Developing an Educational Module for Advanced Practice Nurses: The Screening and Management of Postpartum Depression in Primary Care

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Developing an Educational Module for Advanced Practice Nurses: The Screening and Management of Postpartum Depression in Primary Care

Abstract
Postpartum depression (PPD) is thought to affect 13% of new mothers. Yet it is believed that up to 50% of cases escape detection, resulting in a host of adverse sequelae for mother, infant and family. The current state of the science is promising, as advances in pharmacotherapy and psychotherapy have demonstrated PPD’s amenability to treatment. However, expertise among providers appears to be deficient, as seen in survey results which portray most physicians and nurse practitioners largely ill-equipped to detect and deal with PPD. A rich opportunity to intervene exists, particularly within primary care settings, where suffering women may be encountered. The purpose of this project was to address this gap between services and need, by providing an educational module to nurse practitioners. It is designed with the goal to educate primary care nurse practitioners in assessment, screening, diagnostic, treatment, and referral skills relative to this disorder. The module was presented on two occasions to the Greater Rochester Nurse Practitioner Association (NPA), where those present received continuing education credits. Attendees of the presentation were asked to fill out a simple evaluative form, which invited commentary regarding usefulness and effectiveness of the presentation. Subsequently, a podcast of the presentation was recorded, and submitted for posting to the NPA website. An accompanying evaluative survey was also attached. Interpretation of findings from the project are discussed in summary.

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The Screening and Management of Postpartum Depression in Primary Care

By

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Abstract

Postpartum depression (PPD) is thought to affect 13% of new mothers. Yet it is believed that up to 50% of cases escape detection, resulting in a host of adverse sequelae for mother, infant and family. The current state of the science is promising, as advances in pharmacotherapy and psychotherapy have demonstrated PPD’s amenability to treatment. However, expertise among providers appears to be deficient, as seen in survey results which portray most physicians and nurse practitioners largely ill-equipped to detect and deal with PPD. A rich opportunity to intervene exists, particularly within primary care settings, where suffering women may be encountered. The purpose of this project was to address this gap between services and need, by providing an educational module to nurse practitioners. It is designed with the goal to educate primary care nurse practitioners in assessment, screening, diagnostic, treatment, and referral skills relative to this disorder.

The module was presented on two occasions to the Greater Rochester Nurse Practitioner Association (NPA), where those present received continuing education credits. Attendees of the presentation were asked to fill out a simple evaluative form, which invited commentary regarding usefulness and effectiveness of the presentation. Subsequently, a podcast of the presentation was recorded, and submitted for posting to the NPA website. An accompanying evaluative survey was also attached. Interpretation of findings from the project are discussed in summary.
Chapter One

Postpartum Depression: Introduction to the Problem, Project Rationale and Goals

One of life’s greatest joys is also among the greatest of stressors: the transitional period when parents bring home a new baby for the first time. Families, especially the often primary care-giving mothers, frequently feel overwhelmed, fatigued and isolated, even as they must care for an utterly dependent infant. Studies show that during this vulnerable period, up to 76% of mothers across all social classes crave expert advice and support (Family and Parenting Institute, 2007). With our increasingly mobile society, a traditional source of support - the family - is frequently unavailable, as extended members may live far away. Additionally, the rigors of infant care have a momentous impact on nuclear family relationships, posing risks for dysfunction. What many report to be mood-altering hormonal shifts following delivery may further exacerbate the distress of familial role alterations. And so emerge the conditions for a “perfect storm” preceding the development of post-partum depression (PPD).

Consider the experience of one woman with PPD:

When I had cancer, I thought that was the worst experience I could ever have. I was wrong — this is. With cancer, I allowed myself to ask for and receive help, and expected to be depressed. My friends and family rallied around me, bringing me meals, cleaning my house, and giving me lots of emotional support. Now, during postpartum depression, I feel guilty asking for help and ashamed of my depression. Everyone expects me to feel happy and doesn’t accept that this illness is just as real as cancer. (Bennett & Indman, 2003)

Lynne Goodman is a local woman who suffered with PPD almost twenty years ago, and now helps run a support group for new mothers with depression. She recalls the sense of
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profound isolation she experienced at the time, and describes the feeling of “going crazy . . . I didn’t tell anyone, because I was afraid they’d take the baby away” (L. Goodman, personal communication, February 12, 2008). From these unsettling words resounds a most unfortunate reality, a state of misinformation, or abject lack of information, that leaves so many bereft of hope. Goodman goes on to say that “many woman come to the group feeling betrayed that they weren’t told [about PPD]. But hearing other women’s stories helps.”

The intent of my project is to fill this void of information, and to ultimately contribute to a practice environment where hope for depressed new mothers is restored. The following paper details research supporting a teaching module I have designed for nurse practitioners in primary care practice. The module is supported by the theoretical framework of interpersonal relations proposed by Hildegard Peplau, particularly as it relates to the nurse practitioner functioning in the counseling role, guiding the client to healing through a skilled, empathetic, and cooperative interaction (Peplau, 1999).

Advanced Practice Nurses (APNs) who stand the chance of encountering women with PPD, whether in pediatric or family practice settings, should have facility with primary care screening and/or management of this disorder. Given the scope of PPD, its potentially serious impact on families, its recently assumed status as a national health priority, and the dearth of knowledge and confidence among most providers in managing this illness, the time is ripe for a comprehensive, yet succinct tutorial. After completing this module, my goal is that the APN will be better informed to screen for and manage PPD symptoms, as appropriate, by meeting these objectives:
• Describe the epidemiology and significance of PPD
• Assess for PPD by informed identification of symptoms
• Recognize PPD screening tools and become familiar with their implementation
• Identify potential diagnostic differentials in symptomatic women
• Demonstrate familiarity with treatment options
• Utilize a simple decision tree for management of PPD, to include knowing when to refer to mental health experts
• Develop a plan for appropriate follow-up and collaboration
Chapter Two

Review of the Literature

Medline and Cochrane Library’s Central Register of Controlled Trials and Database of Systematic Reviews were searched using various permutations of these terms as keywords: postpartum depression, screening, prevention, treatment, management, primary care. The search was limited to humans and English language. Also, secondary searches were performed by reviewing references from major PPD papers. In addition, the author contacted experts in the field, via telephone, email and face-to-face meetings. The organizational framework that follows is a topical arrangement of systematic reviews, watershed theoretical analyses, randomized clinical trials, and many descriptive papers. While an extensive quantity of research was reviewed for background, the author was careful to choose evidence-based literature with robust statistical data, and conclusions that generally resonated across the relevant body of work, to inform this educational module.

PPD background.

Described as “a thief that steals motherhood” by Cheryl Beck, a leading researcher in the field of PPD study, the disorder can be most vexing in its insidious and isolating nature (Beck, 2006). Approximately 13% of new mothers suffer from PPD, according to meta-analyses, as well as a prospective, longitudinal cohort study of 14,000 antepartum women (Spinelli & Endicott, 2003). It is most often experienced six to eight weeks following delivery, but may manifest up to one year later (Beck & Gable, 2000). In fact, around half of PPD cases arise after the first three postpartum months (Daley, MacArthur, & Winter, 2007). Many researchers feel that the 13% prevalence figure is an under representation, due to the medical community’s failure to standardize screening, and the fact that other smaller studies put the prevalence closer to 20%
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(Beck, 2008). The postpartum period appears to increase the risk of first onset of a severe depressive episode, by three times (Gaynes et al., 2005). And for some, the stress of childbirth catalyzes manifestation of a pre-existing major depression (Gjerdingen & Yawn, 2007).

While PPD can affect women from all races and levels of society, it seems to strike those in the lower socioeconomic strata more often. In a recent report by the Centers for Disease Control (CDC), Medicaid patients, women under financial or traumatic stress, those with fewer than 12 years education, and teenage moms are among those describing depression symptoms more frequently (Centers for Disease Control, 2008). Some studies suggest Hispanic women report higher levels of postpartum depression than other groups (Beck, 2008). New mothers reporting inadequate social support, and low self-esteem are also found especially vulnerable (Beck). Beck deduces from her cross-cultural literature reviews that PPD is a “universal phenomenon, not just limited to industrialized Western societies” (Beck, 2008, p. 125). A more thorough discussion of risk factors is forthcoming.

A meta-analysis commissioned by the Agency for Healthcare Research and Quality (AHRQ) examined point prevalence of PPD, and found the distinction between “major” and “minor” depression - a distinction often overlooked in the research - to be meaningful (Gaynes et al., 2005). For example, where studies spoke to major depression alone, so designated because of the associated severe functional impairment, the combined point prevalence in the first postpartum year was 1.0% to 5.9%. A higher range of combined point prevalence, 6.5% to 12.9%, was yielded by studies that included both major and minor depressions. Another frequent shortcoming in the literature is the failure to distinguish between incidence and prevalence in research methodology. Clearly then, prevalence and incidence figures depend not only on the timing of assessment, but also on the method and operational definitions employed. (Gaynes et
Clinical manifestations.

Women with PPD experience a range of symptoms, including fatigue, anxiety, guilt, inability to cope, irritability, disabling sense of uneasiness, confusion, forgetfulness, anhedonia, insomnia, and possibly suicidal ideation (Dennis & Creedy, 2004). Additional exacerbating features are low self-esteem, lack of confidence, and unrealistic expectations of motherhood (Dennis & Creedy). While new mothers without PPD also experience alterations in sleep patterns and life roles as a matter of course, they generally report positive progress as they transition into their new identities as mothers (Clemmens, Driscoll, & Beck, 2004). Conversely, women with PPD describe "more profound emotional responses to their role transitions," and become tearful and irritable in retelling their stories of birthing and mothering (Clemmens et al., 2004, p. 184). In her synthesis of PPD research, Beck identifies four major themes descriptive of the PPD experience: asynchrony between expectations and reality of motherhood, the feeling of spiraling downward emotionally, a sense of pervasive loss, and eventual gains toward recovery (Kennedy, Beck, & Driscoll, 2002).

In the postpartum depression literature, there are three general categories of mood disorders following delivery. The "baby blues" are experienced most commonly, with up to 80% prevalence (Munoz, Agruss, Haeger, & Sivertsen, 2006). Women with the "blues" are emotionally labile and overwhelmed, usually most distressed around five days postpartum. This situation typically arises immediately after delivery, but is self-limiting and responds well to support and encouragement, without any further treatment. It is considered a normative experience, common to new mothers. However, if symptoms worsen or persist beyond 10 days, or become debilitating even sooner, women are advised to seek medical evaluation, to rule out...
the more serious PPD (Beck, 2006). This can be challenging, as symptoms of both disorders are at first so similar. Some 20% of women with the “baby blues” progress to PPD (Sobey, 2002). At the opposite end of the mood disorder continuum, postpartum psychosis is rarely experienced among new mothers (about 0.1%-0.2% prevalence) (Munoz et al., 2006), but is by far the most severe condition. Characterized by extreme lability and agitation, rapid cycling, chaotic behaviors, and possible hallucinations, it is thought by some to be a variant of bipolar disorder, and should be handled as a medical emergency (Baker, Mancuso, Montenegro, & Lyons, 2002).

The third mood disorder is PPD. The research community has debated whether maternal depression during the postpartum period is in fact distinct from general depression experienced during other periods in life (Baker et al., 2002). Interestingly, the Diagnostic and Statistical Manual (DSM-IV) does not assign PPD its own diagnosis; instead PPD is classified as a major depressive episode with a “postpartum onset specifier,” occurring within four weeks after giving birth (Munoz et al., 2006, p. 249). As with general depression, a clinical diagnosis of PPD is based on meeting DSM-IV criteria for major depression: one must experience five or more depression-related symptoms, occurring most days for a period of at least two weeks (Gjerdingen, Katon, & Rich, 2008). In practice, the DSM’s “four week” onset qualification is considered by many to be too narrow (Beck, 2006), so that the body of relevant literature typically extends the vulnerable period for PPD up to one year postpartum.

Meta-analyses demonstrate post-partum depression’s notable influence on maternal/infant interactions. Specific behaviors often seen in depressed mothers include blunted responsiveness to their babies’ cues and reduced awareness of their needs. These mothers tend to be less communicative and interactive, not as likely to stimulate their infants by talk, song, or play. Overall, empathy toward the baby may be compromised. It is important to note that in
many cases, there are no such effects. (Beck, 2006)

Potentially deleterious effects on infants include lower activity levels, less vocalization, and greater irritability, as well as slight but significant long-term cognitive and emotional damage (Beck & Gable, 2000). Other effects noted in the literature are irregular sleeping and feeding patterns, impeded growth during the first year, and lifelong difficulty in coping with stress (Gaynes et al., 2005). Research bears out that sons of depressed mothers are more prone to develop behavioral problems, while daughters are more likely to themselves be depressed (Olson et al., 2002). A mother’s confidence in her parenting skills may also be adversely impacted by PPD (Olson et al.). An episode of PPD heightens a woman’s risk for future depression, thoughts of harming herself or her infant, impaired bonding with her infant, and change in plans for future children (Chaudron, Szilagyi, Kitzman, Wadkins, & Conwell, 2004).

The more time that elapses from onset to diagnosis, the more intransigent PPD is to treatment (Beck & Gable, 2000). However, it is estimated that up to 50% of cases escape detection altogether, leaving many untreated mothers depressed one year after birth (Beck & Gable). The aforementioned AHRQ-commissioned meta-analysis concludes, along with several other studies reviewed herein, that primary care providers (PCPs) must not overlook depression screening (Gaynes et al., 2005).

And so the stage is set for a new imperative in women’s health care: providers must be educated in assessing for PPD, so that they will be better equipped to improve detection of the disorder. Through innovative methods and in unconventional settings, the hope is that the PCP community will overcome traditional barriers in the recognition of PPD. APNs encountering new mothers in pediatrics or primary care are uniquely positioned to take the lead in this endeavor, by virtue of their skills and experience. (While many studies included here refer to medical doctors
(MDs) as “PCPs,” advanced practice nurses are also considered part of this group in the present discussion, unless otherwise noted.)

**Etiology and known predictors.**

Numerous risk factors have been implicated in the development of PPD. Thirteen such factors were identified in Beck’s meta-analysis of 84 relevant studies published in the 1990s, and replicated in a 2009 report: prenatal depression, prenatal anxiety, low self-esteem, childcare stress, life stress, inadequate social support, strained marital relationship, history of previous depression, “difficult” infant temperament, maternity blues, single marital status, lower socioeconomic status, unplanned/unwanted pregnancy (Oppo et al., 2009).

From a recent synthesis of three meta-analyses emerged the strongest predictors of either depression or anxiety during pregnancy (Munoz et al., 2006). These are stressful life events such as divorce or job loss, and past history of psychiatric illness. In fact, relevant research has demonstrated that previous depression is associated with a three-and four-fold increase in likelihood of having PPD (Oppo et al., 2009). Similarly, an episode of previous PPD is thought to put a woman at a 30%-50% increased risk of recurrence with future births (Baker et al., 2002). In the same way, a family history of mental disorders exacerbates risk. Even as Beck makes a strong case for PPD as a distinct entity, we can also see several of the same causal factors as with general depression (Brockington, 2004). Additionally, organic factors such as nutritional deficiencies, and disrupted sleep are implicated (Association of Reproductive Health Professionals, 2006). Restorative REM sleep is typically altered in mothers caring for newborns round-the-clock, with the resulting fatigue likely to negatively impact mood (Kennedy et al., 2002).

While there is widespread agreement that change in hormone levels (i.e., thyroid,
estrogen, progesterone) precipitated by delivery is a major causative factor (Baker et al., 2002), there has been debate around the existence of evidence that would unequivocally support a specific biological link to PPD (Dennis & Creedy, 2004). Surprisingly, Gjerdingen and Yawn (2007) report that female hormone fluctuations do not correlate with PPD.

Nevertheless, more recent studies provide promising data linking hormone levels to mood. For example, Fan and colleagues (2009) studied four groups of women (n=77 per group): one group in each trimester of pregnancy, and one postpartum group. Depression was more prevalent in the first trimester and postpartum, which the authors then correlate with subsequent anxiety and attendant surge in cortisol. When serum concentrations of estrogen and progesterone levels were high, depression was low, but when progesterone sharply dropped postpartum, depression rates increased. Fan et al. concluded that depression was correlated with sharp changes in estradiol and progesterone levels, anxiety was positively correlated with total cortisol, and depression and anxiety were associated. These were all significant at p<0.05 overall and p<0.01 for between-group differences. While the study’s strengths include its eligibility criteria, which excluded those with a history of psychiatric illness or diagnosis requiring hormonal treatment, one could argue that a weakness was the choice of the Hamilton depression and anxiety scales. As we shall discuss, these scales are not considered ideal screening tools for PPD, and are more suited for use in populations with general depression/anxiety.

Consistent with these findings, the National Mental Health Association (NMHA) takes a position that there are three major factors in the development of PPD, one of which is hormone fluctuation, particularly due to the drop in serotonin and estrogen levels post-delivery (Munoz et al., 2006). The other general factors are situational stressors, such as divorce or death, as well as normative life stressors, to include attempts to balance motherhood with career, adjusting to...
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relational changes, and loss of freedoms (Munoz et al.). Despite the plethora of research on etiology of PPD, there is still no consensus as to the optimal time for assessment of risk factors, or a clear understanding of their cumulative effect (Oppo et al., 2009).

And so we begin to see consistent themes emerge across studies, relating to the complex interplay of biopsychosocial mediators. Further complicating the clinical picture is the fact that PPD is often suffered covertly, as some mothers silently endure symptoms for which they fear a social stigma if “found out.” Or, many women may fail to recognize PPD symptoms, unable to disentangle them from normal aspects of life with a newborn, such as fatigue (Chaudron et al., 2004).

How then does a provider approach this multifactorial, often stealthy illness? A guiding principle for providers is fittingly described by Sichel and Driscoll’s analogy of an earthquake, as cited by Kennedy et al., (2002). In the context of this imagery, it is imperative for a provider to be aware of the “fault lines” - the risk factors enumerated above - that may predispose a woman to PPD. Genetic propensity for mental illness, previous history with depression, and stressful life events may apiece or together, conspire with the “tremor” of a baby’s birth, to precipitate a full-scale “earthquake.”

Prevention efforts.

In the words of Ian Brockington, “It is remarkable that a disorder that presents such an excellent opportunity for prevention has proved so resilient to prophylaxis” (2004, p. 91). The weight of evidence strongly implies that efforts to mitigate PPD by intervening prenatally have been disappointing (Webster et al., 2003).

Dennis and Creedy (2004) examined all Randomized Clinical Trials (RCTs) of acceptable quality, found in the Cochrane, Medline, EMBASE and CINAHL databases,
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comparing a psychosocial or psychological intervention with usual antenatal, intranatal or postpartum care. They then produced their own systematic review and meta-analysis of interventions for preventing PPD, comprised of 15 trials from 1995-2003, with a combined 7697 subjects in pregnancy to up to six weeks postpartum, with no known risk of PPD. The authors state their major finding was that subjects receiving a psychosocial preventive intervention were just as likely to develop PPD as were controls. Similarly, no preventive effect was found with psychological debriefing or interpersonal therapy. Interestingly, home visits provided by nurses or midwives proved to be the one beneficial intervention. (Dennis & Creedy)

Dennis and Creedy (2004) provide a rigorous description of their methodology in choosing studies for their review, excluding from their analysis trials susceptible to bias (i.e., those with unclear allocation concealment, unblinded outcome assessment, etc.). They note that there is a general failure in studies to consistently present details of key research elements. In addition, only two of the trials were conducted in the U.S., which compromises generalizability of results that relate to systemic issues, such as home visits. (The U.S. health care system has not provided for universal postpartum home visits, unlike the U.K.). The authors also acknowledge personal involvement in one of the trials in the review. From this review and others like it, we know that research is ongoing to elucidate the most effective prevention and screening strategies.

A useful summation of recommendations is provided by McQueen, Montgomery, Lappan-Gracon, Evans and Hunter (2008). The authors describe a “best practice guideline” developed for nurses by the Registered Nurse Association of Ontario, Canada. In their words, the guideline’s scope is “the confirmation, prevention and treatment of postpartum depression during the first postpartum year” (p. 127). Comprehensive databases such as CINAHL, PsychInfo, Cochrane, and Medline were searched for relevant peer-reviewed research and guidelines. Over
100 articles and two guidelines were identified. Both guidelines were critiqued using the Appraisal for Guidelines and Evaluation Instrument (AGREE), which appraises six domains: scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability and editorial independence. It was determined that the two guidelines chosen did not meet these standards. The remaining studies were appraised using the Effective Public Health Practice Project Quality Assessment Tool for Quantitative Studies, which examines study methods and statistical rigor. A subsequent scoring algorithm was devised via consensus, which influenced the ultimate level of evidence assignment.

Of the ten guideline elements developed by the group, four were given optimal (levels Ia to IIb) ratings. These top recommendations are: Nurses provide individualized, flexible postpartum care based on the identification of depressive symptoms and maternal preference (Ia—evidence obtained from meta-analysis or systematic review of RCTs); Nurses initiate preventive strategies in the early postpartum period (Ia); Nurses provide supportive weekly interactions and ongoing assessment focusing on mental health needs of postpartum mothers experiencing depressive symptoms (Ib—evidence obtained from at least one well-designed RCT); and Nurses facilitate opportunities for the provision of peer support for postpartum mothers with depressive symptoms (IIb—evidence obtained from at least one other type of well-designed quasi-experimental study without randomization). The guideline also recommends using the Edinburgh Postnatal Depression Scale (EPDS) for screening, later discussed.

A major limitation here is that this was developed in Canada, where the health care delivery system differs from our own, again jeopardizing generalizeability. Also, the authors concede that conclusions about clinical utility of their guideline will await further research on maternal perception and preference for prevention and treatment modalities (McQueen et al.,
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2008). While this guideline is intended for RNs, APNs can easily build on its recommendations to suit their own practices. Interestingly, no single intervention was found effective in PPD prevention, but those that were flexible, individually-based and delivered after birth were found promising (McQueen et al., 2008).

Theory of PPD.

The way in which we perceive this disorder may make all the difference when it comes to treatment. Two primary schools of conceptual thought surface in the literature. One is that PPD is a unique entity, singularly experienced by some women after giving birth and quite distinct from depressions that settle during other periods. The other philosophy is that no meaningful differences exist between PPD and general depression.

Valerie Whiffen (1991) deconstructs the notion of PPD as being qualitatively different from general depression, and in fact advises another name altogether: “childbearing depression” (CBD). Moreover, to conceive of it in any other way (as “PPD”), Whiffen believes is ultimately harmful to the healing process, and in a larger sense, antithetical to the ideal of gender equality. With a traditional view of postpartum depression as a unique entity, adequate research in diagnosis and treatment is consequently hindered, writes Whiffen. She points to the fact that research in postpartum depression lags behind that in general depression. The crux of her work rests on her assertion that science has failed to link CBD with hormonal or biological changes. In her estimation, to subscribe to a hormonal etiology, and therefore the notion that it is merely a temporal condition, or a “woman’s problem,” is to dismiss it as unworthy of serious consideration.

A leading researcher in the field, Cheryl Beck, has taken a decidedly different tack. It is this “lack of consensus regarding the conceptual definition” (Beck & Gable, 2001, p. 242) of
PPD that has in fact hindered advancement in diagnosis and treatment. Beck feels that the assumption underlying many previous studies - that PPD and general depression are virtually indistinguishable - has obstructed success in diagnosis, namely through the use of general depression screening instruments, rather than ones specific to the unique experience of PPD. Out of this conviction came Beck’s own phenomenological study on the experience of PPD, from which was born her grounded theory. Beck devised a screening tool specific to what, unlike Whiffen, she feels is a most unique entity: postpartum depression.

Grounded theory relates to symbolic interactions, how people view their lives, how they interact, and how they deal with change (Beck, 1993). Beck’s grounded theory is “hailed as an exemplar of substantive midrange theory,” (Lasiuk & Ferguson, 2005, p. 127) backed by a program of exploratory research, concept analysis and clinical testing. Beck believes it is critical for health care professionals, especially nurses, to convey to new mothers that having PPD does not indicate that one is a poor mother, or a weak person. Instead, PPD must be understood as a highly treatable mood disorder, with a biochemical basis (Beck, 2006).

Beck (1993) calls her theory “Teetering on the Edge.” This word picture describes the psychological process at work, where suffering women walk a narrow line between sanity and insanity. In a 1992 phenomenological study, Beck identified 11 theme clusters from her analysis of seven mothers attending a PPD support group: loneliness; obsessive thinking; insecurities; anxiety attacks; loss of control; guilt; diminished concentration; fear that life would never again be normal; loss of interest in hobbies or goals; lack of all positive emotions; and contemplation of death (Beck, 1993).

For her grounded theory research, over an 18 month period, Beck observed a PPD support group with the number of participants ranging from one to twelve, in addition to
conducting twelve more extensive taped interviews. The overarching theme of her findings was that a basic psychological problem experienced by new mothers with depression emerged: loss of control. Time and again, these women agonized in their descriptions of lacking control over their thought processes, lacking control over their emotions, and lacking control over their actions. Beck further identified these coping constructs, in her language: Encountering terror (characterized by horrifying anxiety attacks, obsessive thinking, and enveloping foginess); Dying of self (experienced in alarming unrealness, isolating oneself, contemplating/attempting self-destruction); Struggling to survive (seen in “battling the system,” praying for relief, and seeking solace in support groups); and Regaining control (seen in unpredictable transitioning, mourning lost time, and guarded recovery). This qualitative work corroborated her earlier phenomenological study, thereby providing theory triangulation. One will not find “loss of control” as DSM criteria for general depression (APA, 2000), hence Beck’s assertion that PPD is a unique diagnosis. (Beck, 1993)

Critical to a provider’s approach to screening and treatment is the “theoretical lens through which [he or she] views the disorder” (Beck, 2002, p. 282). In later work with Clemmens and Driscoll (2004), Beck solidifies her theory of PPD as a unique disorder, based on a synthesis of findings from qualitative studies in the 1990s that “yielded a new and different picture” of PPD than that previously held (p. 182). Common themes emerged from these studies that are said to be somewhat distinct from the experience of general depression. Namely, all five qualitative studies in the analysis found these distinctive features: loss of self and sense of loneliness. Some studies also found obsessive thoughts and feelings of insecurity, as well. The theoretical model suggested by Clemmens, Driscoll and Beck (2004) is rooted in the phenomenology of a woman’s experience, with a focus on her genetic history, life events, stress
response, and hormonal effects.

Given the rigor of Beck’s work, and corroboration of results across multiple studies, I chose to anchor my educational module on her conclusions.

We will examine treatment strategies more closely, forthcoming. Generally speaking, the ways in which various theoretical perspectives govern treatment can be seen, as follows. The dominant perspective is the medical model, where PPD is considered an illness. Pharmacological treatments are most often considered, usually antidepressants. Social or environmental factors are not as emphasized. Feminist theory largely opposes the medical approach, and instead encourages women to explore personal and gender issues related to power struggle, nurturing of self, and expression of anger. Attachment theorists say that PPD occurs when a partner does not satisfy a mother’s attachment needs, or if a mother is insecure or avoidant in her relationships. Similarly, interpersonal therapy is used by theorists who see the need for depressed women to modify relationships by focusing on four problem areas, to include role transitions, interpersonal disputes, grief, and interpersonal deficits. This method is based on Sullivan and Bowlby’s work. Finally, Thoit’s self-labeling theory guides the use of emotional management techniques, where there is a perceived deficit in coping, according to adherents. Behavioral and cognitive therapies are then employed to steer women toward sound emotional management, using such strategies as biofeedback, and mentally reframing situations to appear less difficult. Support groups serve as key tools in this approach. Beck advises a blending of these perspectives, tailored to best suit each patient. (Beck, 2002)

**Screening tools.**

The literature most often refers to two highly recommended scales for PPD screening: they are the Edinburgh Postnatal Depression Scale (EPDS) and the Postpartum Depression...
Screening Scale (PDSS). Another tool, occasionally used, is the Beck Depression Inventory (BDI), which screens for general depression. The EPDS and PDSS are specific to PPD, and have been found to be more sensitive in screening for PPD than the BDI. In fact, use of a general depression instrument is thought to hamper recognition of PPD (Beck & Gable, 2001). A promising newer tool is the Patient Health Questionnaire-9, which appears to be gaining attention in the research community.

The PDSS has the highest sensitivity and specificity for PPD detection, at 94% and 98%, respectively; EPDS has a sensitivity of 86% and specificity of 78%, and positive predictive value of 73% (Beck & Gable, 2000). The EPDS is easy to administer and score. It is a ten item Likert-scale questionnaire that takes around five minutes to answer (Munoz et al., 2006). Responses are scored from 0-3; conventionally, women with a score of 12 or higher warrant further assessment, though some suggest that a score of 10 or more merits attention (Beck & Gable). Most trials employ the EPDS. It is free to obtain, easily downloaded off the Internet. Criticisms address fluctuating question stems, and failure to capture all domains of PPD (Beck & Gable).

Beck and Gable subsequently devised the PDSS. Derived largely from Beck’s qualitative research, this scale includes seven dimensions common in postpartum depression, to include sleeping/eating disturbance, anxiety/insecurity, emotional lability, cognitive impairment, loss of self, guilt/shame, and contemplation of self-harm. While DSM-IV major depression criteria captures some nuance of many dimensions listed above, emotional lability, and loss of self are considered unique to PPD. The PDSS is a 35-item Likert-scale questionnaire, with each item scored from 1-5. The scoring range is 35-175, with 60-79 indicating minor depression, and 80 or more suggestive of major depression (Clemmens et al., 2004). Beck and Gable (2000) report that the judgments of five content experts and a focus group support its content validity. This tool is
proprietary. The length and cost of this tool may be considered disadvantages, by some.

What these tools share in common is their ability to capture PPD as “unfolding within a continuum” (Clemmens et al., 2004, p. 180). It is important to note that a positive screen on either tool is not diagnostic, but rather should be followed up with an interview based on DSM-IV criteria for a depressive episode to arrive at a clinical diagnosis of PPD (Gjerdingen et al., 2008). However, there is a tool that is considered a “diagnostic interview,” and does not require the extra step just described. It is just beginning to be validated in the PPD population, but has not yet predominated in PPD literature. It is the PRIME-MD or Patient Health Questionnaire-9 (PHQ-9). The PHQ-9 is based on the specific criteria for diagnosing major depression, has a built-in guide for scoring interpretation, and score-specific treatment suggestions. The instrument is regarded by some as the optimal depression screening tool for use in primary care (Gjerdingen & Yawn, 2007). (See Appendix I).

The PHQ-9 tool is freely obtained via Internet, and is scored as follows: 0-4 - no depression; 5-9 - mild depression; 10-14 - moderate depression; 15-19 - moderately severe depression; 20-27 - severe depression. As additional research further clarifies this method’s effectiveness in PPD screening, its simplicity and elegance will likely support its use in future screening efforts. Naturally, an indication of contemplating self-harm on any tool warrants immediate attention (Beck, 2006).

For a final word on this subject, consider the AHRQ-commissioned meta-analysis (Gaynes et al., 2005), which addresses accuracy of screening tools. The authors’ conclusion is that the small number of subjects enrolled in the studies reviewed, preclude any recommendations for one screening tool over another. The fact that wide confidence intervals overlapped “nearly completely” when comparing sensitivity ranges between the tools highlights
Considerations regarding screening.

The question of screening for PPD goes far beyond a simple choice of tool. With screening comes legal, ethical, and practical implications. While she typically sees her obstetrician/gynecologist only once - six weeks after delivery - and not again until her next annual appointment, a new mother visits her pediatrician for at least six well-child visits during the first postpartum year. Some see this as the ideal setting to target screening efforts. Currently, there is no standard of care requiring primary care and/or pediatric providers to perform PPD screening (Chaudron, Szilagyi, Campbell, Mounts, & McInerny, 2007). Developments in the medico-political landscape around this issue in recent years suggest that this may well change. An example of promising movement in this direction is the American Academy of Pediatrics (AAP) definition of pediatricians' scope of practice, to encompass evaluation of family factors which may bear on children's health, such as depression (Gjerdingen et al., 2008).

In their insightful piece on the risks and benefits of PPD screening, Chaudron et al. (2007) outline major issues facing pediatricians in particular, should screening become a mandate. These include the quality and context of the screening assessment, and follow-up obligations. Their work centers on screening in the pediatrician's office, at well-child visits. Such an innovative screening model holds promise for capturing cases of PPD heretofore missed.

Yet this model is not without its obstacles. Obviously, a pediatrician is the child's provider, not the mother's. This poses concerns regarding scope of practice, legally, ethically, and practically. What is appropriate follow-up, should a positive screen occur? What is due diligence regarding treatment, education, counseling and referral? How might screening and follow-up be reimbursed? Will a mother, reluctant to share her struggles with her pediatrician be
off-put by this overture, or feel stigmatized, and then be discouraged from seeking care for her child altogether? Is a pediatrician properly trained to delve into the potentially unfamiliar terrain of adult mental health concerns? If a mother with a positive screen chooses not to seek care and subsequently harms her child as a direct result of untreated PPD, is there any pediatrician liability? Does a busy pediatrician even have the time to take on these responsibilities? (Chaudron et al., 2007)

While there are no easy answers in these matters, Chaudron et al. (2007) provide useful guidelines for pediatricians. From their analysis of the attendant risks/benefits, they believe that the benefits of screening outweigh the risks. To be sure, many areas require further investigation, such as time limitations, reimbursement for care related to maternal mental health issues, scope of practice limitations, and acceptability - to patients and providers alike - of screening outside of an OB/GYN setting. And overall, the authors advise that pediatric providers must be careful not to overstep the boundaries of their roles, and refer to qualified mental health professionals (MHPs), where appropriate. They also note the importance of documenting in the child’s record any maternal screening and referral services performed, but that all care subsequent to referral must become part of the mother’s record. Such caution is warranted in view of confidentiality concerns with mental health records.

Chaudron et al. (2007) suggest that before establishing a screening standard of care, policy makers and providers must ask whether the burden of suffering is sufficient to warrant universal screening. They must also ask if safe, inexpensive, and efficient screening tools exist with sufficient sensitivity and specificity. Finally, they should ascertain whether there are effective interventions available, if the chosen tool does detect PPD. To these questions, the authors answer that the burden of PPD is indeed well-established, and qualified screening tools
do exist. However, they are quick to note that screening must not be “administered in a vacuum” (p.125), and that adequate resources must exist for referrals. Furthermore, systemic problems exist to hinder implementation, such as inadequate mental health resources in many areas, and poor insurance coverage for mental health care, as well as limitations in provider competence in screening and referral-making.

Chaudron, Szilagyi, Kitzman, Wadkins, and Conwell’s (2004) work is instructive here. In a pediatric practice, they randomly chose 110 infant records before and 110 records after universal PPD screening was instituted. Detailed description of each cohort’s demographics is provided, with the conclusion that no significant between-group differences exist. They found that there was a statistically significant increase in documentation of depression, after use of the EPDS was initiated: 8.5% of visits versus 1.6%, respectively (a = 0.05, power = .80).

The clinic was said to have “moderate success” in implementing screening, as the EPDS was included in the record of 46% of eligible visits. This experience illustrates that while changing practice patterns may be difficult, it is not impossible, and most worthwhile.

This study is limited by the fact that it was conducted in only one pediatric practice, located in an academic medical center, with a comprehensive psychiatric emergency practice on site. Perhaps this proximity to emergent care increases provider comfort level with administering the screening tool in a way that may not apply to those in other settings. Additionally, records extraction is limited by incomplete data, and provider differences in documentation. Finally, the relatively small sample size may limit generalizeability. (Chaudron et al., 2004)

The USPSTF has this to say about screening for general depression: the benefits of depression screening in primary care outweigh the risks, and moreover, can improve clinical outcomes (Chaudron et al. 2007). The Task Force “recommends screening adults for depression
in clinical practices that have systems in place to assure accurate diagnosis, effective treatment and follow-up” (p. 124). We have learned from research in primary care management of general depression, that screening alone does not significantly affect outcomes; it seems improvement is only meaningful when screening takes place within a “systems” perspective, complete with collaboration between primary care providers (PCPs) and mental health providers, and cases are managed with effective treatment and follow-up (Gjerdingen & Yawn, 2007).

**Treatment modalities: The state of the science.**

Despite the fact that recent decades have seen ever-increasing rates of depressive disorders in women, depression continues to go under-treated. Twenty percent of women in one large study evaluating 3472 pregnant women for depressive symptoms met the criteria for depression, but only 13.8% reported receiving some type of therapeutic intervention (Sanders, 2006). Similarly, in another study, just 47% of 56 women with a previous PPD episode had actually received treatment (Peindl, Wisner, & Hanusa, 2004). Elsewhere in the literature, within a group of 122 women with PPD, only 12% had received psychotherapy and 3% were prescribed medication at three-month follow-up (Gjerdingen et al., 2008).

And yet the US Department of Health and Human Services (USDHHS) has identified the reduction of PPD as a priority agenda item, earmarking grant moneys to this end from its Healthy Start Initiative Grants (Gjerdingen et al., 2008). Traditionally, PPD has garnered far less research attention than has general depression (Gjerdingen et al.). As previously discussed, while many see these disorders as virtually identical, there are some distinguishing features of PPD, which call for differences in treatment; customary management of general depression may not be completely applicable to women with PPD due to commonly seen social characteristics (Gjerdingen et al.). Such barriers to PPD treatment are considerable. Practical obstacles which
often arise include the need for child care, and transportation issues. Women also express concerns about the compatibility of antidepressant medications with breastfeeding. Some may not carry insurance that covers mental health care. And others anticipate judgment and stigma surrounding mental illness, with some fearing referral to Child Protective Services if so labeled (Gjerdingen et al.).

The results of many studies examining primary care treatment of depression are disappointing. Poor outcomes include infrequent follow-up; patient non-adherence; difficulties in financing treatment; inappropriate dosing of antidepressants; gaps in physician knowledge; lack of necessary referral and/or access to MHPs; and poor collaboration between PCPs and MHPs (Gjerdingen et al., 2008). Yet it is widely recognized that when properly implemented, various treatment modalities including pharmacological, counseling, cognitive behavior therapy (CBT), and interpersonal therapy (IPT) have all “demonstrated the amenability of PPD to treatment” (Dennis & Creedy, 2004). The challenge lies in making universal recommendations for one technique over another.

The literature yields an array of results when comparing CBT with IPT, or group therapy with psychodynamic therapy, for example (Munoz et al., 2006). Generally speaking, evidence based practice recommends for combination treatment of antidepressant medication and some type of psychosocial therapy (Gjerdingen et al., 2008; Sanders, 2006; Baker et al., 2002).

According to University of Rochester PPD researcher, Emma Robertson-Blackmore (2008), we are beginning to see compelling results out of National Institute of Mental Health (NIMH) trials, that suggest various therapies (CBT, IPT, etc.) yield quite similar outcomes, with the apparent message that the benefit lies in simply receiving any approved psychological treatment (E. Robertson-Blackmore, personal communication, March 24, 2008). Treatment approaches must
be tailored to each patient, after a thorough risk/benefit analysis is undertaken, always accounting for patient preference and cost liability. The following sections will take a closer look at pharmacotherapy and psychosocial therapy.

**Pharmacotherapy.**

As with general depression, for moderate to severe PPD, antidepressants are the primary treatment modality (University of Illinois at Chicago, 2008). An imperative for any prescribing provider is to stay abreast of current drug information, as there are often new reports emerging on antidepressant safety and efficacy. For example, the past few years have seen much press around potential teratogenicity of SSRIs. There is some evidence from recent study that SSRIs such as fluoxetine and sertraline may increase infant risk of pulmonary hypertension, if exposed in utero during the third trimester (Hampton, 2006). It is also postulated that up to 30% of newborns may be at risk for the jitteriness of neonatal abstinence syndrome, if exposed to SSRIs in utero (Hampton). This may require special care nursery, but is typically transient. And a very small percentage (1%) may experience respiratory distress (University of Illinois).

The American Academy of Pediatrics (AAP) states that antidepressants do exist in small concentrations in breast milk, an important consideration with respect to infants' immature liver and kidney function, as well as researchers' inability to forecast long-term neurological effects, at present (Beck, 2006). In fact, even as all psychotropic medications will appear in breast milk, infants' neurological systems and body fat ratios promote drug absorption (Kennedy et al., 2002). Babies' reduced plasma protein binding and undeveloped blood brain barrier exacerbate these risks (Brockington, 2004). The AAP classifies most antidepressants as having unknown, potentially concerning effects on breastfed infants (Dennis & Hodnett, 2007).

There, too, are risks if a pregnant woman were to discontinue her SSRI. Untreated
Depression appears to increase the chance of miscarriage, preeclampsia, preterm birth, and low birth weight (Hampton, 2006), not to mention the emotional risks attendant with depression relapse, jeopardizing capability to adequately parent. In one study, 68% of women who discontinued their SSRI subsequently relapsed into depression, versus 26% who maintained their drug regimen (Hampton).

An Expert Consensus Guideline from a 2001 report rated sertraline as first-line PPD treatment with respect to efficacy and safety, taking into account lactation (Beck, 2006). In her work on antidepressant effects on breastfeeding babies, Gjerdingen et al. (2008) explain that infants exposed to certain other SSRIs (particularly fluoxetine) have manifested the following adverse behaviors: sedation, irritability, colic, vomiting, diarrhea, poor sleep, feeding problems, and weight reduction. However, these side effects are rare. In addition, fluoxetine appears to lead to greater detectable levels in infants: over 10% of the dose may pass to a baby via breast milk, compared to a maximum of about 2% of sertraline (University of Illinois, 2008). The drug also has a comparatively longer half-life. And so fluoxetine is not recommended for PPD. Citalopram and Doxepin are also to be avoided for their adverse effects (Gjerdingen, 2003). Sertraline, venlafaxine and paroxetine appear to have not adversely impacted breastfed infants (Gjerdingen et al., 2008).

SSRI side-effects are comparatively mild, consisting of agitation, GI symptoms, insomnia, nausea, decreased libido, and inorgasmia in some (Munoz et al., 2006). Some of these may mimic PPD symptoms, and will generally disappear by about one month (Whooley & Simon, 2000). Tricyclic antidepressants (TCAs) are first generation antidepressants and well-researched agents. While effective for some, their side effect profile is more troublesome, to include dry mouth, urinary retention, constipation, diarrhea, tachycardia, nervousness, and sexual
dysfunction (Kennedy et al., 2002). TCAs are lethal in overdose amounts, and thus considered less favorable than the safer SSRIs for a depressed population in which there may exist a suicide risk (Sanders, 2006). Other agents such as herbals (i.e. St. John’s Wort and SAM-E) are not recommended, as there are concerns around their safety and efficacy (Sanders).

**Psychotherapy.**

In addition to pharmacotherapy, the other element of the aforementioned “combination therapy” is psychotherapeutic treatment. In the Cochrane database of systematic reviews, we find a review of psychosocial and psychological interventions for PPD. Trials were rated based on authors’ quality assessment. Ten trials met inclusion criteria, for a total of 956 study subjects. The authors performed meta-analyses using relative risk calculations to quantify effect size. Reviewers Dennis and Hodnett (2007) state that most trials are not methodologically robust. The authors find the research to be limited, as between studies, there are differences in the target groups’ characteristics, screening tools are varied, outcomes measures are inconsistent, and follow-up is often incomplete. Nevertheless, the studies reviewed do leave fairly convincing evidence that psychological and psychosocial interventions are effective in reducing depressive symptomatology. In fact, any psychosocial or psychological intervention compared to usual postpartum care was found to reduce depression (RR=0.70, 95% CI 0.60 to 0.81).

In general, psychosocial interventions include support groups, or home visits, while psychological interventions are aimed at structured efforts to alter a patient’s perspective and coping style. Psychological methods include CBT and IPT, proven effective in major depression (Whooley & Simon, 2000). According to Brody et al. (1994, p. 569), “taken collectively, these strategies reduce patients’ distress associated with personal and social concerns, increase patients’ sense of control over their lives and moods, and help promote feelings of hopefulness.”
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Gjerdingen (2003) finds that these more structured techniques generally achieve more positive outcomes, as compared to “group” therapy.

One psychological technique, cognitive behavior therapy (CBT), focuses on changing flawed, pessimistic beliefs and improving coping skills (Whooley & Simon, 2000). Patients are encouraged to avoid behavior that reinforces depression, while seeking out rewarding, pleasurable behavior. From their review, Dennis and Hodnett (2007) conclude that CBT was found to be effective in five trials, with lasting benefits, up to one year postpartum (n=482, RR=0.72, 95% CI 0.57 to 0.90). Unfortunately, the limits of CBT noted here are time, cost and patient commitment requirements; up to 40% drop out. Indeed, sessions should be frequent, possibly conducted telephonically. Outpatient care is preferable, unless there are safety concerns (Kennedy et al., 2002).

Relevant research also supports the benefit of interpersonal therapy (IPT) in relieving depressive symptoms in some situations (n=120, RR=0.80, 95% CI 0.66 to 0.98) (Dennis & Hodnett, 2007). Interpersonal therapy relates a patient’s situation to one of the following possible problem areas: role disputes; role transitions; grief; or interpersonal deficits, and works to resolution, where relevant (Dennis & Hodnett). IPT alleviates depression in about 40% of PPD cases, according to Baker et al. (2002).

So how is a busy primary care provider to incorporate psychotherapeutic techniques into helping patients with PPD? Is the average family nurse practitioner equipped to venture into the realm of psychotherapy? Differing opinions appear in the literature. Some researchers advocate for PCPs to avail themselves of opportunities to learn techniques like IPT, deeming basic psychological counseling to exist within the purview of general practice. Others soundly reject the philosophy that anyone other than a mental health provider is competent to provide such care.
It is no secret that many PCPs do indeed provide psychotherapy routinely. Brody et al. (1994) describe a study that revealed better mood outcomes in a group of primary care patients receiving an abbreviated version of IPT by trained NPs, as compared to an untreated control group. The authors cite other studies that support the benefit of counseling by PCPs in relieving symptoms of distress. They have outlined counseling strategies for primary care providers, and support the viability of such a model citing the fact that many providers already counsel patients in this vein, and many distressed patients prefer to counsel with their PCP than with a MHP. The reality is that family physicians and FNPs are the main source of direct care for mental health problems in many communities, especially those underserved.

As with pharmacotherapy, primary care providers must know their limits when it comes to psychotherapy. Coyne (2001) writes that while IPT is efficacious for some primary care patients, “interventions of this sort are difficult to implement, and require a large investment relative to their impact. IPT requires highly skilled therapists” (Pressing research priorities section), and there are simply not enough to go around, nor is there sufficient funding to employ many in primary care. Whooley and Simon (2000) resonate with this view, and furthermore, cast doubt on the effectiveness of psychotherapy provided in primary care.

Another consideration is that some advocates of PCPs providing IPT are from countries such as the UK or Canada. So while their commentary may be applicable to similarly nationalized health care systems, it is not always so in the US. First, most cases of depression are handled by family doctors in the UK, Canada and Australia, where trained mental health counselors are typically affiliated with primary care offices and available for referral of more severe cases, according to therapist Emma Robertson-Blackmore (personal communication, March 24, 2008). She also notes that doctors and nurses typically undergo a longer period of
psychiatric training in these countries, compared to that in the U.S., so there is generally more familiarity with mental health issues among providers.

In 1993, the Agency for Health Care Policy and Research (AHCPR) issued clinical practice guidelines for the treatment of depression in primary care. These guidelines promote the value of psychotherapy for major depressive disorder, but stipulate that such treatment be performed by trained mental health providers (Brody et al., 1994). A variation on this approach, honoring the finding that patients are more prone to engage in mental health treatment when it’s integrated with primary care, is a collaborative model (Gjerdingen et al., 2008). Integrated care comprised of a collaboration between PCPs and MHPs is often hailed in the literature as highly effective (Gjerdingen et al., 2008; Whooley & Simon, 2000). Advocates of the team strategy feel that while few primary care providers have the time or training to provide formal psychotherapy, brief counseling can incorporate several of its effective elements (Whooley & Simon, 2000).

Gjerdingen et al., 2008 cites a meta-analysis of 37 collaborative care studies which document that collaborative depression care versus usual care improves outcomes, with benefits lasting up to five years. In their descriptive paper, they propose a health care systems-based quality improvement model for PPD treatment, derived from research outcomes in primary care populations. As we shall see, this proposed method once again brings to mind Peplau’s theory of sequential phases in therapeutic interpersonal relations, namely orientation (define the problem), identification (initiate professional assistance), exploitation (utilize professional expertise), and resolution (terminate the professional relationship and reap the benefit of collaboration).

The authors advocate a team approach, which may consist of a PCP, MHP (psychiatrist, psychiatric NP, psychologist, and/or social worker), nursing specialist, and a case manager, all working together to offer patient education, treatment with medication and/or psychotherapy,
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and case management. A “stepped care” tactic is outlined, as follows: Step One - Screen, diagnose, and provide initial treatment in the primary care setting. Educate patients as to the nature of depression, course of treatment, and lifestyle recommendations around exercise, nutrition and rest. Step Two - Initiate active treatment (i.e., pharmacotherapy, psychotherapy). Step Three - Consult with specialist within the primary care setting for persistent PPD, over two to three visits. Step Four - Refer to specialty care, for resistant or complicated disorders.

Preliminary clinical trial findings indicate that this model is successful in depression care, incorporated into family practice. Challenges remain, such as training primary care providers to screen, diagnose, and manage or refer PPD cases. The establishment of mental health care networks and financing the infrastructure to support care integration are ongoing tasks. (Gjerdingen et al., 2008)

Whooley and Simon (2000) advise that after eight weeks, if there is no apparent clinical benefit of psychotherapy, then antidepressants should be considered. They also recommend psychiatric consultation for patients with a history of mania or psychosis, and immediate referral if there exists a danger of harm to self or others. Yet a referral for psychotherapy does not absolve the referring PCP of follow-up responsibility, since patients commonly withdraw from psychotherapy (Whooley & Simon).

Additional therapeutic approaches.

While the foregoing detailed the two major facets of the much acclaimed “combination therapy” for depression - pharmacotherapy and psychotherapy - there is evidence supporting the benefit of other interventions in some cases. It is increasingly recognized that many suffering from general depression find exercise ameliorative. Daley et al. (2007) describe a literature search on the role of exercise in PPD, which yielded only two small Australian studies showing
significant reductions in depressive symptoms as measured by the EPDS, after trialing stroller walking. Possible explanations for this benefit may be exercise-induced release of endorphins, endogenous opioids. Other contributing factors may be the increased sense of self-esteem a woman feels from taking control in this way. Adherence to an exercise routine is encouraged by the lack of stigma (which some women may fear if taking antidepressants), and the independence from medical setting or financial situation. There are few side effects, and such exercise affords the opportunity to enjoy a time-out, while being with one’s child.

Obstacles to initiating this type of exercise program may include physical exhaustion or pain if recovering from a C-section, the challenge of adding one more task to an already busy day, and for those with more severe symptoms, finding the inner drive to take action (Daley et al., 2007). With the limits of small sample size and inconsistent recruitment methods, the connection between exercise and postpartum depression relief is not sufficiently solid from these studies, but is certainly promising.

The benefit of a balanced nutritional plan is indisputable, in terms of maintaining energy stores and bolstering immunity. Yet while some advocate for specific nutrients thought to fight depression, such as the omega-3 fatty acid docosahexaenoic acid (DHA) (Kennedy et al., 2002), Webster et al. 2003 found that DHA supplementation for four months following delivery did not improve depressive symptoms. Another area of equivocal evidence is with respect to hormonal treatment. While some conclude that there is little connection to PPD, as we have seen, there is contrary evidence. In an RCT of 61 depressed mothers given daily transdermal estradiol, depression symptoms were mitigated after one month, more than that seen in the control group (Gjerdingen, 2003). Exogenous progesterone, on the other hand, is thought to have no benefit and possibly be detrimental (Gjerdingen). The explanation given here is that glucocorticoids and
estrogens plummet after delivery, after having risen dramatically during pregnancy. This drop suppresses the hypothalamic-pituitary axis for several weeks to months, an effect found to be more severe and extended in women with PPD (Gjerdingen).

Study limitations.

Many of the studies referenced in our review have common methodological weaknesses. Research in this field is plagued by small sample sizes (Gaynes et al., 2005). Dennis & Creedy’s (2004) review finds reporting less than comprehensive, with thin detail as to the nature of interventions analyzed, or qualifications of health care providers. Generalizeability is often compromised, as there are typically variations in the way sampling procedures are executed, PPD is measured, or follow-up is timed (Stewart, Robertson, Dennis & Grace, 2004). And, studies differ in what scoring cut-off to use when screening for PPD with the EPDS. Stewart et al. (2004) describe a “dearth of evidence-based literature” (p. 97) owing to frequent selection bias, failure to randomize, and insufficient power.

Gaynes et al. (2005) are surprised to find such paucity of quality research, and that “the small number and small size of relevant studies are not adequate to guide national policy” (p. 5). In fact, in their meta-analysis of perinatal depression, they found common limitations leading to exclusion from their analysis, to include failure to report sensitivity/specificity data for utilized screening tools, and sampling from specific population groups (i.e. psychiatric patients), which threatens generalizeability of results. Other confounders are varying risk categories of subjects at baseline, failure to control for socioeconomic status, and inconsistent diagnostic criteria (Gaynes et al.).

With follow-up often limited to less than six months, it’s difficult to draw conclusions about recovery with certainty, especially considering depression’s relapsing and remitting nature.
(Goldsmith, 2007). Goldsmith also raises the concern that researchers typically have not solicited maternal perceptions, such as preferences regarding treatment modality.

And finally, given the impact of a nation’s health care system on the way treatment is delivered, it is critical to remember that results from studies performed in the UK may not necessarily be pertinent to the US (Goldsmith, 2007). As discussed, there are differences in the way general practitioners and nurses are trained between these countries, as there are differences in home care provisions for new mothers, not to mention overall financing of care. Such discrepancies may have untold effects on outcomes.

**Current state of expertise in PPD among PCPs.**

There is a growing theoretical recognition that primary care providers ought to know how to assess for PPD. Yet there are wide practice variations in what this means to the average practitioner. While screening by MDs, FNPs or pediatric NPs is not yet standard practice, this may change as PPD awareness expands. New AAP guidelines promote a more proactive role in this vein (Olson et al., 2002). Similarly, the USPSTF recommends that providers screen for depression (Olson et al.).

So what is currently happening in medical offices with respect to PPD? Several relevant surveys are enlightening. On average, only a minority of women are screened for PPD at either OB/GYN visits, well-child, or primary care visits (Gjerdingen et al., 2008). Even fewer are screened with a validated tool. The statistics are these: a survey of American College of OB/GYNs (ACOG) members revealed that 44% screen routinely for depression, but fewer than one quarter use a written screening tool or interview (Gjerdingen et al.).

We have explored screening and treatment barriers previously. As discussed, time constraints, and legal and ethical concerns pose obstacles (Gjerdingen et al., 2008). Perhaps most
significantly, an inadequate knowledge base is a common complaint (Olson et al., 2002). There appears to be a significant deficiency in training. In two national surveys of 822 ACOG fellows and 339 general pediatricians, at least half had no recollection of formal training in PPD (Gjerdingen et al.). In another survey of 389 pediatricians, only 31% expressed confidence in recognizing PPD, and a mere 7% were familiar with screening tools (Goldsmith, 2007). Slightly over half (51%) saw screening as a possibility; this view is associated with fewer than six years in practice, and a greater awareness of PPD (Goldsmith). The latter point underscores the importance of educational endeavors, such as this present activity!

Goldsmith’s (2007) article on PPD screening by FNPs yields somewhat promising results. Fifty eight percent report conducting some PPD screening activity in their practice. Screening predictors seen in this group are belief that PPD screening has a high priority in health care, simply remembering to screen, confidence in PPD education received, and most importantly, confidence in knowledge about screening tools. While FNPs report a general inclination to follow clinical guidelines, there are none systematized at present to direct PPD care. The existence of such a protocol, and more education on PPD, will be crucial in conquering this disorder.

Kennedy, Beck and Driscoll (2002) have described postpartum care as “scant at best . . . The crack [a] woman falls into can become an abyss” (p. 322). It is past time that current practice meets this need, and catches up to the state of the science.

And so the shared theme of most articles reviewed herein is that clinicians ought to be proactive in the identification of PPD and its appropriate management or referral. As Munoz et al. (2006) reminds us, NPs, are well-suited to provide comprehensive care to women with PPD, screening and referring where needed. If an FNP is qualified to manage PPD by virtue of her
training and expertise, she need not refer to a physician, unless indicated by persistence or severity of symptoms (Munoz et al.). In the absence of a screening protocol, screening ought to be considered as an “ongoing process” (Kennedy et al., 2002); the Illinois Healthy Beginnings Project recommends screening at least twice in the first postpartum year, which may occur when the child is approximately one month, two months, four months, and/or six months of age (University of Illinois, 2008). According to Whooley & Simon, 2000 (Conclusions section), “primary care providers can provide the essential elements of effective care for depression, including education of patients, prescription of medications, systematic follow-up, and appropriate use of specialists and resources. This comprehensive approach will improve patients' physical and psychological well-being.”

Amidst the myriad of protocols proposed in the literature, the one chosen for this module stood out for its comprehensiveness and elegance, as well as its recommendation of the PHQ-9, recalling that this screening tool is considered diagnostic. (See Appendix H for Treatment Algorithm). Specific strategies for APNs laid out in the literature are elucidated in the presentation’s “Action Steps” slides (see Appendix A).

Research recommendations.

Scholars and invested lay people agree. From basic operational concepts to detailed treatment strategies, we need to know more. To begin with, the literature reveals considerable variation in the foundational notion of “depression.” Additional study is needed to better define the range of PPD experiences along the “major” or “minor” depression continuum, with guidance as to how this should be reflected in the nomenclature of future work (Gaynes et al., 2005).

We must return to the basic question: will universal screening improve patient outcomes
DEVELOPING AN EDUCATIONAL MODULE

(Gaynes et al., 2005)? The fundamental question as to whether screening is cost-effective requires further study. What are the costs of false negatives or false positives? In other words, how much do we sacrifice by using a specific tool that tends toward one direction or the other (Gaynes et al.)? The sensitivity and specificity of screening tools must be clarified at various thresholds (Gaynes et al.). For the sake of comparability, there should be consistency across studies to use the same tools with the same thresholds, i.e. EPDS cutoff of $\geq 12$, or PDSS cutoff of $\geq 80$ (Gaynes et al.). There must be more study of various screening tools’ effectiveness across diverse populations. Further research is necessary to quantify provider burden and patient acceptability of universal screening (Gaynes et al.). And so we need more RCTs to steer protocols regarding the optimal tool, time and place for screening, and subsequent pathways of care (Stewart, Robertson, Dennis, & Grace, 2004).

We need more research to further test the safety of antidepressant use in lactation, to identify co-morbidities such as anxiety disorders, and to investigate possible neuro-endocrine triggers for PPD. We need large, controlled longitudinal evaluations in diverse settings that test various treatment modalities so that we may more accurately draw conclusions about the comparative merits of widespread therapies - pharmacological, as well as psychological - in addition to lesser studied interventions, like telephone counseling or home visits (Dennis & Hodnett, 2007; Stewart et al., 2004).

Family systems ought to be the focus of research. There is a recognized gap in knowledge when it comes to dealing with the partners of women with PPD. Fathers in this situation typically feel isolated. Many experience a lack of support from a depressed wife, which adversely affects their own adaptation to parenthood. Such strain may put the marital relationship at risk, a risk that could be mitigated by early intervention. A vicious cycle ensues, as these partners’ potential
to positively influence treatment outcomes is jeopardized, while they must work through their own distress. (Meighan, Davis, Thomas, & Dropleman, 1999)

The problem of PPD lends itself well to the nursing model. APNs should be involved in every aspect of finding a way to ease the transition for new mothers and their families. From conducting RCTs, to educating patients and other providers, to honing their own skills in primary care counseling techniques, the field is wide open for APNs to bring their unique holistic perspective to the bedside, telephone, office . . . wherever there is an interface with a suffering mother. It is the APN who stands singularly positioned at the “tipping point,” to function as an invaluable agent of change. And it is the APN who can play a pivotal role in redefining our cultural milieu as one in which postpartum depression is recognized as a valid and treatable illness, and suffering women receive early and effective intervention, rather than ambivalence or stigma.
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Chapter Three

Project Methods

Suggestions in the literature for professional training venues include websites, continuing education modules, relevant grand rounds, and graduate/medical school curriculum on PPD (Summers & Logsdon, 2005). A Scandinavian study concerning a web-based course in PPD for nurses is instructive. Nurses who had taken the course documented performing significantly more evidence-based interventions than did their control counterparts. Overall, this transfer of knowledge was said to have a beneficial effect on postpartum women (Summers & Logsdon).

And so I have created a teaching module designed for nurse practitioners in primary care practice to close these gaps in expertise heretofore identified. The purpose of the module is to better prepare APNs to appropriately screen and manage PPD, through meeting the objectives laid out in Chapter One. It was designed as a PowerPoint presentation, chosen for its ease of delivery to a large group, and its generally familiar and well-received format.

The module runs approximately 50 minutes, and was first presented as a “live” presentation to the members of the Nurse Practitioner Association of New York State (NPANYS) in July, 2008. This was facilitated by NPA Chapter president, Dr. Cynthia McCloskey. NPA members were notified, via email invitation, of this presentation, which took place during the group’s monthly meeting. The New York State Nurses Association granted 0.75 contact hours for completion of this activity, upon my application. Given the low numbers in attendance (eight), the presentation was delivered again, in June, 2009. Turnout was similarly scant (six), an outcome which suggested that a different time and setting may have drawn more attendants. Instead, to further expand the target market, I recorded a podcast of the module, using the same slides, and submitted it in March, 2010, for uploading with secure access to the website.
Principles of adult learning helped guide the module’s design. Known as the father of adult learning theory, Malcolm Knowles laid out useful guidelines regarding andragogy (Collins, 2004). He advanced self-directed learning for adults, believing it to yield the most lasting results. The on-line presentation format I chose values this ideal, as interested APNs may take responsibility for their own learning by choosing this educational activity, on their own time. Another reason to select this format is that while we retain 10% of what we read, we retain 50% of what we see and hear (Collins), hence the podcast’s inclusion of recorded voice accompanying written text. In teaching adults, it is also important to discover what adult students already know. My research on the state of current practice and knowledge regarding PPD revealed that there is a significant lack of expertise among primary care physicians and APNs, alike. And so a clear and present need was identified.

Adults are motivated to learn by extrinsic and intrinsic factors (Collins, 2004). In reference to this module, some may find intrinsic satisfaction in learning how to better serve women with PPD; extrinsic reward comes from receiving contact hours in fulfillment of employment requirements. Adult professionals are also oriented toward relevancy and practicality. It was my intention to repeatedly present rationale for the importance of this subject to everyday practice where new mothers are encountered, as well as to provide practical suggestions for disease management. A resource list was also provided (see Appendix B).

Finally, savvy adult learners are goal-oriented. Educational programs ought to reflect this by clearly organizing topical material and outlining the relationship of the curriculum to specific goals (Collins, 2004). In this module, purpose, goals and specific objectives are detailed at the beginning to give the audience clear direction.
To engage the listener with respect to the principles above, I developed the module using a blend of personal anecdotes, evidence-based data, and opportunity for involvement in case study analysis. Additionally, the validity of the module regarding mental health principles was enhanced by my partnership with Myrna Hill, a local Licensed Mental Health Counselor, with 30 years experience. I made the connection with Ms. Hill by first contacting St. John Fisher's mental health counseling department head, Signe Kastberg, PhD. After I received her name and made initial contact, I met with Ms. Hill to discuss my project. She expressed great interest, and we both agreed that her participation in the presentation would lend credibility to my work, while giving her the opportunity to showcase her seminars in mindfulness techniques, one of the therapeutic modalities discussed in my slides. She also reviewed my presentation, to ensure content validity of the mental health recommendations. Ms. Hill and I would like to explore future opportunities to carry this message into the community, targeting OB/GYN, pediatric and primary care offices in particular, and brainstorming unique strategies to package the presentation.

**Evaluation – Design, Data Collection**

The worth of this educational module hinges upon its integrity to the supporting theoretical frameworks. Does the presentation provide the listener with the tools to embody Peplau's vision of the role of nurse as counselor? Does it effectively meet Knowles' expectations for adult self-directed, goal-oriented learning? And does it do so in the context of evidence-based practice in PPD management? In retrospect, it would have been helpful to gather participants' thoughts in a more qualitative vein, along these lines.

In fact, a more direct measure of success was gauged by administering simple survey questions. Upon attending the presentation, the NPA gathered data from participants using the
tool the organization employs with guest speakers. Responders were asked to use either a Likert scale (4=agree; 3=somewhat agree; 2=disagree somewhat; 1=disagree) or dichotomous responses to rate the following:

- To what extent did the presenter address each objective?
- To what extent was the speaker for this session knowledgeable, organized and effective in their presentation?
- Were the speaker’s teaching methods and aids used appropriately and effectively?
- Did the presentation meet your expectations? (Y/N)
- Was the information and/or data current? (Y/N)
- Was the information and/or data accurate? (Y/N)

Those who participated online were asked to take a brief evaluative survey, created via the online evaluative tool, SurveyMonkey, which requested their ratings as follows:

- Did you learn new information from this presentation? (Y/N)
- How often do you see women at risk for PPD in your practice? (daily, weekly, monthly, 1-2x yearly, never)
- Given the opportunity, do you anticipate applying any of the principles you learned in this module to your own practice? (Y/N/NA)
- Are there any changes you plan to make to your practice after listening to this podcast? (Y/N/NA)
- Was this module organized and presented effectively? (Y/N)

Sample

Efforts to increase sample size have been described above. No doubt, a larger audience would enhance the validity of module evaluation. Our sample is not representative of the universe of APNs, as it drew only from the NPA. This could lead to bias, as there may be characteristics of non-members that differ from members. In addition, future efforts to present this module might include more careful selection of APNs in primary care, OB/GYN, or pediatric practice, thereby capturing those more likely to encounter women with PPD. Failure to more consistently collect this data from participants limits generalizeability of the present project. That said, the group proved to be a most valuable and receptive audience, before which to introduce this module.
The rights of human subjects were addressed by application to St. John Fisher's Institutional Review Board (IRB) for review in February, 2008. The project was cleared for expedited review by Ms. Merges, Chair of the IRB Board.
Chapter Four

Data Analysis/Evaluation Methods

The straightforward nature of this project lends itself well to simple descriptive analysis. Statistical tests employed were means, appropriate for this level of measurement. (See Appendix D – G to view the evaluation forms, responses, and a graphic depiction of results obtained thus far; feedback from the podcast is pending.) Recalling that this project is an educational module, evaluative indices must speak to whether objectives were met, determined from participants’ perceptions reflected in their survey answers.

As discussed, the NPA administered its own survey for the live presentations. The NPA survey broke down the objectives for Likert-style rating purposes; each measure received an average score of “4,” the highest possible rating (total n=6, compiled from both presentations.) Dichotomous responses (Yes/No) were similarly positive. A “yes” answer was provided for each question, to include “Did the presentation meet your expectations?”; “Was the information/data current?”; “Was the information/data accurate?”

Qualitative data was compiled in summary, as follows:

- “Very professional presentation.”
- “More presenters should have the knowledge base that Lynne shared.”
- “Excellent (n=2).”
- “Much better” [than expectations].

This is the totality of the responses to date.
Chapter Five

Interpretation and Discussion of Findings

The experience of producing this project has been invaluable in my professional development as an advanced practice nurse. Namely, I have greatly appreciated the opportunity to create an educational module and present it to members of a professional organization. From my research, I discovered a considerable deficit in knowledge, concerning screening and treating PPD in primary care. It is my belief that delivering this message to APNs, and giving them the tools to close this knowledge gap, has significant implications for future delivery of care to women with PPD. This paper has described positive outcomes in this regard, where similar educational initiatives have taken place.

And yet, as alluded to previously, this expectation is limited by small sample size. Were I to undertake this again in the future, a different setting may prove beneficial. For example, a dinner meeting held at a restaurant/banquet facility may have been more optimal in incentivizing more APNs to attend. More comprehensive recruitment strategies might entail a letter campaign, targeting local primary care, OB/GYN, and pediatric offices at which APNs are employed. Perhaps this would allow for a more representative sample than that merely drawn from professional organization membership. It would also be helpful to gather more detailed information on participants’ work setting, and potential opportunities to encounter women with PPD.

Other limitations of the present project relate to evaluation methods. I would recommend a “pre”- and “post”- presentation survey for future administration of the module. In this way, we could gauge participants’ knowledge and experience with PPD screening and treatment before listening to the module, and obtain their feedback after listening. Values might then be compared
using the paired t-test. Similarly, a longitudinal study would allow for follow-up with attendees, to discover whether the material conveyed in the module was in fact put to use in practice. This date would provide robust and meaningful information, and could inform revisions of the module’s educational content. Moreover, actual content could be more thoroughly tested, by querying audience members as to which components are more effective in enhancing their learning, than others.

This project provided ample opportunity to sharpen my research and presentation skills. Perhaps most of all, it taught me the value of flexibility and adaptability, as I devised various methods to meet the challenges of delivering the module. I will continue to brainstorm ways in which to improve the content and delivery of this educational module for future use, in the hopes of improving care for women with postpartum depression.
References


DEVELOPING AN EDUCATIONAL MODULE


Appendix A

Postpartum Depression
A Primer for Screening and Management in Primary Care

Lynne Weiler, RN, MPH
FNP Student – Wegmans School of Nursing
St. John Fisher College
Master’s Project
2010

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Objectives

• Describe the epidemiology and significance of PPD
• Assess for PPD by informed identification of symptoms
• Recognize PPD screening tools and become familiar with their implementation
• Identify potential diagnostic differentials in symptomatic women
• Demonstrate familiarity with treatment options
• Utilize a decision tree for management of PPD, to include knowing when to refer to mental health experts
• Develop a plan for appropriate follow-up and collaboration
Introduction

- Needs Assessment
  - High stakes
  - Unique challenges of PPD
  - Gap Analysis
    - Significant need for services
    - Dearth of training and knowledge in PPD
- In their own words . . .

(Gjerdingen, Katon, & Rich, 2008)

... it came out of nowhere

Michael F. Wood. Far Away.
... living constantly in those terrible thoughts that I was a horrible person, a horrible mother

Berthe Morisot. Le berceau.

...I just wanted to get out of this world. It was like everything was black.

Mary Cassatt. Mother with Child.
Clinical Scenarios

- "I just had Sarah five days ago, and I'm really weepy and tired. Sometimes I cry for no reason. This motherhood stuff is overwhelming! Sometimes I think having a child was a big mistake."

- "I feel so alone and lost. It's like I'm losing control. Where is the "me" I used to know? I feel like I'm just going through the motions. David was born a month ago, and I'm beginning to wonder when I'll feel like myself again."

- "My thoughts frighten me. So do these weird voices telling me that I'm no good. Last night I thought that if I just took a handful of sleeping pills and never woke up, everyone would be better off."

- "Katie is ten months old now, and we've had a great time together this past year. Until now. Suddenly, I find myself having a hard time getting up in the morning because I feel so sad and worthless, and other times I'm snapping at my family for no good reason. I used to love to read, but now I can't focus on anything. This isn't like me."

- "Incredibly exhausted, depressed, and having difficulty concentrating. That's what I really feel like saying when someone asks me how being a new mother is, three months after having Jake."

Prevalence

- The "thief that steals motherhood"
- Affecting 13% new mothers (meta-analyses; prospective longitudinal cohort study of 14,000)
- Usually experienced six to eight weeks after delivery, but may occur up to one year later
- About 50% cases occur after first three months
- It's estimated that up to 50% of cases go undetected

(Beck, 2006; Spinelli & Endcott, 2003; Beck & Gable, 2000; Daley, MacArthur, & Winter, 2007)
Symptoms

- fatigue
- anxiety
- guilt
- inability to cope
- irritability
- disabling sense of uneasiness
- confusion
- forgetfulness
- anhedonia
- insomnia
- possibly suicidal ideation
- sense of loss of control

Beck’s themes:

- asynchrony between expectations and reality of motherhood
- feeling of spiraling downward emotionally
- sense of pervasive loss
- eventual gains toward recovery

(Dennis & Creedy, 2004; Kennedy, Beck & Driscoll, 2002)

PP Mood Disorders: Comparative Prevalence

- Baby Blues
  - Common
  - Emotionally labile, overwhelmed
  - Peaks approx. five days postpartum

- PPD
  - DSM IV – Major Depressive Episode with postpartum onset, occurring within four weeks of giving birth (technical definition)

- PPD
  - Rare - Extreme lability, agitation, rapid cycling, chaotic behaviors, hallucinations; possible variant of bipolar disorder – MEDICAL EMERGENCY!

(Beck, 2006; Munoz, Agruss, Haeger, & Sivertsen, 2006)
DSM-IV Criteria for Major Depressive Disorder

Must have at least five of the following symptoms for at least a two week period:

<table>
<thead>
<tr>
<th>1) Depressed mood nearly every day*</th>
<th>6) Fatigue or loss of energy nearly every day</th>
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<tbody>
<tr>
<td>2) Diminished interest or pleasure in most all activities nearly every day*</td>
<td>7) Feelings of worthlessness and excessive guilt</td>
</tr>
<tr>
<td>3) Weight loss or gain &gt;5% of body weight in one month</td>
<td>8) Diminished ability to concentrate or think nearly every day</td>
</tr>
<tr>
<td>4) Insomnia/hypersomnia</td>
<td>9) Recurrent thoughts of death; may have with suicidal ideation, attempt or plan</td>
</tr>
<tr>
<td>5) Psychomotor agitation or retardation</td>
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</tbody>
</table>

(American Psychiatric Association, 2000)

Impact on Infants

- Blunted responsiveness to infants; reduced awareness of needs
- Less communicative with infants
- Empathy toward infants compromised
- Risk of: lower activity levels, less vocalization, greater irritability, slight but significant long-term cognitive and emotional damage
- Other effects: irregular sleeping, feeding patterns, impeded growth (1st yr.), lifelong difficulty coping with stress
- Sons – more likely to develop behavior problems
- Daughters – more likely to be depressed

(Beck & Gable, 2000; Olson, Kemper, Kelleher, Hammond, Zuckerman, & Dietrich, 2002)
Impact on Mothers

- Adverse effect on confidence in parenting
- Heightens risk for:
  - future depression
  - thoughts of harming self, infant
- Impairs the way in which she experiences bonding
- May change plans for future children

(Chaudron, Szilagyi, Kitzman, Wadkins, & Conwell, 2004)

GOAL

Providers must be educated in assessing for PPD, so that they will be better equipped to improve detection of the disorder. Through innovative methods and in unconventional settings, the hope is that the healthcare community will overcome traditional barriers in the recognition of PPD. APNs encountering new mothers in pediatrics or primary care are uniquely positioned to take the lead in this endeavor, by virtue of their skills and experience.
Predictors

- prenatal depression
- prenatal anxiety
- low self-esteem
- childcare stress
- general life stress
- inadequate social support
- strained marriage
- history of previous depression
- "difficult" infant temperament
- maternity "blues"
- single marital status
- lower SES
- unplanned/unwanted pregnancy

(Beck, 2001)

And the Strongest Predictors Are . . .

- Stressful recent life events (i.e., divorce, job loss)
- Past history of psychiatric illness

(Munoz, Agruss, Haeger, & Sivertsen, 2006)
Etiology

- National Mental Health Association-identified risk factors:

  Hormonal fluctuation  Normative life stressors
  (esp. precipitous drop in estrogen)  (adjustments to motherhood)

  Situational stressors (death in family, financial problems)

  (Munoz, Agruss, Haeger, & Sivertsen, 2006)

Beware the “Earthquake”

- Know your patient’s “fault lines” - the risk factors enumerated above - that may predispose a woman to PPD.

- Genetic propensity for mental illness, previous history with depression, and stressful life events may apiece or together, conspire with the “tremor” of a baby’s birth, to precipitate a full-scale “earthquake”.

  (Kennedy, Beck, & Driscoll, 2002)
Screening Tools

- Postpartum Depression Predictors Inventory (PDPI) – risk factor identification, applicable from pre-conception to postpartum to help ID vulnerable women
- Edinburgh Postpartum Depression Scale (EPDS)
- Postpartum Depression Screening Scale (PDSS)

EPDS

- Developed in England to facilitate recognition of depression in primary care, and “specifically designed and standardized in the field of perinatal psychiatry” (http://psy.psychiatryonline.org/cgi/content/full/42/5/446)
- Sensitivity = 86%; Specificity = 78%
- Dimensions include assessment of anxiety; happiness; sadness; panic; sense of pleasure; and thoughts of self harm – seven day look-back period

(Beck & Gable, 2000)
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EPDS

- 10-item Likert-scale questionnaire
- Each item is scored from 0-3
- Score of 12 or higher warrants further assessment, though some suggest a cut-off of 10 (moderate depression: 10-12; major depression: >=13)


EPDS

- Shortcomings:
  - Fluctuating question stems
  - Failure to capture the following poses threats to content validity:
    - loss of control; loneliness; sense of unrealness; irritability; fear of going crazy; obsessive thinking; concentration difficulties and loss of self
  - Lacks items that contextualize experience to new motherhood

(Beck & Gable, 2000; Kennedy, Beck, & Driscoll, 2002)
**PDSS**

- Devised by Beck and Gable to address shortcomings of existing tools.
- Highest sensitivity (94%) and specificity (98%) for PPD detection.
- Seven dimensions common to PPD:
  - sleeping/eating disturbance; anxiety/insecurity;
  - emotional lability; cognitive impairment; loss of self; guilt/shame; and contemplation of self-harm

(Clemmens, Driscoll, & Beck, 2004)

<table>
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<tr>
<th>PDSS</th>
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<tbody>
<tr>
<td>- 35-item Likert-scale questionnaire</td>
</tr>
<tr>
<td>- Each item is scored from 1-5</td>
</tr>
<tr>
<td>- Scoring range is 35-175, with 60-79 indicating potential symptoms of PPD (minor depression), and 80 or more suggestive of major depression – a positive screen for major PPD</td>
</tr>
<tr>
<td>- Shortcoming – proprietary ($79 – including manual; lengthier than EPDS)</td>
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</tbody>
</table>

(Clemmens, Driscoll, & Beck, 2004)
Scope of Tools

- Neither tool is considered "diagnostic," but should be followed up with a DSM-IV based interview to arrive at a clinical diagnosis:
  - Consult DSM-IV criteria for MDD, or
  - Use diagnostic tool, such as PHQ-9
- Above path is taken if one chooses to "screen and treat"; alternatively, all positive screens may be referred to a mental health provider: "screen and refer"

(Gjerdingen, Katon, & Rich, 2008; Wiedmann & Garfield, 2007)

When to Refer

- Symptoms of greater severity
  - Suicidal tendencies/history of suicide attempts
  - Severe depression; with respect to PPD: all "severe" cases (EPDS >=13; PPDS >=80)
  - Bipolar disorder
  - Atypical depression
  - Psychotic depression
- Patients with drug interactions
- Patients who are treatment resistant

(Ferguson, 2000, p. 177)
Patient Health Questionnaire-
(PSQ-9) aka PRIME-MD

- Considered diagnostic
  - based on DSM-IV criteria for diagnosing
    major depression, has a built-in guide for
    scoring interpretation, and score-specific
    treatment suggestions
- Not yet validated in PPD population
- Regarded by some as “best available
  depression screening tool for primary
  care.”

(Whooley & Simon, 2000)

Screening Considerations

- Innovative settings for screening, i.e.
  pediatrician offices at WC visits
- Medico-political environment is becoming
  more amenable to such practice: AAP
  defines pediatricians’ scope of practice as
  encompassing evaluation of family factors
  bearing on children’s health
- Legal, ethical, practical implications

(Chaudron, Szilagyi, Campbell,
Mounts, & McInerney, 2007)
Screening Considerations

- The "What if's":
  - appropriate follow-up, should a positive screen occur?
  - due diligence around education, counseling, referral?
  - receptiveness of mothers?
  - receptiveness of providers?
  - time limitations?
  - reimbursement?
  - documenting obligations?
  - cost-effectiveness?

(Chaudron, Szilagyi, Campbell, Mounts, & McInerny, 2007)

Screening Considerations

- Before establishing a screening standard of care, policy makers and providers must ask:
  - Is the burden of suffering sufficient to warrant universal screening?
  - Are there safe, inexpensive, and efficient screening tools with sufficient sensitivity and specificity?
  - Are effective interventions available, if the chosen tool does detect PPD?

(Chaudron, Szilagyi, Campbell, Mounts, & McInerny, 2007)
Treatment Modalities – The State of the Science

- The under-treatment of depression
- Barriers to PPD treatment:
  - child care
  - transportation
  - concerns regarding compatibility of antidepressant medication and breastfeeding
  - lack of mental health insurance parity
  - stigma
  - fear

(Sanders, 2006; Peindl, Wisner, & Hanusa, 2004; Gjerdingen, Katon, & Rich, 2008)

Treatment Modalities

- Research has found PPD “amenable to treatment”
- Evidence-based practice recommends combination therapy: antidepressant with some type of psychotherapy

(Gjerdingen, Katon, & Rich, 2008; Sanders, 2006)
Pharmacotherapy

- Antidepressants are primary treatment modality
- Prescribing providers must stay abreast of current drug information
  - Ex.- recent SSRI-related teratogenicity concerns (may increase risk of pulmonary hypertension of fetus is exposed in third trimester)
- Prescribing providers must be keen diagnosticians
  - Ex. - to mistake bipolar disorder for PPD may lead to dangerous manic episodes, if antidepressants are given

(Weidmann & Garfield, 2007; Organization of Teratology Information Specialists, 2006; Kennedy, Beck, & Driscoll, 2002)

Pharmacotherapy

- Considerations regarding SSRIs in pregnancy: potential for infant withdrawal; risk of depression relapse
- Considerations in breastfeeding: concentration in breastmilk; known infant side effects
- Sertraline (Zoloft) is considered first-line – no known adverse effects; comparatively smaller amounts found in breastmilk
- SSRIs compared to TCAs

(Weidmann & Garfield, 2007; Organization of Teratology Information Specialists, 2006; Beck, 2006)
Thought Provoking . . .

- When breastfeeding becomes an issue . . .

  *Does she need medication? How does she feel about taking medication while breastfeeding? . . . Is breastfeeding depleting her of her strength and energy, thereby worsening her illness? . . . Does she have proper guidance to wean sufficiently so as not to aggravate the delicate hormonal balance?*

  These are considerations that I daresay have been largely ignored by breastfeeding organizations and the medical community. . . It's time we let [these women] off the hook . . . So they can get the treatment they need. **So they can get better.**

  ([http://www.postpartumstress.com/breastbest.html](http://www.postpartumstress.com/breastbest.html))

- Use of anxiolytics – Caution advised

  (Kleinman, n.d.; Kennedy, Beck, & Driscoll, 2002)

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Psychotherapy

- Dennis and Hodnett – Cochrane Review – methodological limitations

- Psychosocial interventions include group therapy, home visits
  - Social support has been found protective against depression
  - Multiple barriers to support group attendance

- Psychological interventions encompass structured efforts to alter a patient’s perspective and coping style
  - Cognitive Behavior Therapy (CBT) and Interpersonal Therapy (IPT) are often-touted techniques that use different methods to arrive at similar therapeutic goals

  (Dennis & Hodnett, 2007)
Psychotherapy

- CBT – focuses on changing flawed, pessimistic beliefs and improving life management skills
  - avoid depression-reinforcing behavior
  - seek out pleasurable activities
  - found effective in the literature
  - limits: time, cost, expertise, patient commitment

- IPT – relates patient problems to one of four situations: role disputes; role transitions; grief; interpersonal deficits
  - encourage insight into relevant stressor; focus on social context
  - "specific, problem-focused, short-term" (Grigoriadis, 2007)
  - intensive five-weekend training for primary care MDs provided via U Toronto seminar
  - limits: time, ineffectiveness in severe cases

(Whool€y & Simon, 2000; Gjerdgingen, 2003; Brody, Thompson, Larson, Ford, Katon, & Macgruder, 1994)

Boundaries of Practice

- Is a primary care NP equipped to venture into the realm of psychotherapy?
- How is a busy primary care NP to incorporate appropriate counseling techniques into care of women with PPD?

The Evidence - improved depression symptoms in a group of primary care patients receiving an abbreviated version of IPT by trained NPs, as compared to an untreated control group. The authors cite other studies that support the benefit of counseling by PCPs in relieving symptoms of distress.

Many distressed patients prefer to counsel with their own providers, rather than tackle the mental health system; such arrangements occur often

(Brody, Thompson, Larson, Ford, Katon, & Macgruder, 1994)
Boundaries of Practice

- "Interventions of this sort are difficult to implement, and require a large investment relative to their impact. IPT requires highly skilled therapists" and there are simply not enough to go around, nor is there sufficient funding to employ many in primary care. (Coyne, 2001)
- Commentary from studies conducted in other countries with nationalized health systems (i.e., Canada, UK), are not entirely applicable to US system (E. Robertson-Blackmore, personal communication, March 24, 2008)
- Agency for Health Care Policy and Research depression guidelines (1993): promote value of psychotherapy; stipulate provision by trained MHP

(Coyne, 2001; Brody, Thompson, Larson, Ford, Katon, & Macgruder, 1994)

Collaborative Model

- Integrated care (PCPs + MHPs) hailed in the literature as effective
- Stepped Care (28):
  - Step One: screen, dx, initial tx in PC setting
  - Step Two: initiate pharmacotherapy, psychotherapy
  - Step Three: consult with specialist for persistent PPD, over two or three sessions
  - Step Four: refer to specialty care for resistant, complicated disorders
- Currently in NIH RCT, with promising results

(Gjerdingen, Katon, & Rich, 2008)
Additional Therapeutic Approaches

- Exercise – Australian studies
  - lack of stigma; freedom from medical setting or financial obligations; may include child (i.e. walking)
- Balanced nutrition
- Hormonal treatment – equivocal evidence
  - drop in estrogen and glucocorticoids after delivery suppresses HPA axis for many weeks – an effect found more severe in women with PPD
  - transdermal estradiol found beneficial for some
- Relaxation techniques
  - Massage therapy decreases cortisol, increases mood-enhancing serotonin and dopamine

(Daley, MacArthur, & Winter, 2007; Kennedy, Beck, & Driscoll, 2002; Gjerdingen, 2003; Field, Hernandez-Reif, Diego, Schanberg, & Kuhn, 2005)

Research Limitations – Compromised Generalizability

- Small sample sizes
- Incomplete detail
- Inconsistent diagnostic criteria
- Inconsistent measurement of PPD/varying scoring cut-offs
- Variations in sampling techniques
- Varying baseline characteristics
- Selection bias
- Failure to randomize
- Unclear allocation methods
- Insufficient power
- Failure to control for confounders
- Insufficient follow-up
- Studies performed in other countries
- Lack of information on maternal perceptions

(Gaynes, Gavin, Meltzer-Brody, Lohr, Swinson, & Gartlehner, et al., 2005; Gjerdingen, 2003; Dennis & Creedy, 2004; Stewart, Robertson, Dennis, & Grace, 2004; Goldsmith, 2007)
Action Steps

- Pediatric NP – Refer mother to PCP if positive screen, or concerns
- For all providers, WHEN IN DOUBT, CONSULT OR REFER! [i.e., cases refractory to trial of meds, as described; all “severe” cases (EPDS >=13; PPDS >=80)]
- In general, NPs are well-suited to provide comprehensive care to women with PPD, screening, treating and referring as appropriate

(Munoz, Agruss, Haeger, & Sivertsen, 2006; Whooley & Simon, 2000)
An Icebreaker: Helpful words, from Provider to Client . . .

- "Many women experience some degree of sadness, anxiety, or other mood changes after the birth of a baby. Many things may contribute to these feelings, and they are understandable. However, I am concerned about the level of sadness and depression that you expressed in your answers to some of the questions on the assessment form . . . This sometimes happens, but not as a result of anything you have done. It is important to talk about exactly how you are feeling, and what to do about it. You do not have to deal with this problem alone. Help is available." (Association of Reproductive Health Professionals, 2006, Quick Reference Guide for Clinicians)

Helpful Tips for Providers

- Acknowledge concern and validate mother’s struggle
- Reassure that treatment is available and that you as her provider are there for her
- Encourage her to share her feelings
- Help her to identify and mobilize support system
- Foster atmosphere of openness

(Association of Reproductive Health Professionals, 2006; Roca, 2005)
Helpful Tips for Moms

- Get plenty of rest. Try to nap when baby sleeps.
- Eat well-balanced meals
- Try to exercise regularly
- Think about joining a support group
- Avoid spending a lot of time alone
- Schedule daily outings as much as possible
- Avoid making any major decisions, or significant life changes during this transitional time
- Give yourself permission to enjoy your new baby, and let partner, family and/or friends help with chores!

(Association of Reproductive Health Professionals, 2006; Roca, 2005)

Acute Diagnostic Skills – A Must

- Cues
  - Frequent visits to PCP
  - complaints of anxiety, insomnia, "fuzzy" thinking
- Differential diagnoses
  - Thyroid disease
  - Anemia
  - Diabetes
  - Viral infections
  - Certain medications (i.e. beta-blockers)
  - Substance abuse
  - Bipolar disorder

(Beck, 2006; Clemmens, Driscoll, & Beck, 2004; Kennedy, Beck, & Driscoll, 2002; Sanders, 2006)
Mental Status Exam Pearls

- Always assess risk of suicide
  - "Have you felt so bad that it seems life is not worth living?"
  - **IMMEDIATE EMERGENT CARE**
- Is she dressed appropriately for the weather?
- Is there adequate hygiene? Is she cooperative or hostile?
- Is she agitated, apathetic or anxious?
- How is her speech pattern?
- Does mood coincide with affect?
- Is there evidence of delusions or hallucinations?
- Is level of attention, memory, insight, and judgment appropriate?
- Is there evidence suggestive of BPD (warranting referral), such as grandiosity, flight of ideas, or extreme agitation?

(From Sanders, 2006)

Teamwork

- Establish an interdisciplinary team of care, wherever possible
- Keep a resource file: support groups; local MHPs; community based programs; helpful websites, etc.
- Collect a "database" of teaching tools
- Attend relevant grand rounds, network, read, research. It makes a difference!
  (Scandinavian study)

(From Kennedy, Beck, & Driscoll, 2002; Munoz, Agruss, Haeger, & Sivertsen, 2006; Sanders, 2006)
Web-based Education

- MedEDPPD http://www.mededppd.org/

Practical Guidelines: Prescribing

- Keep apprised of the latest in medications, formulary changes, and FDA news
- Refer more acute cases (i.e., refractory to meds; screening scores above cut-offs; risk of harm) to MHCs
- First consider any agent used effectively in the past
- Weigh with mother risks/benefits
- Sertraline (zoloft) – first-line
- SSRI SEs: agitation; GI symptoms; insomnia; nausea; decreased libido; and inorgasmia in some. Usually diminish by one month.

(Sanders, 2006; Kennedy, Beck, & Driscoll, 2002; Munoz, Agruss, Haeger, & Sivertsen, 2006; Gjerdingen, 2003; Whooley & Simon, 2000)
Practical Guidelines: Prescribing

- SSRIs peak in BM 7-9 hrs. after ingestion; BF moms may wish to time dosing accordingly
- Note baseline infant behavior (eating, sleeping, activity patterns); look for any changes (sedation, weight gain, progress against developmental milestones)
- Start on lowest dose and titrate up slowly; maintain on lowest dose possible
- Increase dose after four weeks, if no improvement
- If still no improvement, or intolerable SEs develop, may trial other med
- No need for a waiting period when switching from one SSRI to another
- Full effect may not be realized until six to eight weeks
- Continue until at least six months after initial episode subsides
- Gradually taper med when time to D/C

(Kennedy, Beck, & Driscoll, 2002; Sanders, 2006; Whooley & Simon, 2000; Gjerdingen, Katon, & Rich, 2008)

Practical Guidelines – Counseling

- Patient education - the underpinning
- Validation, reassurance – key elements
- Empower to share in treatment decisions
- Encourage to maximize pleasurable opportunities. “Was there anything you did recently that made you feel even a little bit better?” Draw up a contract.
- Offer supportive listening, with empathetic statements. “I can understand why you might feel this way;” “I hear you when you say that these are stressful times.”

(Brody, Thompson, Larson, Ford, Katon, & Macgruder, 1994)
Practical Guidelines – Counseling

- Distill problems into “bite-sized” tasks to maximize sense of control
- Give permission to relax standards
- Help discover the new “normal”
- Schedule regular follow-up. Ask for recount of depressive symptoms, activity level. “Have you modified negative thoughts?” “Have you taken steps to solve some larger problems?”
- Develop mindfulness techniques

(Brody, Thompson, Larson, Ford, Katon, & Macgruder, 1994)

Cultural Competence

- Speak slowly and directly to the patient rather than to the interpreter
- Use short sentences and normal tone of voice
- Avoid idioms
- Ask patient what illness means to her and any current treatment in use
- Provide treatment instructions in writing
- Have patient repeat instructions in her own words (p. 9).
- For many African Americans and Latin Americans religion (as with many others) is often prominent. To “God will heal me,” offered by the patient, a provider may reply, “God would want you to feel good so you can care for your baby.”
- Avoid initial labeling of the disorder

(Wiedmann & Garfield, 2007)
Current Initiatives

- 2001 – NIMH Maternal Depression Roundtable revealed concerns around dearth of research
- USDHHS has established tackling PPD as national health priority
- Innovative state programs (IL, NJ)
- Melanie Blocker Stokes Act

(Sanders, 2006; Summers & Logsdon, 2005; Sobey, 2002)

Research Recommendations

- Need for consensus around definitions
- Quantification of provider burden and patient acceptability
- RCTs to steer protocol regarding optimal screening tool, time and place to screen, and subsequent treatment modalities

(Gaynes, Gavin, Meltzer-Brody, Lohr, Swinson, & Gartlehner et al., 2005; Stewart, Robertson, Dennis, & Grace, 2004)
APNs - Up to the Task!

- A time to let APNs' unique competencies shine!
- Using EBP techniques, acting as change agents, APNs are uniquely positioned to bring their holistic perspective to the place of PPD suffering, and help to advance understanding of this disorder, as a valid and treatable illness, and create a culture where suffering women receive early and effective intervention, rather than ambivalence or stigma.
Appendix B

PPD RESOURCES

WEBSITES

www.depressionafterdelivery.com - organized primarily around general depression information

www.postpartum.net - URL for Postpartum Support International. Very comprehensive. List of relevant books, links to regional support, resources and events, legislative updates, PSI local coordinators (Laursaf@aol.com for Upstate NY; no support group listed here for Rochester area).

www.nlm.nih.gov/medlineplus/postpartumdepression.html - Medline index of overview, treatment, clinical trials, journal articles. Open clinical trials in recruitment at:
http://clinicaltrials.gov/search/opencondition=Depression&Postpartum

PPD Action Plan at:

www.postpartumstress.com - very comprehensive, hosted by The Postpartum Stress Center. Offers consultation for clinicians, as well as an eight hour post-gra training program. Links to PPD in the media. Helpful brochure with tips for talking to the doctor, and other informative articles.

www.postpartumprogress.typepad.com - excellent blog; one of top ten such blogs

www.mentalhealth.samhsa.gov/databases - identifies local mental health services

www.nimh.nih.gov - helpful information for providers on general depression, current clinical trials listing. link to NIMH primer: Depression: What Every Woman Should Know

www.postpartumdads.org - dads touched by PPD share their stories

www.mededppd.org - PPD education, videos with patient testimonials and providers answering common questions

URL for article with PPD Management Protocol Featured in Presentation:
http://www.aafp.org/pdfs/MaternalDepression.pdf

- Local Suicide Crisis Telephone Number – Lifeline: 585-275-5151

BOOKS


TOOLS

EDINBURGH POSTNATAL DEPRESSION SCALE –
www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf

POSTPARTUM DEPRESSION SCREENING SCALE – order from:

PATIENT HEALTH QUESTIONNAIRE-9 – www.americangeriatrics.org/education/dep_tool_05.pdf
Appendix C

THE NURSE PRACTITIONER ASSOCIATION
NEW YORK STATE,
GREATER ROCHESTER CHAPTER (NPAGR)

Postpartum Depression: A Primer for Screening and Management in Primary Care

Presented by:

Lynne Weiler, RN, MPH,
FNP student, Wegmans School of Nursing &

Myrna Hill, MHC, Rochester Psychological Associates.

Monday July 28, 2008
4:30pm -5:30pm

Wegmans School of Nursing
Room 101
St. John Fisher College

Light refreshments will be served
1.0 hours of CE credit are pending for this presentation.

Send check before 7/24/08 to: NPAGR

c/o Alyce Ferrarrese
324 Paddy Hill Drive
Rochester, NY 14616

If any questions, contact:
Nancy Brinkwart (585) 395-2414 (Work)
or e-mail:
nbrinkwa@brockport.edu

Registration –Postpartum Depression: Make check payable to "NPAGR." Do not send cash.

Name ____________________________________________
Specialty/Practice area ________________________________
Address ___________________________________________
Phone ____________________________________________ E-Mail ________________________________
Members for presentation: $5 ________
Non-members for presentation: $10 ________
Payment for CE credit: $5 ________
Total Enclosed: $ ________
Appendix D

NPA Evaluation Form

SPEAKER EVALUATION FORM

Title of Presentation: Postpartum Depression: A Primer for Screening and Management in Primary Care

Speaker Name: Lynne Weiler MPH

Please complete this evaluation form by using the scale to rate the following:

<table>
<thead>
<tr>
<th>4 = Agree</th>
<th>3 = Somewhat Agree</th>
<th>2 = Disagree Somewhat</th>
<th>1 = Disagree</th>
</tr>
</thead>
</table>

To what extent did the presenter address each objective? (each object must be listed)

1. Epidemiology and Significance of PPD
   - Rating: 4 3 2 1

2. Assess for PPD by identification of symptoms and Differential Diagnosis
   - Rating: 4 3 2 1

3. Recognition of PPD Screening Tools
   - Rating: 4 3 2 1

4. Discuss Treatment Options
   - Rating: 4 3 2 1

5. Decision Tree for Management of PPD
   - Rating: 4 3 2 1

6. Understanding when to refer to a Mental Health Provider
   - Rating: 4 3 2 1

5. Did the presentation meet your expectations? Yes No

6. Was the information and or data current? Yes No

7. Was the information and or data accurate? Yes No

If no please explain:

Other comments or suggestions:

Revised 2/2007
Appendix E

Results from NPA Survey

SPEAKER EVALUATION FORM

Title of Presentation: Postpartum Depression: A Primer for Screening and Management in Primary Care
Speaker Name: Lynne Weiler, RN, MPH, FNP

Please complete this evaluation form by using the scale to rate the following:

<table>
<thead>
<tr>
<th>4 = Agree</th>
<th>3 = Somewhat Agree</th>
<th>2 = Disagree Somewhat</th>
<th>1 = Disagree</th>
</tr>
</thead>
</table>

1. To what extent did the presenter address each objective? (each objective must be listed)

   A. Describe the epidemiology and clinical presentation of postpartum depression 4.0
   B. Describe assessment of PPD by identified symptoms and differential diagnosis including PPD screening tools 4.0
   C. Discuss management strategies including treatment Decision tree, treatment options and referral 4.0

2. To what extent was the speaker for this session knowledgeable, organized and effective in their presentation? 4.0

3. Were the speaker's teaching methods and aids used appropriately and effectively? 4.0

4. Did the presentation meet your expectations? Yes
   Much better!

5. Was the information and/or data current? Yes

6. Was the information and/or data accurate? Yes

If no please explain:

Other comments or suggestions:
Very professional presentation. More presenters should have the knowledge base that Lynne shared! Excellent! (x2).
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you learn new information from this presentation?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>2. How often do you see women at risk for postpartum depression in your practice?</td>
<td>Daily, Weekly, Monthly, Once or twice, Never a year</td>
</tr>
<tr>
<td>3. Given the opportunity, do you anticipate applying any of the principles you learned in this module to your own practice?</td>
<td>Yes, No, Unsure, Not Applicable</td>
</tr>
<tr>
<td>4. Are there any changes you intend to make in your practice as a result of listening to this podcast, i.e. choosing a different screening tool, incorporating a treatment strategy discussed, etc.?</td>
<td>Yes, No, Unsure, Not Applicable</td>
</tr>
<tr>
<td>5. Was this module organized and presented effectively?</td>
<td>Yes, No</td>
</tr>
</tbody>
</table>
Appendix G

Evaluation Form Results – NPA Survey

<table>
<thead>
<tr>
<th>Objective Met? (Describe epidemiology and clinical presentation of PPD)</th>
<th>Objective Met? (Identify symptoms and differentials)</th>
<th>Objective Met? (Understand management strategies)</th>
<th>Speaker knowledgeable, organized and effective?</th>
<th>Teaching methods appropriate and effective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score: 1=Disagree 2=Disagree Somewhat 3=Somewhat agree 4=Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

Treatment Algorithm – Reprinted with permission from Dr. Laura Miller, U of Illinois at Chicago

![Treatment Algorithm](image)

**Figure 2** Sample Algorithm for Care According to the “Screen and Treat” Model (Onsite Treatment) of Maternal Depression.

Legend:  
MDO= Mood Disorder Questionnaire (screen for bipolar disorder);  
MDD= major depressive disorder.

Source: Women's Mental Health Program, University of Illinois at Chicago.
## APPENDIX

### PRIME-MD Patient Health Questionnaire (PHQ-9)

**Patient Name:**

**Date:**

1. Over the last 2 weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Problem Description</th>
<th>Not at all 0</th>
<th>Several days 1</th>
<th>More than half the days 2</th>
<th>Nearly every day 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Trouble falling/staying asleep, sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Feeling tired or having little energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Poor appetite or overeating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Moving or speaking so slowly that other people have noticed, or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If you checked off any problem on this questionnaire so far, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

<table>
<thead>
<tr>
<th>Difficulty Level</th>
<th>Not difficult at all</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
<th>Extremely difficult</th>
</tr>
</thead>
</table>

This questionnaire may be photocopied for use in the physician office. Copyright Pfizer.

**Instructions—How to score PHQ-9**

**Major Depressive Syndrome is suggested if:**

- Of the 9 items, 5 or more are checked as at least "More than half the days"
- Either item #1 or #2 is positive, that is, at least "More than half the days"

**Other Depressive Syndrome is suggested if:**

- Of the 9 items, 2, 3, or 4 are checked as at least "More than half the days"
- Either item #1 or #2 is positive, that is, at least "More than half the days"

**Guide for Interpreting PHQ-9 Scores**

<table>
<thead>
<tr>
<th>Score</th>
<th>Action</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 4</td>
<td>The score suggests the patient may not need depression treatment.</td>
<td></td>
</tr>
<tr>
<td>≥5-14</td>
<td>Physician uses clinical judgment about treatment, based on patient’s duration of symptoms and functional impairment.</td>
<td></td>
</tr>
<tr>
<td>≥15</td>
<td>Warrants treatment for depression, using antidepressant, psychotherapy, or a combination of treatment.</td>
<td></td>
</tr>
</tbody>
</table>