



Original research article

Risk factors associated with fear of childbirth among pregnant women

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Abstract

Aim: The aim of the study was to analyse the associations between selected risk factors and the level of fear of childbirth among pregnant women.

Methods: The research sample consisted of 251 pregnant women, most commonly aged 25–30 years, in all stages of pregnancy. The level of fear was measured using the standardized Tokophobia Severity Scale (TSS) questionnaire, supplemented with demographic data and obstetric history information. Data were processed as a combined research design and analyzed using the Mann–Whitney *U* test and the Kruskal–Wallis test.

Results: Statistically significant associations were found between the level of fear of childbirth and pregnant women's education ($p = 0.015$) and high-risk pregnancy ($p = 0.041$). The most common concerns reported by participants were complications during pregnancy (55%) and concerns about potential threats to the child during pregnancy or delivery (48%).

Conclusion: The results highlight the importance of systematic educational activities, open communication with pregnant women, and interprofessional collaboration in reducing concerns about potential health complications affecting the child in the future. Particular attention should be paid to demographic groups with lower levels of education. Risk factors associated with fear of childbirth require further targeted research.

Keywords: Delivery; Fear of childbirth; Pregnancy; Risk factors; Tokophobia

Introduction

Pregnancy and childbirth represent significant life events with a strong psychosocial impact on women. Childbirth is an individual and complex process in which positive emotions such as joy and anticipation are intertwined with concerns, anxiety, and fear. Fear of childbirth is common even in the context of safe maternal care and may negatively affect women's physical and mental health, well-being, and relationships with their child or partner (Nilsson et al., 2018).

Physiologically, excessive fear may activate the stress response system, increase catecholamine levels, and inhibit oxytocin production, which may lead to prolonged labour, increased pain, and negatively affect the course of delivery (Brenišin et al., 2021; Kaščáková and Hašto, 2018). Activation of the sympathetic nervous system and elevated adrenaline levels may inhibit uterine contractions and worsen the childbirth experience. Additionally, stress affects levels of prolactin, oestrogen, and progesterone, potentially disrupting reproductive processes (Kubalová, 2018).

The prevalence of tokophobia – a pathological fear of childbirth – ranges between 8–25% according to international studies, and its occurrence has been increasing in recent years

(Demšar et al., 2018; O'Connell et al., 2017). Increased fear of childbirth is associated with higher psychological stress, more intense pain perception, and a greater number of requests for elective cesarean sections (Alizadeh-Dibazari et al., 2023).

Risk factors for tokophobia include demographic characteristics, such as higher maternal age, lower educational level, and single marital status (do Souto et al., 2022; Osman et al., 2021; Sioma-Markowska et al., 2017), as well as psychological factors, previous negative childbirth experiences (Sydsjö, 2011), and high-risk pregnancy (Imakawa et al., 2022). Antenatal psychophysical preparation has been shown to be a protective factor that reduces fear and promotes a positive childbirth experience (Bakhteh et al., 2024; Poggi et al., 2018).

The aim of this study was to analyze the associations between selected risk factors and the level of fear of childbirth among pregnant women and to identify the most common concerns associated with childbirth.

Materials and methods

The study was conducted as a quantitative study with a correlational design, to analyze the associations between selected pregnancy and childbirth risk factors and the level of fear

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of childbirth. The research sample consisted of 251 pregnant women aged over 18 years, most of them aged 25–30 years. Women were included in the study if they met the following criteria: age over 18 years and informed consent to participate.

Data were collected through purposive sampling of pregnant women approached at the gynaecology and obstetrics department and the antenatal monitoring outpatient clinic of a tertiary hospital serving a catchment population of approximately 660,000 inhabitants in central Slovakia. Data were collected electronically from September 2023 to February 2024. After the initial contact in the hospital, pregnant women received the questionnaire via email.

The study was approved by the hospital ethics committee, and all participants were informed about the anonymity, voluntary participation, and the possibility to withdraw from the study at any time.

For data collection, the standardized Tokophobia Severity Scale (TSS) questionnaire was used (Wootton et al., 2020), consisting of 13 items assessing common concerns related to pregnancy and childbirth. Responses were recorded using a four-point Likert scale (always – often – sometimes – never).

The total possible score ranges from 0 to 39, with higher scores indicating greater levels of anxiety and fear of childbirth. The instrument does not yet have a defined cutoff score.

The Slovak version of the questionnaire was prepared using the back-translation method, along with additional evaluation of translation accuracy. Particular attention was paid to potentially ambiguous questions and culturally sensitive items. The internal consistency of the scale was high (Cronbach's alpha = 0.899), confirming its reliability.

In addition to the standardized items, the questionnaire included questions related to:

- demographic data: age, education, marital status, financial situation;
- obstetric history: parity, high-risk pregnancy, participation in psychophysical childbirth preparation classes.

Statistical analysis

Data were processed using Microsoft Excel 2016 and the statistical software Jamovi (version 2.4.11). Descriptive statistics, data categorization, and transformation were performed for further analysis. Differences between groups were tested using the Mann–Whitney *U* test and the Kruskal–Wallis test; nonparametric tests were chosen because the dependent variable did not meet the criterion of normal distribution.

Results

The main objective of the study was to analyze the association between selected demographic and obstetric factors and the level of fear of childbirth measured by the Tokophobia Severity Scale (TSS).

The research sample consisted of 251 pregnant women, representing all age categories between 20 and 40 years, with the largest group being women aged 25–30 years (37.1%).

More than half of the participants were primiparous women (54.2%), and the majority of respondents had completed higher education (61.8%). Pregnancy was not classified as high-risk in 81.3% of women (Table 1).

Table 1. Demographic and clinical data of the sample (n = 251)

Demographic data	N	%	Clinical data	N	%
Age			Parity		
20–25	45	17.9	Primipara	136	54.2
25–30	93	37.1	Secundipara	86	34.3
30–35	80	31.9	Multipara	29	11.6
35–40	28	11.2			
Ovec 40	5	2.0			
Education			High-risk pregnancy		
Secondary without a school-leaving certificate	6	2.4	Yes	47	18.7
Secondary with a school-leaving certificate	90	35.9	No	204	81.3
University	155	61.8			

The analysis showed statistically significant differences in the level of fear of childbirth in two variables: education ($p = 0.015$) and high-risk pregnancy ($p = 0.041$). Women with secondary education without a school-leaving certificate reported the highest level of fear, whereas the lowest level of fear was reported by women with secondary education with a school-leaving certificate. Among respondents with a high-risk pregnancy, a lower mean TSS score was recorded compared to women with physiological pregnancies (Table 2).

For the other variables – age, marital status, parity, psychophysical preparation for childbirth, and financial situation – no statistically significant differences were found ($p > 0.05$). The level of fear of childbirth differed only minimally across categories of these variables.

The most frequently reported concerns included health complications during pregnancy or childbirth (55%), con-

cerns about the baby's health (48%), and fear that something dangerous might happen to the woman during childbirth (47%). In contrast, the lowest level of fear was observed in areas such as avoiding conversations about pregnancy (79% "not at all") and excessive checking or monitoring of pregnancy (83% "not at all"). These findings suggest that most women experience mild to moderate levels of concern, primarily related to the health and safety of both mother and child (Table 3).

The raw TSS score was calculated for all 251 respondents. The average score for fear of childbirth was 27.8 points, indicating a mild to moderate level of fear in the sample. The median was 29 points, and the mode was 28 points. The range of results was relatively wide, from 2 to 39 points with a standard deviation of 7.2 points. This indicates a wide variation in the intensity of fear among the respondents (Table 4).

Table 2. Differences in the level of fear of childbirth based on the potential risk factors

Variable	N (%)	TSS score	p-level
Education			
Secondary without a school-leaving certificate	6 (2.4%)	34.5 (\pm 3.73)	0.015
Secondary with a school-leaving certificate	90 (35.9%)	26.7 (\pm 7.9)	
University	150 (61.8%)	28.1 (\pm 6.7)	
High-risk pregnancy			
Yes	47 (18.7%)	26.0 (\pm 7.37)	0.041
No	204 (81.3%)	28.2 (\pm 7.12)	
Age			
20–25	45 (17.9%)	27.4 (\pm 6.86)	0.613
25–30	93 (37.1%)	27.5 (\pm 7.69)	
30–35	80 (31.9%)	28.8 (\pm 6.74)	
35–40	28 (11.2%)	26.6 (\pm 7.94)	
Over 40	5 (2.0%)	27.6 (\pm 2.7)	
Marital status			
Unmarried (<i>without partner</i>)	5 (2.0%)	25.6 (\pm 8.44)	0.674
Unmarried (<i>with partner</i>)	68 (27.1%)	28.3 (\pm 6.93)	
Married	173 (68.9%)	27.7 (\pm 7.28)	
Divorced/Widow	5 (2.0%)	25.6 (\pm 8.26)	
Parity			
Primipara	136 (54.2%)	27.4 (\pm 7.06)	0.203
Secundipara	86 (34.3%)	27.6 (\pm 7.63)	
Multipara	29 (11.6%)	30.1 (\pm 6.23)	
Psychophysical preparation			
Attended	64 (25.5%)	28.0 (\pm 6.69)	0.903
Not attended	187 (74.5%)	27.7 (\pm 7.38)	
Financial status			
Above average	45 (17.9%)	28.3 (\pm 7.22)	0.566
Average	192 (76.5%)	27.8 (\pm 7.21)	
Below average	14 (5.6%)	26.4 (\pm 7.37)	

Table 3. Frequency and intensity of pregnant women's concerns regarding pregnancy and childbirth

Area of concern	Always n (%)	Often n (%)	Sometimes n (%)	Never n (%)
Health complications during pregnancy/childbirth	22 (8.8%)	59 (23.5%)	137 (55%)	33 (13.1%)
Mode of delivery	26 (11%)	48 (19%)	101 (40%)	76 (30%)
Fear that something terrible will happen to the woman during pregnancy/childbirth	15 (6%)	40 (16%)	115 (46%)	81 (32%)
Fear that something will happen to the baby during pregnancy/childbirth	23 (9%)	65 (26%)	111 (44%)	52 (21%)
Fear that the woman will not cope with pain during pregnancy/childbirth	15 (6%)	43 (17%)	106 (42%)	87 (35%)
Fear of medical procedures during pregnancy/childbirth	21 (8%)	36 (14%)	104 (42%)	90 (36%)
Avoidance of conversations about pregnancy, childbirth, and deliveries	4 (2%)	11 (4%)	38 (15%)	198 (79%)
Fear of inability to influence medical procedures	17 (7%)	34 (14%)	81 (32%)	119 (47%)
Fear that pregnancy or childbirth will be accompanied by excessive pain	22 (9%)	46 (18%)	111 (44%)	72 (29%)
Excessive checking/monitoring of pregnancy	2 (1%)	12 (5%)	27 (11%)	208 (83.5%)
Nightmares about pregnancy or childbirth	0 (0%)	14 (6%)	40 (16%)	195 (78%)
Fear that something dangerous will happen to the woman during pregnancy/childbirth	14 (6%)	35 (14%)	118 (47%)	84 (33%)
Fear that something dangerous will happen to the baby during pregnancy/childbirth	22 (9%)	51 (20%)	120 (48%)	58 (23%)

Table 4. Descriptive indicators of the TSS scale

	TSS scale
N	251
Missing	0.0
Mean	27.8
Median	29.0
Modus	28.0
Standard deviation	7.2
Minimum	2.0
Maximum	39.0

Discussion

The aim of this study was to identify the risk factors that influence the experience of fear of childbirth and to analyze specific areas of concern among pregnant women. Fear of childbirth is a multidimensional phenomenon influenced by biological, psychological, social, and cultural factors. At the same time, it represents an important determinant of obstetric outcomes, as a high level of tokophobia has been associated with an increased risk of obstetric interventions, prolonged labor, planned cesarean sections, prenatal anxiety, and postpartum depression (O'Connell et al., 2017; Saisto and Halmesmäki, 2003).

Age as a risk factor

In the sample, the age of respondents was not found to be statistically associated with experience of fear. This finding does not correspond with several international studies in which higher maternal age (particularly over 30 years) has been associated with increased fear of childbirth (Lukasse et al., 2015; Sioma-Markowska et al., 2017). One of the possible explanations may lie in the age structure of our sample; it is relatively homogeneous with an under-representation of higher age groups which may reduce variability and thus statistical power. Cultural context may also play a role. According to official data (NCZI, 2025), nearly 31% of women giving birth in 2025 were aged 30–34 years, suggesting that maternal age above 30 may be considered relatively common and therefore associated with lower perceived risk.

Furthermore, a study conducted in Brazil (Dal Moro et al., 2023) also reported no significant correlation between maternal age and fear of childbirth. Similarly, Bakouei et al. (2025) observed no remarkable associations between fear of childbirth and age, suggesting that the relationship between maternal age and fear of childbirth remains not straightforward.

Marital status

Marital status was not found as a significant predictor of fear. This finding does not correspond with the study of do Souto et al. (2022), which identified a higher prevalence of anxiety and tokophobia among women without partners. We assume that this difference may be related to the distribution of categories in our sample, where married women predominated (69%) thus limiting the ability to detect differences between groups. Supportive partner relationships are consistently presented in the literature as a protective factor, reducing prenatal anxiety, improving coping strategies, and supporting positive expectations regarding childbirth (Garthus-Niegel et al., 2014;

Sydsjö, 2011). While some studies have not found family support or marital status alone to be a significant predictor of fear of childbirth, other research indicates that relationship quality and family ties may reduce anxiety and concerns (Zhou et al., 2021). A meta-analysis of 17 studies showed that family support was not significantly associated with reduced fear, although partner support was (Alizadeh-Dibazari et al., 2025). These findings may reflect differences in how social support is measured across cultural contexts.

Financial situation and socioeconomic factors

Financial situation was not identified as a significant factor in the sample. However, this result does not correspond with findings by Osman et al. (2021) reporting that lower socioeconomic status, lower education, and limited material resources significantly increase the risk of tokophobia. Similarly, Bakouei et al. (2025) reported that family financial situation was significantly associated with fear of childbirth, with women reporting insufficient household income having a higher risk of fear compared with those reporting sufficient income. A likely explanation for our findings may be the relatively homogeneous socioeconomic status of the sample, as most respondents reported stable financial conditions, which may limit the ability to detect differences. Nevertheless, international studies consistently show that socioeconomic stress increases prenatal anxiety, concerns about complications, and a reduced sense of control (Grote et al., 2010).

Parity

Parity was not found to be statistically significant in our sample. However, it is often described in the literature as one of the main determinants of fear of childbirth. Primiparous women often report greater fear related to the unknown, pain, and possible complications, whereas multiparous women may experience fear stemming from previous negative birth experiences (Räisänen et al., 2014; Sydsjö, 2011). The discrepancy in our findings may be explained by the balanced representation of both groups and the absence of extreme negative childbirth experiences among respondents. A study conducted in northern China (Zhang et al., 2023) reported an association between high levels of fear of childbirth and nulliparity, attributing this to a lack of information about the childbirth process. Conversely, Çiçek et al. (2025) reported that parity did not influence the mean fear of childbirth score. Similarly, Bakouei et al. (2025) found no statistically significant association between parity and fear of childbirth. A study conducted in Nigeria (Eleke et al., 2020) also reported that the number of previous births was not a significant determinant of fear of childbirth.

Significant factors: high-risk pregnancy and education

Two variables were identified as statistically significant factors: high-risk pregnancy and education.

High-risk pregnancy was associated with higher levels of fear. Findings confirm that complications during pregnancy or pre-existing medical conditions increase anxiety, concerns about childbirth complications, and fear for the child's health (Korukcu et al., 2022). Health risks may trigger anticipatory anxiety, which can be reflected in higher ratings across all dimensions of fear. Nilsson et al. (2018) reported higher levels of fear among women with high-risk pregnancies compared to low-risk pregnancies. Similarly, Thayer et al. (2023) identified high-risk pregnancy as significantly associated with an increased likelihood of fear of childbirth, supporting the need for targeted psychological support for this group. Other stud-

ies also report that pregnancy complications may increase fear of childbirth by linking expectations of complications with concerns about birth outcomes (Zhang et al., 2023). On the other hand, our results differ from those reported by Dal Moro et al. (2023), indicating no association between fear of childbirth and high-risk pregnancy.

Lower education was also identified as a significant factor associated with increased concerns. In the literature, this phenomenon is often explained by the possibility that women with lower education may have limited access to reliable information and fewer opportunities to critically evaluate available sources. Uncertainty or lack of verified knowledge may lead to higher levels of insecurity. Additionally, these women may rely more heavily on informal information from their surroundings, which tends to be inaccurate or exaggerated, and thus contributing to increased anxiety and uncertainty. The study “The Effect of Pregnancy Health Literacy on Risk Perception in Pregnancy and Pregnancy Anxiety” (Uyanik et al., 2025) found that higher health literacy during pregnancy (which is closely linked to higher education) was paradoxically associated with higher levels of pregnancy anxiety, even though it was also associated with a lower perception of risk. At the opposite end of the spectrum, a study by Kotimäki et al. (2020) showed that women with lower levels of education were significantly more likely to experience clinically significant symptoms of anxiety or depression during pregnancy than women with tertiary education. Internationally, several studies have examined educational level as a factor related to fear of childbirth. For example, the regression analysis showed that a lower educational level of the woman and her partner was significantly associated with higher levels of tokophobia (Rashidi et al., 2025). Similarly, the study conducted in the U.S. (Thayer et al., 2023) found a significantly higher risk of fear of childbirth (OR = 1.37) among women with lower education compared to women with higher education. Similarly, a large-scale study conducted in China found that lower education was one of the factors associated with higher levels of fear of childbirth.

Analysis of areas of fear

In our analysis of the TSS responses, we identified the most common sources of anxiety:

1. Concerns about health complications

Respondents felt the most intense concerns about health complications during pregnancy or childbirth. This aspect represents a key dimension of tokophobia in international studies as well, although some studies reported fear of pain as a dominant concern (Demšar et al., 2018; Kanellopoulos and Gourounti, 2022). Qualitative studies (Arfaie et al., 2017) also confirmed that specific fears of health complications (e.g., bleeding, genital injury) constitute a significant part of prenatal anxiety and fear of childbirth. Our results can be interpreted to suggest that health-related concerns may be more pronounced in the Slovak context – they may be linked to the specifics of obstetric care, media coverage of childbirth complications, or low awareness of the physiology of childbirth. Our findings reporting a high prevalence of fears of health complications during pregnancy and childbirth correspond with several international studies: He et al. (2025) and the systematic meta-analysis of East African populations (Abebe et al., 2024) reported that complications significantly increase the likelihood of fear of childbirth, while other qualitative studies confirmed that these fears are among the most frequently cited reasons for prenatal anxiety.

2. Concern for the child's health

This finding is fully consistent with the literature. Studies (Alizadeh-Dibazari et al., 2023; Dal Moro et al., 2023; Nilsson et al., 2018) have indicated that concern for one's child is a universal phenomenon across cultures. Maternal identity activates protective mechanisms and hypervigilance toward potential threats as early as pregnancy, which may explain the high scores in this domain. Our finding that concerns about the child's health rank among the most frequent domains of fear of childbirth is supported by other works. Research carried out in Slovakia (Mazúchová et al., 2016) found that up to 64% of pregnant women reported fear for the child's health as the most intense concern during their pregnancy. Similarly, international studies showed that during stressful periods (e.g., COVID-19), concerns about the foetus were significantly associated with higher levels of fear of childbirth (Mijalevich-Soker and Taubman-Ben-Ari, 2025). Similarly, fear of harm to the child during childbirth is among the dominant concerns for women across various cultural settings (AlDardeir et al., 2025).

3. Fear of pain

In our sample, fear of pain was frequently reported, but it was not among the main determinants. This finding may be related to greater access to information about pain relief options and childbirth preparation. Similarly, several international studies point out that labor pain itself is not always the primary source of fear, but its perception is closely linked to psychological factors. A population-based longitudinal study from Norway demonstrated that while women with severe fear of childbirth rated labor pain as more intense, this relationship was significantly influenced by anxiety levels, depressive symptoms, and a sense of control over the birthing process (Ryding et al., 2007). A systematic review by Nilsson et al. (2018) also noted that fear of pain was a common component of fear of childbirth, but its significance varied depending on cultural context, parity, and the level of prenatal support. Kaščáková and Hašto (2018) confirmed that the perception of pain was modulated by psychological readiness, partner support, and trust in an obstetric team. Our findings thus suggest that, in the current context, fear of pain can, to some extent, be reduced through adequate education and psychosocial support during pregnancy.

4. Low levels of avoidant and compulsive behavior

Low scores in the areas of avoiding topics related to childbirth and excessive control over pregnancy suggest that most respondents exhibit healthy, adaptive coping. This result may reflect a good level of prenatal education and a positive attitude among women. Similarly, international studies highlight the importance of coping strategies in relation to fear of childbirth: research among Chinese pregnant women showed that women who adopt positive coping styles report lower levels of fear of childbirth compared to those who tend toward negative or avoidant strategies, confirming the importance of active stress management and informed decision-making (Han et al., 2022). The systematic review indicated that avoidance and other maladaptive coping styles were often associated with poorer psychological adaptation during pregnancy, whereas problem-focused strategies led to more favourable outcomes (Alizadeh-Dibazari et al., 2025). Similarly, correlational analyses have shown that problem-focused coping was associated with higher levels of self-efficacy during childbirth, which may enhance adaptive coping with stressors related to childbirth (Guardino and Schetter, 2014).

5. Fears of losing control and medical interventions

Some respondents reported fears around losing control and medical interventions. This is an aspect frequently described in the literature – perceived autonomy, the attitude of healthcare providers, and the quality of communication significantly influence anxiety and the childbirth experience (Mongan, 2010). International research confirms that the feeling of loss of control during childbirth is a commonly reported factor associated with fear of childbirth, especially when women are exposed to unfamiliar medical procedures, unexpected interventions, or when they lack sufficient information and involvement in decision-making regarding childbirth. For example, a systematic review (Rúger-Navarrete et al., 2023) reported that women with greater concerns about loss of control or unforeseen interventions often experience higher levels of anxiety and prefer more controlled or planned modes of delivery. Similarly, cross-sectional analyses have identified fear of losing control during childbirth as one of the key psychological factors contributing to fear of childbirth among first-time mothers, including in relation to how women perceive their subjective health status and the course of labor (Demšar et al., 2018). According to the literature, a sense of control is one of the protective factors that reduce anxiety and improve the overall childbirth experience. These findings suggest that supporting women's autonomy – e.g., through informed consent and shared decision-making – can be an important preventive measure for minimizing the fear of losing control during childbirth.

Limitations of the study

Our findings should be interpreted in the context of several limitations. The first concerns the size and structure of the research sample, which consisted predominantly of women with stable partner relationships and socioeconomic backgrounds. The uneven representation of certain groups (e.g., single women, women with low income, or women of higher maternal age) may have limited the ability to detect differences between categories. Another limitation is the cross-sectional design, which does not allow causal relationships or dynamic changes in fear during pregnancy to be assessed. Therefore, it is not possible to determine whether specific factors increase fear or whether increased fear is associated with other psychological variables not included in the analysis.

A potential methodological limitation is the self-report nature of the questionnaire, which may be subject to social desirability bias or subjective distortion. Furthermore, the TSS scale was originally validated in a different cultural context, which may influence the sensitivity of certain items within the Slovak population.

Finally, the study was conducted only in one region of Slovakia, which may limit the generalizability of the findings to the entire population of pregnant women.

Implications for clinical practice and the care of pregnant women

Based on our findings, we recommend systematic screening for tokophobia as part of routine prenatal care, ideally beginning in the first trimester of pregnancy. Women with high-risk pregnancies should automatically be considered a group requiring increased psychological attention. The early identification of tokophobia makes it possible to implement preventive interventions, potentially reducing the risk of negative obstetric outcomes such as elective cesarean sections on maternal request, prolonged labor, or increased obstetric interventions. Given that our results identified higher levels of fear among

women with lower education, prenatal education should be adapted to the needs of different groups of women.

For women with lower health literacy, we recommend using visual materials, practical demonstrations, short educational videos, as well as individual consultations instead of standard group lectures using complex professional terminology. Educational activities should systematically address the most common concerns, including explanation of the physiology of childbirth, realistic information about possible complications and their management, explanation of fetal monitoring, and strengthening women's perception of their own competence. Our findings regarding fear of loss of control and medical interventions also highlight the importance of strengthening shared decision-making in maternity care. Women should be actively involved in developing a birth plan, receive clear explanations of proposed procedures, and be given space to express their preferences and concerns. Support for perceived control during childbirth – through continuity of care with a midwife, partner presence, freedom of movement, and choice of birth position – may significantly reduce anxiety and improve childbirth experience. When severe tokophobia is identified, particularly with comorbid depressive or anxiety symptoms, early consultation with a clinical psychologist or psychiatrist is essential. However, in the Slovak context, the availability of systematic perinatal psychological care remains limited, making it an important area for future development. Implementing these measures can help improve the mental well-being of pregnant women, reduce unnecessary medical interventions, and support a positive childbirth experience for women giving birth.

Conclusion

The results of our study provide important insights into factors influencing the experience of fear of childbirth and the most common areas of concern among pregnant women. Among the analysed variables, high-risk pregnancy and education were identified as statistically significant factors, suggesting that a woman's health status and level of information play a key role in the intensity of experienced fear. In contrast, age, marital status, financial situation, and parity were not identified as significant factors, although international research reports different findings. This discrepancy highlights the need for further research with larger and more diverse samples.

The most prominent concerns in our sample were related to maternal health complications and the health of the child, confirming that women primarily perceive childbirth as an event associated with potential health risks. Although concerns about pain were present, they did not represent the dominant source of fear. The relatively low level of avoidance and compulsive behaviour and moderate concerns about medical interventions suggest that most women approach childbirth adaptively and with a certain level of trust.

Our findings emphasize the importance of targeted prenatal education, psychological support, and effective communication between healthcare professionals and expectant mothers in reducing concerns about potential health complications affecting the future child, particularly among women with lower levels of education.

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Ethical aspects and conflict of interest

The authors have no conflict of interest to declare.

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