JOGNN CLINICAL ISSUES

Identifying and Treating Postpartum Depression

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Postpartum depression affects 10% to 20% of women in the United States and negatively influences maternal, infant, and family health. Assessment of risk factors and depression symptoms is needed to identify women at risk for postpartum depression for early referral and treatment. Individual and group psychotherapy have demonstrated efficacy as treatments, and some complementary/alternative therapies show promise. Treatment considerations include severity of depression, whether a mother is breastfeeding, and mother's preference. Nurses who work with childbearing women can advise depressed mothers regarding treatment options, make appropriate recommendations, provide timely and accessible referrals, and encourage engagement in treatment. *JOGNN, 34*, 264–273; 2005. DOI: 10.1177/0884217505274583

Keywords: Mental health—Postpartum depression—Psychiatric referral—Psychopharmacology—Psychotherapy

Accepted: September 2004

Postpartum depression (PPD) is a serious and common mood disorder that emerges within several weeks after delivery and poses significant risks to maternal, infant, and family well-being. Onset of depression during this critical time interferes with mothers' ability to recognize and respond to their infants' cues in a sensitive way and thwarts the evolving maternal-infant relationship (C. T. Beck, 1996). When PPD is undetected or inadequately treated, a chronic depressive course can result with potential negative outcomes for the entire family (Campbell & Cohn, 1997; Horowitz & Goodman, 2004).

Despite adverse health consequences, systematic PPD screening is not standard clinical practice in the United States. Limited availability of psychiatric services impedes referral for evaluation and treatment. Nurses require knowledge about the nature and efficacy of PPD treatments to refer their clients and recommend psychiatric services with confidence. To inform nursing practice, this article describes PPD, examines screening approaches, and synthesizes the literature concerning evidence-based treatments for PPD.

Overview of Postpartum Depression

Description, Prevalence, and Course

Symptoms that typically characterize PPD include despair, sadness, anxiety, fears, compulsive thoughts, feelings of inadequacy, loss of libido, fatigue, and dependency (Sichel, 2000). A diagnosis of PPD requires a major depressive episode with onset during the first 4 weeks after delivery (American Psychiatric Association, 2000); however, researchers commonly define depression occurring within 3 months postpartum as PPD (Wisner, Parry, & Piontek, 2002). According to psychiatric diagnostic criteria (American Psychiatric Association, 2000), the essential feature of a major depressive episode is a 2-week or longer period during which a woman has either depressed mood or loss of interest or pleasure in activities that is a change from previous functioning. Presence of four or more of the additional symptoms nearly every day also is required for a diagnosis: significant weight loss when not dieting or weight gain or change in appetite, insomnia or hypersomnia, psychomotor agitation or retardation,

fatigue or loss of energy, feeling guilty or worthless, decreased ability to think or concentrate, and recurrent thoughts of death or suicide with or without a plan (American Psychiatric Association, 2000). If depressed mood and loss of interest and pleasure in activities are present, only three of the additional symptoms are needed. When anxiety, agitation, and disturbing thoughts dominate the presentation, Sichel and Driscoll (2000) have described this symptom cluster as postpartum obsessive-compulsive disorder, although many clinicians consider this a variant of PPD.

PPD affects a half-million mothers in the United States each year, and approximately half of these women receive no mental health evaluation or treatment.

For postpartum women, symptoms must be evaluated in relation to anticipated changes and infant care demands. For example, weight loss associated with normal postpartum recovery and sleep problems caused by infant sleep patterns should not be considered as depressive symptoms.

PPD affects approximately 500,000 mothers and infants in the United States each year (Wisner et al., 2002). Approximately half of affected women in the United States receive no mental health evaluation or treatment (Hearn et al., 1998). One meta-analysis determined overall PPD prevalence to be 13% (i.e., 1 in 8 women; O'Hara & Swain, 1996), and estimates of moderate to severe PPD in the United States range from 8% to 12% (Merritt, Kuppin, & Wolper, 2001; Najman, Anderson, Bor, O'Callaghan, & Williams, 2000).

For many women, PPD remits between 2 and 3 months postpartum (Beeghly et al., 2002; Horowitz et al., 2001); however, depression may continue through the 1st and 2nd postpartum years (Josefsson, Berg, Nordin, & Sydsjo, 2001). Horowitz and Goodman (2004) found that at 2 years after delivery, 30.6% of participants who previously exhibited PPD symptoms within a month after delivery continued to score in the depressed range on the Beck Depression Inventory II (A. T. Beck, Steer, & Brown, 1996). Such research results show that PPD can evolve into an ongoing course of depression throughout the first 1 to 2 years after childbirth.

Influences of PPD on the Family

PPD threatens the quality of family health. Multiple studies have linked PPD with maternal behavior that is less affectionate and more withdrawn, or intrusive and hostile, and infant behavior that is avoidant, discontent, and withdrawn (Dawson & Ashman, 2000; Tronick & Weinberg, 1997). C. T. Beck (1995) demonstrated that PPD had a moderate to large effect on maternal interactive behavior, infant interactive behavior, and dyadic interactive behavior. In a subsequent meta-analysis, C. T. Beck (1999) found a moderate relationship between maternal depression and behavioral problems of children from 1 to 18 years of age. Evidence is also accumulating that PPD has negative influences on fathers' mental health, suggesting that a family perspective on assessment and treatment is needed (Goodman, 2004).

Identifying Women at Risk for Postpartum Depression

Identifying women who may be at increased risk for PPD is an important clinical goal. Despite growing knowledge that PPD is a major childbirth complication, postpartum depression screening is not yet standard care in the United States (Georgiopoulis et al., 1999; Horowitz et al., 2001).

Risk Assessment During Pregnancy

Prenatal assessment for PPD risk is an imprecise endeavor. At present, no reliable, valid, prenatal screening instrument is available for routine use (Austin & Lumley, 2003), but use of assessment measures and clinical interviewing may detect known prenatal risk factors and depressive symptoms. Therefore, a two-pronged approach to identify pregnant women at risk for PPD is needed: identification of PPD risk factors in the health history and current psychosocial situation and depression symptom assessment.

A range of risk factors has been associated with PPD, and research results have been contradictory in many instances; however, a few characteristics have emerged that are likely to raise PPD risk. Prenatal depression or anxiety, history of depression, inadequate social support, poor quality of the relationship with a partner, and life and child care stress have been the most consistent forecasters of PPD. Low socioeconomic status and difficult infant temperament have been inconsistent and weaker predictors (C. T. Beck, 2001; Nielson, Videbech, Hedegaard, Dalby, & Secher, 2000). C. T. Beck's (2001) most recent meta-analysis uncovered four new predictors: low self-esteem, unpartnered marital status, low socioeconomic status, and unplanned/unwanted pregnancy.

Adolescent mothers may have increased PPD likelihood (Hudson, Elek, & Campbell-Grossman, 2000), but otherwise, maternal age does not tend to increase risk. Parity is another inconsistent predictor. Researchers typically have not found an association between parity and

PPD (Gürel & Gürel, 2000). Ethnicity and race typically are not significant PPD predictors (Yonkers et al., 2001).

Biologic studies have produced little conclusive data, although the effects of rapid alteration in hormonal levels on the neuroendocrine system remain poorly understood. Genetic susceptibility possibly affects reactions of monoamine and peptide pathways to postpartum hormonal fluctuations (Sichel, 2000).

Thus, given the available research evidence, the following factors merit prenatal PPD risk evaluation: history of depression or anxiety disorder, presence of prenatal depression or anxiety symptoms (including previous PPD), inadequate social or partner support, and situational and parenting stress. In addition, monitoring very young or poor pregnant women is appropriate because they may have increased PPD risk.

Nurses are well positioned to provide guidance about PPD, detect presence of symptoms, and help women obtain mental health evaluation and appropriate treatment.

Systematic health history and psychosocial assessment in pregnancy, with periodic updates to identify any changes in situational factors, may identify women who have increased PPD risk. Providing anticipatory guidance about PPD risk factors, prevalence, and typical symptoms could alert women who have one or more risk factors to the importance of contacting their health care providers whenever depression or anxiety symptoms persist beyond 2 weeks postpartum. Clearly, clinicians' interviewing skills and clinical judgment are critical elements in identifying and monitoring PPD risk factors. However, assessment tools are available to identify known prenatal PPD risk factors or evaluate depression symptom severity.

Prenatal Depression Screening and Symptom Measurement

The Cooper Survey (Cooper, Murray, Hooper, & West, 1996) was developed as a predictive index for PPD. The instrument developers tested the measure with 6,000 pregnant women. Based on responses of two thirds of the sample, the original items were reduced to produce a predictive 17-item index that was applied to the remaining third of the sample for validation. The index predicted that 35% of pregnant women who scored 27 or higher were later found to have PPD, a higher percentage than the approximately 10% to 15% that generally could be expected without prenatal risk identification. The tool has been an effective prenatal measure of PPD risk (Honey, Bennett, & Morgan, 2003).

Because postpartum factors such as maternity blues and parenting stress add to PPD risk, this instrument's ability to identify pregnant women at increased risk is noteworthy. Although the Cooper Survey misses some women who go on to develop PPD despite having a low prenatal risk profile, the tool could assist clinicians to identify and monitor at-risk women and provide anticipatory guidance to families about PPD symptoms and the need for early evaluation.

The Postpartum Depression Prediction Inventory (C. T. Beck, 1998) is a prenatal checklist of risk factors such as prenatal depression and anxiety, depression history, marital satisfaction, social support, and life stress. The Postpartum Depression Prediction Inventory performed well as a clinical interview guide and as a self-report instrument (with modifications) and was endorsed by nurses for both types of administration (Hanna, Jarman, Savage, & Layton, 2004). The updated version, Postpartum Depression Prediction Inventory–Revised (C. T. Beck, 2002), includes new risk factors, and this instrument can be used to identify women who are vulnerable to development of PPD (Kennedy, Beck, & Driscoll, 2002).

Other measures of depression symptoms have been used in an effort to identify pregnant women at risk for PPD. For example, the Edinburgh Postnatal Depression Scale (Cox, Holden, & Sagovsky, 1987) has been used outside of the postpartum period (Cox, Chapman, Murray, & Jones, 1996) and can be used to assess prenatal depression. The Beck Depression Inventory II (A. T. Beck et al., 1996) is a well-established instrument that may be used to evaluate severity of prenatal depression symptoms.

Clinical assessment of PPD risk factors and depression symptom levels in pregnancy enables health care providers to monitor women with any positive findings. Prenatal evaluation, however, will miss many women who later develop PPD (Austin & Lumley, 2003). Therefore, universal postpartum depression screening should be adopted as the standard of care.

Postpartum Depression Screening and Symptom Measurement

A number of depression symptom instruments can be used to effectively screen for PPD (Peindl, Wisner, & Hanusa, 2004). The Edinburgh Postnatal Depression Scale (Cox et al., 1987) was developed specifically to screen for depression symptoms during the postpartum period. The Edinburgh Postnatal Depression Scale is a reliable, valid, brief 10-item tool that can be administered easily in about 5 minutes, and no fee or purchase of instrument copies is required. Established cutoff scores (e.g., greater than 10 for mild depression and greater than 13 for moderate to severe depression symptoms) enable

clinicians to identify women who have elevated risk for PPD and require additional clinical evaluation. The Edinburgh Postnatal Depression Scale is effective, easy to administer, and widely used (Wisner et al., 2002). The Postpartum Depression Screening Scale (C. T. Beck & Gable, 2001), a relatively new instrument to assess PPD symptoms, also shows strong promise as an assessment measure.

Other general depression measures, such as the Beck Depression Inventory II (A. T. Beck et al., 1996), have been used effectively to measure PPD symptoms; however, the Beck Depression Inventory II and other depression symptom measures are designed to evaluate symptom severity rather than to screen for depression.

To access the Beck Depression Inventory II and the Postpartum Depression Screening Scale, as well as many other depression measures, researchers and clinicians are required to apply and purchase instruments. Others are available at no cost. When selecting a PPD screening or symptom measure, clinicians are encouraged to consider ease of use and "burden" (e.g., length of the tool and time required to complete), accessibility, and cost (i.e., must the measure be ordered and purchased or is it available to reprint freely?), evidence of reliability and validity as a PPD measure, and context of planned administration (i.e., can the tool be self-administered or is clinician administration required?). Health history and interview questions concerning personal and family history of previous depression or other mental health disorders and current symptoms also help to identify women who are at risk for PPD (Wisner et al., 2002; Wroblewski, & Tallon, 2004).

Extensive evidence supports routine screening for PPD. Given the prevalence and negative effects of PPD, a change in health care policy to mandate universal PPD screening is overdue. The current literature provides examples of feasible PPD screening approaches (Georgiopoulis et al., 1999; Horowitz et al., 2001). Unless depression symptoms are identified, referral and early intervention for PPD cannot occur.

Responding to Depression Symptoms in Primary Care Settings

Medical Considerations

If PPD is suspected, a clinical evaluation includes screening for thyroid disease, anemia, and diabetes because these disorders can influence or mimic mood disorder symptoms (Sichel, 2000). Assessment of hormonal contraception is relevant. The widely held view that oral contraceptives contribute to mood disorders is not supported uniformly. Results from randomized placebo-controlled trials provide only limited evidence that oral contraception may induce symptoms of depression and anxiety (Yonkers, Bradshaw, & Halbreich, 2000). Moreover, results from a study of 119 healthy women using monophasic or triphasic oral contraceptives and women using nonhormonal contraceptives showed that women who did not take oral contraceptives had more negative mood symptoms and fatigue than women who did take oral contraceptives (Abraham, Luscombe, & Soo, 2003).

On the whole, research indicates that most women experience positive mood effects of oral contraceptive use; however, a subgroup of women has negative mood changes, so women already experiencing depression symptoms may be more vulnerable (Oinen & Mazmanian, 2002). Individualized recommendations for contraception are based on each woman's past response and preference. If hormonal contraception is prescribed in the postpartum period, mood changes should be monitored. If negative mood symptoms increase, use of a nonhormonal contraceptive method would be preferable, at least until depression has completely resolved.

Reluctance to take medication, especially among breastfeeding mothers, makes psychotherapeutic interventions a more acceptable treatment for many women.

Treatment Planning and Coordination

The optimal treatment plan for a woman with PPD involves a coordinated interdisciplinary team and a holistic, family-centered approach (Brockington, 2004; Kennedy et al., 2002). Because nurses have frequent contact with women during the perinatal period, they are well positioned to detect women experiencing depression who are often reluctant to seek help.

Nurses can assist depressed women by initiating referrals and securing appointments if needed. In the context of a therapeutic relationship, nurses can follow up with depressed mothers to ensure successful engagement, appropriate treatment, and follow through. In addition, nurses with advanced practice psychiatric-mental health preparation (i.e., certified nurse practitioners/clinical nurse specialists) are especially well qualified to provide mental health treatment and to collaborate with primary care providers for women affected by PPD.

Holistic Care for Women With PPD

Quality care for women with PPD includes education about the disorder and its treatment and promotion of behaviors that improve mental health and overall health.

TABLE 1
Psychotherapeutic Approaches for Postpartum Depression

Type of Approach	*Description*
Cognitive-behavioral therapy	Time-limited treatment, typically lasting 12 to 14 weeks. Emphasizes the role of thinking in how a person feels and behaves; focuses on identification of distorted perceptions of the world and self, changing these perceptions, and discovering new patterns of behavior. Unwanted feelings and behaviors are identified in relation to thinking that is causing them. Goal: to learn how to replace this thinking with thoughts that lead to more desirable reactions.
Interpersonal therapy	Time-limited psychotherapeutic intervention. Focus on interpersonal relationships, role transitions, grief, and interpersonal deficits. For postpartum depression treatment, includes focus on relationships with the infant and partner and the transition back to work and other roles.
Psychodynamic therapy	General label for approaches designed to bring feelings to the surface to understand them. Based on the assumption that everyone has an unconscious mind and that feelings held in the unconscious are often too painful to be faced. People use defenses to protect themselves from the painful feelings; problems arise when these defenses cause more harm than good. Expectation is that insights gained will reduce psychic pain and symptoms.
Supportive psychotherapy	Uses therapist-patient relationship to promote effective coping. Palliative form of treatment in which the therapist attempts to help the patient cope with problems in daily life rather than treat the cause of the problems.
Psychoeducation	Provides factual information to the client about current problems and health status. For postpartum depression treatment, problems related to infant care, relationships, role transitions, and other specific difficulties are discussed. Problem-oriented solutions to identified problems are offered. Often combined with supportive psychotherapy.

Note. Psychotherapeutic approaches are often used in combination.

Physical health problems may be more common among women with PPD (Brown & Lumley, 2000). Promoting physical recovery can have a positive effect on mood, and strategies include helping women to obtain adequate sleep, good nutrition, and exercise and to limit or avoid alcohol and caffeine. Household help may be needed to assist women with the increased demands of caring for an infant. Suggesting a leave of absence from work or decreased work hours may reduce stress and allow time for recovery; however, some women may find being home alone with an infant isolating. Clearly, suggestions require individualization. Hiring household help and extending maternity work leave are costly. Nurses should facilitate social support networks and available social services for many women.

Treatment Options for PPD

PPD is a treatable disorder. Prompt intervention improves long-term outcomes (Brennan et al., 2000; Brockington, 2004). Nurses who work with childbearing women need current knowledge about available evidence-based treatments to facilitate women's informed decision-making about treatment options and to make appropriate referrals. Treatment options include individual and group psychotherapies, psychopharmacologic therapy, and complementary/alternative therapies. Approaches frequently are combined to resolve symptoms and reach treatment goals.

Psychotherapeutic Treatments

Psychotherapeutic treatments found to be effective in the treatment of women with PPD include cognitive-behavioral therapy (CBT), interpersonal psychotherapy (IPT), psychodynamic therapy, supportive counseling, and psychoeducation (see Table 1). These can be delivered individually or in group settings.

Individual psychotherapy. Individual therapy has the advantage of offering women personalized care and scheduling flexibility. Research has shown that women seek contextually based treatment that respects their views, acknowledges their experiences and roles, and provides needed assistance to manage the demands of motherhood (Berggren-Clive, 1998; Fowles, 1998).

Clinical studies have demonstrated the effectiveness of psychotherapy in treating PPD. Cooper, Murray, Wilson, and Romaniuk (2003) randomized 193 women with PPD to CBT, IPT, nondirective counseling, or routine care. After 10 weekly home-based sessions from 8 to 18 weeks postpartum, women in all treatment groups had lower Edinburgh Postnatal Depression Scale scores than did women in the usual-care control group. In another investigation, 12 weekly sessions of mother-infant group therapy or IPT produced significant reduction in depression symptoms in comparison to outcomes for the control group (Clark, Tluczek, & Wenzel, 2003).

Thus, research evidence supports efficacy of CBT (Chabrol et al., 2002; Cooper et al., 2003), IPT (Cooper

et al., 2003; O'Hara, Stuart, Gorman, & Wenzel, 2000), supportive counseling (Chabrol et al., 2002, Cooper et al., 2003); and psychoeducation (Chabrol, 2002; Misri, Kostaras, Fox, & Kostaras, 2000). Including a partner in treatment also can enhance outcomes (Misri et al., 2000).

Of studies reviewed from the past 10 years, only one treatment intervention involving six weekly CBT sessions (Prendergast & Austin, 2001) was no more effective than the control condition in decreasing depressive symptoms in women with PPD. In this study, however, the control group received nurse-delivered idealized care involving supportive counseling, which may have had positive effects comparable to CBT.

Group therapy. Group therapy is an interactive process aimed at increasing women's social support networks and decreasing the social isolation that many women feel after giving birth. Researchers have examined the effectiveness of various group therapy approaches in treating PPD. For example, Honey, Bennett, and Morgan (2002) assigned 45 women with moderate to severe PPD symptoms to either a psychoeducational group for eight weekly sessions or to routine primary care. After treatment and at 6-month follow-up, the women in the treatment group experienced a significant reduction in symptoms in comparison to the control group. In an open trial with 17 women with PPD who received 9 weekly IPT group sessions plus an individual termination session, 58% of participants had a full remission, 29% had a partial remission, and 11% showed no improvement.

Thus, research outcomes validate use of support groups (Chen, Tseng, Chou, & Wang, 2000), CBT groups (Appleby, Warner, Whitton, & Faragher, 1997), IPT groups (Klier, Muzik, Rosenblum, & Lenz, 2001), and groups with supportive, CBT, and psychoeducational components (Meager & Milgrom, 1996) to treat PPD. Although recruiting an adequate number of women with PPD who agree to group therapy and scheduling convenient sessions pose challenges, promising results indicate that group approaches are effective treatments for PPD.

Reducing barriers to psychotherapy. Qualitative findings suggest that barriers to treatment for depressed women include scheduling difficulties, reluctance to attend without their infant, and shame and embarrassment regarding their depression (Ugarriza, 2004), but mothers may find individual psychological interventions more acceptable than pharmacological treatment and group treatments (Cooper et al., 2003), especially if breastfeeding (Sichel & Driscoll, 2000).

Psychotherapeutic approaches that address difficulties with relationships can be combined with treatment with medication. In addition, engaging men in therapy with their postpartum depressed partners improved the mental health of women and their partners (Misri et al., 2000).

Pharmacologic Treatment

Recommendations for pharmacologic treatment of PPD generally are based on knowledge about treatment of depression for nonpostpartum samples, although some evidence of effectiveness of antidepressants for postpartum women is available (Wisner et al., 2002). Evidence of effectiveness of antidepressants for the general population suggests that pharmacologic treatment should reduce PPD symptoms.

Results from studies of medication treatment for PPD without control groups demonstrated that selective serotonin reuptake inhibitor (SSRI) antidepressants including sertraline (Logsdon, Wisner, Hanusa, & Phillips, 2003; Stowe, Casarella, Landry, & Nemeroff, 1995), fluvoxamine (Suri, Burt, Altshuler, Zuckerbrow-Miller, & Fairbanks, 2001), and venlafaxine (Cohen et al., 2001) improved PPD symptoms. These results are promising, even though other factors, such as passage of time, might have influenced these results, given the absence of control groups.

Only one randomized controlled trial was identified from the literature to date that compared the effectiveness of an SSRI to CBT (Appleby et al., 1997). In this study, researchers assigned 87 women with PPD to four groups at 6 to 8 weeks postpartum that involved combinations of treatment with fluoxetine and one or six CBT sessions or placebo with one or six CBT sessions over 12 weeks. They found that antidepressant drug therapy, specifically fluoxetine, and CBT each treated PPD effectively, and combining psychotherapy and psychopharmacologic treatments did not improve outcomes.

SSRIs are the first choice for medication treatment for PPD because of ease of administration, low toxicity, and available studies of mother-infant pairs (Wisner et al., 2002; Wisner, Peindl, & Gigliotti, 1999). Based on a woman's history, favorable response to previous treatment with an antidepressant should guide selection (Misri & Kostaras, 2002; Sharma, 2002). Antidepressant treatment should be initiated at half the recommended starting dose for 4 days and then be increased by small weekly increments as tolerated until full remission occurs (Wisner et al., 2002).

For psychopharmacologic treatment, positive response to an initial trial of medication of 6 to 8 weeks indicates that the same dosage should be continued for at least 6 months after a full remission has been achieved to prevent relapse (American Psychiatric Association, 2002). If improvement does not occur within 6 weeks of antidepressant therapy, or if the patient has a response but then a relapse, referral to a psychopharmacologist is recommended (Wisner et al., 2002). Complete remission is the goal because inadequate treatment places women at risk for chronic depression (Nonacs & Cohen, 1998). Long-term maintenance therapy is recommended for women

who have had three or more episodes of depression or severely disabling episodes (Sharma, 2002; Wisner et al., 2002).

Antidepressant medications and lactation. Safety of maternal antidepressant use during breastfeeding is an important consideration. The risk of serious complications related to infant exposure from breast milk appears low; however, all antidepressants are secreted in the breast milk at varying concentrations (Nonacs & Cohen, 1998).

Weissman and colleagues (2004) conducted a systematic evaluation of 57 studies of maternal plasma, breast milk, infant plasma levels of antidepressants, or all of these. Nortriptyline, paroxetine, and sertraline typically were undetectable in infants. Fluoxetine and citalopram produced the highest proportion of infants with detectable levels. However, results of other studies indicated that with maternal dosage of 20 mg/day or less, levels of fluoxetine in breast milk were typically low (Hendrick, Stowe, et al., 2001) and that sertraline was more likely to be detected in breast milk when maternal dosage was 100 mg/day (Hendrick, Fukuchi, Altshuler, Wertheimer, & Brunhuber, 2001).

Minimal levels of sertraline among breastfed infants produced little functional effects in the infants (Epperson et al., 2001). Therefore, sertraline, an SSRI, is recommended as the first-line, low-risk medication for treating PPD during breastfeeding (Altshuler et al., 2001; Burt et al., 2001; Wisner et al., 2002).

Making recommendations for antidepressant use during breastfeeding requires careful consideration of the latest evidence to weigh possible risks and benefits (Burt et al., 2001; Hoffbrand, Howard, & Crawley, 2002). Therapeutic effects and dosage also should be weighed. Women have highly personal and emotionally charged feelings and attitudes about breastfeeding. Women and their partners require sensitive counseling and unbiased, up-to-date information about the effects of infant exposure to maternal psychotropic medication. Nonjudgmental listening and supportive understanding can enable women to make informed decisions.

In accordance with guidelines for treatment of depression in general populations (American Psychiatric Association, 2002), mild depression may be treated either by medication or psychotherapy, based on the client's preference. This recommendation is consistent with research findings that SSRI and CBT produced equal positive effects (Appleby et al., 1997). However, a combination of psychotherapy and medication may be needed if significant psychosocial issues, interpersonal problems, or underlying personality disorders are present (American Psychiatric Association, 2002). Given the psychosocial and relational issues associated with PPD and its effect on the mother-infant relationship and infant development, combined treatment for PPD is optimal (Brockington, 2004).

Complementary/Alternative Treatments for PPD

Postpartum hormonal imbalances have been hypothesized as causal factors in PPD. Moreover, estrogen's antidepressant properties have been demonstrated through 70 years of study (Brockington, 2004). Yet data to support the effectiveness of hormonal treatment for PPD are equivocal. In a double-blind randomized clinical trial (Lawrie et al., 1998), synthetic progesterone was not effective in preventing or treating PPD and caused increased depression in the postpartum period. In contrast, results from one study (Gregoire, Kumar, Everitt, Henderson, & Studd, 1995) showed that high-dosage estrogen therapy was beneficial in treating severe PPD. However, associated clinical risks (e.g., deep vein thrombosis, endometrial hyperplasia, and inhibition of lactation) preclude recommendation of estrogen therapy for PPD until researchers provide adequate evidence of efficacy and safety (Lawrie et al., 1998).

Herbal medicines, most notably, St. John's wort, are used widely to treat depression (Plotnikoff, 2002); however, effectiveness in reducing PPD symptoms has not been demonstrated, and toxicity from interactions with prescription medication poses a serious risk. Thus, ongoing investigation of the efficacy and safety of these treatments for PPD is needed.

Complementary or alternative treatments for PPD can complement more standard approaches. Promising treatments include bright-light therapy (Corral, Kuan, & Kostaras, 2000; Epperson et al., 2004), exercise (Treat-Jacobson & Mark, 2002), massage therapy (Field, Grizzle, Scafidi, & Schanberg, 1996), and chronobiological therapies, such as wake therapy (sleep deprivation; Parry et al., 2000).

African American women with PPD also have described culturally specific ways of managing their depression (Amankwaa, 2003), such as "keeping the faith" by using religion to cope. Culturally competent care for women experiencing PPD is based on collaboration between the nurse and mother that integrates valued postpartum traditions with mental health treatment (Posmontier & Horowitz, 2004).

For severe PPD, especially if psychotic symptoms are present or if a mother is at risk for suicide or infanticide, inpatient hospitalization is indicated. Presence of psychotic symptoms also requires treatment with antipsychotic medications (e.g., the atypical antipsychotic medications) or combination psychopharmacologic treatment. When a mother is severely depressed and rapid treatment is necessary, electroconvulsive therapy is considered safe and effective during the postpartum period and may be recommended (Altshuler et al., 2001; Rabheru, 2001).

Conclusions and Clinical Implications

PPD is a serious disorder that affects a large cross section of women. Factors such as prenatal and past maternal depression history, current life and parenting stress, poor quality of relationships and social support, and very young age and very low socioeconomic status may increase PPD risk. A sizable group of women who experience PPD are at risk for chronic depression. In addition, PPD negatively affects the health of infants, children, mothers, and fathers and the overall quality of the family environment. Until screening for prenatal and postpartum depression becomes standard practice, our health care system will fail to detect the majority of women who are at risk for PPD and to provide timely evaluation and effective treatment.

Treatment considerations include severity of depression, whether a mother is breastfeeding, and treatment preference. Evidence-based treatments include CBT and IPT individual and group treatment, supportive counseling, psychoeducation, and antidepressant medications, specifically SSRIs. Combination approaches involving psychotherapy and psychopharmacology are recommended to treat symptoms and relational components of moderate to severe PPD. Complementary and alternative therapies show promise, but additional evidence is needed to demonstrate efficacy and safety.

Nurses who care for childbearing women are well positioned to counsel depressed mothers regarding treatment options, make appropriate recommendations, provide timely and accessible referrals, and encourage engagement and treatment follow-through.

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