

Prevalence of Psychiatric Medication Use and Obstetric Complications

RESUMO

Objetivo: verificar a prevalência de medicamentos psiquiátricos utilizados por gestantes com transtornos mentais e associá-los às complicações obstétricas. **Método:** estudo transversal analítico, conduzido por meio da busca de prontuários eletrônicos de gestantes atendidas em uma Estratégia Saúde da Família de um município do estado do Rio Grande do Sul. **Resultado:** foram analisados 162 prontuários, que demonstrou o uso de medicamentos psiquiátricos em 32 gestantes. Não houve associação entre o uso ou não de medicamentos psiquiátricos em relação aos casos de hemorragia, parto prematuro e parto tardio. **Conclusão:** o uso de medicamentos psiquiátricos é importante, no entanto é necessário avaliar risco benefício, e a possibilidade de outras abordagens. Salienta-se desse modo a necessidade do uso de abordagens com tecnologias de cuidado leve na assistência as gestantes a fim de estabelecer relações de vínculo.

DESCRIPTORES: Antidepressivos; Cuidados de Enfermagem; Enfermagem; Gravidez; Psicotrópicos.

ABSTRACT

Objective: To verify the prevalence of psychiatric medications used by pregnant women with mental disorders and to associate them with obstetric complications. **Method:** Analytical cross-sectional study conducted through the review of electronic medical records of pregnant women cared for in a Family Health Strategy unit in a municipality in the state of Rio Grande do Sul. **Results:** A total of 162 medical records were analyzed, showing the use of psychiatric medications in 32 pregnant women. There was no association between the use or non-use of psychiatric medications and cases of hemorrhage, preterm birth, or post-term birth. **Conclusion:** The use of psychiatric medications is important; however, a risk-benefit assessment and the possibility of other approaches are necessary. Thus, the need for using soft care technologies in assisting pregnant women is emphasized in order to establish bonding relationships.

KEYWORDS: Antidepressants; Nursing Care; Nursing; Pregnancy; Psychotropic Drugs.

RESUMEN

Objetivo: Verificar la prevalencia de medicamentos psiquiátricos utilizados por gestantes con trastornos mentales y asociarlos con complicaciones obstétricas. **Método:** Estudio transversal analítico, realizado mediante la revisión de historias clínicas electrónicas de gestantes atendidas en una unidad de la Estrategia de Salud de la Familia de un municipio del estado de Rio Grande do Sul. **Resultado:** Se analizaron 162 historias clínicas, que mostraron el uso de medicamentos psiquiátricos en 32 gestantes. No se encontró asociación entre el uso o no uso de medicamentos psiquiátricos y los casos de hemorragia, parto prematuro o parto postérmino. **Conclusión:** El uso de medicamentos psiquiátricos es importante; sin embargo, es necesario evaluar la relación riesgo-beneficio y la posibilidad de otras estrategias. Se destaca así la necesidad de utilizar tecnologías de cuidado ligero en la atención a las gestantes para establecer relaciones de vínculo.

DESCRIPTORES: Antidepressivos; Atención de Enfermería; Enfermería; Embarazo; Psicotrópicos.

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INTRODUCTION

Pregnancy is a natural and physiological process that occurs during the female reproductive cycle. It is a phase characterized by various changes in a woman's life, in which physical, hormonal, social and

psychological alterations occur, in such a way that it can influence a woman's psychological health, as well as the development of her socio-familial role⁽¹⁾.

During pregnancy, the rate of depression is approximately 7-15% and for anxiety 20%. Symptoms of anxiety during the perinatal period and pu-

erperium are frequent and can vary in intensity. On the other hand, depression affects various regions of the mother's brain and, when this occurs, it manifests itself through characteristic symptoms: unexplained and persistent crying, feelings of worthlessness, guilt, rejection by the baby, lack of interest

in breastfeeding and low self-esteem⁽²⁾.

As a result, there has been an increase in the prescription of psychotropic drugs in recent years, with antidepressants accounting for 8% of all drugs prescribed during pregnancy⁽³⁾. In this scenario, for a good prognosis, early diagnosis is necessary, with appropriate interventions, whether therapeutic or pharmacological.

Recognizing and treating mental health problems can prevent more serious complications and significantly improve the quality of life of pregnant women. During prenatal care, the team of health professionals must be trained to identify mental health problems and thus contribute to the development of strategies to intervene in risk groups of women in need of intervention⁽⁴⁻⁵⁾.

Given these concerns, there is evidence that the use of psychotropic drugs during pregnancy has various effects that compromise the baby's development. On the other hand, untreated depression in pregnant women has been associated with increased risks of miscarriage, premature birth and low birth weight⁽⁶⁾. Therefore, the decision to treat should consider not only the potential risks of medication, but also the significant risks of not treating the mother's mental health.

The teratogenic effects of certain drugs can cause disturbances in the development of fetal organs and tissues, resulting in possible neurological, cardiac, pulmonary and neural tube malformations⁽⁷⁾. The period of greatest vulnerability is between the 8th and 12th weeks, and the introduction of psychotropic drugs in the first 12 weeks of pregnancy should be avoided⁽⁸⁾.

Given the importance of this issue for women's health, it is important to check the prevalence of psychiatric drugs used by pregnant women with mental disorders and associate them with obstetric complications.

METHOD

This was an analytical cross-sectional study conducted by searching the electronic medical records of pregnant women treated at a Family Health Strategy in a municipality in the state of Rio Grande do Sul. The population was made up of all pregnant women aged 18 or over who went through the process of childbirth and had prenatal care at the service between 2020 and 2022.

Data collection took place in 2023. Pregnant women who had miscarriages and who had incomplete information in their electronic medical records were excluded. A questionnaire was used containing sociodemographic data with the following variables: age, education, race, occupation, employment status, marital status and type of psychiatric medication used. The obstetric complications were: bleeding, premature birth and late delivery.

The data collected was double-entered into an Excel® spreadsheet and then transferred to SPSS 25. To characterize the sample, a descriptive analysis of the participants' data was carried out. Categorical variables were presented as percentages and quantitative variables as means, standard deviations, maximums and minimums.

The chi-square test was used to assess the factors associated with the prevalence of psychiatric medication use and obstetric complications in pregnant women receiving primary health care. Associations were considered significant when the results showed a p-value <0.05. The research was approved by the Research Ethics Committee of the Franciscan University, under opinion no. 5.183.201.

RESULTS

The average age of the women was 28.1 years old, with ages ranging from 13 to 46, the majority were white (82.1%) and had elementary school education (67.1%), followed by secondary school education (27.3%) and

higher education (5.6%). With regard to marital status and employment, the majority were married or in a stable union (40.7%) and had no employment (40.7%). With regard to social benefits, this information was not identified in the majority of medical records (76.4%). Table 1 - Sociodemographic characteristics of pregnant women treated in a Family Health Strategy - shows the sociodemographic characteristics of the sample.

Table 1 - Sociodemographic characteristics of pregnant women seen in a Family Health Strategy. Santa Maria, Rio Grande Do Sul, Brazil, 2023.

Variables	Results
Age (mean±SD) (minimum - maximum)	28.1±7 (13 - 46 years)
Race (n (%))	
White	133 (82,1%)
No bank	29 (17,9%)
Schooling (n (%))	
Basic education	108 (67,1%)
High school	44 (27,3%)
Higher education	9 (5,6%)
Marital status (n (%))	
Single	40 (24,7%)
Married/stable union	66 (40,7%)
Not informed	56 (34,6%)
Employment (n (%))	
It has	25 (15,4%)
None	66 (40,7%)
Not informed	71 (43,9%)
Do you have any social benefits (n (%))	
Brazil Aid	38 (23,6%)
Not informed	123 (76,4%)

Graph 1 Proportion of pregnant women by number of pregnancies shows the number of women and the number of pregnancies each had at the time of the survey. The average number

of pregnancies was 2.5, with a minimum of 1 and a maximum of 11 pregnancies, of which 160 were singletons (98.8%) and 2 (1.2%) were twins.

There was no association between the use or non-use of psychiatric drugs in relation to cases of hemorrhage, premature birth and late delivery. In the analysis of hemorrhage, it was noted that parturients who used psychiatric drugs did not experience hemorrhage in any of the 32 cases, while those who did not use them experienced this problem in only 4 (3.3%).

It was noted that parturient women who used psychoactive substances associated with the use of psychiatric medication had a preterm birth about 2.6 times higher than women who did not use them (OR = 2.662), so this complication cannot be related to the use of medication alone. However, it is essential to monitor treatment throughout pregnancy to check for possible obstetric complications, as well as the presence of fetal malformations.

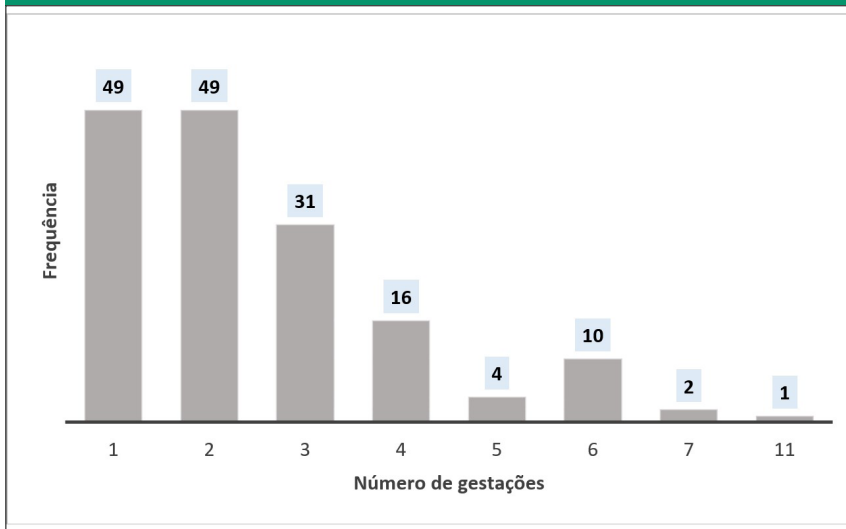
DISCUSSION

During pregnancy, depression and anxiety are common conditions, differing only in their severity, which is related to the pregnant woman's previous history. Depression is a pathological condition characterized by aversion to everyday activities, sleep and appetite disorders, as well as irritability, affecting behaviour, health and interpersonal relationships⁽⁹⁾. On the other hand, anxiety is an emotional state with physiological and psychological components, including sensations such as fear and insecurity, increased alertness, and somatic and autonomic nervous system discomfort⁽¹⁰⁾.

The safety of antidepressants during pregnancy has not yet been fully confirmed. The use of medication during pregnancy and the puerperium is common and represents a problem, especially with regard to the safety and efficacy of these drugs⁽⁸⁾.

There is evidence that the use of

Graph 1-Proportion of pregnant women by number of pregnancies. Santa Maria, Rio Grande Do Sul, Brazil, 2023.



162 medical records were analyzed. The medical records indicated the use of psychiatric medication in 32 pregnant women. The most commonly used drugs were: fluoxetine hydrochloride, haloperidol, sertraline hydrochloride, lithium carbonate, clonazepam and amitriptyline hydrochloride. The mental

disorders that predominated were anxiety and depression.

As for the association between the use of psychiatric drugs and comorbidities, these are described in Table 2 Association between the comorbidity SAH in relation to cases of hemorrhage, premature birth and late birth.

Table 2-Association between use of psychiatric medication and comorbidities. Santa Maria, Rio Grande Do Sul, Brazil, 2023.

Medicines	Bleeding		P
	Yes	No	
Made use of	0 (0%)	32 (100%)	0,301
Not used	4 (3,3%)	119 (96,7%)	
Medicines	Premature birth		P
	Yes	No	
Made use of	5 (15,6%)	27 (84,4%)	0,097
Not used	8 (6,5%)	115 (93,5%)	
Medicines	Late delivery		P
	Yes	No	
Made use of	1 (3,1%)	31 (96,9%)	0,467
Not used	8 (6,5%)	115 (93,5%)	

antidepressants during pregnancy can result in various effects that harm the baby's development⁽¹¹⁾.

“Laboratory research has shown that pregnant women who use these drugs have high levels of cortisol, which affects fetal development and increases maternal irritability⁽⁶⁾. The use of antidepressants is also an important risk factor for fetal hypoglycemia⁽¹²⁾.”

In addition, neonates exposed to selective serotonin reuptake inhibitors (SSRIs) during the third trimester are at greater risk of respiratory distress, cyanosis, apnea, seizures, temperature instability, feeding difficulties, vomiting, hypoglycemia, hypotonia, hypertonia, tremor and nervousness⁽¹¹⁾. In addition, significant evidence has been found between the association of SSRIs in pregnancy and autism spectrum disorder (ASD) in babies⁽¹¹⁾.

Research has shown that the most widespread repercussions are cardiac anomalies, but there is also a high correlation between the use of antidepressants and the increased development of mental and/or behavioral disorders⁽⁸⁾.

The use of these drugs during pregnancy can be harmful to the fetus and newborn, in addition to possible long-term effects on children exposed during intrauterine life, as antidepressants cross the placental and blood-brain barrier and pass into breast milk, they can increase the level of mediators in the developing fetus and can adversely affect the functional development of the brain⁽¹¹⁾.

Adverse effects vary according to the medication. Among the most reported are congenital alterations associated mainly with the use of antiepileptic/anticonvulsant drugs, with a 61.5% chance compared to those who don't use this medication. Also noteworthy is Neonatal Abstinence Syndrome (NAS), characterized by hypotonia, hypothermia, lethargy, respiratory depression and feeding difficulties, which is related to the use of antiepileptics, antidepressants, anxiolytics and antipsychotics⁽¹³⁾.

Fetal malformations induced by teratogenic drugs are serious congenital disorders with great potential for morbidity and functional limitations, and with the high rate of use of these substances, it is possible that their occurrence will become ever greater⁽¹⁴⁾.

In summary, it was validated that psychotropic drugs, especially SSRIs, were strong predictors of FNS, suggesting different etiologies and the need for preventive measures to avoid the occurrence of this neonatal disorder.

CONCLUSION

The study showed that there was no association between the use or non-use of psychiatric drugs in relation to cases of hemorrhage, premature birth and late delivery. In the analysis of hemorrhage, it was noted that parturients who used psychiatric drugs did not experience hemorrhage in any case, while those who did not use them experienced this problem in only four cases.

On the other hand, parturients who used psychoactive substances associated with the use of psychiatric medication had a higher number of premature births compared to women who did not use them, so this complication cannot be linked to the use of medication alone. However, it is essential to monitor treatment throughout pregnancy to check for possible obstetric complications, as well as the presence of fetal malformations.

The conclusion is that the use of psychiatric medication is important, but it is necessary to assess the risk-benefit ratio and, if possible, other approaches. This highlights the need to use approaches with light care technologies in assisting pregnant women in order to establish bonding relationships.

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