

UDC 159.9

DOI: 10.34670/AR.2023.13.14.013

The emotional state of women with preterm delivery experience: a review of Russian and foreign publications

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Abstract

Scientific interest in the problem of women's mental health in the postpartum period remains relevant and attracts the attention of domestic and foreign psychologists. At the same time, it can be noted that more specific questions, such as the features of the emotional state of women with a history of preterm birth, are not widely represented in scientific literature. The article tries to determine the manifestation features of anxiety, depression, stress, and signs of post-traumatic stress disorder based on a theoretical review of modern domestic and foreign studies of the emotional state of women having preterm birth. Modern domestic and foreign studies over the period from 2015 to 2022 show, but do not widely represent, interest in the problem of the emotional state of women who deliver preterm. It is especially noted in the studies by domestic authors. Many studies have been conducted on small empirical samples (20 to 35 respondents), which affects the representativeness of the results. Our review has shown that women experiencing preterm birth had more severe symptoms of anxiety and depression than those who deliver at term. Long-term stress and anxiety effects were revealed in women with preterm delivery experience and in the dynamics. We believe that the designated problem requires further study, which will allow us to expand not only our understanding of the specifics and dynamics of the emotional state of women having preterm labor but also to determine prevention mechanisms of profound changes in the psycho-emotional sphere.

For citation

Evmenenko A.O. (2023) The emotional state of women with preterm delivery experience: a review of Russian and foreign publications. *Psikhologiya. Istoriko-kriticheskie obzory i sovremennye issledovaniya* [Psychology. Historical-critical Reviews and Current Researches], 12 (1A), pp. 145-150. DOI: 10.34670/AR.2023.13.14.013

Keywords

Preterm birth, emotional state, stress, anxiety, depression, post-traumatic stress disorder.

Introduction

The importance of the national health problem is reflected in the federal projects "Healthcare", "Demographics", "Education". The concept of maintaining health, longevity, healthy lifestyle, maternal and child support, and providing conditions to support families with children is mentioned in different contexts.

But despite scientific progress, including medicine, the frequency of preterm labour does not tend to decrease and remains an important problem in many countries worldwide. Preterm labor is defined as a birth occurring between 22 and 36.6 weeks of pregnancy.

According to WHO, an estimated 15 million babies are born preterm in the world each year. In the Russian Federation about 100 thousand premature babies are born every year. In this regard, a comprehensive medico-social and psychological approach to the study and assistance of women giving preterm birth becomes particularly relevant.

The aim of the study is to analyze data on the emotional state of women who experience preterm birth presented in the scientific literature between 2015 and 2022.

For data acquisition, articles published in Scopus, Web of Science, Semantic Scholar, Pub Med, Bielefeld Academic Search Engine databases were examined using the keywords: "preterm birth," "emotional state," "stress," "anxiety," "depression," "post-traumatic stress disorder.

During the analysis of publications, typical shortcomings in the organization, conduct, and interpretation of research results were noted, such as a small range of empirical data and limited sample size; questionable relevance and feasibility of the use of psychodiagnostic methods; inconsistency of research results. These features were considered in the review of foreign and domestic publications. Nearly 17 domestic and 25 foreign studies were found during data analysis. Those that represent the data of empirical studies with the largest samples were chosen for this review.

Overall review of the knowledge of the problem

In domestic and foreign general psychology there are various definitions of emotional state and its many manifestations as a significant part of a person's mental state. The most common point of view is understanding the emotional state and its manifestations as regulated by the emotional sphere of subjective experiences of a person's attitude to himself and the surrounding reality [Rean, 2019].

A.N. Leontiev, A.O. Prokhorov, and other researchers stated that the phenomenological characteristics of emotional states are reactivity, resistance, relatively weak intensity, and duration of manifestation [Korgoza, 2019].

The problem of a person's emotional state in different frustrating conditions, in particular specifics of women's emotional state in the situation of premature delivery, is represented in the works of N.V. Andruschenko, V.O. Anikina, K.A. Shafieva [Andrushenko, 2019].

The literature describes works that studied the emotional state of pregnant women with threatened preterm labor. According to the results of the study conducted by M.V. Semenova and D.A. Nabeeva, the emotional state of pregnant women in a situation of threatened preterm labor was characterized by a higher level of state and trait anxiety, which agrees with the study by T.Y. Babich and co-authors, who noted a high level of trait anxiety in women with threatened preterm labor [Semenova, 2015., Bibich, 2018].

Based on the above and other data, special attention must be paid to women in the situation of preterm birth, as both short-term and long-term reactions can be observed, emotional changes can be

persistent and occur not only during the period of preterm birth itself but also over a long time after [Mal'gina, 2017].

Since 2015, there have not been many domestic studies on the emotional state of women with preterm labour that meet the selection criteria of publications for this article. The majority of scientific studies of this period are focused on the dynamics of the emotional state of women experiencing preterm delivery and involve the study of the emotional status of both parents.

According to several studies, the emotional state of women with preterm delivery experience is described by the severity of stress, depression, and anxiety due to giving birth before term [Evmenenko, 2022]

In 2017, E. V. Kuftyak carried out research in which the severity of depression and coping strategies in women with a complicated course and the outcome of pregnancy were studied. Seventy women participated in the study and the main group consisted of women giving preterm birth at 26-33 weeks of pregnancy (aged 28.3 ± 6.1 years). The emotional state of mothers was measured by the "Beck Depression Inventory" and a semi-structured interview, coping behavior was studied using the "Coping Techniques Questionnaire," the "Me and My Baby" projective drawing was used to reveal specifics of the mother's attitude towards the baby, and an expert assessment of the mother's attitude towards the newborn was performed by medical personnel of the health facility. The results show that the occurrence frequency of severe depression symptoms in the group of women who gave birth prematurely was 32%, moderate depression symptoms were 36%, and mild depression symptoms (subdepression) were 32% [Kuftyak, 2017]. The research confirms that gestational age of birth is a predictor of a woman's depressive state.

A study conducted at the Malaysian Neonatal Intensive Care Unit, which was published in 2018, researched maternal stress and anxiety among mothers whose premature infants were admitted to the neonatal intensive care unit. 180 mothers participated in the study. The authors used the Perceived Stress Scale (PSS) and the 40-item State-Trait Anxiety Inventory (STAI) in their study. The results of the study show that 56.5% of mothers had a high level of stress, and 85.5% of mothers had a high level of anxiety [Ong, 2018]. The result was the authors' conclusions that there is a great need for a program aimed at relieving the anxiety of mothers who gave birth prematurely.

Certain scientific works are dedicated to the study of the emotional state of women during the long postpartum period.

For instance, one full-scale study was conducted by a group of British scientists in 2015. The object of the study was the risk of developing emotional distress among parents of premature infants in their first year of life. Twelve hundred families enrolled in the study. Both parents filled in a modified Rutter Malaise Inventory (RMI) 9 months after preterm birth. In addition, the authors studied the prevalence of medical diagnosis of depression in women and the self-report of current treatment for depression. The results show that 12.1% of mothers and 8.9% of fathers showed signs of psychological distress 9 months after delivery. Mothers of very preterm infants had an increased risk of psychological distress compared with mothers of full-term infants [Carson, 2015].

Such data is compatible with a study conducted in the Netherlands and published in 2021 in which a group of researchers monitored the mental health of parents during the follow-up care for preterm infants, 1,260 families took part in the study over 4 years. Of these, 693 mothers and 340 fathers (300 couples) completed the Hospital Anxiety and Depression Scale (HADS) twice. 1 month later, both mothers and fathers had significantly higher average scores and higher rates which indicated increased symptoms of anxiety and depression than 12 months later. After 1 month, 22% and 15% of the mothers and 10% and 9% of the fathers, respectively, reported increased symptoms of anxiety and depression.

After 12 months, these rates were significantly reduced to 14% and 9% for the mothers and 5% and 4% for the fathers, respectively. The authors noted improvement in mental health, but symptoms of anxiety and depression were still observed in 17% of included families after one year [Vriend, 2021].

The occurrence of post-traumatic stress disorder in parents of prematurely born children was studied in 2016 in two Iranian hospitals. 160 parents participated in the study. They were assessed using the Acute Stress Disorder (ASD) and the Prenatal Posttraumatic Stress Questionnaire (PPQ) on days 3-5 after birth and one month later parents were invited for a second study. According to the results, acute stress disorder was observed in 32.5% of all mothers and 4% of all fathers, and after one month, post-traumatic stress disorder was observed in 40% of mothers and 21.5% of fathers [Aftyka, 2019].

A domestic research conducted by G.B. Malgina, K.A. Shafieva, and E.P. Shikhova (2017) studied the psychoemotional state of mothers over time after very early preterm birth (22-28 weeks). 23 women took part in it. A comprehensive psychological study was performed on days 3 and 30 after very early preterm birth. Clinical interviews, HARS, and HRDS scales were used. The results showed that the level of anxiety on days 3-5 after very early preterm birth was three times higher than after full-term birth (36.1 points vs. 14.4 points ($p < 0.05$), which persisted at 30 days after birth. HRDS depression scores were 1.7 times higher on days 3-5 and 2.3 times higher on days 30 after a very early preterm birth than after full-term birth. Hence, 28.6% of the women in the study group had symptoms of severe postpartum depression on the third and 30th days after labor. The authors of this study emphasize that delivery at 22-27 weeks is a predictor of severe postpartum depression with manifestations of anxiety and note the special need for psychological work with women after preterm birth [Mal'gina, 2017].

Conclusions

Modern domestic and foreign studies over the period from 2015 to 2022 show, but do not widely represent, interest in the problem of the emotional state of women who deliver preterm. It is especially noted in the studies by domestic authors.

Many studies have been conducted on small empirical samples (20 to 35 respondents), which affects the representativeness of the results.

Our review has shown that women experiencing preterm birth had more severe symptoms of anxiety and depression than those who deliver at term.

Long-term stress and anxiety effects were revealed in women with preterm delivery experience and in the dynamics.

We believe that the designated problem requires further study, which will allow us to expand not only our understanding of the specifics and dynamics of the emotional state of women having preterm labor but also to determine prevention mechanisms of profound changes in the psycho-emotional sphere.

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Эмоциональное состояние женщин в ситуации преждевременных родов: обзор российских и зарубежных публикаций

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Аннотация

Научный интерес к проблеме психического здоровья женщины в послеродовом периоде сохраняет свою актуальность и привлекает внимания отечественных и зарубежных психологов. Вместе с тем, можно отметить, что более частные вопросы, например, особенности эмоционального состояния женщин, в анамнезе которых были преждевременные роды, не нашли широко представления в научной литературе. В статье предпринята попытка на основе теоретического обзора современных отечественных и зарубежных исследований об особенностях эмоционального состояния женщин с

преждевременными родами, определить особенности проявлений тревоги, депрессии, стресса и признаков посттравматического стрессового расстройства. Полагаем, что обозначенная проблема требует дальнейшего изучения, что позволит не только расширить наши представления о специфике и динамике эмоционального состояния женщин с преждевременными родами, но и определить механизмы профилактики глубоких изменений в психоэмоциональной сфере.

Для цитирования в научных исследованиях

Евмененко А.О. The emotional state of women with preterm delivery experience: a review of Russian and foreign publications // Психология. Историко-критические обзоры и современные исследования. 2023. Т. 12. № 1А. С. 145-150. DOI: 10.34670/AR.2023.13.14.013

Ключевые слова

Преждевременные роды, эмоциональное состояние, стресс, тревога, депрессия, посттравматическое стрессовое расстройство.

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