# Early Detection of Postpartum Depression: Screening in the First Two to Three Days

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## ABSTRACT

Postpartum depression (PPD) is a mood disorder that affects 10 to 15 percent of new mothers and can have a devastating effect on the mother and the development of her baby. Management of postpartum depression is a vital part of adequate medical care, but it often goes unrecognized in new mothers without a formal screening. Early formal screening for postpartum depression is not only best practice, but also highly feasible with a brief structured screening measure. The Edinburgh Postnatal Depression Scale (EPDS) is a 10-item, self-administered questionnaire that has been shown to predict scores at 4–6 weeks postpartum when administered 2-3 days postpartum. Given in this early interval after delivery, EPDS helps to predict postpartum depression, thus allowing the initiation of secondary prevention efforts that focus on reducing the prevalence as well as the duration of the condition. A multidisciplinary approach involving obstetricians, family doctors or pediatricians, and mental healthcare providers is recommended to maximize secondary prevention efforts and to minimize the negative impact of PPD. An Appendix lists regional resources that can help patients with this problem.

# INTRODUCTION

Postpartum depression (PPD) is a mood disorder that occurs in about 10 to 15 percent of new mothers, and should be differentiated from milder forms of the more common "postpartum blues."<sup>1</sup> The impact of PPD is significant not only to the mother, but also to the baby. Through an effective screening process during the antepartum and postpartum periods, secondary prevention of PPD is possible, i.e. the prevention of progression from mild blues to more serious depression. This article presents an overview of PPD, early screening for PPD, and methods of secondary prevention. The Appendix provides a list of organizations in this region which offer services designed to prevent or help resolve this problem.

# **PPD** Defined

PPD is characterized by sadness or loss of interest, in addition to poor concentration, appetite disturbance, sleep deficit beyond that required for care of the baby, lack of or excessive concern for the baby, constant fatigue, anxiety, or irritability. Symptoms tend to fluctuate, with the predominant symptom often being anxiety. Symptoms of PPD present within the first four weeks following childbirth.<sup>2</sup> As defined by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text-Revision, PPD is not a discrete disorder, but a subcategory of major depressive disorder.<sup>2</sup>

The term PPD has been used in the past to describe a wide range of depressive symptoms following childbirth. More recent research has tended to follow standardized criteria for identifying PPD, which differs from postpartum blues in severity and duration.

Postpartum blues, or baby blues, occurs in up to 80 percent of new mothers. It characteristically involves relatively mild symptoms that generally develop within 2–4 days after delivery, last for a few hours to a matter of days, and resolve at most within a couple of weeks. Many women suffer from such a period of emotional dysregulation following childbirth; it typically does not develop to the level of a major depressive episode and is of shorter duration. It is thought to be relatively benign and to have limited impact on the individual's or baby's overall functioning.

About 15–20% of mothers who experience postpartum blues develop a more severe form of the blues, however, and they are six times more likely to go on to a clinically significant depressive disorder.<sup>3</sup>

## Psychosocial Consequences of PPD

The incidence of PPD is considerable. Primiparous women are at highest risk for psychiatric hospitalization 10–19 days postpartum.<sup>4</sup> One in 25 women who suffer from PPD still report depressive symptoms after 6 months. Individuals who develop PPD are more likely to experience another episode of depression within the next five years. In fact, the interval from 6 months to 5 years postpartum is characterized by an increase in depressive symptoms for about 25% of women.<sup>5</sup>

The psychosocial consequences of PPD have been found to extend beyond the effects on the mother, making early detection and treatment of this disorder imperative not only for care of the mother, but also for adequate care of the baby. Researchers have found that maternal depression places the child at increased risk for attachment difficulties, impaired mental and motor development, emotional and behavioral dysregulation, low self-esteem, and poor health outcomes.<sup>6,7,8</sup>

Weissman and colleagues (2006) found a correlation not only between the mother's and child's mental health, but between treatment for the mother and mental health outcomes for the child. When mothers were successfully treated, outcomes improved for the child.<sup>9</sup> This study illustrates the importance of early identification and secondary prevention of postpartum depression.

## SCREENING FOR PPD

#### The Edinburgh Postnatal Depression Scale (EPDS)

Detection of PPD has become considerably more feasible with the availability of structured, well-validated, easily administered screening measures. The Edinburgh Postnatal Depression Scale (EPDS) is a widely used 10item questionnaire for postpartum depression that was developed in 1987, and has been extensively validated for antepartum and postpartum depression, with multicultural applicability. Cronbach's alpha, the widely accepted standard of internal consistency, has been found to be around 0.86,<sup>10</sup> sufficiently higher than the minimum identified standard of 0.70. The EPDS is commonly the measure of choice when assessing for depression related to pregnancy and childbirth.

The ten brief items from the EPDS assess sadness and tearfulness, loss of interest, anxiety and worry, sleep deficit, self-blame, sense of being overwhelmed, and suicidal ideation. The questionnaire can be self-administered in less than 5 minutes. Respondents are asked to answer the items in relation to how they have been feeling in the past week. Responses to the 10-item screening are scored on a 4-point scale: 0,1,2,3. Items 3 and 5–10 are reverse scored (i.e., 3,2,1,0), with the total score being the sum of all items.

Scores on the EPDS range from 0 to 30. A score of 9/10 or above has been found to be most sensitive, specific, and predictive of antepartum and postpartum depression.<sup>11</sup> Notably, the EPDS predicts PPD when it is administered

in the immediate postpartum period. As noted earlier, when administered 2-3 days postpartum, the EPDS is the only screening measure to date that has been found to accurately predict scores 4-6 weeks postpartum.<sup>12</sup>

### Early Detection: A two-part assessment

Many health care professionals are apprehensive about early screening due to concern that women experiencing postpartum blues will be falsely identified as having postpartum depression. Dennis and Ross used the EPDS to investigate this issue in a study that examined its ability to differentiate between women whose symptoms persisted after being identified in the first postpartum week, from those whose symptoms remitted.<sup>11</sup> They identified several risk factors that predicted more persistent depression, including antepartum depression, lack of perceived social support, and a history of child sexual abuse. The researchers suggested that a screening measure should be used in conjunction with assessment of known risk factors, in order to decrease the rate of false positives. They recommended further evaluation for women screening positive and having one or more known risk factors.

Additional associated risk factors that have been identified in other studies include a prior history of PPD, other current or recent psychosocial stressors, conflict with a partner, and a history of premenstrual symptoms.<sup>13,14,15</sup>

#### Secondary Prevention

Research supports the performance of early screening not only from a clinical standpoint, but from both a practical and ethical perspective.<sup>4,8,12</sup> Ogrodniczuk and Piper summarized this well when they stated, "Developing and practicing preventive measures may be cost effective as well as humane."<sup>16</sup>

One of the strongest arguments for early screening of PPD is the possibility of enhancing secondary prevention. With the ability to identify women who develop symptoms of PPD immediately after delivery, health professionals will be able to provide new mothers with psycho-education, increased support, and readily available professional services. Supported individuals may experience only a subclinical, less severe, or abbreviated episode of postpartum depression.

## Case Examples

L.F. is a 24-year-old woman with no significant risk factors for PPD, who is two weeks postpartum. The EPDS she took just two days after delivering her baby in the hospital was not significantly elevated with a score of 6/30. At 4 days postpartum, she finds herself tearful. In response to this, her husband comforts her and reassures her. She has two more brief episodes of sadness and tearfulness, both of which are met with support from her husband and other family members. At two weeks, she has had no repeat episodes, looks bright, has confidence in herself as a new mother and enjoys her supportive family. When she relays this experience to her daughter's pediatrician, he administers the EPDS, which is not clinically significant with a score of 2/30. At her 6 week follow-up with her obstetrician, he diagnoses her with an episode of postpartum blues.

This case illustrates a woman who has no known risk factors for PPD, a negative screen in the immediate postpartum period, and mild depressive symptoms of short duration that resolve by two weeks postpartum. Her obstetrician appropriately diagnoses her with an episode of postpartum blues.

M.L. is a 29-year-old woman with no pre-existing risk factors for PPD who is one week postpartum. She obtained a positive screen of 10/30 when the EPDS was administered in the hospital 2 days postpartum. In the well-baby visit she reports being very worried about the health of her baby boy. She described not being supported by her spouse, who seems to be absent most of the time. He often is critical of her abilities as a new mom. Her son's family doctor attempts to reassure her, but she continues to exhibit a pre-occupation with worry when her son is in good health. The doctor asks her how she has been feeling, and she says "fine." She denies having depression. He then gives her an EPDS to complete as a follow-up to her previous positive score. He finds that her score again is significantly elevated at 12/30, with the endorsement of items related to not finding enjoyment, self-blame, anxiety, panic, and sleep disturbance. Recognizing how the mother's health can affect the baby's health and well-being, the doctor then educates her regarding PPD, provides her with a list of community resources, and refers her to a psychologist for a comprehensive evaluation.

This case describes a woman, with lack of support and strain in her marital relationship (i.e., a risk factor for PPD), who is having symptoms of PPD that are predominantly anxiety-based. While she is reluctant to endorse or perhaps does not recognize "depression," a formal screening identifies an increased likelihood for PPD. Now with two positive screens and one risk factor for PPD, appropriate follow-up is taken, including education, community support and a referral for a more comprehensive evaluation.

# RECOMMENDATIONS

It is recommended that clinicians screen women for postpartum depression utilizing the EPDS while in the hospital in the first 2–3 days postpartum. Individuals with positive screenings considered within the context of one or more known risk factors should be provided secondary prevention efforts including psychoeducation, community resources and if warranted, professional assistance. A follow-up re-screening can be completed for all positive screens via the primary care provider or during the well-child visit approximately 1–2 weeks postpartum.<sup>11,17</sup> It is recommended that individuals with 1) a positive screen and one or more risk factors, or 2) two consecutive positive screens, be further evaluated by a primary care physician or mental health professional.

## **FUTURE DIRECTIONS**

Early screening and secondary prevention for PPD is beneficial to both mother and baby. As more women become accurately identified as having symptoms of PPD, the demand for secondary and tertiary prevention and treatment resources will increase. It will take a multidisciplinary approach involving obstetricians, family physicians, pediatricians, and mental health professionals to ensure the need is met. Future research examining how varying disciplines can work together to meet the needs of this population of mothers will aid coordination of efforts.

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# APPENDIX A

## Available Community Resources in Lancaster County

Women and Babies Hospital Wellness Programs: Baby Weigh Station and Discussion Group Wellness Center 717.544.5511

Elizabethtown Mom's Club etownmomsclub@mail.com

Lancaster Mom's Club lancasterpamoms@yahoo.com

Neither Dr. Castle nor any member of her immediate family have any relevant financial relationships with any corporate

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