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Factors associated with levels of anxiety in postpartum women hospitalized in an obstetrics service

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Abtract

Postpartum Anxiety is a frequent phenomenon, since the puerperium is the period of greatest risk for the onset or worsening of anxiety. It is usually manifested by irritability, fatigue, concentration difficulties, tension and sleep disturbances. It can have consequences both for the woman and for her relationship with the baby and her partner, interfering with the quality of life and the future of the family. Objective: to identify the factors that relate to the anxiety levels of postpartum women during hospitalization in an obstetrics service. Methodology: this is a descriptive, correlational and analytical quantitative study, with the application of the Zung Self-Rating Anxiety Scale, the Supportive Hospital Environment Design Scale and the Maternal Self-Perceived Scale of Neonatal Care Skills. Participants were 85 postpartum women who were hospitalized in the obstetrics service, in a hospital in the northern region of Portugal. Results: Most mothers (51.8%) had no anxiety, 11.8% had non-pathological anxiety and 36.5% had pathological anxiety. Of the anxiety factors studied, a global relationship was established between the level of postpartum anxiety and the perception of neonatal care skills (p=0.00). Conclusion: The postpartum women showed greater anxiety in the Central Nervous System (CNS) dimension. A better perception of social support in the hospital environment reduces levels of maternal anxiety in different aspects. The higher the maternal self-perception of skills in caring for the baby, the lower the level of postpartum anxiety.

Keywords: Anxiety. Postpartum Period. Obstetric Nursing. Hospitalization.

INTRODUCTION

The birth of a child implies changes in different aspects of life/of the woman, such as physiological, psychic and socio-familial. It represents the transition and definition of a new role for women and families[1]. In recent years, less attention has been paid to anxiety disorders in the postnatal period, but they are considered to be as common as depression. Postpartum anxiety (PPA) is a frequent phenomenon, since the puerperium is the period of greatest risk for the emergence or worsening of anxiety disorders[2].

Hormonal changes, psychological, family and social changes, the adoption of a new role of great responsibility, the acceptance of a new body image, a new identity and changes in sexuality lead to psychological changes in women that can be severe[3].

The hospital environment is a factor that increases the probability of triggering anxiety in postpartum women, as it is considered an unpleasant experience, due to the numerous changes and interruptions in women's relationships and daily life. Emotions become more intense, there is loss of self-esteem, change in body image, changes in the sleep-

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-wake cycle, fear of invasive procedures and the unknown, and social isolation[4].

PPA is manifested by restlessness, irritability, fatigue, concentration difficulties, tension and sleep disturbances[3]. Due to the changes suffered in the puerperium, the woman may have fears, doubts and fears about her ability to take care of the baby[1].

PPA happens mainly due to excessive concerns regarding the care of the newborn (NB) and the management of other tasks[3], with greater maternal anxiety when women propose to carry out basic care for their children[5]. Most of the mothers' difficulties result from the vulnerability of the NB and doubts and insecurity about how to take care of them properly[6].

The existence of adequate socio-family support, especially from the husband, is essential to reduce the impact of anxiety symptoms[7]. When socio-family support is not enough, the mother-baby bonding can be difficult, both in the sense of being insufficient and exaggerated, generating disturbing symptoms in family life[1].

There is evidence that maternal anxiety has a negative effect on galactopoiesis and on the quality of the mother-infant bond[2], and that there is some difficulty, on the part of postpartum women, in adequately responding to the needs of their children. These difficulties can negatively influence the child's later development, including problems with childhood learning, attention, language and emotion regulation[1]. In terms of the effects on child development, the literature points out that the mother-child dialogue may be altered, since mothers with PPA tend to speak in an out-of-tune and excessive manner, which may have effects on the functioning of children's language[3].

To prevent consequences for the woman and the baby, PPA must be treated early. In this sense, the identification the factors that are related to the levels of anxiety of postpartum women during hospitalization in an obstetrics service was aimed.

MATERIALS AND METHODS

This is a quantitative, descriptive-correlational and analytical research, carried out at the Obstetrics Service of Tâmega e Sousa Hospital Center (CHTS). We defined as population the postpartum women hospitalized in this service, during the months of July and August 2021. For the selection of the sample, the non-probabilistic sampling technique were resorted to, for convenience. We considered as inclusion criteria being over 18 years old, having at least 24 hours of hospitalization in the obstetrics service and a maximum of 72 hours, being the mother of living children, full-term newborn without malformations and having agreed to participate in the study. Exclusion criteria were: illiteracy; women with a previous diagnosis of mental illness; history of alcoholism and drug use; and postpartum women with babies transferred or hospitalized in another service. 85 postpartum women participated in this study. In order to safeguard the ethical aspects, the research obtained a favorable opinion from the CHTS ethics committee CHTS (Proc. No. 31/2021 from April 9th, 2021).

To collect the data, a characterization questionnaire was applied that allowed the collection of sociodemographic data (age, marital status, educational qualifications, professional situation and monthly income), information regarding pregnancy planning (planning, desire and acceptance by the father), pregnancy surveillance data (frequency of prenatal consultations, place of consultations, frequency of Childbirth Preparation Courses [CPCs] and number of sessions) and obstetric data (number of children, number of deliveries and

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current type of delivery). To assess the level of anxiety, the influence of the hospital environment and the mother's self-perception of skills to care for the NB, the Zung Self-Rating Anxiety Scale (SAS), the Supportive Hospital Environment Design Scale (SHEDS) and the Maternal Self-Perceived Scale of Neonatal Care Skills (MSPSNCS), in their versions adapted for Portugal.

SAS was developed by Zung in 1971 and later validated for the Portuguese population[8]. It was designed to assess four components of anxiety: cognitive (referring to anxious thoughts), motor (manifested with symptoms such as worry and insecurity, feeling of loss of control, sudden movements, hyperactivity and motor incoordination), vegetative (presenting if as altered physiological activation, which is characterized by symptoms such as: tachycardia or increased heart rate – palpitations, chest tightness, muscle tension, feeling short of breath, nausea, dizziness, syncope, muscle stiffness, numbness in hands and feet) and CNS (manifests with symptoms such as irritability, inability to make decisions, inability to concentrate, and sleep disturbances). The scale's total score ranges from 20 to 80 points. To make your quote, divide the score obtained by the maximum possible value, thus reaching an index that represents the degree of anxiety. In the validation for the Portuguese population, the authors argue that the clinical significance cutoff point is between the values of 37 and 40, and an individual who scores above 37 can be considered as having a strong probability of being anxious, and above 40 the individual is considered to be pathologically anxious[8].

SHEDS was created by Andrade and Devlin and was developed to measure the qualities of the hospital environment, considering three dimensions: conditions for positive distraction, social support and control of the environment. The score is obtained by adding the items and varies between 21 and 105, with high scores corresponding to a better perception of the supportive design of the hospital environment[9].

MSPSNCS, created by Marques e Sá[10], assesses the level of self-perceived maternal competence in caring for premature NBs. In this study, the version adapted and validated by Santos and Mendes for full-term NBs was used. This scale assesses the mother's self-perceived neonatal care skills in two dimensions: the cognitive-motor dimension and the cognitive-affective dimension, defined by Steele and Polack. The scale consists of 34 questions, with a score from 1 to 5, corresponding to higher levels of competence that reflect the intensity with which the mother perceives her care competence. This intensity is evaluated through an average score obtained, dividing the sum of the scores corresponding to the marked response alternatives, by the number of selected items. Thus, the higher the final score, the higher the self-perceived maternal competence[11].

In the procedure for collecting, processing and analyzing data, ethical considerations were considered, guaranteeing the informed consent of the participants, their anonymity and the confidentiality of the data obtained. For data processing, descriptive statistics were resorted to, for sociodemographic characterization; and the inferential analysis, for the hypothesis test, using the non-parametric Mann-Whitney U tests and Spearman correlation. The value of $p<0.05$ was considered statistically significant. For the statistical analysis, version 27 of the SPSS software was used.

RESULTS

The study included 85 postpartum women aged between 21 and 43 years, corresponding to an average age of 31.48 (±6.03) years old. Most were married or living in a de

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facto relationship (74.1%). As for educational qualifications, about half of the mothers completed secondary education (50.6%). Most participants were employed (70.6%), with 34.1% earning a monthly income between €500-1000. Regarding the number of children, the value ranged from 1 to 3 children, with a larger group of women with 1 child (43.5%), followed by the group of women with 2 children (42.5%).

As to planning the pregnancy, 69.4% of the women stated that it was a planned pregnancy. In most cases, the baby was desired by both parents (87.1%) and in only 1.2% of pregnancies there was no paternal acceptance. All postpartum women underwent prenatal surveillance, with 40% having consultations only at the health center. Regarding the frequency of CPC, only 35.3% of the mothers reported having participated in CPC sessions, with the number of sessions varying between 2 and 10, corresponding to an average of 6.41 (±1.94). With regard to the number of deliveries, the same percentage of women with 1 and 2 deliveries (43.5%) was found. Regarding the current type of delivery, 69.4% of the mothers had a eutocic delivery.

In the evaluation of the levels of anxiety, through SAS, 51.8% of the postpartum women with no anxiety, 11.8% with non-pathological anxiety and 36.5% with pathological anxiety were obtained. To compare the dimensions of the SAS, its index was calculated, making the dimensions vary between 0.25 and 1. Thus, it could be verified that the postpartum women had greater anxiety in the CNS dimension and less anxiety in the vegetative dimension (Table 1).

We've seeked to establish a relationship between parity (the woman's number of deliveries) and the level of anxiety of the postpartum women, and although there is a negative correlation, which indicates that with the increase in parity, the PPA decreases, this does not reach statistical significance (Table 2).

Analyzing the relationship between the type of delivery and the level of anxiety of the postpartum women, only a statistically significant relationship between the type of delivery and the CNS anxiety dimension were found, noting that postpartum women with dystocia had a higher level of CNS anxiety. However, there is no relationship between the type of delivery and the total SAS (Table 3).

Regarding the relationship between the perception of the supportive design of the hospital environment and the level of PPA, a negative correlation between the SHEDS and the CNS anxiety dimension was observed, meaning that the better the perception of the hospital environment, the less anxiety the postpartum women manifest. We also found a negative correlation between the social support dimension of the SHEDS and the SAS and all its dimensions, that is, women who better perceive social support showed less anxiety (Table 4). However, there is no statistically significant relationship between the perception of the supportive design of the hospital environment and the level of anxiety of the postpartum women, that is, there is no global relationship between the SHEDS and the SAS.

There was no relationship between planning the pregnancy and the level of anxiety of the postpartum women (Z=-0.82 and p=0.41), as well as no relationship between the frequency of CPC and the level of anxiety of the participants. We can also see (Table 5) that, contrary to expectations, women who attended CPC obtained higher values of anxiety in the SAS global scale and in all its dimensions.

With regard to the relationship between maternal self-perception of skills in caring for the NB and the level of anxiety of postpartum women, a negative correlation between MSPS-NCS and SAS in all its dimensions was found, which means that postpartum women with better perception of their neonatal care skills showed a lower level of anxiety (Table 6).

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Table 1 - Statistics related to the dimension index of the Zung Anxiety Self-Rating Scale. Vale do Sousa, Portugal, 2021.

	Cognitive anxiety	Motor anxiety	Vegetative anxiety	CNS anxiety
Mean	0.47	0.47	0.46	0.55
Median	0.45	0.44	0.44	0.50
Mode	0.45	0.44	0.39	0.50
Deviation Pattern	0.12	0.13	0.10	0.16
Minimum	0.25	0.25	0.25	0.25
Maximum	0.75	0.75	0.72	1

Table 2 - *Spearman* correlation between the number of deliveries and the Zung Anxiety Self-Rating Scale. Vale do Sousa, Portugal, 2021.

	Number of deliveries	
	r	*p*
SAS	-0.13	0.27
SAS – Cognitive	-0.19	0.08
SAS – Motor	-0.15	0.18
SAS – Vegetative	-0.08	0.49
SAS - CNS	-0.002	0.99

Table 3 - Comparison by *Mann-Whitney* U test between type of delivery and Zung's Anxiety Self-Assessment Scale. Vale do Sousa, Portugal, 2021.

	Type of delivery	Nº	*Mean Rank*	Z	*p*
SAS	Eutocic	55	3.16		
	Dystocic	24	44.21	1.08	0.28
	Total	79			
SAS – Cognitive	Eutocic	56	38.62		
	Dystocic	24	44.90	1.12	0.26
	Total	80			
SAS – Motor	Eutocic	58	40.49		
	Dystocic	26	46.98	1.14	0.26
	Total	84			
SAS – Vegetative	Eutocic	57	39.73		

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... continuation table 3

	Type of delivery	Nº	*Mean Rank*	Z	*p*
SAS – Vegetative	Dystocic	25	45.54	1.02	0.31
	Total	82			
SAS – CNS	Eutocic	59	39.45		
	Dystocic	26	51.06	2.09	0.04
	Total	85			

Table 4 - *Spearman* correlation between the Supportive Hospital Environment Design Scale and the Zung Anxiety Self-Rating Scale. Vale do Sousa, Portugal, 2021.

	SHEDS		SHEDS - Positive distraction		SHEDS – Perception of control		SHEDS – Social support	
	r	*p*	r	*p*	r	*p*	r	*p*
SAS	-0.22	0.07	0.05	0.69	-0.09	0.43	-0.47**	0.000
SAS - Cognitive	-0.16	0.19	0.12	0.30	-0.13	0.26	-0.41**	0.000
SAS - Motor	-0.10	0.39	0.006	0.96	0.03	0.83	-0.34**	0.002
SAS – Vegetative	-0.22	0.07	0.02	0.89	-0.09	0.46	-0.40**	0.000
SAS - CNS	-0.25*	0.03	-0.05	0.67	-0.19	0.08	-0.40**	0.000

Table 5 - Comparison, using the *Mann-Whitney* U test, between the attendance to the Childbirth Preparation Course and the Zung Anxiety Self-Assessment Scale. Vale do Sousa, Portugal, 2021.

	Attendance to CPC	N.º	Mean Rank	Z	*p*
SAS	Yes	29	44.93	-	
	No	50	37.14	1.46	0.15
	Total	79			
SAS – Cognitive	Yes	30	45.88	-	
	No	50	37.27	1.62	0.11
	Total	80			
SAS – Motor	Yes	30	48.3	-	
	No	54	39.28	1.64	0.10
	Total	84			
SAS - Vegetative	Yes	29	45.19	-	
	No	53	39.49	1.04	0.3
	Total	82			
SAS - CNS	Yes	30	45.48	-	
	No	55	41.65	0.72	0.47
	Total	85			

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Table 6 - *Spearman* correlation between the Maternal Self-Perceived Scale of Neonatal Care Skills and the Zung Anxiety Self-Rating Scale. Vale do Sousa, Portugal, 2021..

	MSPSNCS		MSPSNCS - cognitive-affective		MSPSNCS - cognitive-motor	
	r	p	r	p	r	p
SAS	-0.48**	0.000	-0.35**	0.002	-0.47**	0.000
SAS – Cognitive	-0.41**	0.000	-0.29*	0.01	-0.41**	0.000
SAS – Motor	-0.42**	0.000	-0.32**	0.004	-0.40**	0.000
SAS – Vegetative	-0.48**	0.000	-0.34**	0.002	-0.46**	0.000
SAS - CNS	-0.32**	0.003	-0.24*	0.03	-0.31**	0.006

DISCUSSION

The birth of a child implies transformations from a physiological, psychic and socio-familial point of view, as it represents the woman's transition to a new role, that of being a mother[7].

As a result of the changes undergone, the woman may have fears, doubts and anxieties about her ability to care for the baby, regardless of her previous desire to become pregnant. The transformations that occur in women in the pregnancy-postpartum period provide conditions for the development of PPA and other maternal psychiatric conditions[1].

In the current investigation, it was found that 51.8% of the postpartum women had an anxiety level within the range considered as absence of anxiety. A percentage of 11.8% of women with non-pathological anxiety and 36.5% with pathological anxiety was recorded.

We also found that postpartum women had greater anxiety in the CNS dimension. This dimension is characterized by symptoms such as irritability, inability to make decisions, inability to concentrate and sleep disturbances[3].

In the postpartum period, most women have sleep disorders with reduced quality and quantity, resulting in significant drowsiness, shorter sleep duration, sleep fragmentation and longer periods awake[12]. Interruption in the quantity and quality of sleep may be related to the environmental barrier (environmental noise, exposure to light, ambient temperature/humidity, unfamiliar location), immobilization, non-restorative sleep pattern (caregiver responsibilities and motherhood practices) and insufficient privacy[13], while staying in the hospital environment.

An imbalance in the quality of sleep can affect the emotional and physical state of the postpartum woman. In addition, providing care to the NB, combined with breastfeeding on demand, causes mothers to sleep less in the first months[13]. Inadequate sleep impairs maternal mood, cognitive-motor performance, immune response, endocrine function, the ability to maintain adequate daytime wakefulness and the ability to fulfill the role of caregiver for the baby. In addition to the negative impact on the well-being of the postpartum woman, fragmented and insufficient sleep has an influence on the performance of breastfeeding, on the health and development of the NB[12].

Numerous investigations have been developed in the last decade about PPA. In one

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of the studies that studied PPA during hospitalization, through the application of the State-Trait Anxiety Inventory (STAI), the authors obtained an average state anxiety score of 31, with 17.1% of women with positive screening for anxiety state[14].

Another study studied PPA during hospitalization in the maternity ward and found an average of 43.1 points for trait anxiety and an average of 41.3 points for anxiety state, these values being considered moderate anxiety[1].

Our research found levels of pathological anxiety higher than most other authors, which reinforces the importance of expanding this type of studies in the recognition of the condition, in its early detection and intervention.

In the postpartum period, anxiety can influence the mother-baby relationship, bringing repercussions for the child's development. An anxious mother may have difficulties in understanding the needs of the newborn, decoding their crying and lack of breastfeeding, sleep and affection, which can compromise the well-being of the baby[7].

Analyzing the variable number of deliveries, it was found that 43.5% of the women were primiparous and the remaining 56.5% were multiparous. When testing the relationship between the number of deliveries and the PPA level, although there was no statistical significance (p=0.27), a negative correlation was observed between both variables, which suggests that, with the increase in parity, the level of anxiety of postpartum women tends to decrease.

These results are in line with other studies where no correlation was found between parity and PPA levels[15]. Another author found that primiparous women, at the time of discharge, were more likely to have a positive STAI value than multiparous women. These data give us a clear perception that anxiety levels tend to decrease with increasing parity, which may in fact be related to less anxiety in NB care[14].

The birth of a child brings many joys, but the transition to parenthood is widely recognized as a time of significant change and anxiety, as new parents are faced with a range of challenges and changes in their lives[1].

The literature has portrayed a particularly difficult adaptation to parenthood for primiparous women, although for multiparous women, the tension and anxiety resulting from this phase may come from the process of incorporating a new member into the preexisting family and having to take care of several children at the same time[16], which may explain that, in some studies[16,17], greater anxiety has been verified in multiparous women.

Psychological symptoms developed by first-time mothers may be related to specific changes associated with the unknown of pregnancy, childbirth and the puerperium. On the other hand, the greatest psychological difficulties found in multiparous women may be related to the need to combine the challenges of the new child in the preexisting family system[16].

Becoming a mother for the first time is a significant developmental milestone in a woman's life. The birth of a child is not only a significant event for couples, but also worries the whole family. Primiparous women may have a feeling of incompetence in their maternal role and need guidance and support to adapt[18].

The inferential analysis did not reveal a statistical relationship between the type of delivery and the level of maternal anxiety (p=0.28). However, there was a relationship between the type of delivery and the CNS anxiety dimension (p=0.04), noting that postpartum women with dystocia had a higher level of CNS anxiety. We also found that, despite the lack of statistical significance, postpartum women with dystocia present, in total SAS and in all dimensions, a higher level of anxiety. These results are identical to those of some studies analyzed, where it was found that postpartum women with dystocia had a higher level of anxiety (minimum, moderate and severe) compared to postpartum women with eutocic delivery[7].

The fact that the dystocia delivery is not what the woman planned or wanted can negatively affect her psychological state. Postpartum

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women may manifest symptoms such as low self-esteem, a sense of failure, loss of control or disappointment, and, together with the need to adapt to changes in lifestyle after childbirth, may make it difficult to adapt to parenthood[19].

On the other hand, the fear of complications associated with a dystocia delivery, namely pain, surgical wound infection, bleeding and anesthetic complications, can have adverse effects on women's mental health[20].

Hospital rooms can exacerbate or reduce patient anxiety. According to Ulrich's theory of supportive design, the hospital environment reduces stress if it promotes perceptions of control, social support, and positive distraction9. An unknown, uncontrollable, impersonal hospital physical environment with little privacy, often associated with the mechanized way in which women are treated and the lack of family support, can be assessed as harmful and demanding, and may cause anxiety in patients[4].

In the present study, the SHEDS obtained an average value of 55.15, which means that, taking into account the range of variation, mothers have a low perception of the support design in the hospital environment. Analyzing the dimensions of the scale in view of the possible ranges of variation, it was found that the social support dimension had the best score. The effort to humanize health services and care may have contributed to this fact, namely an extended visitation regime, in which the postpartum woman does not feel so far from her family and social environment.

The SHEDS dimension that scored the least favorably was the positive distraction dimension. Positive distraction measures help women attend to stimuli other than postpartum discomfort and anxiety[9].

When analyzing the relationship between the perception of the support design in the hospital environment and PPA, it was found that there was no correlation between these variables (p=0.07). Regarding the dimensions of the scale, it was found that there is a negative correlation between the SHEDS and the CNS anxiety dimension, allowing us to state that, the better the mothers' perception of the hospital environment, the less CNS anxiety, that is, less symptoms such as irritability, inability to make decisions, inability to concentrate, and sleep disturbances.

The inferential analysis also allowed verifying the existence of a negative correlation between the social support dimension of the SHEDS both with the SAS and with all its dimensions. It is important to point out that this dimension of the SHEDS was the one in which the best mean was verified and presents a significant negative correlation with anxiety. This indicates that postpartum women who perceive better social support have reduced levels of anxiety in its different aspects.

Social support is widely recognized as a psychosocial factor that influences health outcomes, being a way to create a sense of belonging, increase self-esteem and develop feelings of security. When postpartum women identify gaps in care support, they reinforce the importance and need for guidance and support from health professionals. This support is more evident in the first postpartum days, when more doubts and difficulties arise[18,21].

Thus, it appears that social support, namely from family, friends and health professionals, reduces the anxiety levels of women in the postpartum period, facilitates the transition to motherhood and can help to increase the competence of parents during this role transition period[18].

In our research, 69.4% of the postpartum women stated that they had planned the pregnancy, with a percentage of 30.6% of women who did not plan it. When relating the planning of the pregnancy and the level of anxiety of the postpartum women, it was concluded that there was no relationship between the variables (p=0.41). Although, theoretically, planning can translate into less anxiety due to the absence of something that occurs unexpectedly and that can complicate a woman's life plans, the fact is that, for the

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group of participants in this study, it seems to have no been a relevant factor. The same evidence was found in other studies, where no relationship was observed between pregnancy planning and the level of PPA[1,7].

Although there was no statistical significance, it was found that higher anxiety scores in women who planned the pregnancy, both in the total scale and in its dimensions, with the exception of the CNS anxiety dimension. Results contrary to other studies where higher scores of anxiety were noted in postpartum women who did not plan the pregnancy[1,7]. Thus, our results may be the result of the pandemic context in which the pregnancy occurred, marked by numerous limitations and restrictions, and in which these women, because they planned the pregnancy, are more aware of what they might have to face.

Of the postpartum women studied, only 35.3% reported having participated in CPC. The low attendance of these courses can be explained by the pandemic context, which led to the suspension of many CPCs, as well as the low adherence of pregnant women given the multiple constraints verified in their functioning. When analyzing the relationship between the frequency of CPC and the level of PPA, it was verified that there was no relationship (p=0.15). However, it was found that women who attended CPC had higher anxiety scores on the SAS global scale and in all its dimensions. These contradictory results may come from the aforementioned, that is, from the fact that women are already aware of the many limitations of follow-up in the maternity ward, as a result of the pandemic situation, and that they have probably already felt during the CPCs.

It is known that prenatal education is important and beneficial during childbirth and helps prepare for parenthood. Preparing for postpartum problems can reduce maternal distress and the risk of depression and PPA[18].

In the descriptive analysis of the MSPSNCS, an average intensity of 4.09 was observed, which allows us to verify that the postpartum women have a high self-perceived competence in their care for the NB. Regarding the dimensions of the MSPSNCS, it appears that the postpartum women have a higher score in the cognitive-motor dimension (4.12 versus 3.98).

When maternal self-perception of NB care skills was correlated with the level of PPA, a relationship between the variables was verified ($p<0.001$). If the dimensions of both scales are analyzed, it is also concluded that there is a relationship between all the dimensions of the SAS with the dimensions of the MSPSNCS. The negative correlation verified allows us to state that the scales vary in the opposite direction, that is, the greater the maternal self-perception of skills in caring for the baby, the lower the women's level of anxiety.

These results corroborate the literature consulted, where it was found that the more anxious mothers are, the less they feel prepared to provide care to their NB, with the opposite also occurring. The provision of care to the NB has been studied as an anxiogenic factor in the postpartum period. The authors report that there is more anxiety on the part of mothers when they propose to perform basic care for their children and this feeling seems to be exacerbated at the time of hospital discharge[5,21].

Health professionals play a key role in meeting the needs of pregnant women and, above all, preparing them for childbirth. Thus, the educational actions developed in the prenatal period allow pregnant women to acquire knowledge about the care of the NB, since the reality of the postpartum woman is often surrounded by fears and anxieties that can interfere with the care of the baby[6].

Faced with the adversities of caring for the NB, postpartum women need to receive guidance, supervision and clarification of doubts. Prenatal education should promote knowledge and skills in pregnant women about newborn care, particularly with regard to hygiene, breastfeeding, immunization, sleep, comfort, care for the umbilical stump and baby handling[6,22].

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CONCLUSION

The severe impact of psychological disorders, such as PPA, can have consequences not only for the woman, but also for the relationship with the baby and the partner, interfering with the quality of life and the future of the family. Therefore, this investigation was considered essential, with the aim of intervening in the modifiable factors.

Levels of pathological anxiety were found higher than those of the other authors, which reinforces the importance of expanding studies in the recognition of the condition, in its early detection and intervention.

Globally, it was found that only the maternal perception of newborn care influences the mothers' level of anxiety. The provision of care to the NB has been studied as a postpartum anxiogenic factor, since mothers have a higher level of anxiety when they propose to perform basic care for their children, especially at the time of hospital discharge.

Analyzing in detail the results of our research, it can be seen that postpartum women with dystocia present a higher level of anxiety when compared to postpartum women with eutocic delivery. This fact may be associated with more intense pain reported by women with dystocia and with a longer recovery time.

It was also found that postpartum women who perceive better social support have reduced levels of anxiety in its different aspects. In the first postpartum days, women have more doubts and difficulties, considering the social support received from family members, friends and health professionals to be extremely important, helping mothers to deal with the new condition of being a mother and the responsibilities that come with it.

With the aim of reducing PPA levels, health professionals should, during hospitalization, invest in social support for postpartum women; attend to their wishes and allow them to express their doubts and fears, inducing less insecurity in the woman in providing care for the baby.

This study had some limitations, namely the fact that the sample size was small and that it was developed in a pandemic context, which may have influenced some results due to a series of limitations, uncertainties and demands in monitoring the postpartum woman in the maternity ward. In this context, and contrary to the majority of the literature, it can be highlighted that the most relevant anxiety in postpartum women who planned their pregnancy and attended CPCs.

Author Statement CREdiT

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REVISTA O MUNDO DA SAÚDE

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