POSTPARTUM DEPRESSION: AN EDUCATIONAL MODULE FOR HEALTH CARE PROVIDERS

By

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STATEMENT BY THE AUTHOR

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ABSTRACT

Postpartum depression (PPD) is a well-recognized public health problem with a predictable onset beginning after childbirth and lasting from 3 to 14 months. Studies consistently report that cases of PPD are not identified and treated which results in serious personal, family, and social consequences (Webster et al., 2000). Therefore, it is of great importance that this disorder be diagnosed and treated early to prevent these deleterious consequences. The reported prevalence for PPD ranges from 3.5% to 33% depending upon assessment criteria used (Whifen as cited in Evins et al., 2000).

The purpose of this clinical project was to review the literature in order to identify those factors that prevent postpartum depression from being identified and treated. A critique of the literature led to assessing one commonly used screening tool and to proposing strategies to increase early diagnosis and treatment. Not a single article reported PPD as being identified and treated, and this resulted in the development of an education module for health care providers.

A suggestion for future educational modules includes targeting women in their reproductive years, as well as the community. The goal of these educational modules would be to increase awareness of PPD risk factors, screening, and treatment strategies to avoid women and their families from suffering from PPD sequelae.
CHAPTER 1

Introduction

Postpartum depression (PPD) is a well-recognized public health problem with a predictable onset beginning after childbirth (Lumley & Austin, 2001; Evins, Theofrastous, & Galvin, 2000). It is a highly treatable condition and is not a new syndrome. It has been reported as far back as Hippocrates in 400 B.C. and Tortula in the first century of the Common Era (Newport, Hostetter, Arnold, & Stowe, 2002). Galen, Marce’ and Celsus have written about the emotional disturbances experienced by women following childbirth (Postpartum Support International, n.d.). In spite of that, identification and treatment still remain sporadic (Webster, Linnane, Dibley, & Pritchard, 2000; Georgiopoulous, Bryan, Yawn, Houston, Rummans, & Therneau, 1999). Studies consistently report that cases of PPD are not identified and treated; this results in serious personal, family, and social consequences (Webster et al.; Georgiopoulous et al.).

Improvement in the direction of identification and treatment has been slow (Newport et al., 2002; Webster et al., 2000). National organizations and media highlight the magnitude of PPD to society. New Jersey’s legislative reform is developing an awareness campaign to inform the public of the vulnerability to the development of affective mood disorders (Newport et al.). The most recent reporting by the media in June, 2001, was of Andrea Yates, a mother of five who murdered her children by drowning (Kennedy & Suttenfield, 2001; Munro, 2001.) The trial and sentencing of this case increased the public's awareness of mood disorders during the postpartum period. Repercussions from this notorious case may include heightened public awareness and could lead to better recognition with early intervention.
The term 'postpartum depression' implies a range of diseases that includes maternity blues, postpartum depression, and postpartum psychosis (Appendix A). For the purposes of this paper, the focus will be on postpartum depression, not either the blues or the psychosis extremes of this mood disorder that can occur during the postpartum period.

There are many reasons PPD is not identified and treated. One is that health care providers do not recognize those at risk (Kennedy & Suttenfield, 2001; Webster et al., 2000). Epperson (1999) named four reasons why PPD goes unrecognized, including the under diagnosis by health care providers. The first reason is new mothers are not cognizant of normal vs. abnormal feelings; they recognize and expect changes postpartum yet can't distinguish abnormality. Sometimes these new mothers credit their feelings to adjustment rather than depression (Epperson). The similarities between postpartum depression and the normal sequelae of childbirth frequently make it difficult to distinguish between them. As well, symptoms of depression, including sleep disturbances (insomnia or hypersomnia), weight loss, loss of energy, and diminished concentration or indecisiveness, are symptoms normally attributed to postpartum (Epperson). The only way to distinguish PPD from normal postpartum is to assess degree.

The second reason PPD is unrecognized is due to societal pressures to be well adjusted. With this mindset, women are reluctant to report negative feelings or problems, because they do not wish to be labeled maladjusted (Epperson, 1999). The extreme result of societal pressures can be that women fear their child will be taken away if they report
negative feelings to a health care provider, have emotional problems, or even ask for help of an authority figure (Epperson).

Third, mothers without access to health care have no way to report signs and symptoms or disturbed feelings (Epperson, 1999). These disturbed feelings include anger, guilt, being overwhelmed, anxiety, and loneliness (Beck, 2002). The most common access to health care for new mothers is through their pediatricians, but these providers are concerned with the health and welfare of the new babies only. The traditional 6-week postpartum visit may be the only time new mothers can report disturbed feelings including depressive. If this opportunity is missed, the next scheduled appointment might not be until one year later (Epperson).

Finally, Epperson (1999) theorized that new mothers sometimes misconstrue the reassurance offered by health care providers to mean their depressive symptomology is normal. This may be accentuated by the demands of managed care that limits time to care for patients and their needs. Even the most observant or psychologically astute clinicians can overlook issues due to time constraints. Time limitations force even the most caring providers to focus on concerns other than psychological issues (Epperson).

Under diagnosis of PPD can be categorized as, a) lack of equality between the mental and physical health services; b) lack of awareness by the public of the seriousness of PPD, c) lack of identification by providers, and d) the stigma attached to PPD (Kennedy & Suttenfield, 2001). Researchers, reviewers, and summary publications in the women's health literature addressed these broad themes. Most authorities name one or all of these themes when discussing the problem of PPD identification.
Statement of the Problem

Most cases of PPD go unidentified and untreated. PPD can have many adverse personal, family, and social consequences. It can affect the mother’s relationships and the child’s behavior and development. Jacobsen (cited in Miller, 2002) reported that unidentified and untreated PPD could be a precursor of recurrent depression. PPD may render the mother unable to work outside the home resulting in financial consequences for the family. The woman’s significant other may have to take a leave from their job to care for the mother and family (Richards, 1990).

For her children, a mother’s ongoing depression can contribute to emotional, behavioral, cognitive, and interpersonal problems later in life. The child may experience a higher risk of accidents, sudden infant death syndrome, and increased hospital admission (Forman, Videbech, Hedegaard, Salvig, & Secher, 2000). Five to twenty percent of women experience PPD with the highest rates among adolescent mothers (as high as 26%)(Kennedy & Suttenfield, 2001; Armstrong, 1996; Nalepka & Coblentz, 1995). Only a small fraction of these are identified and treated (Newport et al., 2002; Beck, 1995).

Statement of the Purpose

The purpose of this clinical project was to design an educational module for health care providers that incorporated: 1) reasons to identify PPD early; 2) reasons PPD is not identified; 3) PPD risk factors; 4) the most commonly used screening instrument, the Edinburgh Postnatal Depression Scale (EPDS); and 5) administration of the EPDS.
Significance to Health Care

Postpartum depression may influence the use of health care services by affected women. Previous studies outline the impact of PPD on women, children, and family relationships (Nonacs & Cohen, 2002; Beck, 1996; Bewley, 1999; Poustie & Drumm, 1997). Although undocumented, PPD may necessitate increased delivery of services to affected women and their families. Mental health coverage by insurers lags behind that for physical illnesses; PPD may further burden the system long term, as undiagnosed and untreated cases may develop into chronically depressed individuals in need of long term care. Some researchers have noted that depressed individuals require more health services, and they are less productive members in society (Nonacs & Cohen; Beck, 1999; Bewley). This has economic implications for individuals, families, and communities. Children of mothers with PPD may have educational and social problems that impact schools, public services, and families. These, too, have economic implications for society at large.

Whifen’s research (cited in Evins et al., 2000) revealed the reported prevalence for PPD ranges from 3.5% to 33% depending upon assessment criteria used. Earlier research reported the prevalence of PPD is similar to the prevalence of depression in the general population of women (Cox, Murray, & Chapman, 1993). However, up to 50% of PPD cases go undetected (Beck & Gable, 2001; The New York Times [cited in Miller, 2002]; & The Chicago Tribune [cited in Miller]). Undetected and untreated PPD can lead to chronic depression with immeasurable social and economic outcomes.

PPD has recently caught the attention of the American public through high profile cases. Three cases of homicide and suicide were reported in May and June 2001, all
involving women who had severe PPD and psychosis (Kennedy & Suttenfield, 2001). Of these three cases, Andrea Yates was the most notorious. Andrea was a mother of five, a wife, a sister, and a daughter who, in June 2001, murdered her five children by drowning them one at a time in her bathtub at home (Kennedy & Suttenfield; Munro, 2001).

Andrea was not someone, described by those who knew her, who would have committed such a horrific act, especially to her children. She was reported to have been a great mother, a caring parent, someone who would have given her life for her children (Munro). Andrea developed a mood disorder after the birth of her fourth child, was treated with antidepressants; and after the birth of her fifth child, her mood disorder worsened. Evins et al. (2000) reported that women with a history of postpartum depression have a 50% risk of recurrence.

Early identification and treatment of PPD can prevent many years of suffering for a new mother and reduce the potentially adverse impact on her infant (Nonacs & Cohen, 2002). PPD is usually associated with interpersonal difficulties and difficulties in mother-child interactions affecting infant development (Nonacs & Cohen). Recent research revealed that children of depressed mothers often develop behavioral problems and display trouble in cognitive and emotional development (Nonacs & Cohen). More than 40 years of clinical and laboratory animal research have repeatedly confirmed the previous results that maternal mental illness, maternal separation, and maternal stress pose a negative effect upon children’s social and cognitive development (Newport et al., 2002).
Significance to Nursing

Nurses are in the best position to screen women for PPD and to alert women of signs and symptoms that signal depression. They may be the best individuals to administer screening instruments during prenatal visits or at postpartum visits. And they may be the primary source of information for women who have issues and concerns related to mood state. Nurses in advanced practice, primarily nurse practitioners (APNs) may have the sole responsibility for assessing postpartum women in many women’s health settings, so it is essential for them to understand and identify dangers signs for PPD.

The primary role of APNs is in health promotion and disease prevention. APNs are able to do health promotion and disease prevention with women who are in their childbearing years. APNs are able to screen for risk factors of PPD during the prenatal and postpartum periods. Research demonstrated that screening during the antenatal period and providing women with support at that time may prevent postnatal depression (Ward, 1999).

Another aspect to health promotion and disease prevention is education. APNs can educate women and their families about the signs and symptoms of PPD, thus, aid in preventing adverse events that otherwise may ensue when PPD is unrecognized or untreated (Miller, 2000).

The components of a therapeutic provider-patient relationship include respect, trust, and caring (Buttar, Trybulski, Bailey, & Sandberg-Cook, 1999). APNs are known to be caring and to develop trustworthy relationships with their patients. Women with signs and symptoms associated with affective mood disorders may have less difficulty
sharing those signs and symptoms with APNs who are open and nonjudgmental about mental health issues. Embarrassment and apprehension have traditionally prevented women from revealing depressive symptoms (Epperson, 1999). As well, NPs educated in mental health issues can pick up clues from women that might go unrecognized by others. Both visual and verbal clues assist in early detection, but only if the clinician is aware of them (Holden, 1996). With a therapeutic relationship established between the woman and the NP, identification of PPD could be improved.

Summary

PPD is under diagnosed and under treated. The impact that this mood disorder has on personal, family, and social consequences is tremendous. It can affect the mother’s relationship with her child as well as the child’s behavior and development. The woman may be so overcome with depression that she is unable to work outside the home resulting in financial consequences for the family. Therefore, it is of great importance that this disorder be diagnosed and treated early to prevent these dreadful consequences.

The purpose of this project was develop an educational module for health care providers that incorporated reasons to identify PPD early; reasons PPD is not identified; PPD risk factors; the most commonly used screening instrument, the Edinburgh Postnatal Depression Scale (EPDS); and administration of the EPDS. to review the literature in order to identify those factors that prevent postpartum depression from being diagnosed and treated. The identification of these factors can facilitate

PPD has significance to both nursing and the community. As previously mentioned, PPD impacts personal, family, and social relationships possibly resulting in
increased delivery of health care services. This increase in the need for health services may further burden the system that is already burdened and not meeting the needs of individuals seeking services.

The next chapter will focus on the theoretical framework for this project and review of pertinent literature. Discussion will include risk factors of PPD, PPD sequelae and the most commonly used PPD screening instrument.
CHAPTER 2

Introduction

In this chapter, The Health Promotion Model (HPM) will be discussed, which was used as the theoretical framework for this clinical project. Nora J. Pender initially proposed the Health Promotion Model (HPM) as a guide for increasing health-promoting behaviors (Pender, 1996). The author of this paper focused on selected elements of the HPM to frame this project. Those selected elements provided a framework for this project, and variables related to PPD were placed into the framework. Additionally, a review of literature will be presented on the risk factors, interventions, and behavioral outcomes of PPD.

Theoretical Framework

Nora J. Pender initially proposed the HPM model in the early 1980’s as a framework, which reflects on both the nursing and the behavioral science perspectives about factors that have an impact on health-promoting behaviors (Pender, 1996). The revised version of the HPM was adapted to fit the variables of this clinical project.

The assumptions of the HPM, which combine both nursing and behavioral science perspectives, stress that the individual is an active participant in influencing and maintaining health behaviors and in adapting the environmental milieu for health-promoting behaviors (Pender, 1996).

The three main constructs of the HPM are individual characteristics and experiences, behavior-specific cognitions and affect, and behavioral outcomes (Pender, 1996). Interaction between the individual characteristics and experiences and the behavior-specific cognitions and affect create behavioral outcomes (health-promotion...
behavior). The end result of health-promoting behaviors should include increased health, improved functional capability, and improved quality of life that interact in the development of each individual, the objective of the HPM. Figure 1 illustrates the relationships between these main constructs (Pender).

This clinical project focused on the individual characteristics and experiences, one of the constructs of the HPM that either places a woman at risk for PPD or are signs and symptoms of the presence of PPD, however, to accommodate this project, renamed individual characteristics and experiences "identification of risk factors." Figure 2 illustrates the revisions made to the HPM. A focus on identification of risk factors is the first step in a trajectory of diagnosis, intervention, and outcomes that the HPM outlines. For this project, prior related behavior and personal factors (biological, psychological, and sociocultural elements) included family history as a means to identify risk and presence of PPD. Screening instruments for PPD included assessment of prior related behavior and personal factors. When to administer screening for PPD is discussed in the literature review section. Time of screening in the pregnancy trajectory has impact on interventions selected and utilized, which ultimately affects outcome. A focus on interventions and outcome was beyond the scope of this project.
FIGURE 1. Health Promotion Model (Pender, 1996).
FIGURE 2. Revised Health Promotion Model (Pender, 1996).
Review of the Literature

Risk Factors of PPD

The etiology of PPD is unknown but has been hypothesized to be either a consequence of changes associated with postpartum or postpartum changes that aggravate an existing mood disorder. Armstrong (1996) categorized PPD risk factors of into three categories: predisposing factors, precipitating factors, and maintaining factors. Each of the three factors had a biological, social, and psychological component (Armstrong).

Beck (1998) meta-analysis of literature on PPD identified the following as risk factors for PPD: prenatal depression, child care stress, life stress, lack of social support, prenatal anxiety, maternity blues, marital dissatisfaction, and history of previous depression (Beck, 1998). The strongest predictor for developing PPD was depression during pregnancy while a previous bout with depression was the least predictor for developing PPD in the risk factors identified (Beck, 1998).

Forman et al. (2000) conducted a community-based, prospective follow-up study of Danish speaking women (n=6790) from December 1993 to March 1996. They utilized the Edinburgh Postnatal Depression Scale (EPDS) and reported similar risk factors for PPD to those of Beck (1998).

Risk factors identified in Deaves’ study (2001) included unemployment, single parenting, relationship problems, physical or chronic disease, and housing problems. Unemployment was the largest risk factor for developing PPD while housing problems was the least factor. The main purpose of this study (n=78) was to evaluate the use of the EPDS prenatally to predict those women who could develop PPD with known identified risk factors.
Webster et al. (2000) also identified similar risk factors associated with PPD: low social support, personal history of mood disorder, and past history of PPD. Their study was a prospective, hospital-based, cohort study (n=901) in which depression was screened at 16 weeks postpartum using the EPDS. They reported that an objective, psychosocial assessment in the prenatal period improves detection of women at risk for developing PPD (Webster et al.).

Risk factors not already mentioned include family history of depression, unplanned or unwanted pregnancy, and neonatal infant medical problems (Newport et al., 2002; Straub et al., 1998).

PPD Sequelae

PPD leads to interpersonal problems, disruptions in mother-child relationships and attachment producing negative influence on infant development (Nonacs & Cohen, 2002). Recent studies reported that children of depressed mothers were probably going to have behavioral problems and have trouble in cognitive and emotional development (Nonacs & Cohen). More than 40 years of clinical and laboratory animal research have repeatedly confirmed that maternal mental illness, maternal separation, and maternal stress posed a negative effect upon social and cognitive development in children (Newport et al., 2002).

Beck conducted 2 studies (2002; 1996) in which a total of 13 themes emerged: The mothers were unable to bond with their child as well as not able to have any feelings of joy; some mothers chose not to be emotionally and physically connected to their children, and occasionally they were afraid they might harm their children because of unmanageable anger they felt toward their children; they were not able to respond to their
infants' cues because they had no desire to interact with their children plagued by over sensitivity to stimuli; they were constantly having irrational thoughts and guilty feelings when interacting with their children and were terrified that they would not be able to cope; the mothers felt that detrimental relationships with their older children were emerging; they experienced feelings of loss as they focused on their relationships with their children; and the mothers tried to put their children’s needs above their needs with hopes of decreasing the negative effects of PPD; the women became disillusioned with motherhood and felt that they were not able to live up to the expectations of the perfect mother. Together these factors portray a grave negative effect of PPD on mothers and their children.

Beck’s two phenomenological studies (1996; 1992) identified similar themes. The 1996 study focused on PPD sequelae and how the mothers’ minds and bodies hindered them from connecting with their infants or experiencing joy. Themes suggested unbearable loneliness, obsessive thoughts, loss of self, suffocating guilt, cognitive impairment, loss of previous interests and goals, uncontrollable anxiety, insecurity, loss of control of emotions, loss of all positive emotions, and contemplation of death.

O’Hara and Swain (cited in Beck, 1999) posited a description of what a woman experiencing PPD would be like:

“She is most likely to occupy a lower stratum but women representing the middle and upper social strata will also be abundantly represented. She is very likely to have life stressors during pregnancy and may have had a more difficult than normal pregnancy or delivery. She will be experiencing marital difficulties and experience her partner as providing little in the way of social support.
Compounding the life she is experiencing and her poor marital relationship will be her perception that others in her social network are not particularly supportive of her. Finally, her history will show evidence of psychopathology, in most cases major depression or dysthymia, and she will show evidence of being at least mildly depressed and anxious, and excessively worried” (p. 42).

In summary, all studies reviewed credit PPD for interpersonal problems for the mother and resultant negative effects on infants and other children. Together these effects lead to enormous burden on families, communities, and health care. One way to combat the enormity of this phenomenon is to predict and detect PPD early enough to circumvent the consequences. Research studies reviewed utilized a number of screening instruments for PPD, but the most commonly utilized one will be reviewed here.

**PPD Screening Instrument**

Many screening instruments are available for identifying women at risk for developing PPD. However, to date, the EPDS is the only instrument that has been developed specifically to screen for PPD. Researched literature revealed the EPDS as the most commonly used PPD screening instrument.

Boath & Henshaw (2001) conducted a review of literature of 31 articles on the treatment modalities of PPD from various countries throughout the world published between 1964 and 2000. The countries where studies were conducted were the United Kingdom (12), the United States (10), Australia (2), Canada (2), Italy (1), Switzerland (1), Sweden (1), Finland (1), and England (1). Many screening instruments were utilized in these studies, but the predominant one was the EPDS. It was used in 12 of the 31 studies.
John Cox, a psychiatrist from the United Kingdom, pioneered the widely used EPDS specifically for use with PPD identification (Cox, Holden, and Sagovsky, 1987). It is a 10-item self-report scale, specifically validated for childbearing women, that only takes a few minutes to complete (Cox, Murray, & Chapman, 1993). It has been translated into 20 different languages (Cox et al., 1993). It uses a Likert-type format for responses with most items being reverse scored (items #3, 5, 6, 7, 8, 9, 10). The mother selects one of four possible responses closest to how she has felt within the past 7 days. Each item is rated on a scale of 0 to 3, and the total score range is 0 to 30 (Cox et al., 1987). Higher scores suggest PPD. A cut-off score of 12 or greater provides the best diagnostic sensitivity and specificity for PPD based on most developed world studies (Cox et al., 1987). Using the cut-off score of 12 or greater, sensitivity values were 86% (n=30). Sensitivity is defined as the ability of the EPDS to identify correctly all screened women who actually had postpartum depression (e.g., true positive rate) (Beck & Gable, 2000).

Using the cut-off score of 12 or greater, specificity was rated at 78% (n=38). Specificity is defined as the ability of the EPDS to identify correctly all screened women who were not depressed (e.g., true negative rate) (Beck & Gable, 2000).

Positive predictive value (PPV) was not calculated in this study, but is rated in other studies (see Table 1). Positive predictive value is the percentage of women identified as depressed who are truly depressed (Seeley, 2001).

The validity of the EPDS was established on 84 mothers living in Edinburgh or at Livingston. Table 1 illustrates a summary of validation studies done by different researchers.
Table 1

Summary of Validation Studies on the EPDS

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Timing</th>
<th>Validating</th>
<th>Cut point</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>NPV</th>
</tr>
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<tr>
<td>Cox et al 1987</td>
<td>6 wk</td>
<td>SPI</td>
<td>12/13</td>
<td>86.0</td>
<td>78.0</td>
<td>73.0</td>
</tr>
<tr>
<td>Murray 1988/90</td>
<td>28-34 wks gestation</td>
<td>SPI</td>
<td>9/10</td>
<td>79.0</td>
<td>64.0</td>
<td>-</td>
</tr>
<tr>
<td>Harris 1989</td>
<td>6-8 wk postpartum</td>
<td>DSM III</td>
<td>12/13</td>
<td>95.0</td>
<td>93.0</td>
<td>-</td>
</tr>
<tr>
<td>Murray &amp; Carrothers 1990</td>
<td>6 wk postpartum</td>
<td>SPI</td>
<td>9/10</td>
<td>86.7</td>
<td>82.3</td>
<td>33.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10/11</td>
<td>80.3</td>
<td>88.3</td>
<td>48.9</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>12/13</td>
<td>64.1</td>
<td>95.6</td>
<td>67.0</td>
</tr>
<tr>
<td>Thorpe 1990</td>
<td>18 m</td>
<td>PSE</td>
<td>9/10</td>
<td>100.0</td>
<td>85.0</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12/13</td>
<td>57.0</td>
<td>82.0</td>
<td>100.0</td>
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Note. From “Principal self-completion psychosocial measures employed in the study of parents,” by The European Longitudinal Study of Pregnancy and Childhood Protocol Appendix Psychological Measures” (n.d.).

Symptoms of depression included in the EPDS are the inability to laugh, inability to look forward to things with enjoyment, unnecessary blaming of oneself, anxiety or worried feelings, scared or panicky feelings, a feeling that things have been getting on top of me, difficulty sleeping due to unhappiness, sad or miserable feelings, crying, and thoughts of harming oneself (Beck & Gable, 2000).

The PPD literature that reported use of the EPDS for PPD screening includes women from a variety of diverse cultures. Although the preponderance of this literature
originates from the United Kingdom, several studies were conducted in the United States, Europe, Asia, and Arabia.

The EPDS was used to screen for PPD in a mental health facility in the United Kingdom. Results revealed an 89% reduction in hospital admissions and an 87% reduction in community psychiatric nurse referrals between 1994 and 1997 (Ward, 1999). The women were screened at 3 different intervals: 5 to 8 weeks, 10 to 14 weeks, and 20 to 26 weeks following childbirth. This screening process proposed by Elliott, Gerard, and Holden (cited in Ward) was an algorithm with recommendations after each screening interval depending upon the score of the EPDS.

Georgiopoulous et al. (1999) conducted a study in Minnesota, which used the EPDS to determine the prevalence of postpartum depression. The sample size was 909 women and included those who gave birth between July 1997 and March 1998. The results revealed that 11% of the women were identified as having PPD. Screening for PPD did not require much time, and that “the EPDS is a sensitive and specific screening tool supported by excellent previous validation and extensive clinical use worldwide” (Georgiopoulous et al., p. 657).

Eberhard-Gran, Eskild, Tambs, Opjordsmoen, and Samuelson (2002) reviewed 18 studies using the EPDS from 1987 to 2000. The conclusion was the EPDS is a useful instrument for detection of women with PPD in a clinical setting (Eberhard-Gran et al.).

Fergerson, Jamieson, and Lindsay (2002) compared the efficacy of the EPDS to routine clinical evaluation in identifying women with PPD. Seventy-two women participated in the study, all English-speaking who lived in the south in a low-income inner-city population. Thirty-five women were in the routine clinical evaluation group
and 37 in the EPDS group. The results revealed the EPDS to be significantly more likely to identify women as being at risk for depression (11 out of 37 versus 0 out of 35 women) than routine clinical evaluations (Fergerson et al.).

Evins et al. (2000) conducted a similar study with a sample size of 391 women over a one-year period in North Carolina. The results were the same as Fergerson et al. in that the EPDS identified considerably more women with PPD than did a routine clinical evaluation (Evins et al.). Sensitivity was measured at 84%, and specificity measured at 88%. In this study, the recommendation was to use the EPDS in conjunction with the clinical interview for maximum PPD detection.

Abou-Saleh & Ghubash (cited in Regmi, Sligi, Carter, Grut, & Seear, 2002) from the United Arab Emirates reported that 18% of postpartum women were identified as depressed using the EPDS screening instrument; however, the researchers only studied postpartum women up to their first week after delivery. It would extend the value of these findings if women had been studied longer. In fact, most PPD occurs from 6-weeks to 1 year. It is unknown how many cases of PPD were undetected due to the timing of the screening in this particular case. Nevertheless, it is interesting to note the number of women with PPD in an Arabic culture.

Regmi et al. (2002) conducted a study in which the researchers measured the incidence of depression between nonpregnant and postpartum Napalese women in the setting of a postnatal clinic in Kathmandu utilizing the EPDS. Nepal, Kathmandu, is a very poor developing country with an estimated infant mortality of 75.9 per 1000 live births. The sample size 140 women, 100 of those 40 were non-childbearing women and used as a control use. Additionally, the researchers compared the validity and the ease of
use of the EPDS with the *Diagnostic and Statistical Manual of Mental Disorders* criteria for major depression. The results revealed that the incidence of postpartum depression in Nepalese women (12%) and the validity and ease of use were unexpectedly no different to the results of many other research studies in developed countries (Regmi et al.). Sensitivity was reported to be 100%; specificity 92.6% and positive predictive value was 41.6% with all scores being roughly similar to other studies. The researchers additionally reported that trained clinical nurses to detect depression could use the EPDS.

Carpiniello, Pariante, Serri, Costa, and Carta (1997) reported the EPDS to be an excellent screening instrument that had consistent psychometric features when translated and utilized in different countries. The researchers conducted a study (n = 61) to validate an Italian version of the EPDS. Sensitivity was reported to be 100%; specificity 83%. These scores were similar to the English and other translated versions of the EPDS (Carpiniello et al.).

Two research articles reported that routine prenatal screening for PPD did not have an effect on reducing the incidence of PPD (Lumley & Austin, 2001; Nalepka & Coblentz, 1995). Lumley and Austin reviewed the literature pertaining to routine prenatal screening for PPD. Seventy-eight women who lived in the Midwest participated in Nalepka and Coblentz's experimental study.

Deaves' study (2001) reported the EPDS used in the prenatal period did not appear to be an appropriate screening instrument in identifying PPD, that it was good for identifying women during this period who were anxious about labor. The results recommended, "that all expectant mothers have an assessment of the health and social factors relating to the mother and family. Selective use of the EPDS may be more
appropriate, to confirm a suspicion or to open the debate about PND since it only takes a few minutes to complete and score” (Deaves, p. 266).

However, Fry (2000) reported the prenatal period to be an ideal time to screen for PPD in an effort to maximize the health of the women and affect a good outcome for her child. Once the woman is identified as having risk factors for PPD, formal screening at 1 to 2 months following childbirth is appropriate. Additionally, Fry recommended the EPDS as a valid screening instrument for PPD.

Elliott (1994) devoted an entire book chapter on the EPDS and discussed the problems of the EPDS in routine practice, options for its use in routine practice, and the link between research and clinical practice. The author reported the EPDS is not an answer to identifying women with PPD. It does, however, exceed other instruments for validity and acceptability (Elliott). Elliott reported, "the EPDS is often used without any clear idea as to what it is being used for, so inappropriate decisions are made on administration and scoring. It is necessary to be clear about differences between the general population and the population being tested and between those who should be referred on and those who should not. Decisions of time, place and frequency of administration as well as cut-off points are dependent on these facts" (p. 221).

Several options were entertained on when and how to administered the EPDS for PPD screening. One option considered was administering a computerized version of the EPDS, which lessens the demand on the staff and time. However, disadvantages to computer administration were that staff need to be trained to use a computer and the program. Computers would need to be purchased.
Different time periods during the pregnancy and following childbirth were also entertained as when to administer the EPDS for ideal times for identification of PPD: late in pregnancy, 6 weeks, 3 and 6 months following childbirth.

Recommendation was made after reviewing the advantages and disadvantages of the options that the EPDS be administered routinely in late pregnancy; at 6 weeks; and 3 and 6 months following childbirth. If the woman scored a 12 or above, the EPDS should be repeated in 7 to 14 days. If the score remained 12 or above, 4 ½ hourly listening visits per week were offered as an intervention for treatment. Although this is not research based, this chapter presented an interesting perspective on PPD screening; and I felt the information to be pertinent in making recommendations as to when to administer the EPDS.

_Critique of the Literature_

Much of the research on PPD was conducted in England and the term ‘health visitor’ was only defined in a single article. Readers from the Western culture not familiar with this term could find the interpretation of the article confusion. This definition is presented in Appendix A. Additionally, EPDS is currently being used worldwide but norms are not provided and there may be cultural differences to its interpretation.

I did not find a single article stating PPD was being identified and treated. Every article that I reviewed on identification and treatment of PPD reported that mothers were not being screened (Forman et al., 2000; Holden, 1996); that the mothers suffered in silence, fear, confusion thus, the debilitating effects were experienced by the entire circle of contacts of mothers (Beck, 1995).
Considerable disagreement was noted about the causes of postpartum depression: is childbirth causing the depression in women who would not otherwise have become depressed?; is the cause hormonal?; or is the cause a biological consequence?

There are many gaps in the PPD literature. These include the need for studies that pinpoint ideal times to screen for PPD. There is no consistency across studies on this parameter, and this makes it difficult to interpret ideal screening times. As well, there was no consistency on ideal times to intervene. There is some agreement as to the need for early intervention, however this is not defined. Studies that compare intervention with onset would be extremely useful. This might help to identify ideal times to screen.

Benson (cited in Beck & Gable, 2002) reported that the EPDS contains items that have both positive and negative implications, i.e. I have been able to laugh and see the funny side of things, and I have been anxious or worried for no good reason. These types of responses, positive and negative, affect the way participants reply and that responses of the sort should be used with caution (Benson, as cited in Beck & Gable, 2002).

EPDS did not measure “loss of control, loneliness, unrealness, irritability, fear of going crazy, obsessive thinking, concentration difficulty, and loss of self” (Beck & Gable, 2000, p. 274) which were described in Beck’s previous studies (1996, 1992) as being risk factors of PPD.

The sensitivity, specificity, and predictive values of the EPDS are dependent on the cut-off scores chosen for administration (Coyle & Adams, n.d.). If the cut-off score is 12 or greater, some women will not be identified; however, if the cut-off score is greater than 9, few women will be missed, but they will have high false positive rates (Coyle &
Adams, n.d.). This discrepancy can account for the variation in PPDs from 44 to 73% (Coyle & Adams, n.d.). Recommendations are to use a cut-off score of 12 and greater.

As with administration to any screening instrument, not just to the EPDS, it should not be utilized when language, cultural or literacy deficits are present. Some women may not be able to read but fail to inform the health care provider who is administering the EPDS.

**Recommendations for Screening**

The author recommends women be screened initially for risk factors of depression in late pregnancy using the EPDS. If the woman scores a 12 or above, the screening should be repeated in 7 to 14 days. If the repeated score is still greater than 12, a consult should be made for a mental health evaluation. Even if the woman scores less than 12 on the EPDS in late pregnancy, she should be screened at 6 weeks, 3 and 6 months following childbirth for PPD, with the same readministration in 7 to 14 days. If then she scores 12 or above, a mental health referral should be made. This recommendation does appear to be somewhat unrealistic in light of Health Maintenance Organizations limited primary care provider (PCP) visits; however, this is an ideal recommendation to identify and treat PPD early. In more realistic terms when PCP appointments are so restricted, maybe a recommendation for PPD screening would be in late pregnancy and at the 6-week postpartum visit. The woman could be informed of depressive signs and symptoms to be alerted to; and if they begin to occur, a mental health referral should be made.

**Summary**

The theoretical framework used for this clinical project was adapted from the revised HPM, which illustrated the relationships between identification of risk factors,
behavior-specific cognitions/affect, and the behavioral outcomes of PPD. However, for the purpose of this clinical project, little focus was given to the cognitions/affect and the behavioral outcomes of PPD. The main focus of this review of literature was on the identification of risk factors. The key point of the framework emphasized that the individual be an active participant in influencing and maintaining health behaviors and in adapting the environmental milieu for health-promoting behaviors.

Improvement in the direction of identification and treatment has been slow. Further research needs to be done to continue with the identification and treatment of PPD in order to improve the quality of life for new mothers experiencing this highly treatable condition.

From the review of literature, it appeared that EPDS was the most commonly used instrument used in screening for PPD (Miller, 2002; Georgiopoulous et al., 1999; Ward, 1999). Murray and Carothers (cited in Regmi et al., 2002) reported that the EPDS is a sensitive and specific screening instrument supported by excellent validation against a variety of specific depressive screening instruments; it is available in several languages (Ward; Armstrong, 1996). Its use has been well documented in Europe, New Zealand, United States, England, United Kingdom, Canada, and Australia (Boath & Henshaw, 2001; Epperson, 1999; Georgiopoulos et al.).

The next chapter will focus on the clinical project. This clinical project is an educational presentation for health care providers to heighten the awareness of PPD, identify risk factors, become skilled at using a screening instrument and learn when to refer women identified with PPD for follow-up interventions.
CHAPTER 3

Introduction

In this chapter, the clinical project will be detailed. The project is an educational module to be presented to health care providers who interface with pregnant and postpartum women. The presentation focuses on early identification of risk factors/signs and symptoms and use of a screening instrument to assist in early identification. Elements of the module are provided and followed by a plan for evaluation of the presentation. Appendix C is the power point presentation, Appendix D the pretest, Appendix E the power point handouts, and Appendix F the posttest. Appendices D, E, and F will be provided to each student prior to the presentation.

Educational Module

The educational module was developed to be given as a presentation to health care personnel. The aim is intended to heighten awareness about postpartum depression. This module includes a pre- and posttest to measure learning about PPD. It includes an overview of the disorder, risk factors, signs and symptoms, and interventions. A screening instrument is introduced as well as how it is administered and scored. A recommendation when to screen was also presented.

Pretest (see Appendix D)

1. Women who develop postpartum depression can develop postpartum psychosis.

T or F.

2. Which of the following are considered risk factors of PPD?

a. History of depression following previous pregnancy

b. History of unhappy childhood

...
c. History of emotional problems
d. Previous treatment for mental illness
e. All of the above
f. a,b,c

3. Screening for PPD is time consuming and takes too long to do.
   T or F

4. PPD is frequently screened for in prenatal and postnatal visits.
   T or F

5. Children of depressed mothers might develop behavioral problems and display trouble in cognitive and emotional development.
   T or F

6. New mothers might be reluctant to report problems because of societal pressures to be well adjusted.
   T or F

7. If PPD is not identified and treated, serious complications may occur.
   T or F

8. Lack of awareness by the public of the seriousness of PPD is one reason why PPD is not identified and treated.
   T or F

9. Which of the following occurs in postpartum depression:
   a. Guilt
   b. Worthlessness
   c. Feelings of harm to baby
d. Feelings of harm to self

e. All of the above

10. Some personal and social factors contribute to postpartum depression. Which of the following may occur?

a. Concurrent life events, such as bereavement, house-moving

b. Individual personality traits

c. Traumatic pregnancy and birth

d. Relationship with own mother

e. All of the above

Introduction to PPD

Emotional disturbances commonly associated with pregnancy, more accurately 6 to 12 months postpartum, are maternal blues, postpartum depression, and postpartum psychosis. The focus of this presentation is on postpartum depression (PPD), since it affects so many women and is less likely to be diagnosed than postpartum psychosis. It is important to screen women so that they might be identified early in the course of PPD. The aim of this presentation is to: 1) heighten the awareness of PPD, 2) identify risk factors, 3) identify signs and symptoms, 4) become skilled at using a commonly used screening instrument; and 4) learn when to refer women identified with PPD for follow-up intervention. Onset of PPD is usually within 6 weeks after delivery, and signs and symptoms last from 3 to 14 months. The reported prevalence for PPD ranges from 3.5% to 33% depending upon definition, assessment criteria, and time since delivery. Therefore, it is likely that most practitioners will encounter a pregnant or postpartum
woman with signs and symptoms of PPD. PPD screening requires little additional time and can effectively identify affected individuals.

Many cases of PPD are not identified and treated. Unidentified and untreated PPD can devastate not only the mother, but also her family and interactions with society. The mother's ongoing depression, if not identified and treated, can contribute to emotional, behavioral, cognitive, and interpersonal problems later in the life of her child. The child may experience a higher risk of accidents, sudden infant death syndrome, and increased hospital admissions.

Husbands or partners do not know how to deal with the woman's depression. The partner may feel inadequate, frustrated, angry, anxious, or embarrassed about the woman's behavior. Holden (cited in Bewley, 1999) reported couples, particularly the younger ones and those who had not been together very long, were not prepared for the changes that occur with the birth of a child. Counseling that is offered once PPD has been identified should include the woman's partner so that there is a better understanding of what is occurring.

Risk Factors

In order to identify individuals with PPD, you must be familiar with predisposing risk factors. The following are taken from risk factors published by the NAACOG (cited in Youngkin & Davis, 1998):

Factors in history:

- History of perimenstrual mood swings
- History of depression following previous pregnancy
- History of unhappy childhood
• History of emotional problems
• Previous treatment for mental illness

Reported symptoms or worries:
• Increased anxiety/worry during pregnancy
• Feels lack of control of life
• Perceives self as nervous or a worrier
• Believes has no family or friends to call on for support
• Feelings of depression or sadness with this pregnancy
• Regret about being pregnant and unwanted child
• Financial/housing/personal problems
• Feels anger at life situation, family or acquaintances
• Blames self when things go wrong
• Feels unloved by infant’s father

Signs and Symptoms

Risk factors for PPD are one aspect to screen for. As important are actual signs and symptoms of the condition. Not all individuals with signs and symptoms have risk factors. Because PPD is a sub-category of major depression, signs and symptoms include those for major depression plus additional ones. The table below illustrates both (Kennedy & Suttenfield, 2001):
Table 2

<table>
<thead>
<tr>
<th>Major depression</th>
<th>PPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sluggish, fatigue, exhaustion</td>
<td>• Over concern for the baby or excessive anxiety over child’s health</td>
</tr>
<tr>
<td>• Sadness, depressed mood, hopelessness</td>
<td>• Guilt, inadequacy, worthlessness, especially feeling a failure at motherhood</td>
</tr>
<tr>
<td>• Poor concentration, indecisiveness, or confusion</td>
<td>• Fear of losing control or “going crazy”</td>
</tr>
<tr>
<td>• Memory loss</td>
<td>• Lack of interest in the baby</td>
</tr>
<tr>
<td>• Uncontrollable crying, irritability</td>
<td>• Fear of harming the baby</td>
</tr>
<tr>
<td>• Agitation or slowed movements</td>
<td>• Diminished libido</td>
</tr>
<tr>
<td>• Recurrent thoughts of death or suicide</td>
<td>• Anxiety</td>
</tr>
<tr>
<td>• Significant weight loss when not dieting, or weight gain, or decrease or increase in appetite</td>
<td>• Obsessionality</td>
</tr>
<tr>
<td>• Markedly diminished interest or pleasure in all or almost all activities</td>
<td></td>
</tr>
<tr>
<td>• Exaggerated highs and/or lows</td>
<td></td>
</tr>
<tr>
<td>• Lack of interest in sex</td>
<td></td>
</tr>
<tr>
<td>• Insomnia or hypersomnia</td>
<td></td>
</tr>
<tr>
<td>• Feelings of worthlessness or excessive or inappropriate guilt</td>
<td></td>
</tr>
</tbody>
</table>

**Screening**

Early identification of PPD is essential to successful treatment outcome and can prevent months and years of suffering for a new mother as well as decrease the potentially harmful impact on the baby and long term effects on the family. PPD is not commonly screened for, as evidenced by the review of literature. The reasons cited are that health care providers do not identify those at risk for developing this mood disorder. There is a lack of awareness by health care providers, as well as the public, of the seriousness and detrimental consequences of unidentified and untreated PPD. Health care providers and their staff fail to identify signs and symptoms of PPD, because they do not believe they could add more to their already overloaded work schedules. Additional screening activities may be seen as more work.
New mothers might feel that feelings they experience are part of an adjustment period after the birth of a child. They might not be aware that what they are feeling is abnormal.

New mothers might be reluctant to report problems because of societal pressures to be well-adjusted. Any problems encountered can be construed to mean something is wrong with the mother.

Additionally, mothers without access to health care have no way to report signs and symptoms or disturbed feelings, such as anger, guilt, feeling overwhelmed, anxious, and lonely. New mothers often have follow-up visits with their pediatricians, but pediatricians are concerned with the health and welfare of the new babies. The traditional 6 week postpartum visit may be the only chance for new mothers to report depressive signs and symptoms. If these go unmentioned at that time, another scheduled appointment might not occur for one year.

The body of literature related to PPD focuses primarily on identification and treatment. Many have studied PPD, and a few researchers have reported results of studies exploring signs and symptoms at different stages of the pregnancy continuum; prenatal visits, 6 week postpartum visit, or other times in the postpartum period.

According to a literature review, the most commonly identified time to screen for PPD is during the postpartum period. Screening can be as simple as asking a woman how she is feeling physically and emotionally, but these important questions may not be enough to initiate a discussion regarding the woman's state of mind (Fry, 2000). If she identifies that she has depressive feelings, then further evaluation is necessary.
Screening Instrument

United States Preventive Services Task Force (cited in Fry, 2000) identified criteria of what formulates a good screening instrument:

- The condition must have a significant effect on the quality and quantity of life.
- Acceptable methods of treatment must be available.
- Treatment in the asymptomatic phase must yield therapeutic results superior to that obtained by delaying treatment until signs and symptoms develop.
- Tests that are acceptable to patients must be available, at a reasonable cost, to detect a condition in the asymptomatic period.
- The incidence of the condition must be sufficient to justify the cost of the screening.

Researchers developed a screening instrument for PPD called the Edinburgh Postpartum Depression Scale (EPDS), developed specifically for screening for postpartum depression. EPDS, the most commonly used instrument according to the literature, is a valuable and efficient screening instrument for identifying women at risk for developing PPD. It is a 10-item self-report scale and is easy to administer. It takes very little time to complete and is convenient to use. Scoring and interpretation of the instrument are easily learned. The mothers select the response that best describes the way she has felt within the past 7 days. Each item is rated on a scale of 0 to 3, and the total score range is 0 to 30. If the women scores a 12 or above, the screening should be repeated in 7 to 14 days. If the repeated score is still a 12 or above, a consult should be made for a mental health evaluation. A cut-off score of 12 or greater provides the best diagnostic sensitivity and specificity for PPD based on most developed world studies.
The following are instructions for providers administering the screening instrument (Cox et al., 1987):

1. The mother is asked to underline the response which comes closest to how she has been feeling in the previous 7 days.

2. All ten items must be completed.

3. Care should be taken to avoid the possibility of the mother discussing her answers with others.

4. The mother should complete the scale herself, unless she has limited English or has difficulty with reading.

5. The EPDS may be used at 6-8 weeks to screen postnatal women. The child health clinic, postnatal check-up or a home visit may provide suitable opportunities for its completion.

Eberhard-Gran et al. (2002) reviewed 18 studies using the EPDS from 1987 to 2000. Research revealed the “EPDS might be a useful instrument for detection of women with PPD in a clinical setting” (Eberhard-Gran et al., p. 248.).

Georgiopoulous et al. (1999) conducted research using the EPDS to determine the prevalence of postpartum depression. They reported 11% of the participants screened as having PPD. Screening for PPD did not require much time, and “the EPDS is a sensitive and specific screening instrument supported by excellent previous validation and extensive clinical use worldwide” (Georgiopoulous et al., p. 657). Fergerson et al. (2002)
also reported the EPDS to be a valuable and efficient screening instrument for identifying women at risk for developing PPD.

Evins et al. (2000) compared the efficacy of routine clinical evaluation to that of the EPDS in identifying women with postpartum depression. The results revealed that the EPDS identified considerably more women with PPD than did a routine clinical evaluation (Evins et al.). Evins et al. strongly recommended the EPDS to be an effective adjunct to clinical interview for detection of PPD. (Eberhard-Gran et al., 2002, p. 248.).

Deaves (2001) reported that the EPDS used in the prenatal period did not appear to be an appropriate screening instrument in identifying PPD, that it was good for identifying women during this period who were anxious about labor. Results revealed, “that all expectant mothers have an assessment of the health and social factors relating to the mother and family. Selective use of the EPDS may be more appropriate, to confirm a suspicion or to open the debate about PND since it onlytakes a few minutes to complete and score” (Deaves, p. 266).

However, Fry (2000) reported the prenatal period to be an ideal time to screen for PPD in an effort to maximize the health of the women and affect a good outcome for her child. Once the woman is identified as having risk factors for PPD, formal screening at 1 to 2 months following childbirth is appropriate. Additionally, Fry recommended the EPDS as a valid screening instrument for PPD.

*Standard Interventions for PPD*

The interventions identified in the literature review for women identified with having PPD revealed counseling and pharmacological therapy. Since the scope of my
clinical project did not focus on PPD interventions, little detail was given to these interventions.

_Counseling._

Whitton (cited in Bewley, 1999) reported women and their families should be educated on the signs and symptoms of PPD, as well as receive counseling, instead of drug therapy, as being more effective in improving mood. Counseling also proved effective in improving maternal infant interactions. Research recommended that before pregnancy couples receive information about the emotional upheaval following childbirth and the recognition of the signs of depression to identify and seek treatment of PPD, if suspected (Holden, cited in Bewley).

Rogers (cited in Bewley, 1999) identified three principles necessary for counseling to be successful: genuineness, empathy, and non-possessive warmth. Holden (cited in Bewley, 1999) reported that true listening entails the giving of time and self, without judgment to the woman and her circumstances.

Local support groups and support from the family were recommended as another source of intervention in dealing with women who are depressed. Support from the family with household tasks and childcare can be offered and be of great benefit.

Elliott (1994) recommended weekly listening visits as an intervention for treatment if the woman scored a 12 or greater twice on the EPDS. Listening visits were never defined in the literature; as a result, some confusion exists about what exactly is offered at these listening visits.
Pharmacological therapy.

Pharmacological therapy is the second intervention recommended for women who have been identified as having PPD (Beck, 2002). In the body of literature on PPD, drug treatment for women suffering from PPD included tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), hormone therapy, and herbal medicine (i.e. St. John’s wort, kava, mugwort). However, since the Women’s Health Initiative Study on hormone replacement, it is uncertain at this time if hormones are still identified as being a class of drugs used in the treatment of PPD. Additionally, drug treatment is complicated by a woman’s desire to breastfeed her baby. Research needs to be done to determine the effect of antidepressants during lactation.

Posttest (See Appendix F)

Once the presentation is completed, a posttest will be administered. This posttest is the same as the pretest, and the results of both tests will be compared to determine the effectiveness of this educational module.

Evaluation of Educational Module

In 3 to 6 months, the health care providers who attended the presentation will be asked to complete an evaluation to determine what type of PPD screening is being conducted and if they have identified more PPD since the presentation was given.

1. Did you attend the PPD presentation on (date)?
   
   ___ Yes
   
   ___ No
2. If you attended the training, did you find it helpful?
   ___ Yes  Explain:_____________________________________________________  
   ___ No   Explain:_____________________________________________________

3. Have you administered the EPDS since the training?
   a. Yes, I have administered the EPDS, but less frequently than I used to.
   b. Yes, I have administered the EPDS more frequently than I used to.
   c. No, I haven't administered the EPDS. I have not seen pregnant or postpartum women since the training.
   d. No, I haven't administered the EPDS. Even though I have seen pregnant or postpartum women, I don't have time to do PPD screening.

4. How valuable/effective instrument do you feel EPDS to be?
   a. Of no use
   b. Little use
   c. Moderately effective
   d. Very effective

5. Do you use other ways to screen women for PPD?
   ___ Yes  Explain:_____________________________________________________
   ___ No   Explain:_____________________________________________________
6. When is the ideal time to screen for PPD in your opinion?
   a. Prenatal
   b. 6 weeks postpartum
   c. Both
   d. Other: ________________________________

7. Should all women be screened for PPD?
   _____ Yes
   _____ No

8. If your answer above was “no”, who should be screened?

Summary

A teaching module was developed focusing on an overview of PPD, risk factors of PPD, and interventions. A screening instrument was introduced, and its administration and scoring were presented. An ideal schedule for screening women was described as part of this teaching module. In 3 to 6 months, an evaluation of the module will be administered to determine what, if any, changes have been noticed regarding identification of PPD. This presentation was designed for health care providers who interface with pregnant and postpartum women to heighten awareness about postpartum depression in those who interact with women who have potential for PPD.
CHAPTER 4

Introduction

The purpose of this last chapter is to discuss the merits and limitations of the educational module about PPD for health care providers. Suggestions for future educational projects will also be proposed. The long term goal is to educate the entire community about the impact of PPD if it is undetected and untreated.

This project is a first step in a series of educational projects. Companion modules targeting women and their families who are stakeholders in PPD early detection would enhance its value. Epperson (1999) reported that both health care providers and mothers need to be educated about postpartum affective mood disorders. As well as targeted educational modules, educational material should be provided to patients and their families about the signs and symptoms at routine gynecological and obstetric visits.

The goal of a specific educational module for women in their reproductive years is to empower them to voice their concerns to health care providers in ways that mandate screening and attention to issues of mood disorders. Similarly, raising the awareness of PPD risk factors, screening, and interventions in community groups is the ultimate goal of additional educational modules. This would provide all community members with information, raise consciousness, and focus informal discussions in order to bolster detection.

Most cases of PPD go unidentified and untreated, and this can have many adverse personal, family, and social consequences. Identification and treatment of PPD is multidisciplinary. Hence, a presentation of PPD to health care providers and a recommendation for a future project to increase the awareness of women about PPD
would help with identification and treatment in order to minimize suffering of PPD for women and their families.

Strengths

This clinical project identified risk factors, critiqued PPD literature, reviewed a screening instrument, and proposed an educational module for health care providers. The detail and content of the educational module included sufficient information to raise awareness among those in contact with potentially affected women. Importantly, the content of the module is essential to determining the effectiveness of education. This lends credibility and strength to the project. One reason cited for PPD not being identified and treated was that health care providers did not recognize those at risk for developing PPD; therefore, health care providers, women in the reproductive years, and the community need to be educated about postpartum affective disorders (Kennedy & Suttenfield, 2001; Webster et al., 2000; Epperson, 1999). In addition, this project is the important first step in a series of educational presentations intended to include providers, potential victims, and the community. This is a holistic approach to bolstering the early detection and treatment of PPD in order to reduce the sequelae.

An important strength of this clinical project is that it has allowed me to be the link between the research-based or evidence-based literature and clinical practice. Outcomes from research studies must be put into practice, and this clinical project does that.

Risk factors were discussed based on the literature review. The screening instrument commonly used was identified as the EPDS, with sensitivity and specificity values reported. The strategy identified to increase early diagnosis and treatment was an
educational module developed for health care providers. Further strategies were for presentations to women and community groups to increase their awareness of PPD.

**Limitations**

The primary limitation of this project is that it focuses on health care providers only. However, complementary educational modules for patients and for community groups have been proposed. Together these modules cover all individuals who could be affected by PPD and have maximal potential for alerting and raising consciousness about this treatable condition.

Utilizing and teaching only one screening instrument limit this project. This instrument, though widely utilized in research projects, may not be the only approach to PPD screening. Other methods could include clinical interviews or targeted history taking of all pregnant women. The advantage to using the EPDS is that it can be computer administered, and this takes less clinician time. This is an important feature in today's health care delivery.

**Implications for nursing practice**

PPD has significance to both nursing and the community. It impacts personal, family, and social relationships possibly resulting in increased delivery of health care services. This increase in the need for health care services may further burden the system that is already burdened and not meeting the needs of individuals seeking services. Subsequently, health care providers need to be become more knowledgeable about the detection, treatment, and prevention of this serious mood disorder. With the implementation of this educational module, providers will have increased awareness of PPD, risk factors, and interventions appropriate for those women who have been
identified. This increased awareness will aid in preventing serious consequences that otherwise may ensue when PPD is not identified or treated. Nurses who have been exposed to the educational module will have greater knowledge and have greater ability to identify, provide information, and refer individuals with PPD. The overall impact for nurses is to expand their awareness and educate them about signs and symptoms, risk factors, and sequelae for untreated women. This may lead to improvement in quality of life for women and their families.

Further research needs to be done to continue with the identification and treatment of PPD in order to improve the quality of life for new mothers experiencing this highly treatable condition.
APPENDIX A

Definitions of Terms

Postpartum Blues

Postpartum blues, also called maternal blues, can occur within the first few days postpartum and lasting anywhere from 24 to 48 hours (Boath & Crenshaw, 2000), is the most common postpartum mood disturbance affecting from 50% to 80% of new mothers; it is a transient syndrome that resolves spontaneously (Newport et al., 2002; Ugarriza, 2000). Of the three mood disturbances, postpartum blues is the least severe of the postpartum mood disturbances, is of short duration, and does not require medical attention but it still needs to be identified. Mothers may experience any of the following: tearfulness, irritability, mood swings, nervousness, feelings of vulnerability, trouble sleeping, loss of appetite, hyperactivity, lack of confidence, and feeling overwhelmed (Introduction to).

Postpartum Depression

Postpartum depression, which is more serious than postpartum blues, can begin within the first postpartum month and may last up to a year following childbirth (Postpartum Support International, n.d.). If not identified and treated, serious complications may occur (Kennedy & Suttenfield, 2001). Mothers might experience any of the following: sadness, loss of interest in normal activities, guilt, anxiety, tiredness, feeling like you’re not good enough, impaired concentration or memory, over concern for baby or none at all, inability to cope, despondency or despair, hopelessness, panic attacks (numbness, tingling in limbs, chest pain, hyperventilating, heart palpitations), thoughts of
suicide, feeling “like you are going crazy,” and bizarre or strange thoughts (Postpartum Support International, n.d.).

*Postpartum Psychosis*

Postpartum psychosis is extremely incapacitating and is the most severe of the mood disturbances, however, comparatively rare, occurring in less than .001% of deliveries (Newport et al., 2002, Boath & Crenshaw, 2001; Ugarriza, 2000). The onset is similar to PPD: within the first three weeks following childbirth and frequently within the first few days. Women may experience extreme confusion, incoherence, rapid speech or mania, refusal to eat, suspiciousness, irrational statements, agitation, and hearing or seeing things that aren’t there (Postpartum Support International, n.d.).

*Puerperium*

Puerperium or postpartum period is defined as 6-week period following childbirth (Miller, 2002; Nalepka & Coblentz, 1995).

*Health Visitors*

Health visitors is defined as “highly qualified specialist nurses with experience in general nursing and midwifery or obstetrics, who have also studied preventive medicine, sociology, and psychology” (Holden, 1996, p. 80).
APPENDIX B

Edinburgh Postnatal Depression Scale

As you have recently had a baby, we would like to know how you are feeling.

Please underline the answer which comes closest to how you have felt in the past 7 days, not just how you feel today. In the past 7 days:

1. I have been able to laugh and see the funny side of things.
   - As much as I always could
   - Not quite as much as now
   - Definitely not so much now
   - Not at all

2. I have looked forward with enjoyment to things.
   - As much as I always could
   - Not quite as much as now
   - Definitely not so much now
   - Not at all

*3. I have blamed myself unnecessarily when things went wrong.
   - As much as I always could
   - Not quite as much as now
   - Definitely not so much now
   - Not at all

4. I have been anxious or worried for no good reason.
   - As much as I always could
   - Not quite as much as now
Definitely not so much now
Not at all

*5. I have felt scared or panicky for no very good reason.
   As much as I always could
   Not quite as much as now
   Definitely not so much now
   Not at all

*6. Things have been getting on top of me.
   As much as I always could
   Not quite as much as now
   Definitely not so much now
   Not at all

*7. I have been so unhappy that I have had difficulty sleeping.
   As much as I always could
   Not quite as much as now
   Definitely not so much now
   Not at all

*8. I have felt sad or miserable.
   As much as I always could
   Not quite as much as now
   Definitely not so much now
   Not at all

*9. I have been so unhappy that I have been crying.
As much as I always could
Not quite as much as now
Definitely not so much now
Not at all

*10. The thought of harming myself has α
As much as I always could
Not quite as much as now
Definitely not so much now
Not at all

Response categories are scored 0, 1, 2, and 3 according to increased severity of the symptom. Items marked with an asterisk are reverse scored (i.e., 3, 2, 1, and 0). The total score is calculated by adding the scores for each of the 10 items.

Objectives
- Increase awareness of PPD
- Identify risk factors
- Identify signs and symptoms
- Become familiar with screening instrument
- Become familiar with standard interventions for PPD

Emotional Difficulties Associated with Pregnancy
- Maternal/postpartum Blues
- Postpartum Depression (PPD)
- Postpartum Psychosis

Postpartum Psychosis
- Most severe of mood disturbances
- Extremely incapacitating
- Andrea Yates

Postpartum Depression (PPD)
- Onset usually within 6 weeks of delivery
- Symptoms lasting from 3 to 12 months following delivery
- Prevalence ranges from 3.5% to 33%

Maternal/postpartum Blues
- Most common postpartum mood disturbance
- Occurring within first few days following childbirth
- Transient syndrome, resolving spontaneously

PPD
- Unidentified and untreated PPD can be devastating to mother, family, society
  - Emotional, behavioral, cognitive, and interpersonal difficulties later in life for child
  - Inadequacy, frustration, angry on part of husband/partner
PPD

- Unidentified and untreated PPD can be devastating to mother, family, society
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  - Inadequacy, frustration, angry on part of husband/partner

Risk Factors

- History
- Reported symptoms or worries

History

- Perimenstrual mood swings
- Depression following previous pregnancy
- Unhappy childhood
- Emotional problems
- Previous treatment for mental illness

Symptoms/ Worries

- Increased anxiety/worry during pregnancy
- Feeling of lack of control in life
- Self perception as feeling nervous or worried

Symptoms/ Worries

- Feelings of lack of support of family or friends
- Feelings of depression or sadness with this pregnancy

Symptoms/ Worries

- Depression or sadness with this pregnancy
- Regrets about being pregnant and having unwanted child
- Financial/housing/personal problems
### Symptoms/ Worries
- Anger at life situation, family or acquaintances
- Blames self when things go wrong
- Feeling not loved by infant's father

### Signs and Symptoms
- **Major depression**
  - Sluggish, fatigue, exhaustion
  - Sadness, depressed mood, hopelessness
  - Poor concentration, indecisiveness, confusion
  - Memory loss
  - Uncontrollable crying
  - Agitation or slowed movements
  - Recurrent thoughts of death or suicide

- **PPD**
  - Over concern for baby or excessive anxiety over child's health
  - Guilt, inadequacy, worthlessness, especially feeling a failure at motherhood
  - Fear of losing control or "going crazy"

### Signs and Symptoms
- Major depression
  - Significant weight loss without dieting: weight gain
  - Appetite increase
- Diminished Interest or pleasure in most activities
- Exaggerated highs and/or lows
- Lack of interest in sex
- Insomnia or hypersomnia
- Feelings of worthlessness or excessive or inappropriately guilt

### Screening for PPD
- Early identification essential
  - Adverse personal, family and social consequences
- Most cases unidentified and untreated
- Screening takes little time

### Reasons PPD Not Screened
- Lack of awareness by health care providers and public of seriousness and detrimental consequences of unidentified and untreated PPD
- Screening takes too much time and adds more to workload

### Reasons PPD Not Screened
- New mothers reluctant to report difficulties because of societal pressures
- New mothers unaware of normal vs. abnormal feelings following childbirth
- Women without health care unable to report symptoms or disturbed feelings
Reasons PPD Not Screened

- Six-week traditional postpartum visit only opportunity to report depressive symptoms
  - If not reported, next scheduled visit following year

Screening Instrument for Identifying Women at Risk for PPD

- Edinburgh Postnatal Depression Screening (EPDS)
  - Most commonly used instrument
  - Valuable and efficient screening instrument
  - Easy to administer
  - Takes little time, only 10 items

Sample Question #1

I have been able to laugh and see the funny side of things.

a. As much as I always could
b. Not quite as much as now
c. Definitely not so much now
d. Not at all

Sample Question #7

I have been so unhappy that I have had difficulty sleeping.

a. As much as I always could
b. Not quite as much as now
c. Definitely not so much now
d. Not at all

Sample Question #8

I have felt sad or miserable

a. As much as I always could
b. Not quite as much as now
c. Definitely not so much now
d. Not at all

Scoring

Items rated on a scale of 0 - 3; total score range 0-30

Items marked with asterisk reverse scored (i.e., 3, 2, 1, 0)

Total score calculated by adding score for each item

Score of 12 or > indicates EPDS be repeated in 7 to14 days. If repeated score still > 12, mental health referral recommended
Recommendations for Screening

- Late in pregnancy
- 6 weeks
- 3 and 6 months

EPDS might be a useful instrument for detection of women with PPD in a clinical setting


EPDS is a sensitive and specific screening tool supported by excellent previous validation and extensive clinical use worldwide


Interventions

- Counseling
- Pharmacological therapy

Counseling

- Education on risk factor of PPD to women and families
- Local support groups and support from family
- Support with household tasks and childcare

Pharmacological Therapy

- Tricyclic antidepressants (TCAs)
- Selective serotonin reuptake inhibitors (SSRIs)
- Hormone therapy
  - Uncertainty as being recommended since Women's Health Initiative Study
- Herbal medicines
Conclusion
- Overview of PPD
- Risk factors
- Signs and symptoms
- Edinburgh Postnatal Depression Scale
- Interventions

Questions?
APPENDIX D

Postpartum Depression Pretest

1. Women who develop postpartum depression can develop postpartum psychosis.
   T or F.

2. Which of the following are considered risk factors of PPD?
   a. History of depression following previous pregnancy
   b. History of unhappy childhood
   c. History of emotional problems
   d. Previous treatment for mental illness
   e. All of the above
   f. a,b,c

3. Screening for PPD is time consuming and takes too long to do.
   T or F

4. PPD is frequently screened for in prenatal and postnatal visits.
   T or F

5. Children of depressed mothers might develop behavioral problems and display trouble in cognitive and emotional development.
   T or F

6. New mothers might be reluctant to report problems because of societal pressures to be well adjusted.
   T or F

7. If PPD is not identified and treated, serious complications may occur.
   T or F
8. Lack of awareness by the public of the seriousness of PPD is one reason why PPD is not identified and treated.

T or F

9. Which of the following occurs in postpartum depression:
   a. Guilt
   b. Worthlessness
   c. Feelings of harm to baby
   d. Feelings of harm to self
   e. All of the above

10. Some personal and social factors contribute to postpartum depression. Which of the following may occur?
    a. Concurrent life events, such as bereavement, house-moving
    b. Individual personality traits
    c. Traumatic pregnancy and birth
    d. Relationship with own mother
    e. All of the above
APPENDIX E

Class Handouts

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**Signs and Symptoms**

**Major depression**
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- Lack of interest in sex
- Insomnia or hypersomnia
- Feelings of worthlessness or excessive or inappropriate guilt

**PPD**
- Lack of interest in baby
- Fear of harming baby
- Diminished mood
- Anxiety
- Obsessivity
Screening for PPD

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  - Adverse personal, family and social consequences
- Most cases unidentified and untreated
- Screening takes little time

Reasons PPD Not Screened

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Conclusion

- Overview of PPD
- Risk factors
- Signs and symptoms
- Edinburgh Postnatal Depression Scale
- Interventions

Questions?
APPENDIX F

Postpartum Depression Posttest

1. Women who develop postpartum depression can develop postpartum psychosis.
   
   T or F.

2. Which of the following are considered risk factors of PPD?
   
   a. History of depression following previous pregnancy
   b. History of unhappy childhood
   c. History of emotional problems
   d. Previous treatment for mental illness
   e. All of the above
   f. a, b, c

3. Screening for PPD is time consuming and takes too long to do.
   
   T or F

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   T or F

6. New mothers might be reluctant to report problems because of societal pressures to be well adjusted.
   
   T or F

7. If PPD is not identified and treated, serious complications may occur.
   
   T or F
8. Lack of awareness by the public of the seriousness of PPD is one reason why PPD is not identified and treated.

T or F

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