

## **Ansiedade e depressão em mães de recém-nascidos prematuros na pandemia de Covid-19**

Anxiety and depression in mothers of premature newborns during the Covid-19 pandemic

Ansiedad y depresión en madres de recién nacidos prematuros durante la pandemia de Covid-19

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### **RESUMO**

**Objetivo:** identificar sinais e sintomas de ansiedade e depressão em mães de bebês prematuros. **Método:** estudo de abordagem quantitativa, epidemiológica e transversal. Foram utilizados dois formulários: um elaborado pelas pesquisadoras com questões relacionadas a variáveis sociodemográficas e a Escala Hospitalar de Ansiedade e Depressão (Hospital Anxiety and Depression Scale - HADS) para a identificação de sinais de ansiedade e depressão. Foi realizada a análise dos dados na forma descritiva e univariada e produzidas tabelas com a frequência, percentual, percentual válido e porcentagem acumulativa para cada variável e outra tabela com a moda de cada variável. **Resultado:** percebeu-se que 61,11% das mães apresentam sintomas de ansiedade e que 38,88% delas apresentam sintomas de depressão. **Conclusão:** Notou-se que o contexto da pandemia de COVID-19 afetou significativamente a saúde mental das puérperas, havendo aumento de sintomas de ansiedade e depressão.

**Descritores:** Recém-nascido prematuro; Saúde mental; Ansiedade; Depressão; Covid-19.

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### **ABSTRACT**

**Objective:** to identify signs and symptoms of anxiety and depression in mothers of premature babies. **Method:** quantitative, epidemiological and cross-sectional study. Two forms were used: one prepared by the researchers with questions related to sociodemographic variables and the Hospital Anxiety and Depression Scale (HADS) to identify signs of anxiety and depression. Data analysis was performed in descriptive and univariate form and tables were produced with the frequency, percentage, valid percentage and cumulative percentage for each variable and another table with the mode of each variable. **Result:** it was noticed that 61.11% of mothers present symptoms of anxiety and that 38.88% of them present symptoms of depression. **Conclusion:** It was noted that the context of the COVID-19 pandemic significantly affected the mental health of postpartum women, with an increase in symptoms of anxiety and depression.

**Descriptors:** Infant, Premature; Mental health; Anxiety; Depression; Covid-19.

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## RESUMEN

**Objetivo:** identificar signos y síntomas de ansiedad y depresión en madres de bebés prematuros. **Método:** estudio cuantitativo, epidemiológico y transversal. Se utilizaron dos formularios: uno elaborado por los investigadores con preguntas relacionadas con variables sociodemográficas y la Escala Hospitalaria de Ansiedad y Depresión (HADS) para identificar signos de ansiedad y depresión. El análisis de los datos se realizó de forma descriptiva y univariante y se elaboraron tablas con la frecuencia, porcentaje, porcentaje válido y porcentaje acumulado para cada variable y otra tabla con la moda de cada variable. **Resultado:** se observó que el 61,11% de las madres presentan síntomas de ansiedad y que el 38,88% de ellas presentan síntomas de depresión. **Conclusión:** se observó que el contexto de pandemia COVID-19 afectó significativamente la salud mental de las puérperas, con aumento de síntomas de ansiedad y depresión.

**Descriptores:** Recien nacido prematuro; Salud mental; Ansiedad; epresión; Covid-19.

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## INTRODUCTION

Family members of premature newborns are at high risk of developing psychological illnesses that can affect their relationship with the baby and negatively interfere with its development<sup>1</sup>. In this context, the family faces various concerns about the baby's future, such as the possibility of death, which generates feelings of anguish, fear, helplessness, the desire to escape, the need to be with their child and to look after them.<sup>2</sup>

Regarding the feelings experienced by mothers of hospitalized babies, feelings of anguish, fear and insecurity when leaving their children in hospital are noted in mothers of premature babies. Mothers' powerlessness to care for and take their babies home reinforces their feelings of inferiority, affects their self-esteem and their image of their maternal abilities. The feelings experienced by mothers during their child's hospitalization are multiple and affect not only their relationship with their baby, but also their relationship with the environment and with themselves.<sup>7</sup>

Mothers who have had a premature baby and who have indicators of anxiety, characterized by diffuse and unpleasant feelings of apprehension, such as restlessness, discomfort and tachycardia, and depression, are at high risk of mental health problems and may find it more difficult to cope with their child's situation and less prepared for the baby's initial care.<sup>4,5</sup> Anxiety can also make it difficult for the mother to process information.<sup>6</sup>

Correia and Linhares<sup>7</sup> associated the interaction of high levels of maternal anxiety and depression as a possible detrimental factor to the baby's development and the mother's emotional well-being.

Emphasizing the importance of the closeness between parents and baby, research in the field of neuroscience states that the bond between parents and children is fundamental for the baby's development, whether premature or full-term<sup>2</sup>. Therefore, the healthcare team must have a broad perception of how this period affects the family of a hospitalized baby, encouraging the formation and/or continuity of the bond between the family and their baby.<sup>8</sup>

According to the Ministry of Health<sup>9</sup>, COVID-19 is the name of the disease caused by the SARSCov-2 virus and is related to clinical conditions that can range from asymptomatic infection to severe respiratory conditions. Around 80% of COVID-19 patients may be asymptomatic and 20% may require hospital care due to respiratory difficulties, 5% of whom may need ventilatory support to promote better gas exchange.

The SARS-CoV-2 virus is highly transmissible by droplets and contact. It can remain in the environment for hours to days depending on the surface and environmental conditions. Closed spaces with poor ventilation and low light levels are factors that contribute to the transmission of the virus.<sup>10</sup>

Women are the group most vulnerable to mental health problems during the COVID-19 pandemic. This group includes mothers, pregnant women and postpartum women. The hormonal changes of pregnancy and the postpartum period make them even more susceptible to conditions such as anxiety and depression.<sup>11</sup>

The nursing team plays a strategic role in identifying the patient's clinical signs and symptoms, directly accompanying them in their basic human needs and intervening with the multi-professional team in the patient's health. Thus, in view of the possibility of correlations between the presence of signs of anxiety and depression in mothers of premature babies and impacts on the baby, and considering the context of the COVID-19 pandemic in the years 2020 and 2021, in which women are more likely to present these symptoms, the study aimed to identify signs and symptoms of anxiety and depression in mothers of premature babies admitted to a reference maternity hospital, in order to add scientific knowledge and new contributions and work strategies for health professionals and managers, specifically nursing, in caring for the newborn and the family, as well as contributing to future research in this area.

## **METHOD**

This was a quantitative, epidemiological and cross-sectional study. The study site was a kangaroo intermediate care unit (UCINCA) in a public maternity hospital in the city of Manaus. Data collection took place between January and April 2021. In order to take part, the mothers had to be aged 18 or over. Mothers in psychiatric episodes, with chronic illnesses, positive for the HIV virus and who did not speak or understand Portuguese were excluded.

In order to characterize the mothers in terms of sociodemographic variables, a form was drawn up with questions about age, area of residence, number of residents in the house, color, gender identification, sexual orientation, schooling, marital status, number of children, professional occupation, family income, consumption of legal drugs, previous gestational problems and number of premature births. To identify signs of anxiety and depression, the Hospital Anxiety and Depression Scale (HADS) was used, in its version translated and validated for the Portuguese language.

This instrument is made up of multiple-choice questions that address the anxiety and depression variables, with seven questions for each variable. The questions are scored from zero to three, where the highest score for each variable is 21 and the higher the score, the greater the chance of the individual showing symptoms of anxiety and/or depression.<sup>12</sup>

This study was approved by the Comitê de Ética em Pesquisa (CEP) under protocol 4.318.417 and CAEE: 26413619.5.0000.5020 (version 2). All participants in the study signed a Free and Informed Consent Form (FICF) in two copies. Based on Resolution No. 466 of December 2012 of the National Health Council, which provides for research projects with human beings, the bioethical references of autonomy, non-maleficence, beneficence, justice and equity of the research participants were taken into account.

The data obtained was entered into a Microsoft Excel® spreadsheet and transferred to the SPSS version 20 database. The data was analyzed descriptively and univariately and tables were produced with the frequency, percentage, valid percentage and cumulative percentage for each variable and another table with the mode of each variable.

## RESULTS

The total number of participants in the sample was 19 (N). Table 1 shows the name of the variable, the result of the highest frequency from the Mode, the number corresponding to the number of participants who had the answer equivalent to what is shown in the Mode, and the valid percentage of this number of participants.

**Table 1 - Sociodemographic profile. Manaus (AM), Brazil, 2021.**

SOCIO-DEMOGRAPHIC PROFILE			
Variable	Result from Mode	N	Valid percentage
Age	21 to 35 years old	12	63,2%
Area where you live	North, South, West and Center-West	4	21,1%
Number of residents in the house	5 to 10	13	68,4%
Color	Brown	12	63,2%
Gender identification	Cis woman	15	78,9%
Sexual orientation	Straight	18	94,7%
Education	Completed high school	8	42,1%
Marital status	Stable relationship	9	47,4%
Occupation	Unemployed	5	26,3%
Monthly Income	2 to 3 minimum wages (between R\$ 2,090 and R\$ 3,135)	13	68,4%

Main income earner	Partner	13	68,4%
Do you have a religion? What religion?	Yes, Christian	19	100%
Are you a smoker?	No and never consumed	16	84,2%
Are you an alcoholic?	You've already consumed, but you've stopped	14	73,7%
Frequency of alcohol consumption	Didn't answer	14	73,7%
Do you take medication?	No	18	94,7%
Medication	Not applicable	18	94,7%
Number of children	2	7	36,8%
Have you had any complications in previous pregnancies?	No	10	52,6%
Problems with previous pregnancies	Eclampsia, pre-eclampsia, ICU	2	10,5%; 5,3%; 5,3%
First premature baby?	Yes	13	68,4%
Previous premature deliveries	1	4	21,1%

Source: Research authors. The following table describes the results of the Hospital Anxiety and Depression Scale.

**Table 2 - Hospital Anxiety and Depression Scale. Manaus, AM, 2022.**

Classification	Result from Mode	Valid Percentage
Absence of Anxiety (Score<9)	14	66,7%
Anxiety Symptom (Score>8)	6	28,6%
Absence of Depression (Score<9)	17	81%
Symptom of Depression (Score>8)	3	14,4%

Sources: Research authors

## DISCUSSION

A study published in 2011 found the following sociodemographic conditions in the families of premature newborns: 52% of families had a monthly income of more than one minimum wage (R\$380.00 reais, equivalent to R\$1,039.00 in 2020). The majority of households had between 4 and 6 residents, including the NB (48%), with the father as head of household (63%) and 62% of mothers were unemployed.<sup>13</sup>

The current survey shows that the mothers interviewed reported earning between two and three minimum wages (68.4%), which indicates a positive improvement on the survey mentioned above. The number of people living in the same household is the same as that found in the study, from 5 to 10 people, and the spouse is the main earner (68.4%). There is a reduction in the number of mothers who are unemployed (26.3%).

With regard to the Hospital Anxiety and Depression Scale (HAD-A and HAD-S), according to Zigmond and Snaith's cut-off points, a score of 0 to 8 represents the absence of symptoms of anxiety or depression and a score greater than 8 is significant for the presence of symptoms of anxiety or depression. Table 2 shows that 61.11% of the mothers had symptoms of anxiety and 38.88% had symptoms of depression.

Still during pregnancy, pregnant women deal, in addition to all the changes that come with pregnancy, with the side effects of COVID-19, such as restrictions on prenatal appointments, examinations and care, difficulties with family support, socioeconomic concerns and fear of the disease and its complications. Thus, there is a direct relationship between the pandemic caused by SARS-CoV-2 and serious psychological challenges, which cause a potential increase in anxiety, depression and postpartum depression in puerperal women.<sup>14</sup> In line with this, a study carried out with pregnant women identified 26.6% of cases of alterations compatible with probable mental disorders, with symptoms of depression/dysthymia and anxiety/panic being found.

The report of alcohol consumption was related to prematurity. The analysis of alterations compatible with probable mental disorders showed that there was no significant association with prematurity, but there was a link with the mother's perception of alterations in the NB's behavior, either in groups or isolated for depression/dysthymia and anxiety/panic.<sup>15</sup> Another study found that the majority of mothers did not have depression (61.9%) or that it was mild (14.9%). Similarly, most mothers did not have anxiety (52.4%) or it was mild (26.2%). Of the total, eleven (26.2%) mothers had depression and anxiety at the same time. Most of the mothers (71.4%) were using the kangaroo position for the first time at the time of this study.<sup>16</sup>

## **CONCLUSION**

It was noted that the context of the COVID-19 pandemic has significantly affected the mental health of puerperal women, with an increase in symptoms of anxiety and depression. It is therefore necessary for professionals to be prepared to deal with greater insecurity and concern

on the part of the mother and family in relation to the health and protection of the baby. More research is also needed to assess the impact of COVID-19 on the mental health of these mothers and on the care of premature babies.

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