

Mental Symptoms and Disorders During Pregnancy

By Uriel Halbreich, MD, and Susan G. Kornstein, MD

Pregnancy is a period of substantial neuroendocrine changes.¹ These changes are not limited to the hypothalamic-pituitary-gonadal hormones, but also involve the placenta and its secreted hormones, especially the corticotropin releasing hormone that is a major component of the stress axis. These hormonal changes are also associated with changes in the immune/inflammatory and cardiovascular systems.² The cumulative evidence that dysregulation in this multifactorial interactional field may cause deleterious effects on the fetus and its future development emphasizes the importance and clinical relevance of this line of research. When vulnerability and genetic predisposition to gestational stress and its adverse effects are added to the equation, the importance of adequate treatments and possible preventive interventions is underscored.

Pregnancy is usually perceived as a happy period. However, as demonstrated by Uriel Halbreich, MD, severe mood, behavior, and cognitive symptoms are quite prevalent during pregnancy. The magnitude of the problem is probably not reflected by the reported prevalence of *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* or *International Classification of Diseases, Ninth Edition* major mental disorders. A closer evaluation and treatment of symptoms, especially when they are associated with impairment, stress, and distress, may improve the mental health of the mother and the expected baby.

The second article in this month's issue of *CNS Spectrums*, by Pamela A. Geller, MD, describes how pregnancy is perceived as a stressful life event. Many women experience stress in their efforts to conceive and maintain their pregnancy or to overcome its possible complications. Women may react with distress to unplanned pregnancy, to external stimuli that may be perceived as harmful by the pregnant woman, and to prenatal screening for genetic abnormalities. The impact of common pregnancy complications like hypertension or diabetes may be amplified due to an increase in stress level. All of these situations may cause depressive and anxiety symptoms and disorders that should be recognized and treated.

Adequate treatment of stress and psychiatric disorders during this time is of utmost importance because, as Ilona S. Federenko, PhD, and Pathik Wadhwa, MD, PhD, demonstrate, during pregnancy there are two patients: mother and fetus. Women's mental health during pregnancy influences fetal and infant development and his or

her future health. A mother's perceived psychosocial stress and weak social support have been demonstrated to be associated with preterm delivery and reduced birth weight.

The diagnosis and treatment of mental disorders during pregnancy is reviewed by Lee S. Cohen, MD, and colleagues. Depression and anxiety during pregnancy call for adequate treatment, which is available. The potential risk to the fetus should be a major consideration. Risks may involve pregnancy loss or miscarriage, organ malformation or teratogenesis, neonatal toxicity or withdrawal syndromes during the acute neonatal period, and long-term effects on neurobehavioral functions.³ Cumulative data on the use of fluoxetine and other selective serotonin reuptake inhibitors as well as venlafaxine and nefazodone suggest that exposure to these antidepressants probably does not cause increased short-term risk to the fetus.⁴ The neonatal effects are still unclear. As the authors conclude, knowledge of the long-term neurobehavioral sequelae of in utero exposure to antidepressants is still limited but it is quite reassuring.

The risk/benefit assessment involved in the careful pharmacologic treatment of a depressed pregnant woman should compare the risk to the fetus of maternal depression or its relapse, as weighed against possible adverse effects of selective serotonin reuptake inhibitors or their withdrawal. Following careful assessment, a tailored pharmacologic antidepressant treatment may be quite safe. However, non-pharmacological interventions are recommended by some authorities.⁵ Due to the sensitivity of this issue and its clinical importance, additional targeted research is certainly needed. **CNS**

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