

**ANXIETY SYMPTOMS AND ASSOCIATED VARIABLES: A STUDY WITH
PUERPERAS****SINTOMAS DE ANSIEDADE E VARIÁVEIS ASSOCIADAS: UM ESTUDO
COM PUÉRPERAS****SÍNTOMAS DE ANSIEDAD Y VARIABLES ASOCIADAS: UN ESTUDIO
CON PUERPERAS**

Kélita Gomes da Silva¹, Iasmim de Lima Torres², Bethania Ferreira Goulart³, Mariana Torreglosa Ruiz⁴, Bibiane Dias Miranda⁵

How to cite this article: Silva, KG, Torres IL, Goulart BF, Ruiz MT, Miranda BD. Anxiety symptoms and associated variables: a study with puerperas. Rev Enferm Atenção Saúde [Internet]. 2023 [access: ____]; 12(3): e2023112. DOI: <https://doi.org/10.18554/reas.v12i3.5348>

ABSTRACT

Objective: The aim of this research was to identify anxiety symptoms and their association with sociodemographic and obstetric factors among puerperal women hospitalized in rooming-in. **Method:** It is a quantitative and transversal research. Participants were 264 postpartum women hospitalized in the rooming-in sector of a teaching hospital. To identify anxiety symptoms, the IDATE instrument was used. In the bivariate analysis, the t-Student test was used. The average score of postpartum women on the STAI-State was 34 (± 8.2) points, and on the STAI-Trait, it was 33.7 (± 8.5). **Results:** a low state of anxiety among the participants was showed. The variables: not living with a partner, having a “bad” relationship with a partner and previous abortion were associated with a higher score of state-anxiety symptoms. Regarding trait anxiety, the variables: having a “bad” relationship with a partner and not planning the pregnancy were associated with a higher score of trait anxiety symptoms. **Conclusion:** It is essential that nurses consider evidence so that they can implement, prioritize and consolidate the professional practice with the aim of preventing anxiety and early identifying its signs and symptoms.

Descriptors: Nursing; Postpartum Period; Anxiety; Maternal and Child Health.

¹ RN at the Neonatal Intensive Care Unit at Mario Palmério Hospital Universitário, Uberaba (MG), Brazil. <http://orcid.org/0000-0002-8090-600X>

² RN. Resident in Family Health at the State University of Montes Claros - Unimontes. Montes Claros. Brazil. <http://orcid.org/0000-0002-1439-6726>

³ RN. Doctor. Adjunct Professor of the Undergraduate Nursing Course. Federal University of Triângulo Mineiro. Uberaba (MG), Brazil. Federal University of Triângulo Mineiro. <http://orcid.org/0000-0003-2855-6767>

⁴ RN. Doctor. Adjunct Professor of the Undergraduate Nursing Course. Federal University of Triângulo Mineiro. Uberaba (MG), Brazil. Federal University of Triângulo Mineiro. <http://orcid.org/0000-0002-5199-7328>

⁵ RN. Doctor. Adjunct Professor of the Undergraduate Nursing Course. Federal University of Triângulo Mineiro. Uberaba (MG), Brazil. Federal University of Triângulo Mineiro. <http://orcid.org/0000-0001-7369-5745>

RESUMO

Objetivo: identificar os sintomas de ansiedade e a sua associação com fatores sociodemográficos e obstétricos entre puérperas internadas no alojamento conjunto. **Método:** Trata-se de uma pesquisa quantitativa e transversal. Participaram 264 puérperas internadas no setor de Alojamento Conjunto de um hospital de ensino. Para a identificação dos sintomas ansiosos, foi utilizado o instrumento IDATE. Na análise bivariada, foi usado o Teste t-Student. O escore médio das puérperas no IDATE-Estado foi de 34 ($\pm 8,2$) pontos, e no IDATE-Traço, de 33,7 ($\pm 8,5$). **Resultados:** evidenciaram um baixo estado de ansiedade entre as participantes. As variáveis “não morar com o companheiro”, “ter convivência “ruim” com o companheiro” e “aborto prévio” estiveram associadas a maior escore dos sintomas de ansiedade-estado. Em relação à ansiedade-traço, as variáveis “ter convivência “ruim” com o companheiro” e “não planejamento da gravidez” associaram-se a maior escore dos sintomas de ansiedade-traço. **Conclusão:** É essencial que enfermeiros considerem evidências para que possam instrumentalizar, priorizar e consolidar a prática profissional com o objetivo de prevenir a ansiedade e identificar precocemente seus sinais e sintomas.

Descritores: Enfermagem; Período Pós-Parto; Ansiedade; Saúde Materno-Infantil.

RESUMEN

Objetivo: El objetivo de esta investigación fue identificar los síntomas de ansiedad y su asociación con factores sociodemográficos y obstétricos entre puérperas hospitalizadas en alojamiento conjunto. **Método:** Es una investigación cuantitativa y transversal. Participaron 264 puérperas hospitalizadas en el sector de alojamiento conjunto de un hospital universitario. Para identificar los síntomas de ansiedad se utilizó el instrumento IDATE. En el análisis bivariado se utilizó la prueba t-Student. La puntuación media de las puérperas en el STAI-Estado fue de 34 ($\pm 8,2$) puntos, y en el STAI-Trait fue de 33,7 ($\pm 8,5$). **Resultados:** Los resultados mostraron un bajo estado de ansiedad entre los participantes. Las variables: no vivir en pareja, tener una “mala” relación de pareja y aborto previo se asociaron con una mayor puntuación de síntomas de ansiedad-estado. En cuanto a la ansiedad rasgo, las variables: tener una “mala” relación de pareja y no planificar el embarazo se asociaron con una mayor puntuación de síntomas de ansiedad rasgo. **Conclusión:** Es fundamental que los enfermeros consideren las evidencias para que puedan implementar, priorizar y consolidar la práctica profesional con el objetivo de prevenir la ansiedad e identificar precozmente sus signos y síntomas.

Descriptor: Enfermería; Período posparto; Ansiedad; Salud maternal e infantil.

INTRODUCTION

The puerperal phase corresponds to an important moment in a woman's life, as biological changes and transformations occur with a strong impact on the life of the postpartum woman, which can cause conflicts in the choice of exclusive breastfeeding and even trigger emotional

instability, resulting in post-partum depression, childbirth and anxiety.¹

The postpartum period is one of the periods of greatest risk for the emergence or worsening of mental disorders, and in addition to postpartum depression, there are also anxiety disorders, which sometimes become more common than depressive disorders.²

In this sense, it is important to identify that the mother's needs, during this period, reflect the change and changes in roles, the emergence of new functions and the redefinition of routines and responsibilities³, and these changes can be important stressors.

Anxiety in the context of motherhood is a multifactorial phenomenon related to different variables, both sociodemographic and psychosocial. These variables can trigger an anxious state in the mother and also influence the anxiety of mothers who already have it, making it more severe. This complexity requires professionals to look at each woman individually, in search of a better understanding of the origin of maternal anxiety in relation to the typical aspects of motherhood.⁴

There is a high prevalence of anxiety symptoms reported by women before giving birth. In a study, it was identified that one in four women before giving birth, and one in three after 1 year of giving birth, reported symptoms of anxiety, even though they had an uneventful birth and a healthy child.⁵

A study that analyzed the impact of maternal concerns on women's anxiety concluded that the health professionals present during prenatal care are essential for the prevention of depressive and anxiety symptoms, and that this care must take into

account the individual needs of the woman, her age, origin, medical considerations and socioeconomic aspects.⁶

In view of the above, it can be seen that anxious symptoms directly affect the health and well-being of the puerperal woman and her baby, and can lead to various alterations and generate health problems and complications during the puerperal and intrauterine periods.

Considering the great impact that anxiety can have during this period, identifying anxiety symptoms is relevant to clinical practice, as it can provide information and tools that influence and direct practice towards better care for this population.

Direct contact with health professionals, specifically nurses, provides early identification of anxiety symptoms and guarantees specific actions for the mother-child binomial and the family, as well as ensuring appropriate referrals for mental health issues that may be present or likely to worsen.

The aim of this study was to identify symptoms of anxiety and their association with sociodemographic and obstetric factors among puerperal women admitted to the maternity ward.

METHOD

This is a descriptive research, with a quantitative, cross-sectional approach. The present study was carried out in the Obstetrics/Rooming Room Sector of a teaching hospital, in a city in the interior of Minas Gerais.

Based on information from the statistical service of the aforementioned hospital, on the number of births in previous years, the sample size was calculated using the PASS (Power Analysis and Sample Size) application, version of 2002, and obtaining a minimum sample size of $n = 264$ postpartum women. 264 postpartum women participated in the study.

Data collection took place between April and October 2018, during the period of hospitalization of the postpartum women, in the Rooming Room. Women were informed about the research and invited to participate. It was decided to carry out a direct interview due to the possibility of difficulty reading or interpreting the questions, even though the instruments could be self-administered. It is noteworthy that the interviews were carried out at an opportune time, according to the woman's interest and appropriate clinical conditions.

The inclusion criteria in the study were: postpartum women hospitalized in the Obstetrics/Rooming Room sector and who agreed to participate in the study. The exclusion criteria in the study were:

postpartum women who did not accept and/or did not receive consent from their guardians to participate in the study; and clinical and/or cognitive conditions that made participation impossible.

To assess anxiety symptoms, the STAI instrument was used. It is composed of two scales that measure two concepts of anxiety: State Anxiety (STAI-State) and Trait Anxiety (STAI-Trait). Each scale has 20 questions that are presented on a Likert-type response scale. The STAI-State indicates how individuals feel at a given moment and the STAI-Trait scale describes how individuals generally feel. The instrument's total score can vary from 20 (minimum) to 80 (maximum) on each scale. The higher the score, the higher the level of anxiety, with 20 to 40 points representing a low level of anxiety; from 41 to 60 points, medium level of anxiety; and from 60 to 80 points, high level of anxiety.⁷

In this study, we considered the sum of the participants' scores on the State-IDATE and the Trait-IDATE. This variable was classified quantitatively.

It is worth noting that no puerperae with a previous diagnosis of anxiety were identified.

The data was entered into an electronic spreadsheet by double typing, with subsequent validation of the data, and

the analysis was carried out using the software SPSS for Windows version 20.0.

Univariate data analysis was used, the distribution of absolute (n) and relative (%) frequencies for qualitative variables and mean and median values (measures of central tendency), and standard deviations for quantitative variables. In the bivariate analysis, the existence of an association was verified using the T test for independent samples. During the research, results of p less than 0.05 were considered significant, with a CI of 95%.

All current national legislation related to ethics in research with human beings was respected. The project was submitted and approved by the UFTM Research Ethics Committee (CEP) via Plataforma Brasil, with CAAE N° 79943317.6.0000.5154.

RESULTS

264 postpartum women participated. The average age was 25.2 (± 6.5) years, with a minimum of 14 years and a maximum of 43 years. The average years of study of women was 8.9 (± 2.9) years, while family income, in minimum wage (SM), was 1.9 (± 0.9) MW, with a maximum of 5 and minimum of 1 MW, and the number of residents in the household had an average of 4.7 (± 1.6).

Regarding self-reported skin color, there was a prevalence of brown skin color (36.7%), followed by white skin color (33.3%), as well as the marital status of married/in a stable union (69.7%). As for occupation, the prevalence was in the “household” category, with 46.2%, followed by unemployed (24.6%).

In relation to the obstetric profile of the postpartum women, the average number of living children of the participants was 2.2 (± 1.3), with a minimum of 1 and a maximum of 8 children, and the average age of women in their first pregnancy was 19 (± 4.2) years. The current pregnancy was unplanned (62.1%), the majority received prenatal care (97.3%) and 25.8% reported having already suffered an abortion. The relationship with the partner was highlighted as good (96.2%).

The majority (51.8%) had no complications during pregnancy and the current birth, just as the majority received guidance on breastfeeding in the prenatal and postpartum period and were encouraged to breastfeed the baby immediately after birth (82, 2%, 89.8% and 78.4%, respectively).

In the results related to anxiety symptoms, the score for state anxiety symptoms presented an average of 34 (± 8.2) points, and for trait anxiety, an average of 33.7 (± 8.5). Therefore, a low level of state

and trait anxiety symptoms. According to the STAI, the higher the score, the higher the level of anxiety. The results varied between 20 and 40 points, that is, a low level of anxiety.

In the bivariate analysis, the variables “not living with the partner”

($p=0.007$), “having a 'bad' relationship with the partner” ($p=0.048$) and “having had a previous abortion” ($p=0.035$) were associated with greater state anxiety symptom score, as shown in Table 1.

Table 1– Comparison of sociodemographic and obstetric factors and the score of state anxiety symptoms in postpartum women in 2018.

Variables	STAI – STATE			p-value
	n	Average	Standard deviation	
Lives with partner				0.007
Yes	184	33.1	8.1	
No	80	36	8.1	
Living with a partner				0.048
Good	177	32.8	7.6	
Bad	7	39	15.1	
Abortion				0.035
Yes	68	35.8	9.9	
No	196	33.4	7.4	
Intercurrences in maternity				0.19
Yes	127	34.6	9.1	
No	137	33.3	7.2	
Pregnancy Planning				0.99
Yes	100	34	8.8	
No	164	34	7.8	

Source: From the authors, 2020.

Regarding trait anxiety, in the bivariate analysis, the variables “having a 'bad' relationship with a partner” ($p=0.002$)

and “not planning a pregnancy” ($p=0.05$) were associated with a higher symptom score of trait anxiety, as shown in Table 2.

Variables	STAI- TRAIT			p-value
	n	Average	Standard deviation	
Lives with partner				0.9
Yes	184	33.7	8.7	
No	80	33.8	8.1	
Living with a partner				0.002
Good	177	33.3	8.1	
Bad	7	43.4	16.5	
Abortion				0.74
Yes	68	34.0	9.5	
No	196	33.6	8.2	
Intercurrences in maternity				0.13
Yes	127	34.6	9.3	
No	137	33.0	7.6	
Pregnancy Planning				0.05
Yes	100	32.4	8.4	
No	164	34.5	8.5	

Table 2– Comparison of sociodemographic and obstetric factors and the score of state anxiety symptoms in postpartum women in 2018.

Source: From the authors, 2020.

DISCUSSION

In this study, the women participants were similar in age to that found in the literature. A study in three cities in the State of São Paulo found that the majority of mothers were over 25 years of age (72.5%).⁸ In another study with pregnant women participating in an extension project at a Private University in João Pessoa (PB), it was shown that the majority of women were over 20 years old (76%)⁹. Finally, a study carried out in Portugal found the average age 27.69 (± 5.82).¹⁰

In relation to marital status, the majority were married, a fact evidenced in different studies related to maternal anxiety -

87.5%⁸, 64%⁹, 86.2%¹⁰ and 77%.¹¹ In relation to this variable, the literature highlights that marital status contributes greatly to emotional security, financial support and guarantee of assistance in meeting the pregnant woman's basic human needs¹², becoming an important variable for the theme addressed in this study.

Still related to the aspect of these pregnant women's relationships, the literature indicates that 78.5% live with the child's father and the form of participation from this partner is, in 64% of cases, emotional and financial support.⁹

Other important variables, which are discussed as predictors of health indicators,

are education and income, as the scarcity in these aspects generates less access to health services, less access to information and less ability to grasp knowledge.¹³ Thus, such which in the literature, it was found that 56% of women had more than 9 years of study and 94% had an income of less than 2 MW.¹¹ Another study identified that 54.5% of pregnant women had between 9 and 12 years of education¹⁰; in another survey, 64% had a family income between 1 and 2 minimum wages.⁹

The obstetric and clinical characterization of the participants is close to data in the literature. A study carried out showed that 41% of women did not want the baby¹¹; in another, 64% did not plan the pregnancy.⁹

The literature points out that planned pregnancy is an important situation, because, when there is planning, the couple, but especially the woman, prepares herself physically and mentally to begin this new period. When it is not planned, it can lead to negative feelings, such as denial and stress for the couple.⁹

Regarding the investigation into anxiety symptoms, a low level of anxiety symptoms was evident among the participants. On the state anxiety scale, the average score of postpartum women was 34 points (± 8.2), and for trait anxiety, an average of 33.7 (± 8.5) was found. The

literature points to both greater and lesser results than those found in this research.

A survey of women in their third trimester and awaiting prenatal care at Basic Health Units identified that around 36% of pregnant women had high anxiety¹¹; In another study, the authors identified 15.9% (>45 points on the STAI) of women with symptoms of anxiety during pregnancy and 23.1% postpartum.¹⁰

Another study, carried out with pregnant women between the second and third trimester and treated in a basic health unit, identified a high frequency (20.4%)¹⁴ in relation to the probable diagnosis of generalized anxiety disorder; Finally, a study found even higher results, with 86% of women having moderate anxiety.⁹

Authors demonstrated that 36.3% of women were identified with state anxiety¹¹, as well as another study¹, which investigated pregnant women using prenatal services in the city of Araguaia/MT and identified that, for women up to 20 years of age, the mean state anxiety was 46.42 ± 10.52 ; from 21 to 35 years old, 50.68 ± 10.57 ; and over 36 years old, 44.25 ± 18.8 . This result is similar to another study, where 86% of pregnant women investigated by these authors were identified as positive for state anxiety (from >40 to 60 points).⁹ It was evidenced that the characteristics of state anxiety, according to the STAI, were lower in this

study when compared with data from other literature.

Trait anxiety also obtained lower results than those found in the literature. It was found that 36.1% of women had trait anxiety.¹¹ Another study, which interviewed 53 mothers of babies at risk for development, found 40% of them with trait anxiety.¹⁵ Another research showed that up to 20 years of age, the average trait anxiety was 46.5 ± 11.73 ; from 21 to 35 years old, 47.68 ± 9.30 ; and from 36 years old, 44.5 ± 15.26 .¹

This statistical finding may represent that postpartum women already had longer-lasting emotional impairment, but it is not possible to identify whether the symptoms already occurred before or whether they are in this condition due to pregnancy and childbirth.¹⁵ In this sense, it is worth highlighting that the Pregnancy is a splendid stage in a woman's life, but, eventually, some problems may appear and, consequently, trigger or worsen mental health disorders, including an increase in anxiety symptoms.⁹ This fact can continue into the postpartum period.

It is clear that clinical assessment and monitoring in primary care are fundamental, mainly because prenatal care is a unique moment of contact and establishment of a bond between women of reproductive age and health services. In this way, guided actions to promote women's

health become essential; It is at these moments that possible mental disorders during pregnancy are identified, enabling an intervention that favors a better understanding of the dynamics of mother and child and contributing to the quality of care for families in general.¹⁴

The findings of the bivariate analysis indicated that women who reported a “bad” relationship with their partner had higher scores for state anxiety and trait anxiety symptoms. Furthermore, not living with a partner and having had a previous abortion (state anxiety) and not having planned a pregnancy (trait anxiety) were variables for higher anxiety symptom scores among the participants.

Some authors reported in their studies that, in relation to the variable “marital status”, the data showed that married pregnant women had a low to moderate score for both trait and anxious state, and pregnant women who reported their marital status as stable union or consensual participants presented both the trait and the higher anxious state. This shows that there is dependence between the variable “marital status” for both trait and state anxiety¹, which is equivalent to stating that being married has a significant effect on anxiety, that is, the variables are dependent.

In the present study, this relationship was only evidenced for state anxiety, which

denotes anxiety related mainly to the feeling experienced at that moment. The stability of marital relationships identified in the literature⁹ was also presented as a positive aspect; in other words, it is a variable that represents protection. The same authors report that family relationships are considered fundamental during pregnancy.

The findings indicated that women who did not plan their pregnancy had higher trait anxiety scores, a fact that may have occurred throughout the pregnancy. Authors found that, when the mother and her partner wanted the baby, the chances of having a high anxiety characteristic in the third trimester of pregnancy decreased¹¹, corroborating the findings of this research, since women who declared that they had planned the pregnancy had minor results for anxious conditions. This may be due to the fact that, when planned, women, their partners and their families are able to prepare themselves emotionally for the pregnancy and birth process.

Regarding the variable “previous abortion” and higher score of state anxiety symptoms, a study carried out with pregnant women treated in basic health units identified that the threat of abortion increased the chance of high state anxiety by 3.464.¹¹

An important and relevant factor among the data identified in the research

was that “bad” coexistence with a partner presented a higher score of state anxiety and trait anxiety symptoms among postpartum women. This fact was confirmed in a study of rural women. Women who reported a “bad” relationship with their partner had higher scores for state anxiety and trait anxiety symptoms than those who had a “good” relationship¹⁶, as evidenced in another study, where women whose relationships were experiencing difficulties marital relationships and those who had insufficient social support were more prone to developing severe anxiety.¹⁷

A study carried out using longitudinal methodology on the relationship between maternal anxiety and fetal-neonatal growth trajectories found that there is a real need for prenatal consultations with a systematic assessment of anxiety during pregnancy and also in the postpartum period. With this attention, women can benefit from individualized care in health care units, which prevents harm to the development of the fetus, the growth of the baby and the development of the mother-baby bond.¹⁰

Given the results of this research, and according to the discussion above, it can be observed that anxiety is an important predictor of several health complications in both mother and baby.

Therefore, it is important to equip professionals so that they can identify signs and symptoms early and, thus, correctly refer these mothers. This situation is even more relevant when considering the nursing team, especially the nurse, since he is one of the professionals who is directly present in the monitoring and evolution of the mother-baby binomial. Therefore, it is essential that nurses consider the evidence discussed here so that they can implement, prioritize and consolidate professional practice with the aim of preventing anxiety and identifying its signs and symptoms early.

CONCLUSION

The results showed that the postpartum women participating in the study presented scores for state anxiety symptoms (34 points) and trait anxiety (33.7 points), confirming a low level of anxiety among the participants, both for state anxiety and for trait anxiety. This fact does not detract from the symptoms mentioned by the participants and their risk of worsening and emotional complications.

Those who reported that they did not have a good relationship with their partner had higher scores for state anxiety and trait anxiety symptoms. The variables “not living with a partner” and “previous abortion” also showed higher scores for state anxiety symptoms. The variable “not planning the

pregnancy” demonstrated a higher score for trait anxiety symptoms.

It was evident that behavioral and reproductive health factors were related to the mental health of postpartum women, in the case of the study, with symptoms of anxiety.

Anxiety symptoms can be present throughout all life cycles, however, in some situations, people become more vulnerable and prone. Thus, the puerperal pregnancy cycle is a moment, as shown in the literature and research results, in which anxiety as a state can bring harm to both the woman and the fetus/baby and also to the family.

Therefore, the results found by this research bring to light reflections and the need for discussions on the topic, as it is clear that prenatal and puerperal care focuses on technical procedures, laboratory tests and basic physiological needs, relegating social, emotional and mental aspects are secondary, directly impacting the prevalence and incidence of mental disorders.

Limitations include the sample of women coming from only one health institution and the cross-sectional method, which does not allow the identification of causal relationships. Therefore, it is suggested to conduct multicenter research to evaluate cause and effect relationships and obtain final confirmation of possible

predictors of anxiety in pregnant and postpartum women.

REFERENCES

1. Alves JS, Siqueira HCH, Pereira QLC. Inventário de ansiedade Traço-Estado de gestantes. *J Nurs Health* [Internet]. 2018 [cited on 2 jul 2023]; 8(3):e188307. Available at: <https://periodicos.ufpel.edu.br/index.php/enfermagem/article/view/13621/8942>
2. Moita CE, Bomfim CS, Rosário ECSF, Oliveira MCD. As dificuldades no cuidado de enfermagem à mulher com transtornos de humor no período gestacional e puerperal. *Revista Acadêmica Universo Salvador* [Internet]. 2017 [cited on 2 jul 2023]; 3(5):xx-xx. Available at: <http://revista.universo.edu.br/index.php?journal=1UNIVERSOSALVADOR2&page=article&op=view&path%5B%5D=5763>
3. Caetano ABJR, Mendes IMMMD, Rebelo ZASA. Preocupações maternas no pós-parto: revisão integrativa. *Referência* [Internet]. 2018 [cited on 2 jul 2023]; 4(17):149-59. Available at: <https://www.redalyc.org/journal/3882/388256983019/html/>
4. Chemello MR, Levandowski DC, Donelli TMS. Ansiedade materna e maternidade: revisão crítica da literatura. *Interação Psicol.* [Internet]. 2017 [cited on 2 jul 2023]; 21(1):78–89. Available at: <https://revistas.ufpr.br/psicologia/article/download/46153/32917>
5. Janssen AB, Savory KA, Garay SM, Sumption L, Watkins W, Garcia-Martin I, et al. Persistence of anxiety symptoms after elective caesarean delivery. *BJPsych Open* [Internet]. 2018 [cited on 2 jul 2023]; 4(5):354-60. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6127961/pdf/S2056472418000480a.pdf>
6. Gravensteen IK, Jacobsen E-M, Sandset PM, Helgadottir LB, Rådestad I, Sandvik L, et al. Anxiety, depression and relationship satisfaction in the pregnancy following stillbirth and after the birth of a live-born baby: a prospective study. *BMC Pregnancy and Childbirth* [Internet]. 2018 [cited on 2 jul 2023]; 18(1):41. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5781321/pdf/12884_2018_Article_1666.pdf
7. Biaggio AMB, Natalício L, Spielberger RCD. Desenvolvimento da forma experimental em português do Inventário de Ansiedade Traço-Estado (IDATE) de Spielberger. *Arq Bras Psicol Apl* [Internet]. 1977; [cited on 2023 out 20]; 29(3):31-44. Available at: <http://bibliotecadigital.fgv.br/ojs/index.php/abpa/article/view/17827/16571>
8. Dib EP, Padovani FHP, Perosa GB. Mother-child interaction: implications of chronic maternal anxiety and depression. *Psicol Reflex Crit.* [Internet]. 2019 [cited on 2 jul 2023]; 32(1):10. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6967190/pdf/41155_2019_Article_123.pdf
9. Severo MEV, Santos AF, Pereira VCLS. Ansiedade em mulheres no período gestacional. *Rev Ciênc Saúde Nova Esperança* [Internet]. 2017 [cited on 2 jul 2023]; 15(1):80-91. Available at: <http://www.facene.com.br/wp-content/uploads/2010/11/Ansiedade-em-mulheres-v15.1.7.pdf>
10. Pinto TM, Caldas F, Silva CN, Figueiredo B. Maternal depression and anxiety and fetal-neonatal growth. *J Pediatr (Rio J)*. [Internet]. 2017 [cited on 2 jul 2023]; 93(5):452-9. Available at: <https://www.sciencedirect.com/science/article/pii/S0021755717301122/pdf?md5=1cc14d6429863d713796a516dc6142f3&pid=1-s2.0-S0021755717301122-main.pdf>
11. Schiavo RA, Rodrigues OMPR, Perosa GB. Variáveis associadas à ansiedade gestacional em primigestas e multigestas. *Trends Psychol.* [Internet]. 2018 [cited on 2

jul 2023]; 26(4):2091-104. Available at:
<https://www.scielo.br/j/tpsy/a/5Nr4Yz4vHyHdd5kvMgQY53R/?format=pdf&lang=pt>
 12. Melo WA, Alves JI, Ferreira AAS, Souza VS, Maran E. Gestação de alto risco: fatores associados em município do noroeste paranaense. *Espaç Saúde (Online)* [Internet]. 2016 [cited on 2 jul 2023]; 17(1):83-92.

Available at:

<https://espacoparasaude.fpp.edu.br/index.php/espacosaude/article/view/371/11>

13. Ferreira IS, Fernandes AFC, Lô KKR, Melo TP, Gomes AMF, Andrade IS. Percepções de gestantes acerca da atuação dos parceiros nas consultas de pré-natal. *Rev Rene*. [Internet]. 2016 [cited on 2 jul 2023]; 17(3):318-23. Available at:

<http://periodicos.ufc.br/rene/article/view/3444/2680>

14. Costa DO, Souza FIS, Pedroso GC, Strufaldi MWL. Transtornos mentais na gravidez e condições do recém-nascido: estudo longitudinal com gestantes assistidas na atenção básica. *Ciênc Saúde Colet*. [Internet]. 2018 [cited on 2 jul 2023]; 23(3):691-700. Available at:

<https://www.scielo.br/j/csc/a/Z6JBYjY99CHjsFmkygVrfTS/?format=pdf&lang=pt>

15. Alves GMAN, Rodrigues OMPR, Cardoso HF. Indicadores emocionais de mães de bebês com risco para o desenvolvimento. *Pensando Fam*. [Internet]. 2018 [cited on 2 jul 2023]; 22(2):70-87.

Available at:

<http://pepsic.bvsalud.org/pdf/penf/v22n2/v22n2a06.pdf>

16. Parreira BDM, Goulart BF, Ruiz MT, Monteiro JCS, Gomes-Sponholz FA. Sintomas de ansiedade entre mulheres rurais e fatores associados. *Esc Anna Nery Rev Enferm*. [Internet]. 2021 [cited on 2 jul 2023]; 25(4):e20200415. Available at:

<https://www.scielo.br/j/ean/a/FYWhctYJymBLc4gBTr89Tnv/?format=pdf&lang=pt>

17. Shrestha S, Adachi K, Petrini MA, Shrestha S. Factors associated with post-natal anxiety among primiparous mothers in Nepal. *Int Nurs Rev*. [Internet]. 2014 [cited on 2 jul 2023]; 61(3):427-34. Available at:

<https://onlinelibrary.wiley.com/doi/epdf/10.1111/inr.12118>

RECEIVED: 03/23/21

APPROVED: 09/11/23

PUBLISHED: Oct/2023