



Motherisk Update

Risks of untreated depression during pregnancy

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ABSTRACT

QUESTION One of my patients who was taking an antidepressant for major depression is now pregnant and does not wish to take it any more. I believe she needs to continue her medication. She, however, is adamant about stopping it because she believes it would put her baby at risk. Is there evidence that not treating depression during pregnancy puts babies at risk?

ANSWER A growing body of literature investigating the effects of not treating depression on mother and developing fetus suggests that untreated depression is associated with adverse fetal outcomes and a higher risk of maternal morbidity, including suicide ideation and attempts, and postpartum depression.

RÉSUMÉ

QUESTION L'une de mes patientes qui prend des antidépresseurs pour une dépression profonde est maintenant enceinte et souhaite arrêter sa médication. Je crois qu'elle devrait la continuer. Par ailleurs, elle est déterminée à arrêter parce qu'elle croit que ces médicaments posent des risques pour son enfant. Y a-t-il des données scientifiques démontrant qu'une pharmacothérapie contre la dépression durant la grossesse pose des risques pour l'enfant à venir?

RÉPONSE Une quantité grandissante d'ouvrages qui étudient les effets de ne pas traiter la dépression les mères et le fœtus en développement font valoir que la dépression non traitée est associée à des issues indésirables chez le fœtus et à un risque plus élevé de morbidité chez la mère, notamment l'idée du suicide et les tentatives de suicide ainsi que la dépression postpartale.

It is well known that women of childbearing age often suffer from major depression, which is most prevalent among people between 25 and 44 years old.¹ Estimates of lifetime risk in community-derived samples of pregnant women vary between 10% and 25%.¹⁻³ Although commonly used antidepressants have been shown to be safe during pregnancy,⁴ women sometimes decide to discontinue these drugs when pregnancy is diagnosed out of fear of harming their babies.⁵

The literature examining risk of untreated depression during pregnancy suggests that

psychopathologic symptoms during pregnancy have physiologic consequences for fetuses.⁶ It has also been postulated that depression results in hazardous behaviours that can indirectly affect obstetric outcomes.

Risky behaviour

Studies have found that mental illness can affect a mother's functional status and her ability to obtain prenatal care and avoid dangerous behaviour. Mental illness can also affect decision-making capacities by causing cognitive distortions,

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and, because of this, it has been associated with poor attendance at antenatal clinics and malnutrition (which could lead to low birth weight babies).⁷

Depressed women are more likely to smoke and to use alcohol or other substances, which might compromise pregnancy. Depressed women can show deteriorating social function, emotional withdrawal, and excessive concern about their future ability to parent. They report excessive worry about pregnancy, are less likely to attend regular obstetric visits, and do not comply with prenatal advice. They take prenatal vitamins less often than nondepressed women and know less about the benefits of folic acid.^{2,3,8} These behaviours all predict poor pregnancy outcome.

Severe depression also carries the risk of self-injurious, psychotic, impulsive, and harmful behaviours that can affect pregnancy. When patients refuse treatment, physicians should monitor patients for crises, such as suicide attempts, deteriorating social function, psychosis, and inability to comply with obstetric advice.¹

Links to adverse outcomes

Untreated depression during pregnancy has been linked to other adverse outcomes, such as spontaneous abortion,^{9,10} increased uterine artery resistance,¹¹ small head circumference, low ApGAR scores, need for special neonatal care, neonatal growth retardation, preterm delivery, and babies with high cortisol levels at birth.^{1,2,6-8,12-15} Studies also suggest that pregnant women who are depressed require more operative deliveries and report labour as more painful, which means they require more epidural analgesia.

Gestational hypertension and subsequent preeclampsia has also been linked to untreated depression during pregnancy. Psychopathology during pregnancy is thought to affect the uterine environment and, therefore, could have an effect on fetal outcome. Current theories suggest that depression increases excretion of

vasoactive hormones in the mother, and these hormones then mediate birth outcome. More research is needed to find out the exact mechanism.⁷

It is also evident that the risks of untreated depression do not end with birth. Women with untreated antenatal depression are also at increased risk of postpartum depression.¹⁶ Studies have shown that these women are less capable of carrying out maternal duties and of bonding with their children.¹⁷

One study found elevated risk of preterm delivery (<37 weeks), low birth weight (<2500 g), and small for gestational age (<10th percentile) babies in women with Beck Depression Inventory (BDI) scores of 21 or more who were not receiving treatment.¹⁵ Prenatal stress and depression have also been significantly associated with lower infant birth weight and younger gestational age at birth.^{18,19} A recent study of lower social class women found that depression was associated with restricted fetal growth and small for gestational age babies.²⁰ There is also a clear association between increased hypothalamic, pituitary, and placental hormones in depressed mothers and the occurrence of preterm labour.²¹

Studies have investigated the link between depression and preeclampsia. Strenuous work, depression, and anxiety might increase risk of this condition, but the stress of daily living has not been associated with it. In Finland, 623 nulliparous women at low risk of preeclampsia all had healthy first trimesters and were then tested for depression and anxiety at about 12 weeks' gestation. Depression (odds ratio 2.5, 95% confidence interval 1.2 to 5.3) and anxiety were both associated with increased risk of preeclampsia.⁶

Conclusion

A growing body of literature suggests that the risk of adverse effects of untreated depression in pregnancy is high. Because selective serotonin reuptake inhibitors have been shown to be safe during pregnancy, the risk-benefit ratio is quite clear. ❁

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