M. (2015). Women’s needs and expectations during normal labor and delivery. Journal of Education and Health Promotion, 4, 6.

Jafari, E., Mohhebi, P., & Mazloomzadeh, S. (2017). Factors related to women’s childbirth satisfaction in physiologic and routine childbirth groups. Iranian Journal of Nursing and Midwifery Research, 22(3), 219–224.

Kabo, J. W., Holroyd, E., Edwards, G. & Sarki, A. M. (2019). Sociodemographic factors associated with mothers’ experiences of psychosocial care and communication by midwives during childbirth in Nairobi, Kenya. International Journal of Africa Nursing Sciences, 11, 100164. https://doi.org/10.1016/j.ijans.2019.100164

Karlström, A., Nystedt, A., & Hildingsson, I. (2015). The meaning of a very positive birth experience: focus groups discussions with women. BMC Pregnancy and Childbirth, 15, 251. https://doi.org/10.1186/s12884-015-0683-0

Kempe, P., & Vikström-Bolin, M. (2020). Women’s satisfaction with the birthing experience in relation to duration of labour, obstetric interventions and mode of birth. European Journal of Obstetrics & Gynecology and Reproductive Biology, 24, 156–159. https://doi.org/10.1016/j.ejogrb.2020.01.041
Kodyššová, E. (2013). Vliv sociálně psychologických faktorů porodního zážitku na ranou rodičovskou self-efficacy prvoričiček [Social – psychological aspects of childbirth experience and their impact on early parental self-efficacy of first – time mothers]. Psichosom, 11(3), 28–32.

Kongnyuy, E. J., Mlava, G., van den Broek, N. (2008). Criteria-based audit to improve a district referral system in Malawi: a pilot study. BMC Health Services Research, 8, 190. https://doi.org/10.1186/1472-6963-8-190

Larkin, P., Begley, C. M., & Devane, D. (2009). Women’s experiences of labour and birth: an evolutionary concepts analysis. Midwifery, 25(2), e49–59. https://doi.org/10.1016/j.midw.2007.07.010

Lawrence, A., Lewis, L., Hofmeyr, G. J., & Styles, C. (2009). Maternal positions and mobility during first stage labour. Cochrane Database of Systematic Reviews, 2, CD003934. https://doi.org/10.1002/14651858.CD003934.pub2

Maskálová, E., Samselyová, J., & Urbanová, E. (2020). Skúsenosti žien s pôrodom – profesionálna podpora pôrodnej asistenty počas pôrodu [Childbirth experience of women – professional support of a midwife during labor]. Florence, 1, 1–7.

Mazúchová, L., Kelčíková, S., Štofaníková, L., Kopincová, J., Malinovská, N., & Grendár, M. (2020). Satisfaction of Slovak women with psychosocial aspects of care during childbirth. Midwifery, 86, 102711. https://doi.org/10.1016/j.midw.2020.102711

Mohammad, K. I., Afaji, K. K., Mohammad, A. I., Gamble, J., & Creedy, D. (2014). Jordanian women’s dissatisfaction with childbirth care. International Nursing Review, 61(2), 278–284. https://pubmed.ncbi.nlm.nih.gov/24762171/

Nieuwenhuize, M. J., Korstjens, I., de Jonge, A., de Vries, R., & Lagro-Janssen, A. (2014). On speaking terms: a Delphi study on shared decision-making in maternity care. BMC Pregnancy Childbirth, 14, 223. https://doi.org/10.1186/1471-2393-14-223

Nilsson, L., Thorsell, T., Hertfeldt Wahn, E., & Ekström, A. (2013). Factors influencing positive birth experiences of first-time mothers. Nursing Research and Practice, 2013, 1–6. https://doi.org/10.1155/2013/349124

Nilsson, L., Thorsell, T., Hertfeldt Wahn, E., & Ekström, A. (2013). Factors influencing positive birth experiences of first-time mothers. Nursing Research and Practice, 2013, 349124, 1–6. https://doi.org/10.1111/j.1552-6909.2010.01139.x

Ondeck, M. (2014). Healthy birth practice #2: walk, move around, and change positions throughout labor. The Journal of Perinatal Education, 23(4), 188–193. https://doi.org/10.1891/1058-1243.23.4.188

Rijnders, M., Baston, H., Schönbeck, Y., Van Der Pal, K., Prins, M., Green, J. & Buitendijk, S. (2008). Perinatal factors related to negative or positive recall of birth experience in women 3 years postpartum in the Netherlands. Birth, 35(2), 107–116. https://doi.org/10.1111/j.1523-536X.2008.00223.x

Schytt, E., Green, M. J., Helen A. Baston, A. H., & Waldenström, U. (2008). A comparison of Swedish and English primiparae’s experiences of birth. Journal of Reproductive and Infant Psychology, 26(4), 277–294, https://doi.org/10.1080/02646830802408381

Shilling, T. (2007). Care Practice #2: freedom of movement throughout labor. The Journal of Perinatal Education, 16(3), 21–24.

Soriano-Vidal, F. J., Oliver-Roig, A., Cabrero-García, J., Congost-Maestre, N., Dencker, A., & Richard-Martínez, M. (2016). The Spanish version of the Childbirth Experience Questionnaire (CEQ-E): reliability and validity assessment. BMC Pregnancy and Childbirth, 16, 372. https://doi.org/10.1186/s12884-016-1100-z

Srivastava, A., Avan, B. I., Rajbangshi, P. & Bhattacharyya, S. (2015). Determinants of women’s satisfaction with maternal health care: a review of literature from developing countries. BMC Pregnancy Childbirth, 15, 97. https://doi.org/10.1186/s12884-015-0525-0

Škovodová, Z. (2018). Psychológia v pôrodnej asistencii [Psychology in Midwifery]. Univerzita Komenského v Bratislave, Jesseniova lekárska fakulta v Martine.

Takács, L., & Seidlerová, J. (2013). Psychosocial klima porodnice očima rodičiek: I. výsledky celorepublikového průzkumu spokojenosti s perinatální péči v ČR u reprezentativního souboru 1195 rodiček. [Psychosocial climate in maternity hospitals from the perspective of parturients I. Results from a national survey on perinatal care satisfactionusing a representative sample of 1195 Czech parturients]. Česká gynecologie, 78(2), 157–168.

Tocchioni, V., Seghieri, C., De Santis, G., & Nuti, S. (2018). Socio-demographic determinants of women’s satisfaction with prenatal and delivery care services in Italy. Internal Journal of Quality for Health Care, 30(8), 594–601. https://doi.org/10.1093/intqhc/mzy078

Uherková, K. (2016). Důvěra a bezpečí jsou na prvním místě, neboť jsou součástí porodních mechanismů [Trust and safety come first, as they are part of the birth mechanisms]. Retrieved March 17, 2021, from https://jak-jinak.webnode.cz/news/duvera-a-bezpeci-jou-na-prvnim-mistev-nebot-jsou-soucasti-porodnich-mechanismu/

Waldenström, U., Rudman, A., & Hildungsson, I. (2006). Intrapartum and postpartum care in Sweden: women’s opinions and risk factors for not being satisfied. Acta Obstetricia et Gynecologica, 85(5), 551–560. https://doi.org/10.1080/0001634050345378

World Health Organization (2018). WHO recommendations: intrapartum care for a positive childbirth experience. World Health Organization. http://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215eng.pdf?sequence=1&isAllowed=y

Walker, K. F., Wilson, P., Bugg, G. J., Dencker, A., & Thorton, J. B. (2015). Childbirth experience questionnaire: validating its use in the United Kingdom. BMC Pregnancy Childbirth, 15, 86. https://doi.org/10.1186/s12884-015-0513-4