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Postpartum Depression

It isn't just the blues.

Overview: Postpartum depression is a crippling mood disorder, historically neglected in health care, leaving mothers to suffer in fear, confusion, and silence. Undiagnosed it can adversely affect the mother–infant relationship and lead to long-term emotional problems for the child. This article differentiates postpartum depression from other postpartum mood and anxiety disorders and addresses these aspects of postpartum depression: symptoms, prevalence, risk factors, interventions, and the effects on relationships and child development. Instruments available to screen for postpartum depression are also reviewed.

The birth of a healthy baby is an occasion for joy—or so the saying goes. Even the struggles of motherhood are infused with an admirable glow. "The art of motherhood involves much silent, unobtrusive self-denial, an hourly devotion which finds no detail too minute," wrote Honoré de Balzac.[1] But for some women, joy is not an option.

Postpartum depression is a serious mood disorder that can cripple a woman's first months as a new mother. I have described it as "a thief that steals motherhood." Without appropriate clinical intervention, postpartum depression can have long-ranging implications for both mother and child.[2] Recognizing its risk factors and symptoms, and being able to distinguish it from other mood and anxiety disorders, is the first step.

POSTPARTUM DEPRESSION: WHAT IT'S NOT

Postpartum depression has been used as a catchall phrase for many disorders, but it's important to differentiate it from other postpartum disorders. Women may be misdiagnosed; each of the following has its own distinctive symptoms. Some mood

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and anxiety disorders warrant treatment involving psychotherapy or medication or both.

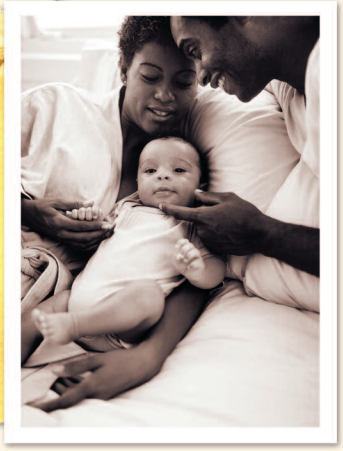
Maternity blues may be a normal reaction to the dramatic physiologic changes that occur after delivery. Early studies found that the maternity blues occur in 50% to 75% of new mothers.[3,4] Symptoms, which can begin in the first few days after delivery, peak on the fifth day, and last up to 10 days, include crying, irritability, fatigue, anxiety, and emotional lability. The blues require support and reassurance but no treatment. If the symptoms last longer than 10 days, the patient should be evaluated to rule out depression. Risk factors for more severe blues symptoms include relationship difficulties, a history of depression, and depressive symptoms during pregnancy.[5] Early symptoms of postpartum depression can be difficult to distinguish from those of the blues; careful follow-up is needed.

Postpartum panic disorder. In this anxiety disorder, a new mother experiences panic attacks for the first time in her life. (If the woman had panic disorder previously, a recurrence during the postpartum period is not considered an onset of postpartum panic disorder.) Panic attacks are discrete periods of intense fear involving palpitations, sweating, shortness of breath, chest pain, dizziness or lightheadedness, numbness, a fear of death, a feeling of unreality, or a fear of losing control.[6] These feelings usually peak within 10 minutes of the start of the panic attack.

Postpartum obsessive–compulsive disorder can cause new mothers to have obsessive thoughts and compulsive behaviors. Some of the thoughts may involve harming their infants, although they are unlikely to carry out such plans. Unlike women with postpartum psychosis (in which they believe that external forces are instructing them to commit specific, often violent, acts), women with postpartum obsessive–compulsive disorder recognize their obsessions as their own thoughts and that following through would be wrong.[7] Many construct elaborate schemes to avoid situations in which obsessive thoughts might turn into action, such as removing all the knives from their home.[8] Compulsive rituals may include changing the baby's diapers even when dry.

Postpartum bipolar II disorder. Women who have been diagnosed with bipolar disorder before pregnancy may experience an episode of postpartum bipolar disorder after childbirth. New mothers with this disorder usually describe hypomanic episodes, "distinct periods of persistently elevated, expansive, or irritable mood, lasting throughout at least four days," which occur within four weeks after childbirth.[6,9] A hypomanic episode might also entail inflated self-esteem, increased talkativeness, decreased sleep, racing thoughts, and increased goal orientation. Unlike mania (found in bipolar I disorder), hypomania is not socially disabling. An episode of major depression often follows after the hypomania subsides.

'As many as 19.2% of new mothers may have major or minor depression in the first three months after delivery . . . with as many as 7.1% having major depression.'



Postpartum posttraumatic stress disorder. Birth trauma, "an event occurring during the labor and delivery process that involves actual or threatened serious injury or death to the mother or her infant,"[10] has resulted in posttraumatic stress disorder in up to 5.6% of women who have given birth.[10,11] Significant contributing factors include clinicians inadequately communicating with and caring for the mother; a long, painful labor during which the woman feels powerless; and the mother's feeling that her emotional needs are ignored after a traumatic labor. Symptoms include nightmares, flashbacks, an exaggerated startle response, anger, and difficulty sleeping and concentrating.[12] Mothers may also take measures to avoid any stimuli associated with the trauma; for example, they may drive miles out of their way in order to avoid passing the hospital where they gave birth.

Postpartum psychosis is the most serious postpartum mood disorder and is associated with high rates of suicide and infanticide.[13] Fortunately, incidence is low; a classic epidemiologic study found that it occurs in one to two women per 1,000 deliveries.[14] Symptoms can include delusions, hallucinations, extreme agitation, confusion, inability to eat or sleep, exhilaration, and rapid mood swings. While postpartum psychosis, like the other conditions described here, may also include symptoms of postpartum depression, the severity of this disorder makes it especially important that it not be confused with postpartum depression. The onset of postpartum psychosis is a psychiatric emergency and warrants immediate hospitalization. At a minimum, those who are not hospitalized require 24-hour supervision by an adult. Women with postpartum psychosis are a danger both to themselves and to their children, and should *never* be left alone.

POSTPARTUM DEPRESSION: WHAT IT IS

Postpartum depression is a major depressive disorder. For a diagnosis to be made, the patient must have five or more of the following symptoms for at least two weeks: insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, changes in appetite, feelings of worthlessness or guilt, decreased concentration, and suicidality.[6] In addition, the patient must have at least one of these two additional symptoms: depressed mood or loss of interest or pleasure. Although the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision (*DSM-IV-TR*) states that the depressive episode begins within four weeks of birth, many clinicians and researchers agree that this description is too limiting, as it's thought that postpartum depression can occur up to a year after childbirth. Mild postpartum depression is classified by the *DSM-IV-TR* as "depression not otherwise specified."

In a recent evidence report by the Agency for Healthcare Research and Quality, the point prevalence estimates of major depression ranged from 1% to 5.9% at different times during the first 12 months after childbirth.[15] Point prevalence of major depression was highest at two months postpartum and at six months postpartum. For major and minor depression, point prevalence estimates ranged from 6.5% to 12.9% during the first year after delivery. Point prevalence for both major and minor depression was highest at three months postpartum, decreasing slightly in the fourth through seventh month after delivery. The authors found that "as many as 19.2% of new mothers may have major or minor depression in the first three months after delivery . . . with as many as 7.1% having major depression." A 1996 metaanalysis concluded that prevalence rate of postpartum depression is 13% of women.[5]

Antidepressants During Pregnancy

Recent studies find benefits and risks.

It may have become more difficult to decide whether or not to continue antidepressant therapy during pregnancy. In February, the *Journal of the American Medical Association* (*JAMA*) and the *New England Journal of Medicine* (*NEJM*) published findings that, taken together, seem to be in conflict: continuing antidepressant therapy during pregnancy may be good for the mother, but not for her baby.

Cohen and colleagues compared the risk of depression relapse in pregnant women who discontinued antidepressant medication with that in women who maintained treatment during pregnancy.[1] The study, which appeared in *JAMA,* enrolled 201 pregnant women with a history of major depression prior to pregnancy. All participants were less than 16 weeks into pregnancy, were euthymic for at least three months prior to last menstrual period, and were currently or recently (less than 12 weeks prior to last menstrual period) receiving antidepressant treatment. Women were excluded if they were actively suicidal, had a positive urine screen for toxic substances, had hypothyroidism or another medical condition associated with depressive symptomatology, or if they met *Diagnostic and Statistical Manual of Mental Disorders,* fourth edition, criteria for psychological disorders such as schizophrenia or psychosis.

The study found that women who discontinued antidepressant therapy had more relapses than those who maintained their medication regimens. Of the former group, 68% experienced relapses of depression during pregnancy, while only 26% of the latter did the same. These findings show that pregnancy does not "provide 'protection' against psychiatric disorder."

In the study in *NEJM,* Chambers and colleagues identified an association between maternal use of selective serotonin-reuptake inhibitors (SSRIs) in late pregnancy and persistent pulmonary hypertension (PPH) in the newborn.[2] Fourteen infants of the 377 mothers who had used SSRIs after the 20th week of pregnancy had PPH, as oppsoed to six infants of the 836 control mothers (the adjusted odds ratio was 6.1). According to the authors, "Although our study cannot establish causality, several possible mechanisms suggest a casual association is possible." One possible mechanism is the accumulation of SSRIs in fetal lung tissue that has been shown to occur. Like the authors of the *JAMA* study, the researchers urged clinicians and their patients to consider both the benefits and the risks when making decisions regarding treatment of depression during pregnancy.—*Joanna E. Cain, BSN, RN*

REFERENCES

1. Cohen LS, et al. Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment. *JAMA* 2006;295(5):499-507.
2. Chambers, CD, et al. Selective serotonin-reuptake inhibitors and risk of persistent pulmonary hypertension of the newborn. *N Engl J Med.* 2006;354(6):579-87.

DETERMINING WHO'S AT RISK

Two recent metaanalyses have identified significant risk factors for postpartum depression. In one, published in 2001, I identified a total of 13 significant risk factors; the following 10 were moderately related to postpartum depression: prenatal depression, low self-esteem, difficulties with child care, prenatal anxiety, a high stress level, a low level of social support, poor marital relationship, a history of depression, difficult infant temperament, and maternity blues.[16] Three had a small but significant relationship to postpartum depression: single marital status, low socioeconomic status, and an unplanned or unwanted pregnancy.

In a 2004 metaanalysis of studies of prenatal risk factors for postpartum depression, Robertson and colleagues found that the strongest risk factors were prenatal depression, prenatal anxiety, stressful life events (usually within the previous year), a lack of social support, and a history of depression before the pregnancy occurred.[17] Moderate risk factors included a poor marital relationship and neuroticism. Obstetric factors (including complications due to pregnancy or delivery) and low socioeconomic status were characterized as small risk factors.

Finally, evidence is mounting that mothers of preterm infants and those who deliver multiple infants experience a higher rate of postpartum depression than those who deliver full-term, single infants.[18-20]

Screening for risk. I developed the Postpartum Depression Predictors Inventory–Revised (PDPI–R) from the 13 risk factors identified in my 2001 metaanalysis.[16] The tool consists of questions that clinicians can use to assess for each risk factor during an interview. (See *Postpartum Depression Predictors Inventory–Revised,* page 46.) The first 10 can be assessed both during and after pregnancy. The final three predictors can be assessed only after delivery. The PDPI–R was designed to be administered by clinicians; ideally it should be completed once per trimester and once after delivery, preferably before discharge. If a new mother is found to have risk factors for depression before discharge, plans can be made for frequent follow-up, perhaps by telephone, and specific interventions can be implemented.

Prevention. Several critical reviews of pharmacologic therapies (such as antidepressants in women who had postpartum depression in the past, estrogen and progesterone therapy, and calcium supplementa-

tion) and nonpharmacologic interventions (such as maternal exercise, support groups, and classes) to prevent postpartum depression have concluded that insufficient evidence exists to strongly recommend any particular intervention.[21, 22] More research is needed, especially that including women from diverse ethnic and socioeconomic backgrounds.[21]

THE EXPERIENCE OF POSTPARTUM DEPRESSION

What is postpartum depression like? With what symptoms do mothers cope? To begin to answer these questions, I conducted in-depth interviews with 12 women with postpartum depression, focusing on how they "view their circumstances, how they interact, and how these processes change."[2] The women I interviewed characterized the problem as a loss of control over their emotions, thoughts, and actions. I developed a substantive theory of postpartum depression from this work that I called "teetering on the edge." As I have defined it as a result of interviews, it's a four-stage process: encountering terror, "dying of self," struggling to survive, and regaining control.

Encountering terror is the stage in which depression suddenly occurs; I identified three symptoms. The first was *horrifying anxiety*. As one mother described, "It was like every nerve in my body was exploding, little fireworks were going off all over my body. I felt like I was going crazy." The second was *relentless obsessive thinking*. Said one mother, "I was living in thoughts that I was a horrible person, a horrible mother, and questioning what's wrong with me." Finally, participants repeatedly used the image of *enveloping fogginess* to describe a loss of concentration.

Dying of self is the stage in which a woman feels as though her "normal self" disappears. Women with postpartum depression reported feeling as though they are just going through the motions of caring for their infants, as well as a sense of "alarming unrealness." As one mother said, "One minute I was socializing and laughing and talking. All of a sudden I felt like all those emotions were being physically sucked away." She said she felt like a robot. Many women reported isolating themselves from friends, family, and providers. Some mothers had self-destructive thoughts—two had even attempted suicide before the study began.

Struggling to survive is the stage in which a woman tries to improve the consequences of the dying of self. Primarily, their struggles involved turning to health care providers for treatment (a process often frustrating for them), praying for relief, and seeking solace in support groups.

Regaining control is the last stage. Participants described an unpredictable and gradual transition, periods of bad days interrupted by a good one. Ultimately, the number of good days outnumbered the bad. As recovery progressed, women began to grieve the time with their infants that they had lost. As one said, "I feel robbed of the first six months of my daughter's life. I never really got to hold her as a baby, and I feel cheated." As depression lifted, women reported feeling afraid of its recurrence and therefore guarded about their own recovery.

THE EFFECTS OF POSTPARTUM DEPRESSION

"I remember when she was about six months old [and I was] holding her in my psychiatrist's office," recalled one mother I interviewed. "I had started to cry, and . . . [the baby] reached up and stroked my face . . . it became very clear [that depression] was really a big burden to put on kids."[23] This mother—like the 11 others I interviewed as part of a 1996 phenomenological study exploring how women with postpartum depression experienced their children—was burdened by guilt as a result of her depression.

A feeling of being overwhelmed by child care responsibilities and the fear of being unable to cope were common in the women I interviewed. Some reported physically separating themselves from their children. Outbursts of uncontrollable anger, unprecedented before childbirth, also occurred, spurring fear that they might harm their children. Invariably, mothers attempted to put their children's needs above their own. For example, one mother said that a desire to protect her infant son kept her from committing suicide.

Outbursts of uncontrollable anger, unprecedented before childbirth, also occurred.

Short-term effects on mother–infant interaction. One study found that when compared with mothers who were not depressed, mothers with postpartum depression were less affectionate toward their infants and less responsive to their cries.[24] Researchers in Australia also found

Q+A

Author Cheryl Beck recalls two decades of postpartum depression research.

What inspired you to begin research on postpartum depression?
The pain and suffering of my patients. Twenty years ago, when I turned to the literature to guide me on how to help these mothers, I didn't find much at all. In medical and nursing textbooks there were only a few sentences devoted to this disorder.

Since you entered the field, how have research and practice changed?
The number of quantitative and qualitative studies has increased dramatically. Studies with women of various cultures have alerted clinicians that postpartum depression is a mood disorder of global concern. Practice has also changed; routine screening of all new mothers has gained long-overdue attention. To me, the most important research on postpartum depression happening today focuses on determining the most effective interventions to help women recover.

What is the most surprising thing you have learned about postpartum depression?
I was most surprised at how emotional women became when completing the Postpartum Depression Screening Scale. Some of the mothers started to cry when they read the items in the scale. They told me they were so relieved to know that they were not the only ones who felt like they were going crazy. I consider this scale, which I created with Robert Gable, EdD, to be my biggest accomplishment in the area of postpartum depression research.

Is there one thing that you think nurses should tell every new mother? If so, what is it?
I think nurses need to dispel destructive myths about new motherhood. Tell mothers directly: "Motherhood is not all happiness and bliss. Postpartum depression occurs in 10% to 15% of new mothers. It doesn't mean that a mother is weak or that she has done something wrong. Postpartum depression has a biochemical basis and is a very treatable mood disorder."
—Lisa Santandrea, senior editor

that mothers with depression, "lifted their infants more, restraining their behaviors."[25] Other studies have found that infants of women with postpartum depression tended to be fussier, to be more distant, and to make fewer positive facial expressions and vocalizations with their mothers than did infants of nondepressed mothers.[26, 27] And in a metaanalysis I conducted of 19 studies, postpartum depression was shown to have had a moderate-to-large adverse effect on both maternal and infant behavior in the first year after birth.[28]

Long-term effects on children. Results of studies of the effects of postpartum depression on children's cognitive development have been mixed. Murray and colleagues reported that 18-month-old boys whose mothers had postpartum depression two months after giving birth scored lower on the mental portion of the Bayley Scales of Infant Development than those whose mothers were not depressed; maternal insensitivity and remoteness were associated with poorer cognitive outcomes.[29] In a longitudinal study Murray and colleagues found no relationship between mothers' postpartum depression and their five-year-old children's performance on cognitive tasks.[30] Sharp and colleagues, however, found that four-year-old sons of mothers who'd had postpartum depression scored significantly lower on perceptual, motor, and verbal subscales of the McCarthy Scales of Children's Abilities than did children of nondepressed mothers.[31] The researchers noted that the "most striking finding in the current study was the fact that girls appear relatively protected against the deleterious effects of their mothers' illness." They suggest that boys may be cognitively delayed, compared with girls, or that mothers treat sons differently. Finally, in a longitudinal study in Barbados, 11-year-old children whose mothers had reported despair and anxiety at seven weeks, three months, and six months after giving birth scored significantly lower on the high school Common Entrance Examination routinely given to all at this age.[32] More research is needed into the long-and short-term effects of postpartum depression on child development.

In contrast, research findings have consistently shown the harmful effects of maternal postpartum depression on children's emotional and behavioral development. School-age children of women who'd had postpartum depression displayed more behavioral problems than children of nondepressed mothers.[33, 34] In the United Kingdom, Hay and colleagues have been conducting one of the longest prospective studies of the children of mothers with postpartum depression.[35] Their most current study analyzed reports of violent symptoms in 11-year-old children from teachers, mothers, and other children. Violent behavior, such as fighting, occurred more often in boys than in girls. Data analysis showed that children's violent behavior was predicted by mothers' postpartum depression, even when other factors, such as depression during pregnancy, a later history of depression, and social class, were controlled for.

Postpartum Depression Predictors Inventory–Revised

During Pregnancy	Check One	
Marital Status		
1. Single	❑	
2. Married/cohabitating	❑	
3. Separated	❑	
4. Divorced	❑	
5. Widowed	❑	
6. Partnered	❑	
Socioeconomic Status		
Low	❑	
Middle	❑	
High	❑	
Self-Esteem	**Yes**	**No**
Do you feel good about yourself as a person?	❑	❑
Do you feel worthwhile?	❑	❑
Do you feel you have a number of good qualities as a person?	❑	❑
Prenatal Depression		
1. Have you ever felt depressed during your pregnancy?	❑	❑
If yes, when and how long have you been feeling this way?	_____	
If yes, how mild or severe would you consider your depression?	_____	
Prenatal Anxiety		
1. Have you ever felt anxious during your pregnancy?	❑	❑
If yes, how long have you been feeling this way?	_____	
Unplanned/Unwanted Pregnancy		
Was the pregnancy planned?	❑	❑
Is the pregnancy unwanted?	❑	❑
History of Previous Depression		
1. Before this pregnancy, have you ever been depressed?	❑	❑
If yes, when did you experience this depression?	❑	❑
If yes, have you been under a physician's care for this past depression?	❑	❑
If yes, did the physician prescribe any medication for your depression?	❑	❑
Social Support		
1. Do you feel you receive adequate support from your partner?	❑	❑
2. Do you feel you receive adequate instrumental support from your partner? (such as help with household chores or babysitting)	❑	❑
3. Do you feel you can rely on your partner when you need help?	❑	❑
4. Do you feel you can confide in you partner?	❑	❑
(repeat these four questions for family and again for friends)		

Marital Satisfaction	Yes	No
1. Are you satisfied with your marriage (or living arrangement)?	❑	❑
2. Are you currently experiencing any marital problems?	❑	❑
3. Are things going well between you and your partner?	❑	❑
Life Stress		
1. Are you currently experiencing any stressful events in your life such as:		
financial problems?	❑	❑
marital problems?	❑	❑
death in the family?	❑	❑
serious illness in the family?	❑	❑
moving?	❑	❑
unemployment?	❑	❑
job change?	❑	❑
After Delivery, Add the Following Items		
Child Care Stress		
1. Is your infant experiencing any health problems?	❑	❑
2. Are you having problems with your baby feeding?	❑	❑
3. Are you having problems with your baby sleeping?	❑	❑
Infant Temperament		
1. Would you consider your baby irritable or fussy?	❑	❑
2. Does your baby cry a lot?	❑	❑
3. Is your baby difficult to console or soothe?	❑	❑
Maternity Blues		
1. Did you experience a brief period of tearfulness and mood swings during the first week after delivery?	❑	❑

COMMENTS:

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SCREENING

Postpartum depression is often suffered privately. Because clinicians identify fewer than half of the women with this mood disorder, routine, periodic screening for one year after delivery is imperative.[36, 37]

There are two postpartum depression screening scales: the Edinburgh Postnatal Depression Scale (EPDS) and the Postpartum Depression Screening Scale (PDSS).[38, 39] In a recent systematic review of the evidence, these scales appeared to be more sensitive in screening for postpartum depression than the Beck Depression Inventory, a general screening instrument created by Aaron Temkin Beck.[15]

The EPDS is a 10-item Likert-style questionnaire that takes about five minutes to complete. The factors assessed are the ability to laugh, the ability to anticipate with pleasure, unnecessary blaming of oneself, worry and anxiety, fear and panic, feeling overwhelmed, difficulty sleeping because of unhappiness, sadness and misery, crying, and thoughts of harming oneself.[38] Responses are scored from 0 to 3 (total score is from 0 to 30). Cox recommends that women who score 12 or higher be assessed by a health care provider as soon as possible; other sources suggest that a score of 10 or more deserves attention. But no matter what the score, an affirmative response to the final question about self-harm should always be addressed immediately.

The PDSS is a 35-item Likert-style questionnaire that I developed with Robert Gable, EdD, to measure the severity and type of postpartum depressive symptoms and is derived from a series of qualitative research studies on postpartum depression.[2, 23, 39, 40] Women respond to statements about how they feel after the birth; answers range from strongly disagree to strongly agree. The seven symptoms assessed are sleeping and eating disturbances, anxiety and insecurity, emotional lability, mental confusion, loss of self, guilt and shame, and suicidal ideation. The total score indicates the severity of depressive symptoms and helps determine whether a referral is needed.

TREATMENT

Among the treatment options in the United Kingdom are "health visitors," RNs who have finished an additional course of training and who make home visits to all new mothers, providing additional support to those suffering from postpartum depression. In the United States, interventions fall into three categories.

Support groups. Postpartum depression support groups have been used internationally and have been led by various types of clinicians: psychologists in Canada, health visitors in the United Kingdom, and nurse researchers in Taiwan.[41-43] Boath and colleagues conducted a review of randomized, controlled trials of preventive interventions for postpartum depression.[44] Five of the studies they reviewed focused on support groups. Two trials found that prenatal support groups decreased depressive symptoms, while one did not.

Research findings have consistently shown the harmful effects of maternal postpartum depression on children's emotional and behavioral development.

I believe that postpartum depression support groups are extremely helpful to women, and I strongly recommend them. As I noted in 1993,[2]

> the support group helped to counter the isolation and loneliness the mothers felt, while introducing them to women who had recovered from postpartum depression. It provided hope that their depression could be overcome and that they would regain control of their lives again. Being among other women suffering from postpartum depression helped to confirm the reality of the condition for mothers.

Interpersonal psychotherapy is a short-term therapy used to treat postpartum depression because it's believed that disruptions in relationships may be a contributing factor in the disorder.[45] The basis of interpersonal psychotherapy is relationships. The therapist and patient decide on specific problems—for example, role transitions, interpersonal disputes, and grief—and set treatment goals.[46] Zlotnick and colleagues randomly assigned primiparas at risk for postpartum depression to receive one of two interventions: regular care plus group therapy (n = 17) or regular care (n = 18).[47] At three months after delivery none of the women in the intervention group had developed postpartum depression; 33% in the control group had. In a similar study, Gorman found that at one month after giving birth, none of the 24 mothers receiving interpersonal psychotherapy had depression; 25% in the control group did.[48] At six months after delivery, however, this difference was no longer significant

(15% versus 23.5%, respectively). Additional research with larger samples is needed to investigate the long-term impact of this intervention.

Psychopharmacologic treatment. For treatment of acute postpartum depression, a combination of antidepressant medications and psychosocial interventions is recommended.[49] The most commonly used classes of antidepressants to treat postpartum depression are selective serotonin reuptake inhibitors (including fluoxetine [Prozac], sertraline [Zoloft], and paroxetine [Paxil]) and tricyclic antidepressants (such as amitriptyline [Elavil] and imipramine [Tofranil]). Mothers should be warned that it may take up to four weeks before the full therapeutic effect is realized. In addition, because information on breastfeeding and antidepressants is constantly changing, it's essential that clinicians be familiar with the current literature.

Women with postpartum depression often consider themselves 'horrible mothers.'

Is pharmacotherapy safe? In an expert consensus report for lactating women, 97% of the experts rated sertraline, the drug most extensively reported on in this population, as the first-line treatment and 83% recommended paroxetine as an alternative first-line treatment.[49] Fluoxetine is not recommended because of an early report of an infant who developed colic because of fluoxetine in the breast milk.[50] However, because there's a limited number of cases on which to base studies of the effects of antidepressants on neonatal outcomes, the consensus panel recommends using caution when drawing conclusions made from existing studies; it suggests that the decision to continue to breastfeed while taking antidepressants be left to the mother.

The panel also recommends discussing with breastfeeding mothers the option of testing the infant's serum concentrations of the drug. (While half of the experts recommended regularly measuring blood levels of antidepressants in infants, it is unclear how even trace amounts correlate with short- or long-term clinical outcomes.) Symptoms to watch for include sedation, agitation, irritability, poor feeding, and gastrointestinal distress.

In its policy statement, *The Transfer of Drugs and Other Chemicals Into Human Milk,* the American Academy of Pediatrics specifies that antidepressants exist in low concentrations

> in milk after maternal ingestion. Because of the long half-life of these compounds and some of their metabolites, nursing infants may have measurable amounts in their plasma and tissues, such as the brain. This is particularly important in infants during the first few months of life, with immature hepatic and renal function. Nursing mothers should be informed that if they take one of these drugs, the infant will be exposed to it. Because these drugs affect neurotransmitter function in the developing central nervous system, it may not be possible to predict long-term neurodevelopmental effects.[51]

Psychopharmacologists treating women with postpartum depression should be current on issues regarding lactation, postpartum depression, and medication. To assess such competence, nurses can inquire about recent conference attendance (specifically regarding psychopharmacologic advances and breastfeeding) and ask if the clinician is aware of any recent studies assessing the safety of antidepressants, mood stabilizers, and tranquilizers in breastfeeding neonates.

It's important to remember that women with postpartum depression often feel profound guilt and consider themselves to be "horrible" mothers; for many who feel this way, breastfeeding is a lifeline to their infants. It's the one thing that they feel they can do right for them.

NURSING IMPLICATIONS

Women with postpartum depression sometimes don't divulge their feelings or discuss their symptoms; the stigma of depression—and the belief that all mothers should be happy—can cause shame, fear, or embarrassment. Therefore, during the first year after childbirth, all mothers should receive attention from nurses aware of the signs and symptoms of postpartum depression. Some mothers may provide clues: for example, Webster and colleagues reported that depressed mothers visited general practitioners twice as often and psychiatrists more than nine times as often as nondepressed mothers.[52] In addition, mothers who say they've felt overwhelmed and anxious since childbirth should receive extra attention.

Anticipatory guidance. Before discharge, mothers and family members should learn the signs and

symptoms of postpartum depression. A pamphlet with this information along with a list of postpartum depression support groups in the area, and names and telephone numbers of mental health professionals who specialize in postpartum mood and anxiety disorders should be given to the mother. Online support networks include Postpartum Support International (www.postpartum.net) and Depression After Delivery (www.charityadvantage.com/depressionafterdelivery/Home.asp).

Providing realistic expectations. Before screening for postpartum depression, nurses should dismiss the myth that new motherhood is constantly blissful, which sets up women for unnecessary guilt. Women with the responsibilities of new motherhood may experience severe changes in social roles, energy level, self-image, and relationships with others. In initiating this conversation, nurses can give new mothers permission to speak their feelings and let go of their guilt.

New mothers need to hear that postpartum depression

- does not mean a person is weak or that she has done something wrong.
- has a biochemical basis.
- is not the woman's fault.
- is a treatable mood disorder.

Providing support. Most important, mothers need to feel cared for and supported. Nurses can mobilize the support of family members (who often feel helpless) by making practical suggestions. For example, in *The Postpartum Husband: Practical Solutions for Living with Postpartum Depression,* Kleiman makes the following suggestions to the husband:

> [You might start by] helping around the house, setting limits with friends and family, accompanying her to doctors' appointments, educating yourself about postpartum depression, writing down the concerns and questions you have and taking them to her doctor or therapist, and the single most important thing for you to do to help is to sit with her. Just be with her.[53]

One final point must be stressed. Mothers should never feel that they are being judged by clinicians. They should not be shamed for their thoughts or emotions. ▼

REFERENCES

1. Balzac H. In: Andrews R, et al., editors. *Columbia World of Quotations.* New York: Columbia University Press; 1996. http://www.bartleby.com/66/77/5477.html.
2. Beck CT. Teetering on the edge: a substantive theory of postpartum depression. *Nurs Res* 1993;42(1):42-8.
3. Kennerley H, Gath D. Maternity blues. I. Detection and measurement by questionnaire. *Br J Psychiatry* 1989;155:356-62.
4. Stein GS. The pattern of mental change and body weight change in the first post-partum week. *J Psychosom Res* 1980;24(3-4):165-71.
5. O'Hara MW, Swain AM. Rates and risk of postpartum depression: a meta-analysis. *Int Rev Psychiatry* 1996;8(1):37-54.
6. American Psychological Association. *Diagnostic and statistical manual of mental disorders: DSM-IV-TR.* 4th ed., text revision. Washington, DC: The Association; 2000.
7. Wisner KL, et al. Postpartum disorders: phenomenology, treatment approaches, and relationship to infanticide. In: Spinelli MG, editor. *Infanticide: psychosocial and legal perspectives on mothers who kill.* Washington, DC: American Psychiatric Publishing; 2003. p. 35-60.
8. Beck CT, Driscoll J. *Postpartum mood and anxiety disorders: a clinician's guide.* Sudbury, MA: Jones and Bartlett Publishers; 2006.
9. Sichel D, Driscoll J. *Women's moods: what every woman must know about hormones, the brain, and emotional health.* New York: William Morrow; 1999.
10. Beck CT. Birth trauma: in the eye of the beholder. *Nurs Res* 2004;53(1):28-35.
11. Creedy DK, et al. Childbirth and the development of acute trauma symptoms: incidence and contributing factors. *Birth* 2000;27(2):104-11.
12. Beck CT. Post-traumatic stress disorder due to childbirth: the aftermath. *Nurs Res* 2004;53(4):216-24.
13. Appleby L, et al. Suicide and other causes of mortality after post-partum psychiatric admission. *Br J Psychiatry* 1998;173:209-11.
14. Kendell RE, et al. Epidemiology of puerperal psychoses. *Br J Psychiatry* 1987;150:662-73.
15. Gaynes BN, et al. Perinatal depression: prevalence, screening accuracy, and screening outcomes. *Evid Rep Technol Assess (Summ)* 2005(119):1-8.
16. Beck CT. Predictors of postpartum depression: an update. *Nurs Res* 2001;50(5):275-85.
17. Robertson E, et al. Antenatal risk factors for postpartum depression: A synthesis of recent literature. *Gen Hosp Psychiatry* 2004;26:289-95.
18. Beck CT. Releasing the pause button: mothering twins during the first year of life. *Qual Health Res* 2002;12(5):593-608.
19. Davis L, et al. The impact of very premature birth on the psychological health of mothers. *Early Hum Dev* 2003;73(1-2):61-70.
20. Veddovi M, et al. The relationship between depressive symptoms following premature birth, mothers' coping style, and knowledge of infant development. *J Reprod Infant Psychol* 2001;19(4):313-23.
21. Dennis CL. Preventing postpartum depression part II: A critical review of nonbiological interventions. *Can J Psychiatry* 2004;49(8):526-38.
22. Howard LM, et al. Antidepressant prevention of postnatal depression. *Cochrane Database Syst Rev* 2005(2):CD004363.
23. Beck CT. Postpartum depressed mothers' experiences interacting with their children. *Nurs Res* 1996;45(2):98-104.
24. Stanley C, et al. The effect of postnatal depression on mother-infant interaction, infant response to the Still-face perturbation, and performance on an Instrumental Learning task. *Dev Psychopathol* 2004;16(1):1-18.
25. Herrera E, et al. Maternal touch and maternal child-directed speech: effects of depressed mood in the postnatal period. *J Affect Disord* 2004;81(1):29-39.
26. Field T. Maternal depression effects on infants and early interventions. *Prev Med* 1998;27(2):200-3.
27. Righetti-Veltema M, et al. Postpartum depression and mother-infant relationship at 3 months old. *J Affect Disord* 2002;70(3):291-306.
28. Beck CT. The effects of postpartum depression on maternal-infant interaction: a meta-analysis. *Nurs Res* 1995;44(5):298-304.
29. Murray L, et al. The impact of postnatal depression and associated adversity on early mother-infant interactions and later infant outcome. *Child Dev* 1996;67(5):2512-26.

30. Murray L, et al. The cognitive development of 5-year-old children of postnatally depressed mothers. *J Child Psychol Psychiatry* 1996;37(8):927-35.
31. Sharp D, et al. The impact of postnatal depression on boys' intellectual development. *J Child Psychol Psychiatry* 1995; 36(8):1315-36.
32. Galler JR, et al. Postpartum maternal moods and infant size predict performance on a national high school entrance examination. *J Child Psychol Psychiatry* 2004;45(6):1064-75.
33. Essex MJ, et al. Timing of initial exposure to maternal major depression and children's mental health symptoms in kindergarten. *Br J Psychiatry* 2001;179:151-6.
34. Sinclair D, Murray L. Effects of postnatal depression on children's adjustment to school. Teacher's reports. *Br J Psychiatry* 1998;172:58-63.
35. Hay DF, et al. Pathways to violence in the children of mothers who were depressed postpartum. *Dev Psychol* 2003; 39(6):1083-94.
36. Hearn G, et al. Postnatal depression in the community. *Br J Gen Pract* 1998;48(428):1064-6.
37. MacLennan A, et al. The self-reported prevalence of postnatal depression. *Aust N Z J Obstet Gynaecol* 1996;36(3):313.
38. Cox JL, et al. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry* 1987;150:782-6.
39. Beck CT, Gable RK. *Postpartum depression screening scale manual.* Los Angles: Western Psychological Services; 2002.
40. Beck CT. The lived experience of postpartum depression: a phenomenological study. *Nurs Res* 1992;41(3):166-70.
41. Fleming AS, et al. The effects of a social support group on depression, maternal attitudes and behavior in new mothers. *J Child Psychol Psychiatry* 1992;33(4):685-98.
42. Pitts F. Comrades in adversity: the group approach. *Health Visit* 1995;68(4):144-5.
43. Chen CH, et al. Effects of support group intervention in postnatally distressed women. A controlled study in Taiwan. *J Psychosom Res* 2000;49(6):395-9.
44. Boath E, et al. The prevention of postnatal depression: a narrative systematic review. *J Psychosom Obstet Gynaecol* 2005;26(3):185-92.
45. Stuart S, O'Hara MW. Treatment of postpartum depression with interpersonal psychotherapy. *Arch Gen Psychiatry* 1995;52(1):75-6.
46. O'Hara MW, et al. Efficacy of interpersonal psychotherapy for postpartum depression. *Arch Gen Psychiatry* 2000; 57(11):1039-45.
47. Zlotnick C, et al. Postpartum depression in women receiving public assistance: pilot study of an interpersonal-therapy-oriented group intervention. *Am J Psychiatry* 2001;158(4):638-40.
48. Gorman LL. *Prevention of postpartum adjustment difficulties* [unpublished dissertation]: University of Iowa; 1997.
49. Altshuler LL, et al. The Expert Consensus Guideline Series. Treatment of depression in women. *Postgrad Med* 2001 (Spec No):1-107.
50. Lester BM, et al. Possible association between fluoxetine hydrochloride and colic in an infant. *J Am Acad Child Adolesc Psychiatry* 1993;32(6):1253-5.
51. Transfer of drugs and other chemicals into human milk. *Pediatrics* 2001;108(3):776-89.
52. Webster J, et al. Postnatal depression: use of health services and satisfaction with health-care providers. *J Qual Clin Pract* 2001;21(4):144-8.
53. Kleiman K. *The postpartum husband: practical solutions for living with postpartum depression.* Philadelphia: Xlibris Corporation; 2000.

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