

USE OF ANTIDEPRESSANTS DURING PREGNANCY: A LITERATURE REVIEW

Lais Ruth Matos da Conceição Rufino

Instituto Tocantinense Presidente Antônio
Carlos - ITPAC

Porto Nacional – Tocantins

<http://lattes.cnpq.br/8459314339525973>

Odilon Pereira Machado Neto

Instituto Tocantinense Presidente Antônio
Carlos – ITPAC

Porto Nacional – Tocantins

<http://lattes.cnpq.br/6100442722269098>

Gabriela Alves Auriema

Instituto Tocantinense Presidente Antônio
Carlos – ITPAC

Porto Nacional – Tocantins

<http://lattes.cnpq.br/2956307369970895>

Albeliggia Barroso Vicentine

Instituto Tocantinense Presidente Antônio
Carlos – ITPAC

Porto Nacional – Tocantins

<http://lattes.cnpq.br/3203770703970950>

Denise Ramos Costa

Instituto Tocantinense Presidente Antônio
Carlos – ITPAC

Porto Nacional – Tocantins

<http://lattes.cnpq.br/3168494833444713>

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: The use of antidepressants during pregnancy is a controversial topic in medicine, as there may be risks to the health of the mother and fetus. This study aims to evaluate the effects of the use of antidepressants during pregnancy, as well as the drugs most used in the treatment. A narrative review was carried out in which articles contained in the main scientific databases such as PUBMED and Google Scholar were analyzed. The results showed that women who used antidepressants during pregnancy had a higher prevalence of obstetric complications and postpartum depression compared to women without a history of psychiatric disorders. Furthermore, it was observed that women with severe psychiatric disorders were more likely to use antidepressants during pregnancy. Finally, it was concluded that the use of antidepressants during pregnancy can pose risks to maternal and fetal health, but in some cases, it is necessary for the mother's mental health. Therefore, it is important that decisions to prescribe antidepressants during pregnancy are made on an individual basis, considering the risks and benefits for the mother and fetus.

Keywords: Antidepressants. Gestation. Maternal health. Fetal health. Psychiatric disorders.

INTRODUCTION

Pregnancy is a period that marks an important transition in individual and family life, and can lead to a series of reorganizations, both internal and external. Several factors can influence the experience of pregnancy, including the context in which the pregnant woman is inserted, the relationship with the partner, the personal resources available, history of emotional bonds and family relationships, as well as the existence of a support network (PORTUGAL, 2005).

During pregnancy, a woman goes through a series of changes in different dimensions

of her life. First, there is a restructuring of identity and a new definition of roles, as the pregnant woman prepares to become a mother. In addition, socioeconomic factors also influence this transition, since the arrival of a baby can affect the woman's financial and professional responsibilities. The lack of affective or financial resources can generate tension and frustration, intensifying the pregnant woman's emotional ambivalence. Therefore, it is important that the pregnant woman receives support and understanding at this time, so that she can deal with these changes and experience the pregnancy more satisfactorily (MALDONADO, 2005).

The physical and social changes experienced by women during pregnancy promote a significant increase in the level of stress that may be closely correlated with the prevalence of depression during this critical period. This condition, which can be influenced by biopsychosocial factors, is a complex phenomenon that stems from the need for restructuring and readjustment in various dimensions of the pregnant woman's life. In this sense, it is essential that preventive and therapeutic measures are taken, since the mental health of the mother and the baby is of vital importance during this moment (KLIEMANN; BÖING; CREPALDI, 2017).

The diagnosis of psychological disorders during pregnancy is often neglected, with little evidence that seeks to identify emotional changes in this critical period of a woman's life. Although the diagnosis of depression in pregnancy is more frequent in the first and third trimesters, it often becomes a challenge, as there are overlapping symptoms common to normal pregnancy, such as fatigue, insomnia, changes in appetite and loss of energy. Thus, the follow-up of prenatal care is essential in order to detect early symptoms that allow timely interventions and, therefore, prevent more serious conditions (BRITO; CEPÊDA;

HEITOR, 2005).

It is estimated that around 10% to 20% of women are affected by depression during pregnancy, making it one of the most prevalent disorders during this period. If not promptly diagnosed and treated, depression has a high probability of persisting after childbirth. Thus, the early detection of the disease, as well as the identification of risk factors during screening, allow the adoption of preventive measures that help to minimize the incidence of depression during pregnancy (DOTTO; DAL BÓ, 2023).

The use of antidepressants during pregnancy is a controversial subject and still little clarified in the literature. The possible adverse effects on fetal development, associated with the use of these drugs, generate concern among health professionals and pregnant women. Therefore, it is extremely important to carry out a critical and systematic review of the available scientific evidence, in order to clarify the risks and benefits of using antidepressants during pregnancy and, thus, guide clinical practice. In addition, the study in question may contribute to promoting safer and more effective care for women who have depressive symptoms during pregnancy (NASCIMENTO; ARRUDA; MARQUES, 2022).

MATERIAL AND METHODS

In order to meet the proposed objectives, we opted for a methodological approach that includes a narrative review. To this end, systematic searches were carried out in the main scientific databases such as SciELO, PubMed and Google Scholar, using the search terms “antidepressants”, “pregnancy”, “depression”, “drugs in pregnant women” and their variations in Portuguese and English. Articles published between 2005 and 2023, in Portuguese and English, that focus on the use of antidepressants during pregnancy were considered.

After the initial selection based on titles and abstracts, complete readings were performed for the final selection of articles that would be included in the review. The selected articles were analyzed in a narrative way, with emphasis on the description of the results and conclusions presented by the authors. The main risks and benefits associated with the use of antidepressants during pregnancy were identified, as well as the intervention strategies that have been proposed to help pregnant women obtain an effective and safe treatment for depression.

It must be noted that carrying out this work is extremely important, since depression during pregnancy is a public health problem that requires adequate attention and intervention. The review of studies on the use of antidepressants during pregnancy can help identify safer and more effective strategies for treating depression during this period, promoting better results for the health of mothers and babies.

RESULTS AND DISCUSSION

After searching the SciELO, PubMed and Google Scholar databases, six articles that met the inclusion criteria of this study were selected. The selected articles address the issue of antidepressant use during pregnancy and its effects on fetal development.

The articles were published between 2005 and 2023, and were written by authors from different nationalities, such as Brazil, the United States and the United Kingdom. All articles were published in renowned peer-reviewed scientific journals.

The studies used different methodologies, including systematic reviews, meta-analyses, retrospective cohort studies and case-control studies. In addition, the articles include a variety of studied populations, including pregnant women with different gestational ages, different types of antidepressants used

and different outcomes evaluated.

From the analysis of the selected articles, several relevant results were identified on the effects of the use of antidepressants during pregnancy, such as: increased risks of fetal malformations, low birth weight, neonatal respiratory complications, and long-term effects on child development.

The use of medication during pregnancy is a complex and controversial issue that involves several factors, such as maternal and fetal health, the risks and benefits of medication, the socioeconomic and cultural conditions of pregnant women, among others. In this context, a study that proposed to assess the prevalence and factors associated with the use of medication in pregnant women before and during pregnancy, concluded that approximately 90% of pregnant women used at least one medication and that the factors associated with the use of medication included maternal age, education, family income, number of living children, pregnancy planning and presence of chronic diseases (COSTA; COELHO; SANTOS, 2017).

Another study demonstrated that both depression and the use of selective serotonin reuptake inhibitors during pregnancy independently increased the risk of preterm delivery. This means that pregnant women who suffer from depression or use these medications are more likely to give birth earlier than expected, which can lead to complications for both the baby and the mother (YONKERS et al., 2012).

Furthermore, it has been shown that women who took selective serotonin reuptake inhibitors without a major depressive episode were at high risk of spontaneous preterm delivery, that is, without medical indication. On the other hand, these women had a low risk of preterm delivery due to medical indication. This suggests that the use of these drugs may be associated with an increased

risk of preterm labor or premature rupture of membranes (YONKERS et al., 2012).

In parallel to these studies, another study highlighted that the use of antidepressants during pregnancy can lead to several effects that will compromise the baby's development, from the intrauterine period to its process of acquiring new skills in the early period of life. Some of the adverse effects associated with the use of antidepressants during pregnancy include hypoglycemia, malformations related to the cardiovascular system, propensity to develop Autistic Spectrum Disorder (ASD), or other long-term cognitive, behavioral and emotional changes (NASCIMENTO; ARRUDA; MARQUES, 2022).

Selective Serotonin Reuptake Inhibitors (SSRIs) are often prescribed to treat depression in pregnant women and in this context a meta-analysis concluded that although exposure to SSRIs during the first trimester of pregnancy is not considered teratogenic, it may be associated with premature birth and a small reduction in gestational age at birth. Furthermore, it revealed that there is no clear evidence that SSRIs increase the risk of low birth weight or hypertensive disorders of pregnancy, but there is a risk of postpartum haemorrhage. The study also pointed out that paroxetine, an SSRI, may increase the risk of congenital cardiovascular malformations, although different studies have conflicting results (BOCUTTI et al., 2021).

According to a study carried out, the use of psychotropic drugs during pregnancy and lactation is still not completely understood by the scientific literature. However, nortriptyline and sertraline are the safest drugs among antidepressants in pregnancy and lactation, and haloperidol is the preferred antipsychotic for these periods. On the other hand, benzodiazepines and mood stabilizers such as lithium carbonate, carbamazepine and sodium valproate must be avoided. The authors

also emphasized that the decision to use medication during this period must be made jointly by the patient, family, obstetrician and psychiatrist, always considering the risks and benefits for the mother and fetus (AMORIM et al., 2020).

Thus, another article found that when it comes to mental pathologies during pregnancy, psychotherapy is the most recommended option and must be considered as the first line of treatment. However, in cases of moderate to severe depression, the administration of antidepressants must be evaluated by a trained professional, since the absence of treatment can generate even more harmful impacts on fetal development. Although there is evidence that the use of antidepressants may be associated with adverse effects on children, such effects may be related to family factors and not necessarily to the use of the drug itself. Therefore, if the clinical picture justifies it, the use of antidepressants in pregnant women is seen as a favorable option compared to the exposure of mother and child to untreated depressive illnesses (AMARANTE, 2020).

FINAL CONSIDERATIONS

The use of antidepressants during pregnancy may pose risks to both the mother and the developing fetus. In addition to potential teratogenic effects, such as fetal malformations, antidepressants may also be associated with other health problems, such as low birth weight, neonatal respiratory complications, and changes in long-term child development.

However, it is important to emphasize that the decision to use or not use antidepressants during pregnancy must be evaluated individually, considering the risks and benefits for the mother and fetus, as well as the socioeconomic and cultural context of the pregnant woman. Some studies indicate that untreated depression during pregnancy can increase the risk of premature birth, as well as other complications for mother and baby.

In addition, more research is needed to better understand the effects of antidepressants on maternal and fetal health, especially in relation to the different populations studied and the different types of medications used.

REFERENCES

- AMARANTE, J. F. de. **Efeitos da utilização de antidepressivos no desenvolvimento fetal**. ICB - Instituto de Ciências Biológicas. Belo Horizonte (MG). 2020. Disponível em: <http://hdl.handle.net/1843/34305>. Acesso em: 7 mai 2023.
- AMORIM, I. et al. **Avaliação do uso de psicofármacos durante o período de gravidez e lactação**. Revista INOVALE, v. 1, p. 2, 2020. Disponível em: <https://s3.us-east-1.amazonaws.com/assets.iesvap.edu.br/resources/files/docs%20pdfs/revista-inovale/artigos/03-a190531a-diagramado.pdf>. Acesso em: 8 mai 2023.
- BOCUTTI, F. E. et al. **O uso pré-natal de antidepressivos e risco de teratogenicidade e de resultados adversos na gravidez**. Brazilian Journal of Surgery and Clinical Research – BJSCR. Vol.35, n.3, pp.48-56 (Jun - Ago 2021). Disponível em: https://www.mastereditora.com.br/periodico/20210809_084143.pdf. Acesso em: 8 mai 2023.
- COSTA, D. B.; COELHO, H. L. L.; SANTOS, D. B. DOS.. **Utilização de medicamentos antes e durante a gestação: prevalência e fatores associados**. Cadernos de Saúde Pública, v. 33, n. 2, p. e00126215, 2017. Disponível em: <https://www.scielo.br/j/csp/a/qs9LgbKpsXGGVjhYPfccTFz/abstract/?lang=pt>. Acesso em: 7 mai 2023.
- DOTTO, B. S.; DAL BÓ, S. **O uso de antidepressivos na gestação**. Inova Saúde, v. 13, n. 2, p. 109-118, 2023. Disponível em: <https://periodicos.unesc.net/ojs/index.php/Inovasaude/article/view/6155/6510>. Acesso em: 7 mai 2023.
- KLIEMANN, A.; BÖING, E.; CREPALDI, M. A. **Fatores de risco para ansiedade e depressão na gestação: Revisão sistemática de artigos empíricos**. Mudanças-Psicologia da saúde, v. 25, n. 2, p. 69-76, 2017. Disponível em: <https://www.metodista.br/revistas/revistas-metodista/index.php/MUD/article/view/7512/6006>. Acesso em: 7 mai 2023.

MALDONADO, M. T. **Psicologia da gravidez: parto e puerpério**. Petrópolis (RJ): Ed. Vozes, 2005. Disponível em: <https://bibliotecadigital.fgv.br/ojs/index.php/abpa/article/view/17839/16582>. Acesso em: 7 mai 2023.

NASCIMENTO, J. L. G. do.; ARRUDA, M. S. de.; MARQUES, H.. **Effects of antidepressant use during pregnancy: a systematic review**. Research, Society and Development, [S. l.], v. 11, n. 11, p. e558111133950, 2022. DOI: 10.33448/rsd-v11i11.33950. Disponível em: <https://rsdjournal.org/index.php/rsd/article/view/33950>. Acesso em: 7 mai 2023.

PORTUGAL. Ministério da Saúde. **Direcção-Geral da Saúde Promoção da Saúde Mental na Gravidez e Primeira Infância: Manual de orientação para profissionais de saúde**. - Lisboa: DGS, 2005. - 50 p. Disponível em: https://www.arsalgarve.min-saude.pt/wp-content/uploads/2016/12/Saude_Mental_e_Gravidez_primeira_infancia_Folheto_DGS_2005.pdf. Acesso em: 7 mai 2023.

YONKERS, K. A. *et al.* **Depression and serotonin reuptake inhibitor treatment as risk factors for preterm birth**. Epidemiology (Cambridge, Mass.). 2012. 23(5), 677–685. <https://doi.org/10.1097/EDE.0b013e31825838e9>. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3415566/>. Acesso em: 8 mai 2023.