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Depression during Pregnancy

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A proportion of women enter pregnancy with active psychiatric symptoms or disorders, with or without concomitant psychotropic medication. Studies report that exposure to untreated depression and stress during pregnancy may have negative consequences for birth outcome and child development. Studies also report that antenatal exposure to antidepressant medications may have adverse consequences for birth outcome and child development. Antidepressant medication use during pregnancy leads to a small increased risk of miscarriage, a possible small increased risk of congenital cardiac malformations, a small increased risk of preterm birth, a small increased risk of persistent pulmonary hypertension of the newborn (PPHN), and transient neonatal symptoms in up to one-third of neonates. In addition, there is a possible increased risk of delayed motor development in children. Several recent systematic reviews and meta-analyses of the existent literature emphasize that there are minimal definitive conclusions to guide treatment recommendations. This review describes best practices for the management of depression in pregnancy, and it provides suggestions for future research.

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Introduction

This manuscript presents a selected review of studies about the course and treatment of depression through pregnancy. This will include some of the research on the influence of untreated depression, stress, and anxiety on birth outcome and child development, as well as some of the research on the potential adverse effects on the fetus, neonate, and child from exposure to antidepressant medications. Unfortunately, there are no risk-free decisions for pregnant women with a psychiatric disorder. As recently reviewed, the existent literature is difficult to draw conclusions from due to psychotropic medications being prescribed for multiple indications, small sample sizes of exposed women, the lack of randomized controlled trials (RCTs), confounding by indication (i.e., the effects of an underlying disorder), confounding by other exposures, lack of consensus of the most important outcome measures, and publication bias [1]. A recent Agency for Healthcare Research and Quality (AHRQ) systematic review reported that the current level of evidence precludes conclusions about the benefits or harms of antidepressant use during pregnancy for maternal outcomes, birth outcomes, or infant and child development [2]. Therapeutic management of depression in pregnancy is therefore a clinical judgment that must be individualized, and which weighs maternal benefit from therapy against the risk of adverse effects to the fetus.

Major depressive disorder

Diagnosis and epidemiology

Major depressive disorder (MDD) is defined as a period of at least 2 weeks of low mood, or loss of interest or pleasure, associated with at least five of the following: (1) change in appetite or weight; (2) insomnia or hypersomnia; (3) psychomotor symptoms such as restlessness or retardation (slowed speech, thought, or movements); (4) decreased energy or fatigue; (5) sense of worthlessness or guilt, hopelessness, or helplessness; (6) difficulty concentrating or making decisions; and (7) recurrent thoughts of death, dying, or suicide [3]. The prevalence of depression in women is 10–20% following puberty, approximately twice the prevalence rate in men [3]. Depression is underrecognized and undertreated in prenatal care [4]. The self-report Edinburgh Postnatal Depression Scale (EPDS) [5], which was developed to identify postpartum depression (PPD), is commonly used to screen for depression during pregnancy. In addition, the Patient Health Questionnaire (PHQ-9) has been validated for the detection of prenatal depression [4]. The diagnosis of depression in pregnant women can be complicated due to the overlap of symptoms of normal pregnancy (e.g., sleep changes, appetite changes, and fatigue) with some of the diagnostic symptoms of MDD [4]. Two-item case-finding questions can also be used to identify patients that may warrant further assessment for a depressive disorder [6]. An EPDS score $\geq$10 or a PHQ-9 score $\geq$10 suggests the presence of a possible depression. A positive screening is not diagnostic; therefore, it should lead to further diagnostic assessment and potential initiation of treatment [7]. It is important to assess psychosocial risk factors in pregnant woman, which include unstable housing, low resources, poor social support, intimate partner violence, active psychiatric disorders, and substance abuse [6]. Screening for perinatal depression is most effective when accompanied by the assessment of psychosocial issues and the availability of integrated treatment and support options [6,8].

In a systematic review of studies in which depression was evaluated by a structured clinical interview, the point prevalence of depression (MDD and less severe depression) was 11% in the first trimester with a drop to 8.5% in the second and third trimesters [9]. The point prevalence of MDD ranged from 1% to 5.6% through pregnancy [9]. Pregnancy does not appear to be a time of increased prevalence rates of depression compared to other time periods during women's reproductive years, but the perinatal period may be considered a time of risk of a major depressive episode in some women. Risk factors for prenatal depression include being adolescent, single, financially disadvantaged, African American, Hispanic or Asian, and having previous MDD, current anxiety, medical problems, psychosocial stress, intimate partner violence, poor social support, and lower education [10,11]. Depression during pregnancy can lead to poor health behaviors such as poor compliance with prenatal care, increased smoking and substance abuse, poor nutrition, lack of exercise, and not taking prenatal