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Research Article

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Postpartum Blues as an Adaptive Response to a New Life Situation

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ABSTRACT

The work has a theoretical-empirical character and is focused on defining postpartum blues and its impacts on a woman's psyche after childbirth. The aim was to identify possible triggering factors of postpartum blues, the most commonly manifested symptoms of postpartum blues, and the degree of women's adaptation to their new life situation - the role of mother. In the research, we evaluated the triggering factors of postpartum blues that contributed to its occurrence. Data were obtained from a self-constructed questionnaire. The selection of respondents was purposeful; the sample consisted of 103 respondents in the postpartum period, in the age category from 18 to 38 years. In the analytical part, we present the results. The research results indicate that iatrogenic factors during pregnancy, childbirth, and in the postpartum period have a greater share in the occurrence of postpartum blues than psychosocial factors.

Keywords: Postpartum Blues, Emotional Lability, Risk Factors, Postpartum Adaptation to Motherhood

Introduction

Childbirth and the birth of a child represent a significant life event for mothers, bringing with it major changes. During pregnancy, many changes occur in a woman's body that affect not only her physical but also her mental health. Childbirth involves great physical exertion and often emotional stress. After childbirth, adaptation to motherhood begins, which for women means learning new skills as well as adjusting to new living conditions. Mothers often feel fear, feel incapable of handling the entire situation. They have a strong sense of failure and instead of love for the child, they feel a certain emptiness. Women after childbirth may have increased vulnerability to mental health issues. Postpartum blues or postpartum depression are conditions that can affect the entire process of adaptation to motherhood. It is important for women to have sufficient support from their partner, family, and healthcare personnel throughout this challenging phase. It is essential to remember that fathers also play an important role in this process. They are a source of emotional, psychological, and practical support for the mother and can be involved in caring for the child.

Pregnancy, childbirth, and the birth of a child are complex life events that bring very different psychological reactions. Having a child means a complex series of losses in a woman's life, which are simultaneously connected to gaining a child and acquiring the role of mother. New duties and responsibilities are added to the woman. The myth of maternal love claims that from the first moment, a woman intuitively knows what to do. The reality is often different, especially if routine medical interventions and separation of the mother from the child are applied to the natural processes of childbirth, bonding, and the early postpartum period. These negative interventions can trigger feelings of failure, threat, or humiliation. A woman feels that not only was she unable to give birth, breastfeed, and care for her child, but that she is the only one who feels nothing toward her child and has failed in her role as a mother. Therefore, it is important to distinguish between the normal process of grieving and mental illness [1].

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Perinatal mental disorders are a significant complication of pregnancy and the postpartum period. These disorders include anxiety disorders, depressions, and postpartum psychosis. Postpartum blues is a common but milder manifestation of postpartum affective disorder. Risk factors include a history of depression, anxiety, or bipolar disorder, as well as psychosocial factors such as ongoing conflict with a partner, weak social support, and persistent stressful life events. Early signs of anxiety, depression, and mania can be detected through screening during pregnancy and in the postpartum period. Early detection and effective treatment of perinatal psychiatric disorders are crucial for the well-being of women and their offspring [2].

Emotional Changes in Pregnancy

In pregnant women, we often find states that under normal circumstances would be labeled as pathological, such as high levels of anxiety, depression, moodiness, impaired cognitive functions, magical thinking, regression, etc. Serious mental illnesses and suicides are rare. Negative emotions occur more frequently than positive ones in 90% of pregnant women [3].

During pregnancy, phobias may also be present. Most often, this involves pathological fear and avoidance of childbirth, known as tokophobia [4].

Pregnant women with the mentioned phobia often request a cesarean section and have a higher rate of psychiatric morbidity if refused [4]. According to Demšar et al, when identifying the prevalence of risk factors for the development of tokophobia, 75% of survey participants reported low to moderate tokophobia, while 25% exhibited high or very high fear of childbirth [5]. Uguz et al found that the prevalence of anxiety disorders in general among women with hyperemesis gravidarum is approximately 36% [6]. The results of this study suggest that mood disorders, anxiety, and personality disorders are often observed in women with the mentioned diagnosis, and that there is a potential relationship between these psychiatric disorders and hyperemesis gravidarum during pregnancy [6].

Psychological changes during pregnancy affect not only pregnant women but also, to a large extent, their partners—future fathers—as well as older children, who must cope with the new role of an older sibling [7].

Factors Influencing the Psyche of a Pregnant Woman

Pregnancy is a period characterized by a wide range of changes. These include biological, social, and psychological changes [8]. Completing psychophysical preparation provides women with maximum psychological and physical readiness, with the assumption of easier coping with childbirth and adaptation to motherhood [9].

Motivation and the relationship to the unborn child are additional factors that in some way contribute to the experience of pregnancy. These two factors are interconnected. In psychology, there are four basic attitudes toward the unborn child depending on whether the child was planned or unplanned, wanted or unwanted. The worst conditions are for children who are unplanned and unwanted [8]. De La Rochebrochard in her meta-analysis points out that children born after an unplanned pregnancy have worse developmental scores [10].

Risks of Untreated Anxiety During Pregnancy and After Childbirth

A pregnant woman who experiences anxiety is often influenced by panic, regret, and subsequent feelings of guilt. She is stressed by the fact that she is stressed. As a result, few pregnant women are able to talk about their anxieties, even with loved ones. Untreated anxiety is a significant risk for the mother, her child, and needs to be addressed [4].

Risk for the Mother

Several studies suggest that expectant mothers with clinically significant anxiety disorders are at higher risk of postpartum depression and postpartum anxiety disorder [11,12]. It was found that women who experienced anxiety during pregnancy also reported more physical difficulties [13]. After childbirth, they are at risk of developing symptoms of PTSD (post-traumatic stress disorder) [4].

Risk for the Child

In a specific study of Peruvian women, it was found that anxious mothers have higher vulnerability to preterm birth compared to women who reported no or minimal depressive symptoms [14]. Studies have also demonstrated low APGAR scores in children of mothers with anxiety during pregnancy [15]. Post-traumatic stress disorder was associated with an increased likelihood of preterm birth [16].

The study by O'Connor states that maternal anxiety can affect the child's temperament, which may later have behavioral and emotional consequences [17].

Prenatal Education and Psychoprophylactic Preparation for Childbirth

Childbirth is the only physiological event in nature associated with pain. Pain can be expected, but there are large individual differences in its perception and psychological processing. Psychological factors are also important—mainly anxiety and fear—because the higher their level, the more the muscle tone of the skin increases, which further heightens the perception of pain. The birth process elicits a physiological stress response in the fetus, which is beneficial for the child's postpartum adaptation [3]. Some women are very undisciplined or uncooperative during childbirth. The reason for such behavior is often the absence of sufficient information about the circumstances of childbirth [3].

Prenatal care and psychological preventive preparation are part of women's (mothers') health care in EU countries [18]. Lewis-Jones in one cross-sectional survey on attendance at prenatal preparation among pregnant women in Sydney found that the main reasons for attending classes were better coping with childbirth (86%), feeling confident in caring for the baby (71%), and feeling confident as a parent (60%) [19]. Reasons for non-attendance included being too busy (33%) and costs (27%). Epidural analgesia, breathing techniques, massage, and nitrous oxide were the most common educational topics [19].

The goal of this preparation is an individual and appropriately chosen approach to the woman in labor. Cooperation with the partner is also very important, especially if he is to be present at the birth, not just as an observer, but as an active participant [18].

The Importance of an Accompanying Person in Preparation for Childbirth

The primary accompanying person during pregnancy and childbirth is necessarily the midwife. Besides her, the most common accompanying person for the birthing woman is the child's father. He uses haptic expressions of love and belonging, such as stroking, hugging, holding hands [9]. Based on synthesized findings by Baldwin et al, three main factors were identified that influence the mental health and well-being of first-time fathers during their transition to fatherhood: forming paternal identity, competing challenges of the new father role, and negative feelings and concerns associated with it [20].

Postpartum Blues

Approximately in the first week after childbirth, it is common for women to experience various forms of physical discomfort and symptoms that have been characterized as postpartum blues or "baby blues" [2]. Heretik describes postpartum blues as "a natural state of increased emotional reactivity after childbirth" [3]. It is such a common mood disorder after childbirth that it is considered a normal reaction to birth [1].

For most people, the birth of a child is associated with a time of joy and satisfaction. Few know that a worsened mood very often appears in the postpartum period. It occurs in 50 to 80% of new mothers. It most commonly develops on the 3rd-4th day after birth with a short episode of worsened mood manifesting as irritability, mood swings, and bouts of crying. It lasts approximately 10 to 14 days but may transition into postpartum depression. It is often associated with dissatisfaction with the course of childbirth, exhaustion, breastfeeding problems, and uncertainty regarding newborn care and meeting its needs [1]. This condition most commonly occurs in first-time mothers. Postpartum blues is not considered a pathological change in a woman's psyche but rather a natural adaptive reaction after childbirth that occurs in all cultures [7].

Etiology

The development of postpartum blues can be led by several risk factors. These include a history of mood changes related to the menstrual cycle or mood changes associated with pregnancy. A history of major depression or dysthymia, a higher number of pregnancies, or a family history of postpartum depression. Other factors that may predispose a patient to the development of postpartum blues include low economic status, ethnic or racial origin, pregnancy (primipara vs. multipara), planned vs. unplanned pregnancy, spontaneous conception vs. IVF, type of delivery (vaginal vs. cesarean section), family history of mood disorders, or a history of postpartum depression in the past [21]. Dr. Dalfen describes perfectionism as a risk factor for the development of baby blues [22].

According to the study by O'Hara and Wisner, three most common predisposing factors were identified in women who developed postpartum blues—higher levels of depressive symptoms during pregnancy, at least one previous episode of diagnosed depression, and a history of premenstrual depression or other mood changes related to menstruation [2].

Zanardo et al in one specific study in Africa demonstrated that women diagnosed with postpartum blues on the fifth day after childbirth had a twelve times higher likelihood of being diagnosed with postpartum depression one month after childbirth and a ten times greater likelihood of being diagnosed with postpartum depression two months after childbirth [23].

Differentiation and Evaluation Based on Symptoms

According to diagnostic criteria, postpartum blues is transient and self-limiting. Therefore, it resolves on its own and does not require any treatment other than confirmation, education, reassurance, and psychosocial support [24]. Symptoms of postpartum blues include crying, emotional lability, irritability, anxiety, insomnia, and changes in appetite. If symptoms persist longer than two weeks, then the diagnostic criteria for postpartum depression are met. A clinical tool that may be useful for screening postpartum blues is the MBQ (Maternity Blues Questionnaire), and for postpartum depression, the EPDS (Edinburgh Postnatal Depression Scale), which have demonstrated sufficient sensitivity and specificity for establishing the given diagnosis [21,25]. In differential diagnosis, it is always necessary to rule out organic causes of the disease, intoxications, endocrine disorders, and withdrawal symptoms [1].

Treatment

Postpartum blues is not considered a mental illness but a natural postpartum adaptive reaction of a woman's body, which often disappears by the tenth day after childbirth [26]. Therefore, pharmacotherapy is not indicated for this diagnosis [7]. This condition requires more of a supportive psychotherapeutic approach, education from healthcare personnel, and a sensitive approach from the family [3]. While the symptoms of postpartum blues are mild, transient, and spontaneously resolve, patients should still be carefully monitored for suicidal thoughts, paranoia, or homicidal thoughts toward the child. In addition, it is necessary to seek help in the household to ensure the mother gets enough rest and sleep. If insomnia persists, cognitive therapy and/or pharmacotherapy may be recommended [21].

Prevention of Postpartum Blues

Empathetic and sensitive treatment of patients in the maternity ward, a dignified course of childbirth, support for bonding immediately after birth, and providing adequate psychosocial support during the postpartum period should be the main representatives in the prevention of postpartum blues [1]. Women should always be informed that if problems do not subside within 14 days after childbirth, it is appropriate to seek professional help [27].

Postpartum Depression

Postpartum depression is a much more serious condition than baby blues and affects approximately 1 in 7 new mothers. It is a prolonged affective disorder that can last weeks to months. It is not precisely defined, but the symptoms and signs do not differ from other depressions [7]. It can occur at any time during the first 6 months after childbirth (Postpartum Depression, 2022). Postpartum major depression is approximately 4 to 11 times more common in women who have postpartum blues [21]. The most critical period for the onset of the first symptoms is the return from the maternity ward to the home environment, when the woman begins to feel the burden associated with caring for the child, the household, and physical discomfort [3]. The onset

of postpartum depression is influenced by sociodemographic factors. According to the study by Dušová and Moniaková, the greatest risk of developing postpartum depression is among women aged 21 to 29 years, single, and primiparas [28]. The lowest risk was achieved by married women with two children aged 30 to 39 years [28].

Findings from the study by Mazúchová support the claims that a mother's deteriorated mental state can negatively affect the ongoing process of forming bonds between mother and child in the postpartum period [29].

The Postpartum Period and Postpartum Mental Disorders

Heretik describes the postpartum period as "a period of approximately 6 weeks from the day of birth, when the mother's body recovers. It is a period characterized mainly by somatic and hormonal changes" [3]. Nearly 85% of women after childbirth experience some degree of depressive symptoms. Although these symptoms are transient and mild for most women [30].

The postpartum period should also be an opportunity for the woman to regain new strength for future and upcoming difficult moments with her newborn and infant. Comprehensive postpartum care by a midwife for the postpartum woman has enormous benefits not only for the woman but also for the entire family [7].

Care for a Woman's Psyche After Childbirth

With the arrival of a child in the family, a sense of responsibility for the child's health and upbringing emerges. On one hand, the woman feels joy and happiness, and on the other hand, fear and an exaggerated sense of responsibility. However, few women find time to process their emotions in new life situations [26].

Postpartum Adaptation to a New Life Situation

Motherhood is one of the most important roles in a woman's life. According to current guidelines, women should reunite with their children as soon as possible after birth [31].

The newborn's adaptation to the outside world is a stressful situation for both the child and the mother. For this reason, it is very important to evaluate risk factors in terms of problems that the mother may encounter during the postpartum period and during adaptation to the child and the new life situation [31].

Maternal mental health has a significant impact on mother-child interaction in the first year after birth, as well as the physical and emotional development of children. The adaptation process can last up to one year after birth [32].

The effort of midwives is to make this period unique and special for the woman. The foundations of attachment and emotional bonding between mother and child are formed [26].

Research Methodology

The research was focused on determining the share of psychosocial and iatrogenic factors in the occurrence of postpartum blues in women during the postpartum period. Information collection was carried out through an anonymous questionnaire. It involved a purposeful selection of respondents—women in the postpartum period who experienced the presence of postpartum blues symptoms after the birth of a child. The distribution of questionnaires to respondents was carried out in the time interval from January 2023 to the end of March 2023 in electronic and print form. The questionnaire in electronic form was successfully completed by 93 respondents. In print form, 10 questionnaires were fully completed from the Maternal Center Mamy Mamám in Šaľa. After the return of the questionnaires, we processed and evaluated the obtained information from 103 respondents.

Research Results

The subject of the research was to highlight the issue of coping with psychological stress in the postnatal period and the occurrence of postpartum blues.

We found that the largest number of respondents in the research — 40 (38.83%) — were in the age category from 28 to 31 years. This is followed by respondents aged 24 to 27 years, numbering 24 (23.30%), and in the category 32 to 35 years, numbering 23 (22.33%). The least represented respondents — 11 — are in the youngest age category from 18 to 23 years (10.68%), and in the oldest from 36 to 38 years, there were 5 approached respondents (4.86%).

The largest group of respondents consisted of married women (n=71; 68.93%). This is followed by women living in a partnership (n=29; 28.15%). The smallest group consisted of single women (n=3; 2.91%). Divorced and widows had zero count.

In terms of education, the largest group of respondents consisted of women with university education (n=57; 55.34%). This is followed by respondents with secondary education with a matriculation exam (n=42; 40.78%). Less than 4%, numbering 4, from our sample of respondents, consisted of women with apprenticeship and basic education.

In the research, primiparas made up 68.94% (n=71). Second-time mothers numbered 28 (27.18%). The smallest group consisted of multiparas (n=4; 3.88%).

Among the respondents, we investigated psychosocial risk factors during pregnancy, childbirth, and the postpartum period that increase the risk of postpartum blues occurrence.

Table 1: Pregnancy Planning n = 103

Pregnancy Planning	AF (n)	RF (%)
yes, we planned it	80	77.67%
no, we did not plan it	23	22.33%
total	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Table 2: Occurrence of Stressful Events During Pregnancy n = 103

Occurrence of Stressful Events During Pregnancy	YES		NO		Total	
	AF n	RF %	AF n	RF %	AP n	RF %
health problems	43	41.74%	60	58.26%	103	100%
hospitalization	31	30.09%	72	69.91%	103	100%
conflicts with husband/partner	28	27.18%	75	72.82%	103	100%
conflicts in the family	29	28.16%	74	71.84%	103	100%
divorce/breakup with partner	0	0%	103	100%	103	100%
loss of a close person	17	16.50%	86	83.50%	103	100%
loss of employment	10	9.71%	93	90.29%	103	100%
financial problems	24	23.30%	79	76.70%	103	100%
I did not experience any	35	33.98%	68	66.02%	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Table 3: Inability to Fulfill the Role of Mother n=103

Inability to Fulfill the Role of Mother	AF n	RF %
yes	19	18.45%
rather yes	36	34.95%
rather no	29	28.15%
no	19	18.45%
total	103	100%

Legend: AF – absolute frequency = n, RF– relative frequency = %

Subsequently, we focused on identifying iatrogenic factors during the course of pregnancy, childbirth, and the postpartum period, which may increase the risk of postpartum blues occurrence.

Table 4: Bonding n = 103

Bonding	AF n	RF %
immediately	25	24.28%
within half an hour after birth	14	13.59%
within 1 hour after birth	8	7.77%
within 2 hours after birth	7	6.79%
after 2 or more hours after birth	49	47.57%
total	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Identified Factors Contributing to the Triggering of Transient Emotional Disorder After Birth

Table 5: Level of Satisfaction with the Approach of the Nurse/Midwife During Hospitalization (For each response, the possibility of rating the level of agreement from 0 to 4, where 0 means to the least extent and 4 means to the greatest extent) n = 103

Approach N/M	0		1		2		3		4		Total	
	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %
expression of attention	11	10.68%	22	21.36%	18	17.48%	24	23.30%	28	27.18%	103	100%
empathetic approach	14	13.59%	15	14.56%	19	18.45%	21	20.39%	34	33.01%	103	100%
encouragement	27	26.21%	15	14.56%	11	10.68%	18	17.48%	32	31.07%	103	100%
listening	26	25.24%	11	10.68%	22	21.36%	21	20.39%	23	22.33%	103	100%
accommodating	16	15.53%	25	24.27%	13	12.62%	23	22.33%	26	25.24%	103	100%
speaking kindly	12	11.65%	21	20.39%	14	13.59%	25	24.27%	31	30.10%	103	100%
expression of interest	12	11.65%	21	20.39%	22	21.36%	23	22.33%	25	24.27%	103	100%
expression of respect	16	15.53%	21	20.39%	12	11.65%	24	23.30%	30	29.13%	103	100%
providing help	7	6.79%	12	11.65%	25	24.27%	18	17.48%	41	39.81%	103	100%
praising	35	33.98%	8	7.77%	15	14.56%	16	15.53%	29	28.16%	103	100%
friendly behavior	9	8.74%	23	22.33%	13	12.62%	25	24.27%	33	32.04%	103	100%
smiling	18	17.48%	16	15.53%	12	11.65%	18	17.48%	39	37.86%	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %, nurse /N/, midwife /M/ Identified Factors Contributing to the Triggering of Transient Emotional Disorder After Birth

Table 6: Women's Participation in Psychophysical Preparationn = 103

Women's Participation in Psychophysical Preparation	AF n	RF %
yes	29	28.15%
no	74	71.85%
total	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Table 7: Occurrence of Complications During Childbirth (Selection of one answer in each row. Option to mark in each row "YES" or "NO") n=103

Occurrence of Complications During Childbirth	YES		NO		Total	
	AF n	RF %	AF n	RF %	AF n	RF %
childbirth before the end of the 37th week of pregnancy	8	7.77%	95	92.23%	103	100%
I pushed for a long time	25	24.27%	78	75.73%	103	100%
the child had poor reflexes	19	18.45%	84	81.55%	103	100%
large blood loss	14	13.59%	89	86.41%	103	100%
large suturing	36	34.95%	67	65.05%	103	100%
non-progressing labor	29	28.15%	74	71.85%	103	100%
prolonged labor	34	33.01%	69	66.99%	103	100%
childbirth was terminated with vacuum extractor	12	11.65%	91	88.35%	103	100%
childbirth was terminated with forceps	0	0%	103	100%	103	100%
childbirth was terminated by cesarean section	31	30.10%	72	69.90%	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Table 8: Symptoms of Postpartum Blues n = 103 (For each response, the possibility of rating the level of agreement from 0 to 4, where 0 means to the least extent and 4 means to the greatest extent)

Symptoms of Postpartum Blues	0		1		2		3		4		Total	
	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %	AF n	RF %
mood changes	6	5.83%	11	10.68%	24	23.30%	27	26.21%	36	34.95%	103	100%
tearfulness	7	6.79%	10	9.71%	14	13.59%	20	19.42%	52	50.49%	103	100%
anxiety	16	15.53%	14	13.59%	19	18.45%	25	24.27%	29	28.16%	103	100%
insomnia	32	31.07%	16	15.53%	22	21.36%	15	14.56%	18	17.48%	103	100%
sadness	33	32.04%	17	16.50%	19	18.45%	18	17.48%	16	15.53%	103	100%
irritability	14	13.59%	17	16.50%	14	13.59%	30	29.13%	28	27.18%	103	100%
emotional lability	12	11.65%	14	13.59%	11	10.68%	14	13.59%	52	50.49%	103	100%
reduced concentration	35	33.98%	29	28.16%	17	16.50%	9	8.74%	13	12.62%	103	100%
loss of appetite	56	54.37%	22	21.36%	10	9.71%	5	4.85%	10	9.71%	103	100%
feeling of inability to meet the child's needs	22	21.36%	18	17.48%	16	15.53%	16	15.53%	31	30.10%	103	100%
excessive fear for the child	20	19.42%	20	19.42%	16	15.53%	26	25.24%	21	20.39%	103	100%
breastfeeding problems	22	21.36%	10	9.71%	20	19.42%	10	9.71%	41	39.81%	103	100%
indifference toward the child	85	82.52%	7	6.80%	6	5.83%	3	2.91%	2	1.94%	103	100%
rejection of the child	93	90.29%	5	4.85%	5	4.85%	0	0%	0	0%	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Table 9: Self-Evaluation – Adaptation to Motherhoodn = 103

Self-Evaluation	AF n	RF %
I adapted poorly	18	17.48%
I adapted adequately	33	32.04%
I adapted well	30	29.13%
I adapted excellently	22	21.36%
Total	103	100%

Legend: AF – absolute frequency = n, RF – relative frequency = %

Discussion

The subject was the investigation of psychosocial risk factors during pregnancy, childbirth, and the postpartum period that increase the risk of postpartum blues occurrence. Mohammad in her study on the prevalence and factors associated with the development of prenatal and postnatal depression among Jordanian women revealed that stress, anxiety, financial problems, perceived lack of parental knowledge, poor relationship with the mother-in-law, low self-esteem, and unplanned pregnancy were associated with the occurrence of prenatal mental disorders [33]. These seven factors were reported by 83% of respondents in the development of likely prenatal mental disorders [33]. in their systematic review and meta-analysis pointed to a decisive relationship between low social support for women and the risk of developing mental health problems (i.e., depression, anxiety, and self-harm) during pregnancy [34]. In the postpartum period, 53.40% of respondents reported a feeling of inability to fulfill the role of mother. Mohammad in her study revealed that perceived low parental knowledge was associated with the risk of developing postpartum mental disorders [33].

In the research, we also focused on identifying iatrogenic factors during the course of pregnancy, childbirth, and the postpartum period that may increase the risk of postpartum blues occurrence. When investigating the participation of respondents in psychophysical preparation, as many as 71.85% reported that they did not participate in this preparation. Barimani in her study described that preparation for childbirth allowed parents to better understand the course of childbirth, the birthing environment, the partner's role, what can go wrong during childbirth, and the advantages and disadvantages of pain relief [35]. When investigating further potential iatrogenic risk factors for postpartum blues during pregnancy, respondents to a large extent reported health problems (41.74%) and hospitalization (30.09%) during pregnancy. Uguz in her study states that relatively common health problems in pregnant women, such as nausea and vomiting, known as hyperemesis gravidarum (HG), may be associated with mood disorders, anxiety, and personality disorders [6].

When investigating iatrogenic risk factors during childbirth, we focused on the time allowed for bonding immediately after birth. In the responses, we found that 47.57% of respondents reported that bonding was allowed only after two or more hours after birth. Allen in her cross-sectional electronic survey states that approximately one-third of her respondents were not allowed "skin-to-skin" contact immediately after birth. Despite the guidelines from the World Health Organization, which recommend immediate and uninterrupted "skin-to-skin" contact during the first 60 minutes, our survey showed that only 24.28% of respondents had this experience immediately after birth [36]. When investigating iatrogenic risk factors in women during the postpartum period, we analyzed the results of the evaluation of the approach of nurses and midwives toward women in the postpartum period. The lowest satisfaction was shown by 25.24% of respondents, who stated that they were not sufficiently listened to by nurses/midwives. Takács in her study assessed predictors of satisfaction with intrapartum and postpartum care in Czech maternity hospitals. Indicators of satisfaction in the postpartum period for 42.10% of respondents included accommodation and empathy [37].

Subsequently, we mapped the share of factors in the occurrence of postpartum blues. The results showed that 71.85% of respondents did not participate in prenatal psychophysical preparation. This indicates that a high proportion of respondents in our survey were not sufficiently prepared for childbirth or the postpartum period. Barimani in her study points to the importance of completing prenatal preparation. As it turned out, another trigger for postpartum blues may be health problems during pregnancy (41.74%) and hospitalization of women (30.09%) due to certain complications related to pregnancy [35]. Wiciński in his study pointed to the negative effect of the substance methyldopa in the drug Dopegyt, which is widely used for pregnancy-induced hypertension disorders [38]. It was analyzed as a potential risk factor for postpartum blues. The next factor that emerged for us was, in 47.57% of respondents, the absence of immediate bonding after birth. As Brňáková described in her book, the separation of the child from the mother can be an event incorrectly evaluated by the brain, which may trigger cascades of negative emotions manifesting as sadness and uncontrollable tearfulness [39]. In topics related to breastfeeding, respondents reported a high level of lack of information regarding the importance of breastfeeding (29.13%), the consequences of incorrect breastfeeding technique (49.52%), the nutrition of the breastfeeding mother (51.46%), and the daily routine of the breastfeeding mother (52.43%). Such a high level of lack of information can evoke in women a feeling of failure in the role of mother. By evaluating our results in the survey, we found that iatrogenic factors have a higher share in the occurrence of postpartum blues than psychosocial factors [40,41].

Conclusion

Pregnancy and childbirth are major life events for all women. The majority of expectant mothers have concerns about managing labor pain, the child's health, and postpartum adaptation to motherhood. These are mostly normal and justified concerns that do not cause serious conditions in women's psyche. However, in some cases, anxious thoughts and anxiety during pregnancy and the postpartum period are very strong and highly distressing. If these problems are not addressed, they can burden women both physically and emotionally. Since midwives play a key role in informing and supporting the health and psyche of expectant mothers, it is essential for them to be their partners in effectively managing pregnancy, childbirth, and the postpartum period.

A more active approach by midwives and nurses toward women, sufficient education, adequate prophylaxis, and family support can contribute to easier adaptation and experience of the new life role of a woman after birth—the role of mother.

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