

Psychiatric disorders in pregnancy

Depression, panic disorder, bipolar illness, and other psychiatric conditions can occur during pregnancy and should be considered when assessing the health of a pregnant patient.

ABSTRACT: Pregnancy is generally thought to be a time of happiness and emotional well-being for a woman. However, for many women, pregnancy and motherhood increase their vulnerability to psychiatric conditions such as depression, anxiety disorders, eating disorders, and psychoses. These conditions are often underdiagnosed because they are attributed to pregnancy-related changes in maternal temperament or physiology. In addition, such conditions are often undertreated because of concerns about potential harmful effects of medication. Practitioners and allied health professionals caring for pregnant or postpartum patients affected by psychiatric conditions can access services for these patients by contacting the Reproductive Mental Health program at BC Women's Hospital and St. Paul's Hospital.

Depression in pregnancy

During pregnancy, symptoms of depression such as changes in sleep, appetite, and energy are often difficult to distinguish from the normal experiences of pregnancy. Although up to 70% of women report some negative mood symptoms during pregnancy, the prevalence of women who meet the diagnostic criteria for depression has been shown to be between 13.6% at 32 weeks gestation and 17% at 35 to 36 weeks gestation (see the **Table**).^{1,2} The course of depression varies throughout pregnancy: most studies report a symptom peak during the first and third trimesters and improvement during the second trimester.³ In a recent study, more women became depressed between 18 and 32 weeks gestation than between 32 weeks gestation and 8 weeks postpartum.¹

Depression is the most common psychiatric disorder associated with pregnancy. Pregnant women may also suffer from anxiety disorders, such as panic disorder, obsessive-compulsive disorder, and eating disorders. While it is rare for women to experience first-onset psychoses during pregnancy, relapse rates are high for women previously diagnosed with some form of

psychosis. (A full description of pharmacological and nonpharmacological therapies for these disorders will appear in Part 2 of this theme issue in April 2005.)

Several risk factors and psychosocial correlates have been identified as contributing to depression during pregnancy. The most clearly identified risk factors include a previous history of depression, discontinuation of medication(s) by a woman who has a history of depression, a previous history of postpartum depression, and a family history of depression. Several key psychosocial correlates may also contribute to depression during pregnancy: a negative attitude toward the pregnancy, a lack of social support, maternal stress associated with negative life events, and a partner or family member who is unhappy about the pregnancy.³⁻⁴

Depression that is left untreated in pregnancy, either because symptoms are not recognized or because of concerns regarding the effects of medica-

Dr Carter is co-director of the Reproductive Mental Health program at BC Women's Hospital and St. Paul's Hospital. Ms Kostaras is a research assistant in the Reproductive Mental Health program.

Table. Prevalence of depression in pregnancy.

Author	N	Patients experiencing depression (%)				
		At 18 weeks	At 32 weeks	At 35 weeks	At birth	At 8 weeks postpartum
Evans et al. ¹	9028	11.8	13.6	—	—	8.1
Josefsson et al. ²	1158	—	—	17	18	13

tions, can lead to a host of negative consequences, including lack of compliance with prenatal care recommendations, poor nutrition and self-care, self-medication, alcohol and drug use, suicidal thoughts and thoughts of harming the fetus, and the development of postpartum depression after the baby is born. An additional and important implication of untreated maternal depression is the psychological effect that the depression may have on the fetus. One study that examined 1123 mother-infant pairs reported that infants of mothers depressed in pregnancy showed less frequent positive facial expressions and vocalizations, and that these infants were also harder to console.⁵ Thus, the relationship between maternal depression and early childhood problems may be part of a sequence that starts with depressive symptoms during pregnancy.

Treatment of depression in pregnancy relies on the same therapies used for depression at any time in life, with the added need to ensure the safety of the fetus. Psychotherapies that have been recognized as effective treatment for depression include cognitive behavioral therapy and interpersonal psychotherapy.⁶ Education and support are also important, particularly as pregnancy is a unique experience for women, some of whom may not know what to expect. Pharmacological therapies are also recognized as effective treatment for depression.

However, full disclosure of both the risk and benefits of various antidepressant medications should be made to the patient and, if possible, her partner prior to starting any pharmacological treatment.

Anxiety disorders in pregnancy

Data are available on some of the disorders that affect pregnant women (panic disorder and obsessive-compulsive disorder) but very little information exists regarding others (generalized anxiety disorder and social phobia).

Panic disorder

The course of panic disorder during pregnancy is variable and remains unclear. While case reports of pregnant women with pre-existing panic disorder have suggested a decrease in symptoms during pregnancy,⁷ large-scale studies have reported that there is no decrease in symptoms for women with pre-existing panic disorder.⁸

In addition, a subgroup of women may experience first-onset panic disorder during pregnancy. Women presenting with panic attacks for the first time should be screened for thyroid disorder. The possible effects of anxiety and panic on the course of the pregnancy and the health of the fetus are not well understood. One study showed a correlation between increased anxiety and increased resistance in uterine artery blood flow.⁹ The correlation

between plasma levels of cortisol in the mother and in the fetus may have implications for the developing fetal brain.¹⁰ Treatments for panic disorder in pregnancy may include pharmacological therapies, particularly benzodiazepines for nighttime sedation and symptomatic relief, and antidepressants, as well as nonpharmacological therapies such as cognitive behavioral therapy, supportive psychotherapy, relaxation techniques, sleep hygiene, and dietary counseling.

Treatment of depression in pregnancy relies on the same therapies used for depression at any time in life, with the added need to ensure the safety of the fetus.

Obsessive-compulsive disorder

Obsessive-compulsive disorder (OCD) is characterized by thoughts that cannot be controlled (obsessions) and repetitive behaviors or rituals that cannot be controlled (compulsions) in response to these thoughts. Several reports suggest that women may be at an increased risk for the onset of OCD during pregnancy and the postpartum period.^{11,12} In one study of women with diagnosed OCD, 39% of the participants reported that their OCD began during a pregnancy.¹¹ Treatments for OCD in pregnancy are the same as those in nonpregnant adults and include cognitive behavioral therapy

and pharmacotherapy. Women with severe OCD can become quite incapacitated and will require treatment.

Generalized anxiety disorder

There are no data on the prevalence or course of generalized anxiety disorder (GAD) through pregnancy. Most women, naturally enough, worry about the health of the fetus and how they will cope with labor and bodily

there are many negative consequences for both the mother and her infant. One recent study reported that pregnant women with active eating disorders appear to be at greater risk for delivery by cesarean section and for postpartum depression.¹⁶ In addition, eating disorders during pregnancy have been linked with higher rates of miscarriage and lower infant birth weights.¹⁷

It appears that some women with bipolar disorder may experience a relief from symptoms during pregnancy, but that the risk for relapse in the postpartum period is high.

changes. Excessive worrying, however, may be a symptom of GAD or depression.

Social phobia

There are no data on either first-onset social phobia or pre-existing social phobia in pregnancy. A very small number of women experience tocopobia, an unreasonable dread of childbirth.¹³ These women are more prone to postpartum depression if denied the delivery method of their choice (i.e., cesarean section).

Eating disorders in pregnancy

The prevalence of eating disorders in pregnant women is approximately 4.9%.¹⁴ While studies have suggested that the severity of symptoms may actually decrease during pregnancy,¹⁵

ued lithium prior to conception, with the relapse rates for either depression or mania in the pregnant women being the same as in nonpregnant matched women.²⁰ In another study, pregnancy appeared to have a protective effect against an increase in symptoms in women with lithium-responsive bipolar I disorder who had discontinued their lithium during pregnancy; however, there was a 14% rate of relapse in the last 5 weeks of pregnancy.²¹ In both studies, the risk of relapse in the postpartum period was very high, ranging from 25% to 70%. In women with a history of bipolar mood disorder, the decision whether to use mood stabilizers must be made following an assessment of risks and benefits. Factors to consider include number and severity of previous episodes, level of insight, family supports, and the wishes of the woman. Careful monitoring of psychological symptoms throughout the pregnancy is of paramount importance.

Schizophrenia

The limited data on schizophrenia in pregnancy suggest that this disease has a variable course, with some women experiencing an improvement in symptoms, while others experience a worsening of their illness.²² Regardless of the course of the illness, women with a history of psychosis require close monitoring by health care professionals during pregnancy. Psychosis during pregnancy can have devastating consequences for both the mother and her fetus, including failure to obtain proper prenatal care, negative pregnancy outcomes such as low birth weight and prematurity, and neonaticide or suicide. Treatment of acute psychosis in pregnancy is mandatory and includes mobilization of supports, pharmacotherapy, and hospitalization. Electroconvulsive therapy may be used for psychotic depression.

Psychoses in pregnancy

The occurrence of new episodes of psychosis during pregnancy is extremely rare. However, for women with a history of psychosis, particularly psychosis in previous pregnancies, the relapse rates are high, with the most common manifestations being bipolar illness, followed by psychotic depression and schizophrenia.^{18,19}

Bipolar mood disorder

The information regarding the course of bipolar disorder in pregnancy is limited. It appears that some women with bipolar disorder may experience a relief from symptoms during pregnancy, but that the risk for relapse in the postpartum period is high. One recent study reported that pregnancy had no impact on the course of bipolar disorder in women who discontin-

Summary

Early identification and treatment of psychiatric disorders in pregnancy can prevent morbidity in pregnancy and postpartum with the concomitant risks to mother and baby. Both psychotherapy and pharmacotherapy should be considered. In British Columbia, the Reproductive Mental Health program (www.bcrmh.com) offers consultation and education services to practitioners and allied health professionals throughout the province.

Competing interests

None declared.

References

- Evans J, Heron J, Francomb H, et al. Cohort study of depressed mood during pregnancy and after childbirth. *BMJ* 2001;323:257-260.
- Josefsson A, Berg G, Nordin C, et al. Prevalence of depressive symptoms in late pregnancy and postpartum. *Acta Obstet Gynecol Scand* 2001;80:251-255.
- Kumar R, Robson KM. A prospective study of emotional disorders in child-bearing women. *Br J Psychiatry* 1984; 144:35-47.
- O'Hara MW. Social support, life events, and depression during pregnancy and the puerperium. *Arch Gen Psychiatry* 1986; 43:569-573.
- Zuckerman B, Bauchner H, Parker S, et al. Maternal depressive symptoms during pregnancy, and newborn irritability. *J Dev Behav Pediatr* 1990;11:190-194.
- Karasu TB, Docherty JP, Gelenberg A, et al. Practice guideline for major depressive disorder in adults. American Psychiatric Association. *Am J Psychiatry* 1993; 150(suppl 4):1-26.
- Hertzberg T, Wahlbeck K. The impact of pregnancy and the puerperium on panic disorder: A review. *J Psychosom Obstet Gynaecol* 1999;20:59-64.
- Cohen LS, Sichel DA, Faraone SV, et al. Course of panic disorder during pregnancy and the puerperium: A preliminary study. *Biol Psychiatry* 1996;39:950-954.
- Teixeira JM, Fisk NM, Glover V. Association between maternal anxiety in pregnancy and increased uterine artery resistance index: Cohort based study. *BMJ* 1999;318:153-157.
- Glover V. Maternal stress or anxiety during pregnancy and the development of the baby. *Pract Midwife* 1999;2:20-22.
- Neziroglu F, Anemone R, Yaryura-Tobias JA. Onset of obsessive-compulsive disorder in pregnancy. *Am J Psychiatry* 1992;149:947-950.
- Buttolph ML, Holland AD. Obsessive-compulsive disorders in pregnancy and childbirth. In: Jenike M, Baer L, Minichiello WE (eds). *Obsessive-Compulsive Disorders: Theory and Management*. 2nd ed. Chicago: Year Book Medical Publishers; 1990:89-95.
- Hofberg K, Brockington I. Tokophobia: An unreasoning dread of childbirth. A series of 26 cases. *Br J Psychiatry* 2000;176:83-86.
- Turton P, Hughes P, Bolton H, et al. Incidence and demographic correlates of eating disorder symptoms in a pregnant population. *Int J Eat Disord* 1999;26:448-452.
- Blais MA, Becker AE, Burwell RA, et al. Pregnancy: Outcome and impact on symptomatology in a cohort of eating-disordered women. *Int J Eat Disord* 2000;27:140-149.
- Franko DL, Blais MA, Becker AE, et al. Pregnancy complications and neonatal outcomes in women with eating disorders. *Am J Psychiatry* 2001;158:1461-1466.
- Brinch M, Isager T, Tolstrup K. Anorexia and motherhood: Reproduction pattern and mothering behaviour of 50 women. *Acta Psychiatr Scand* 1988;77:611-617.
- Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses. *Br J Psychiatry* 1987;150:662-673.
- McNeil TF. A prospective study of postpartum psychoses in a high-risk group. 2. Relationships to demographic and psychiatric history characteristics. *Acta Psychiatr Scand* 1987;75:35-43.
- Viguera AC, Nonacs R, Cohen LS, et al. Risk of recurrence of bipolar disorder in pregnant and nonpregnant women after discontinuing lithium maintenance. *Am J Psychiatry* 2000;157:179-184.
- Grof P, Robbins W, Alda M, et al. Protective effect of pregnancy in women with lithium-responsive bipolar disorder. *J Affect Disord* 2000;61:31-39.
- Patton SW, Misri S, Corral MR, et al. Antipsychotic medication during pregnancy and lactation in women with schizophrenia: Evaluating the risk. *Can J Psychiatry* 2002;47:959-965. 