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Antidepressants & Pregnancy: Are the Benefits Worth the Risk?

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Antidepressants & Pregnancy: Are the Benefits Worth the Risk?

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Question:

Are pregnant women who take an antidepressant during pregnancy at a greater risk for fetal complications compared to pregnant women who do not take an antidepressant?

Background:

- Anxiety and depression are two of the most common psychological conditions that affect women worldwide
- According to the Mayo Clinic (2016), depression occurs in 14-23% of pregnant women
- There has been an association between depression and preterm birth, preeclampsia, and low birth weight (Kaplan, 2013)
- Nearly 30% of women within child-bearing age are currently experiencing depression or have been diagnosed with depression or anxiety (Dawson et al., 2016)
- There have been some reports that claims that antidepressant use during pregnancy can cause spontaneous abortion (miscarriage), malformations, low birthweight, preterm birth, preeclampsia, and pulmonary hypertension (Yamamoto, McCormick, & Burris, 2015)

Key Terms:

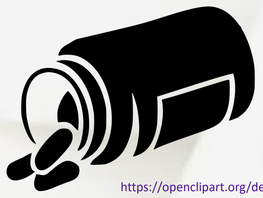
- SSRI: selective serotonin reuptake inhibitor
- SNRI: selective norepinephrine reuptake inhibitor
- NaSSA: noradrenergic and specific serotonergic antidepressant

This work is not an original. This is an evidence-based practice brief that includes published research conducted by professionals. Guidance was provided by Stephanie Burkholder, professor of Practice Research Methods. NU307: Evidence-Based

Study:	Description:	Findings:
Neonatal growth outcomes at birth and one month postpartum following in utero exposure to antidepressant medication (Lewis et al., 2010)	• Level II • Mercy hospital for Women in Melbourne, Australia • Pregnant women diagnosed with depression & taking an SSRI, SNRI, or NaSSA from 2004-2005 • Control group containing 27 women diagnosed with depression not taking antidepressants • Purpose designed questionnaire was used for the prospective and controlled design • Analysis was done to classify the neonates based on their birth weights and gestational age	• Exposure to antidepressant medications affected gestation at birth and neonatal growth outcomes • These infants experienced statistically significant differences in their birth weight, length, and age of gestation at the time of delivery • Neonates exposed to antidepressants were eightfold more likely to weigh less than 2500 grams (significantly lowered) and 4.5 times more likely to be premature
Duration of antidepressant use during pregnancy and risk of major congenital malformations (Ramos et al., 2008)	• Level II • Three administrative databases were used from Quebec, Canada as well as a questionnaire to obtain research on pregnant women taking antidepressants • 2329 qualified for the research study and made up the research group • Participants were 15-45 years old and had a previous diagnosis of depression before pregnancy and had to have been taking an antidepressant for 1 year before pregnancy and during pregnancy. • Pregnancy must have ended in delivery of the baby • To be considered a “case” the offspring had to be diagnosed with a congenital malformation	• Approximately 8.1% of the total infants in the study presented with a minimum of one major congenital malformation • These congenital malformations were not due to one antidepressant in particular, but rather the intake of multiple antidepressants, selective serotonin reuptake inhibitors, or no antidepressants at all during their first trimester of pregnancy • No correlation was found between antidepressant use and these malformations
Use of antidepressants during pregnancy and the risk of spontaneous abortion (Nakhai-Pour et al., 2010)	• Level II • Nested-case study • The Quebec Pregnancy Database was used to obtain data from 1998-2003 of women aged 15-45 who had experienced a spontaneous abortion • Using this data, it was determined if the women had been taking antidepressants during their pregnancy • A control group of women who experienced a spontaneous abortion but did not take an antidepressant was also used • The medications the study classified as antidepressants were SSRIs, tricyclic antidepressants, SNRIs, or what they referred to as “other antidepressants”	• The majority of women who experienced a spontaneous abortion were not only clinically diagnosed with anxiety and depression, but also had several underlying factors contributing to the spontaneous abortion • 5.5% of women diagnosed with a spontaneous abortion had gotten at leas tone prescription of antidepressant medication during their pregnancy while 2.7% of the control group • After adjusting for underlying factors that participants may have, the research concluded that there is no direct correlation between antidepressant use and spontaneous abortion, they are independent of one another
Antidepressant use in pregnancy and the risk of cardiac defects (Huybrechts et al., 2014)	• Level II • Cohort study of 949,504 pregnant women from the United States who were required to be enrolled in Medicaid for at least three months prior to conception and one month postpartum • Any cardiac malformation was considered a positive case • Any cardiac abnormality discovered during the fetal stage was not included	• Of every 10,000 infants born, 90.1 infants exposed to antidepressants displayed cardiac malformations, whereas 72.3 infants not exposed to antidepressants developed malformations • There was no significant increase in the risk of cardiac malformations in infants born to women who took antidepressants during the first trimester, as compared with unexposed women

Results:

- Because all of the studies were not conclusive, we cannot say with full confidence that antidepressant use in pregnancy does not cause an increase in fetal malformations
- Despite some increases in fetal abnormalities, three of the four studies determined that there is no significant relationship between antidepressant use during pregnancy and an increased risk of fetal malformations
- There was no correlation found between antidepressant use during pregnancy and fetal malformations, such as: low birth weight, cardiac defects, low gestational age, am spontaneous abortion



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Application:

- Provide education to women who are pregnant or who are trying to become pregnant and have a history or new prescription for antidepressant medications that there is no increased risk of harm for their baby
- Encourage pregnant women who are suffering from anxiety and depression to receive help in the form of therapy and pharmacotherapy
- Monitor the mental health of pregnant women who are taking antidepressants or who suffer from depression
- Provide all pregnant women with information on the effects depression and anxiety can have on their baby, as well as information regarding potential therapies and medications that may be helpful

Background from: https://www.additudemag.com/treat-kids-intuniv-article-pills-8177-ts-464371647-jpg/