POSTPARTUM MOOD AND ANXIETY DISORDERS: CASE STUDIES, RESEARCH, AND NURSING CARE

3RD EDITION

Cheryl Tatano Beck, DNSc, CNM, FAAN



ABOUT AWHONN

Headquartered in Washington, D.C., the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) is a leader among the nation's nursing associations, serving more than 22,000 healthcare professionals in the United States, Canada and abroad.

AWHONN advances the nursing profession by providing nurses with critical information and support to help them deliver the highest quality care for women and newborns. Through its many evidence-based education and practice resources, legislative programs, research and coalition work with like-minded organizations and associations, AWHONN has firmly established itself as the leading association for women's health, obstetric and neonatal nurses.

AWHONN members are committed to delivering superior healthcare to women and newborns in hospitals, home health and ambulatory care settings. The rich diversity of members' skills and experience make AWHONN the voice for women's health and neonatal nursing. It is through their dedication, knowledge, skill and expertise that we create resources aimed at achieving our mission to promote the health of women and newborns.

AWHONN is grateful to the AWHONN members who reviewed this monograph. Jocelyn Davis, DNP, CNM, RN, C-EFM M. Cynthia Logsdon, PhD, WHNP-BC, FAAN

Copyright 2014 by the Association of Women's Health, Obstetric and Neonatal Nurses. All rights reserved. This book is protected by copyright. This material may not be produced or transmitted in any form or by any other means, electronic or mechanical, including photocopying without permission in writing from the Association of Women's Health, Obstetric and Neonatal Nurses. Requests for permission to use or reproduce material <u>www.awhonn.org/awhonn/permissiontoreprint.do</u> or mailed to: Permissions, AWHONN, 2000 L Street NW, Suite 740, Washington D.C. 20036. ISBN-13: 978-1-938299-06-3.



ABOUT THE AUTHOR

Cheryl Tatano Beck, DNSc, CNM, FAAN, is a Distinguished Professor at the University of Connecticut, School of Nursing. Her Bachelor of Science degree in Nursing is from Western Connecticut State University. She received her master's degree in Maternal-Newborn Nursing from Yale University. Dr. Beck is a certified nurse-midwife. She received her certificate in nurse-midwifery also from Yale University. Her Doctor of Nursing Science degree is from Boston University. She is a fellow in the American Academy of Nursing. She has received numerous awards, including AWHONN's Distinguished Professional Service Award, AWHONN's Award of Excellence in Research, the Eastern Nursing Research Society's Distinguished Researcher Award, the Distinguished Alumna Award from Yale University, and the Connecticut Nurses' Association's Diamond Jubilee Award for her contribution to nursing research. She was a past member of the editorial board for the Journal of Obstetric, Gynecologic, & Neonatal Nursing. Dr. Beck currently serves on the editorial boards of Advances in Nursing Science, Journal of Perinatal Education, and Global Qualitative Nursing *Research*. She is a member of the President's Advisory Council of Postpartum Support International. Over the past 30 years, Dr. Beck has focused her efforts on developing a research program on postpartum mood and anxiety disorders. She has extensively researched these devastating mood disorders that plague new mothers, using both gualitative and guantitative research methods. Dr. Beck, with her co-author Dr. Robert Gable, developed the Postpartum Depression Screening Scale, which is used internationally to screen women for this crippling mood disorder. She is a prolific writer who has published more than 140 journal articles on such topics as postpartum depression, postpartum onset of panic disorder, birth trauma and post-traumatic stress disorder (PTSD) due to childbirth. Dr. Beck and co-author Dr. Jeanne Driscoll published a book, Postpartum Mood and Anxiety Disorders: A Clinician's Guide, which received the American Journal of Nursing (AJN) 2006 Book of the Year Award. Dr. Beck

is co-author with Dr. Denise Polit of the world's leading nursing research textbook, *Nursing Research: Generating and Assessing Evidence for Nursing Practice*, which was named the 2007 and 2011 AJN Book of the Year. Their book, *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*, received the 2013 AJN Book of the Year Award. Dr. Beck recently published *Traumatic Childbirth*, with her co-authors Dr. Jeanne Watson Driscoll and Sue Watson. She also edited the *Routledge International Handbook of Qualitative Nursing Research*. Currently she is researching secondary traumatic stress in labor and delivery nurses and certified nurse-midwives. Dr. Beck is also assessing the effect of a diet enriched in DHA during pregnancy on postpartum depression.

Disclosure: Dr. Beck receives a royalty from Western Psychological Services who publishes and distributes the Postpartum Depression Screening Scale.

This Practice Monograph was developed for AWHONN, the Association of Women's Health, Obstetric and Neonatal Nurses, as an informational resource for nursing practice. The Practice Monograph does not define a standard of care; nor is it intended to dictate an exclusive course of management. It presents general methods and techniques of practice that AWHONN believes to be currently and widely viewed as acceptable, based on current research and recognized authorities.

Proper care of individual patients may depend on many individual factors to be considered in clinical practice, as well as professional judgment in the techniques described here. Variations and innovations that are consistent with law, and that demonstrably improve the quality of patient care should be encouraged. AWHONN believes that drug classifications and selections set forth in this text are in accordance with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations and the constant flow of information related to drug therapy and drug reactions, the reader is urged to check information available in other published sources for each drug for potential changes in indications, dosages, warnings, and precautions. This is particularly important when a recommended agent is a new or infrequently employed drug. In addition, appropriate medication use may depend on unique factors such as individuals' health status, other medication use, and other factors which the professional must consider in clinical practice.

The information presented here is not designed to define standards of practice for employment, licensure, discipline, legal or other purposes.

Copyright AWHONN 2014; All Rights Reserved. Individual use only. Email requests for other uses at permissions@awhonn.org

POSTPARTUM MOOD AND ANXIETY DISORDERS: CASE STUDIES, RESEARCH, AND NURSING CARE

3RD EDITION

Cheryl Tatano Beck, DNSc, CNM, FAAN



TABLE OF CONTENTS

Introduction	1
Historical Perspective	2
Differentiation Of Postpartum Mood And Anxiety Disorders	4
Postpartum Anxiety Disorders	4
Postpartum Obsessive Compulsive Disorders	4
Postpartum Onset Panic Disorder	6
Posttraumatic Stress Disorder Due To Childbirth	8
Traumatic Birth Experiences	10
Theme 1: To Care For Me: Was That Too Much To Ask?	10
Theme 2: To Communicate With Me: Why Was This Neglected?	10
Theme 3: To Provide Safe Care: You Betrayed My Trust And I Felt Powerless	10
Theme 4: The End Justifies The Means: At Whose Expense? At What Price?	10
Experience Of Mothers With Posttraumatic Stress Disorder	11
Theme 1: Going to the Movies: Please Don't Make Me Go!	11
Theme 2: A Shadow of Myself: Too Numb to Try and Change	11
Theme 3: Seeking To Have Questions Answered And Wanting To Talk,	
Talk, Talk	11
Theme 4: The Dangerous Trio Of Anger, Anxiety, And Depression:	
Spiraling Downward	12
Theme 5: Isolation From The World Of Motherhood: Dreams Shattered	12
Implications For Nursing Practice	12
Anniversary Of Birth Trauma	13
Theme 1. The Prologue: An Agonizing Time	13
Theme 2. The Actual Day: A Celebration Of A Birthday Or The Torment	
Of An Anniversary?	13
Theme 3: The Epilogue: A Fragile State	14
Theme 4: Subsequent Anniversaries: For Better Or Worse	14
Implications For Nursing Practice	14
Subsequent Childbirth After A Previous Traumatic Birth	16
Theme 1. Riding The Turbulent Wave Of Panic During Pregnancy	16
Theme 2. Strategizing: Attempts To Reclaim Their Bodies And	
Complete The Journey To Motherhood	16
Theme 3. Bringing Reverence To The Birthing Process And	
Empowering Women	16
Theme 4: Still Elusive: The Longed-For Healing Birth Experience	17
Implications For Nursing Practice	18
Impact Of Birth Trauma On Breastfeeding: A Tale Of Two Pathways	18

Theme 1: Proving Oneself As A Mother: Sheer Determination To Succeed	18
Theme 2: Making Up For An Awful Arrival: Atonement To The Baby	18
Theme 3: Helping To Heal Mentally: Time Out From The Pain In One's Head.	18
Theme 4: Just One More Thing To Be Violated: Mothers' Breasts	20
Theme 5: Enduring The Physical Pain: Seeming At Times An	
Insurmountable Ordeal	20
Theme 6: Dangerous Mix: Birth Trauma And Insufficient Milk Supply	20
Theme 7: Intruding Flashbacks: Stealing Anticipated Joy	20
Theme 8: Disturbing Detachment: An Empty Affair	20
Implications For Nursing Practice	20
Eye Movement Desensitization And Reprocessing	21
PTSD in Fathers	22
Fathers' Experiences Witnessing Partners' Traumatic Childbirth	23
Postpartum Mood Disorders	25
Postpartum Psychosis	25
Bipolar II Disorder: The PPD Impostor	26
Postpartum Depression	28
Diagnosis And Management Of Postpartum Depression	28
Prevalence	28
Adolescents	29
Adoptive Mothers	29
Onset	29
Causes	30
Duration	32
Transcultural Perspectives Of Postpartum Depression	33
Risk Factors For Postpartum Depression	35
The Experience Of PPD: Teetering On The Edge	37
Stage 1. Encountering Terror	37
Anxiety	37
Relentless Obsessive Thinking	38
Enveloping Fogginess	38
Stage 2. Dying of Self	38
Alarming Unrealness	39
Isolating Oneself	39
Contemplating and Attempting Self-Destruction	39
Stage 3. Struggling to Survive	40
Battling the System	40
Praying for Relief	40

Seeking Solace in a Support Group	41
Stage 4. Regaining Control	41
Unpredictable Transitioning	41
Mourning Lost Time	41
Guarded Recovery	41
PPD Experiences in Other Cultures	42
Postpartum Depressive Symptoms And Breastfeeding	47
Effects of PostPartum Depression On Families	47
Effects of PPD on the Mother–Infant Relationship	47
Effects of PPD on Child Development	48
Effects of PPD on Fathers	49
Treatment	51
Primary Prevention	51
Secondary Prevention	52
Psychological Strategies	53
Interpersonal Psychotherapy	53
Cognitive-Behavioral Therapy	53
Pharmacologic Strategies	53
Classes of Antidepressants	53
Antidepressant Treatment and Breastfeeding	53
Electroconvulsive Therapy	55
Complementary and Alternative Medicine Therapies	55
Barriers to Seeking Treatment	56
Screening Instruments	57
Postpartum Depression Predictors Inventory-Revised	58
Postpartum Depression Screening Scale	59
Edinburgh Postnatal Depression Scale	60
Nursing Care	60
References	63
Appendix A	77
Appendix B	
Template Policy and Procedure: Screening Mothers for Postportum Depression	81

INTRODUCTION

Postpartum mood and anxiety disorders have been described as dangerous thieves that rob mothers of the precious time with their infants that they had been dreaming of throughout pregnancy. These disorders can leave lasting scars not only on the mother, but also on her infant, older children, and significant others.

The purpose of this practice monograph is to inform and alert nurses to the gravity of these postpartum mood and anxiety disorders for mothers and their families. It presents a historical perspective of postpartum mental illness, followed by a differentiation of postpartum depression (PPD) from other puerperal mood and anxiety disorders. The following postpartum anxiety disorders are addressed: postpartum obsessive compulsive disorder (OCD), postpartum onset panic disorder, and posttraumatic stress disorder (PTSD) due to childbirth. Next, postpartum mood disorders are discussed: postpartum psychosis (PPP), bipolar II disorder, and PPD. Fathers are not forgotten in this monograph. Both postpartum depression and posttraumatic stress response in fathers are highlighted.

Primary and secondary prevention interventions, such as antidepressants and psychotherapy, are described, and screening scales for identifying women with PPD are reviewed. The symposium ends with nursing interventions for women suffering with postpartum mood and anxiety disorders. Throughout the symposium, case studies of mothers and fathers who have participated in the author's research are interspersed to illustrate their experiences of these postpartum mood and anxiety disorders.

HISTORICAL PERSPECTIVE

In 1838 in France, Esquirol reported the first systematic study of mental illness related to childbirth. He categorized 90 cases into three groups: those occurring during pregnancy, soon after delivery, and several weeks or longer after childbirth. Esquirol believed that the incidence of postpartum mental illness was probably higher in the community than reported in hospital statistics. Many women, he believed, suffered silently at home.

In New York in 1847, MacDonald reported his research on 68 women with postpartum mental illness. He distinguished in more depth the two groups of postpartum-onset mental illness. Characteristics of the early-onset-after-delivery group included rapid development within a few hours or days of irritability, insomnia, and confusion. Women with severe cases experienced bizarre behavior, hallucinations, delusions, and changeability. The later-onset group began to experience symptoms three weeks or more after delivery. Onset was much more gradual than in the early-onset group. Depression was the major characteristic.

The work of Esquirol was continued in France by Louis Victor Marcé. After graduating from medical school he took a position at Ivry-Sur-Seine, a mental hospital near Paris (Hamilton, Harberger, & Perry, 1992). The hospital had been founded by Esquirol for the treatment of postpartum psychiatric illness. Marcé (1858) published his *Traité de la Folie des Femmes Enceintes* about psychiatric illnesses of childbirth based on 79 cases of his own plus hundreds of other cases to which he had access. Marcé distinguished two main categories of psychiatric illness began a few days after delivery and was called *folie des nouvelles accouchées*, meaning the "psychosis of the newly delivered" (DeBofsky & Hamilton, 1995). It was characterized by rapidly changing delirium for a few weeks, followed by depression. Marcé named the second type of *disorder folie des nourrices*, the "psychosis of nursing mothers". This disorder, similar to major depression, usually began three weeks or more after childbirth.

Marcé concluded that the psychiatric disorders of childbirth were connected to the physical events in a woman's body as it moved from its pregnant state to its nonpregnant state. He called this connection *sympathie morbide*, or "morbid sympathy" (DeBofsky & Hamilton, 1995). The endocrine system had not been discovered yet, so the state of knowledge in 1858 prevented Marcé from further clarifying his observation.

In 1888, Marcé's question—what is the connection between the physical changes in organs as they rapidly returned to a nonpregnant state and disorders of the mind?—began to be answered. The Clinical Society of London studied 109 cases of myxoedema. Ninety-four of these cases were in women who were depressed, and onset was often after delivery (Ord, 1888). In half of these cases, insanity occurred in the form of mania, melancholia, or dementia. Administration of a thyroid preparation produced favorable results.

As the 20th century began, evidence was starting to be reported that indicated that Marcé's connexion was partially located in chemical messages sent through the endocrine system (DeBofsky & Hamilton, 1995).

However, this momentum came to a halt with a paper published in 1926 by two well-known psychiatrists, Strecker and Ebaugh. They concluded that there was no psychosis that should be designated as "puerperal" (Strecker & Ebaugh, 1926). After reviewing 50 case histories of postpartum mental illness, they reached a conclusion that denied the uniqueness of postpartum mental illness.

Another blow to the validity of the uniqueness of postpartum mental illness came in 1952 with the American Psychiatric Association's (APA) publication of the first edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (APA, 1952). The word postpartum and related synonyms were nowhere to be found in any of the diagnoses. It wasn't until the fourth edition (*DSM-IV*) (APA, 1994) that the term postpartum appeared, but only as a specifier. In *DSM-IV* "with postpartum onset" was defined as "onset of episode within four weeks postpartum" (p. 423). Now, in *DSM*-5 (APA, 2013), the name of this specifier has been changed to "peripartum onset." *DSM*-5 states that this specifier can be applied "if onset of mood symptoms occurs during pregnancy or in the 4 weeks following delivery" (p. 186). The specifier has now been expanded to include the onset of depressive symptoms during pregnancy. In *DSM*-5 the rationale behind this change in specifier terms was described: "Fifty percent of 'postpartum' major depressive episodes actually begin prior to delivery, thus, these episodes are referred to collectively as peripartum episodes" (p.186).

DIFFERENTIATION OF POSTPARTUM MOOD AND ANXIETY DISORDERS

The term postpartum depression is used as a catchall phrase for many postpartum emotional symptoms, and as a consequence women's symptoms often are misdiagnosed. As more research is conducted on postpartum mood and anxiety disorders, distinctions among these disorders are emerging that help to differentiate PPD from other mental illnesses occurring after birth. Each mood and anxiety disorder has its own pattern of symptoms and unique dangers for disrupting the newly developing family.

Three postpartum mood disorders have been identified in the literature: PPP, PPD, and bipolar II disorder, which is also called the PPD impostor. Three postpartum anxiety disorders are currently identified: panic disorder with postpartum onset, postpartum OCD, and PTSD due to childbirth.

POSTPARTUM ANXIETY DISORDERS Postpartum Obsessive Compulsive Disorders

This postpartum anxiety disorder was identified by Sichel, Cohen, Dimmock, and Rosenbaum (1993). Many new mothers are excessively concerned about details related to their infants. That concern is differentiated, however, from postpartum OCD. Mothers with OCD can experience obsessions or compulsions, or both. Obsessions are recurrent, persistent thoughts, impulses, or images that are intrusive and result in marked anxiety or distress (APA, 2013). Some of these repetitive thoughts are intrusive thoughts of harming the baby. Compulsions, on the other hand, are repetitive behaviors or mental acts that a mother is driven to perform according to rigid rules, e.g., hand-washing or changing the infant's diapers. Mothers with OCD are often afraid of being left alone with their infants and are hypervigilant in protecting the infant. The cause and etiology of OCD are unknown. Hypotheses regarding etiology include the rapid fall in estrogen and progesterone leading to a dysregulation of serotonin (Sichel et al., 1993), and rapid increase in oxytocin (McDougle, Barr, Goodman, & Price, 1999).

A recent meta-analysis provided information on the prevalence and risk of obsessive-compulsive disorder in pregnant and postpartum women (Russell, Fawcett, & Mazmanian, 2013). Included in this metaanalysis were 12 studies in pregnancy, 7 studies in postpartum, and 10 matched controlled studies in the general female population for comparison. Results indicated an increase in the prevalence of OCD during pregnancy and the postpartum period. The lowest prevalence of OCD was in the general female population (mean = 1.08%), followed by pregnancy (mean = 2.07%), and postpartum (mean = 2.43%). Risk analysis indicated that during pregnancy and postpartum women are approximately 1.5 to 2 times more likely to have OCD than women in the general population. In community samples, Wenzel (2011) reported the prevalence of OCD ranged from 0.7% to 4.0% at 6 to 8 weeks postpartum, 4.0% at 6 months after birth, and then decreased to less than 1.0% at 1 year postpartum. Most mothers with postpartum OCD are terrified of revealing their thoughts of harming their infants to anyone because of shame, guilt, and fear that the infant will be taken away from them. When mothers do finally share their thoughts, they often tell clinicians there is no way they would ever act on those thoughts. In fact, mothers usually will describe elaborate plans to avoid situations in which the intrusive thoughts might occur. For example, if a mother experiences repetitive thoughts of cutting her infant with a knife, she may have all the sharp objects and knives removed from her home and kept in a location unknown to her. Unlike mothers suffering from PPP, women with OCD are aware that their obsessions about harming their babies are unreasonable and that these intrusive thoughts are unwanted. In their systematic review of anxiety disorders during the postpartum period, Ross and McLean (2006) found no documented case of a mother with postpartum OCD intentionally harming her infant.

Cognitive-behavioral therapy is recommended as a first line of treatment for OCD. Pharmacotherapy is another treatment option. Selective serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed pharmacologic treatment for OCD (Namouz-Haddad & Nulman, 2014).

Case Study: Alyssa

Six weeks after Alyssa delivered her second daughter, her postpartum obsessive compulsive symptoms became noticeable to her. In fact, these symptoms began on Thanksgiving Day. At around 4 a.m., Alyssa was breastfeeding her baby in a living room chair. She noticed a glass beside her on the coffee table and suddenly she became very afraid that the baby was going to smash her head against it. She kept thinking that something was going to happen involving her baby and that glass. Alyssa kept asking herself, "What am I thinking that for?" It was such a horrible, awful thing to think, but she couldn't stop these thoughts. After that, Alyssa worried a lot about her baby hitting her head against something—against the door, against the coffee table. She was afraid to be alone with the baby and started doing things like asking her husband to come home from work earlier in the afternoon. Taking care of the baby became, in her mind, impossible. Alyssa would become frightened when she thought about her husband going back to work and leaving her alone. She began to be afraid that she might hurt her baby, and kept visualizing broken glass and herself with the baby.

Postpartum Onset Panic Disorder

In 1988, Metz, Sichel, and Goff first described panic disorder that presented initially in the early postpartum period. This anxiety disorder is characterized by frightening panic attacks that include acute onset of anxiety, fear, rapid breathing, palpitations, and a sense of doom. Additional symptoms can include dizziness, choking feeling, chest pain, sweating, numbness, derealization, and fear of dying (APA, 2013).

Findings from community studies report the prevalence of panic disorder in mothers 6 to 10 weeks after birth ranged from 0.5% to 2.9% (Wenzel, 2011). In women with preexisting panic disorder, research on the course of panic disorder throughout pregnancy and the postpartum period reported conflicting findings. Do panic symptoms increase, decrease, or is there no change? For example, Bandelow et al. (2006) conducted a retrospective study with 93 women with panic disorder who provided information on a total of 195 pregnancies. Out of these 195 pregnancies, 9% (n = 17) reported improvement in their panic symptoms during pregnancy, 84% (n = 165) no change, and 7% (n = 13) an increase in panic symptoms. In their postpartum period, 3% (n = 6) experienced an improvement in panic symptoms, 79% (n = 153) no change in symptoms, and 18% (n = 36) a worsening of panic symptoms. In their systematic review, Ross and McLean (2006) concluded that "no change" in panic symptoms was the most frequent response in pregnant women with preexisting panic disorder.

Panic disorder in pregnancy was found to be a significant predictor of postpartum depression (Rambelli, et al., 2010). Women with panic disorder in pregnancy were 4.2 times more likely to develop postpartum depression than women without panic disorder.

In response to limited studies on this postpartum anxiety disorder, Beck (1998a) conducted a qualitative study on postpartum panic disorder that revealed the following essential components of mothers' descriptions of their experiences with this anxiety disorder.

The terrifying physical and emotional components of panic paralyzed mothers, leaving them feeling totally out of control. One mother shared the following description of some of the physical sensations that she experienced during a panic attack:

It was like somebody injected Coca-Cola into my veins. Between the bubbles and the caffeine, everything was just rushing. (Beck, 1998a, p.133)

Other women described how their vision was blurred and sounds were amplified during a panic attack. As panic symptoms worsened and mothers' sense of control in their lives was essentially lost, some women started having suicidal thoughts as the following quote illustrates:

I always knew it was crazy but I needed to do it. I would write to my baby almost as if I knew I was going to die, which is morbid. I would write what I felt about him and how much I loved him, I think because in the back of my mind I was always afraid that I might kill myself (quietly weeping). (Beck, 1998a, p.133) During panic attacks, mothers' cognitive ability was abruptly diminished. Between panic attacks, women did not trust their minds because they were so distracted by the fear that another panic attack would strike. Cognizant of this diminished cognitive ability, one mother started audiotaping her son talking and singing because:

When he is 15, I want to listen to his voice when he was a baby so that I can hear it when I am normal. Because I am not sure now that when I hear him babbling and gooing, that what I am even hearing is normal. (Beck, 1998a, p.133)

Mothers feverishly struggled to maintain their composure in the midst of a panic attack, leaving them exhausted. They became consumed with trying to prevent further panic attacks. Some mothers drastically curtailed their activities outside the home. These negative changes in lifestyle resulted in plummeting self-esteem. As one mother revealed:

The personal disappointment is the hardest part. I had such great aspirations for myself but now I wonder. Sometimes I could cry that I can't do things that other people do. The disappointment is overwhelming to me that I used to be this really unbelievably functioning person. When I was in college, I could do anything until I had a baby and the panic started. (Beck, 1998a, p. 134)

Women were haunted by the fear that their panic could traumatize their children. As this mother shared:

I was so afraid that I would leave a permanent mark on my son. That the way I was would rub off on him. I just wished for his life that he can do well in spite of me somehow. (Beck, 1998a, p. 134)

Case Study: Isabelle

Isabelle was born in Cuba and had lived in the United States for 3 years before she became pregnant. Two months after Isabelle gave birth to her first baby, her panic attacks began. She was at work, and panic hit her suddenly, without any warning. She thought she was having a heart attack. Isabelle felt numb all over and started to hyperventilate. She felt as though she couldn't get enough air. She became scared, started to cry, and ran outside to get air. Feelings of doom came over her. Isabelle also experienced palpitations, sweating, dizziness, fear of losing control, and derealization with her panic attacks. She was treated with lorazepam, a highpotency benzodiazepine that is an effective antipanic medication, in conjunction with cognitive-behavioral therapy.

Posttraumatic Stress Disorder Due to Childbirth

Reported prevalence of diagnosed PTSD secondary to a traumatic childbirth ranges from 1.5% (Ayers & Pickering, 2001) to 5.6% (Creedy, Shochet, & Horsfall, 2000). This postpartum anxiety disorder occurs internationally. For instance, 2.4% of women in Italy 3 to 6 months after delivery had a diagnosis of PTSD due to childbirth (Maggioni, Margola, & Filippi, 2006). At 6 weeks postpartum, the reported prevalence of PTSD after childbirth in Nigeria was 5.9% (Adewuya, Ologun, & Ibigbami, 2006). In Sweden, 3% of women had PTSD within the first 11 months postpartum (Söderquist, Wijma, & Wijma, 2006).

In Table 1 the prevalence of elevated posttraumatic stress symptoms in recent studies is reported. Posttraumatic stress disorder in new mothers was examined in the *Listening to Mothers II* U.S. national survey (Beck, Gable, Sakala, & Declercq, 2011a). The sample of 902 mothers completed the Posttraumatic Stress Disorder Symptom Scale-Self Report (PSS-SR) (Foa, Riggs, Dancu, & Rothbaum, 1993) adapted by Ayers and Pickering (2001) to make it event-specific with its items referring to childbirth. Nine percent of the sample screened positive for meeting all the diagnostic criteria of PTSD after childbirth. In this national sample, 18% of mothers scored about the cutoff score on the PSS-SR, indicating elevated levels of posttraumatic stress symptoms.

Table 1.

Study/Country	Data Collection	Instruments	Prevalence (%)
Sawyer & Ayers (2009)/U.K.	11 months postpartum	PDS	12.4
Beck et al. (2011a)/U.S.	7-18 months postpartum	PSS-SR	18
McDonald et al. (2011)/U.K.	2 years postpartum	IES	17.3
Stramrood et al. (2011)/Netherlands	6 weeks & 15 months postpartum	PSS-SR	11 PE 17 PPROM
Polachek et al. (2012)/Israel	1 month postpartum	PDS	25.9
Verreault et al. (2012)/Canada	1, 3, & 6 months postpartum	MPSS-SR	7.6, 6.1, 4
Shaban et al. (2013)/Iran	6-8 weeks postpartum	PSS	17.2

Prevalence of Elevated Posttraumatic Stress Symptoms after Childbirth

Notes: IES= Impact of Event Scale; PSS-SR= Posttraumatic Stress Disorder Symptom Scale-Self Report; PDS= Posttraumatic Stress Diagnostic Scale; PE= preeclampsia; PPROM= preterm premature rupture of membranes; MPSS-SR= Modified PTSD Symptom Scale In *DSM-IV*, the definition of an extreme traumatic stressor necessary for a diagnosis of PTSD was described as "an event that involves actual or threatened death or serious injury, or the threat to the physical integrity of self or others." The response of the individual is extreme fear, helplessness, or horror (APA, 1994, p. 424). In *DSM-5* (APA, 2013) the emotional responses to the trauma such as fear, helplessness, and horror are now deleted from the definition of an extreme traumatic stressor. The stressor necessary for a diagnosis of PTSD has been revised in *DSM-5* to "exposure to actual or threatened death, serious injury, or sexual violence" (APA, 2013, p.271). Though *DSM-5* does not specifically list childbirth as an example of an extreme traumatic stressor, childbirth certainly can be considered a traumatic event (Beck, 2004a).

Individuals diagnosed with PTSD, no matter what the traumatic event, may experience the following categories of distressing symptoms: (a) intrusion symptoms of reexperiencing the traumatic events by flashbacks or nightmares; (b) persistent avoidance of triggers (thoughts or activities related to the original traumatic event); (c) negative alterations in cognitions and mood such as being unable to remember parts of the traumatic event, exaggerated negative beliefs about yourself or others, detachment from others; and (d) marked changes in arousal and reactivity such as hypervigilance, irritability, anger, difficulty concentrating, and sleep problems (APA, 2013).

Risk factors for PTSD due to childbirth fall into those predictors present during the prenatal period and those during the intrapartum period. In research to date, the following risk factors have been confirmed repeatedly: prenatal depression, prenatal anxiety, prenatal PTSD, a history of mental-health problems, and prior trauma; in particular, childhood sexual abuse (Beck, Driscoll, & Watson, 2013). When focusing on the intrapartum experience, the following predictors have been repeatedly reported in the literature and paint a picture of a profile of women most vulnerable to perceiving their childbirth as traumatic leading to a posttraumatic stress response: high level of medical interventions, feelings of powerlessness, a long painful labor, uncaring labor and delivery staff, and perceived lack of support (Beck, Driscoll, & Watson, 2013). Posttraumatic stress disorder due to childbirth results in long-term effects not only for women, but also for their families.

TRAUMATIC BIRTH EXPERIENCES

What is it about a labor and delivery that could be so traumatic that a mother could develop PTSD? Beck (2004a) conducted a qualitative study investigating birth trauma. Forty women from around the globe participated in this study via the Internet: 23 mothers in New Zealand, eight in the United States, six in Australia, and three in the United Kingdom. Mothers were recruited through Trauma and Birth Stress, a charitable trust in New Zealand. Women described their traumatic childbirths, and analysis of their stories revealed four themes that captured the essence of birth trauma.

Theme 1: To Care for Me: Was That Too Much to Ask?

Mothers' perceptions of lack of caring by obstetric healthcare providers during such a vulnerable time was one of the core components of birth trauma. Women shared that they felt abandoned, alone, and stripped of their dignity. Lack of interest in the women as individuals and lack of support and reassurance when they desperately needed some filled mothers' stories. As one mother vividly stated, "I am amazed that 3 1/2 hours in the labor and delivery room could cause such utter destruction in my life. It truly was like being the victim of a violent crime or rape" (Beck, 2004a, p. 32).

Theme 2: To Communicate with Me: Why Was This Neglected?

Failure of labor and delivery staff to communicate with the woman was another core component of birth trauma. At times during childbirth, the mothers felt invisible. Healthcare providers talked among themselves as if the mothers were not present. One primigravida recalled:

After an hour trying to deliver the baby with a vacuum extractor, the obstetrician said it was too late for an emergency cesarean. The baby was truly stuck. By now the doctors were acting like I'm not there. The attending physician was saying, "We may lose this bloody baby." The hospital staff discussed my baby's possible death in front of me and argued in front of me just as if I weren't there. (Beck, 2004a, p. 33)

Theme 3: To Provide Safe Care: You Betrayed My Trust and I Felt Powerless

At times during their labor and delivery, some women felt waves of terror come over them as they perceived they were receiving unsafe care. These women feared for their own safety as well as the safety of their unborn infants, but felt powerless to rectify the dangerous situation.

Theme 4: The End Justifies the Means: At Whose Expense? At What Price?

The fourth core component of a traumatic birth was the belief that the bottom line in considering a delivery successful was the outcome of the baby. If the baby was born alive with good Apgar scores, that was all that mattered. Women's experiences of birth trauma were pushed into the background as the celebration of a healthy baby took center stage.

One mother painfully recalled, "I was congratulated for how 'quickly and easily' the baby came out and that he scored a perfect 10! The worst thing was that nobody acknowledged that I had a bad time. Everyone was so pleased it had gone so well! I felt as if I had been raped!" (Beck, 2004a, p. 34)

EXPERIENCE OF MOTHERS WITH POST-TRAUMATIC STRESS DISORDER

To better understand mothers' experiences of PTSD due to traumatic childbirth, Beck (2004b) conducted another qualitative study via the Internet with 38 mothers: 22 from New Zealand, seven from the United States, six from Australia, and three from the United Kingdom. Five themes emerged from the women's stories that described the essence of living with PTSD as a new mother.

Theme 1: Going to the Movies: Please Don't Make Me Go!

During the day, mothers were bombarded with flashbacks of their birth trauma and at night, terrifying nightmares would interrupt their much-needed sleep. Women described loop tracks imprinted in their brains, showing distressing memories or "movies" of their traumatic childbirths repeatedly on automatic replay.

One mother who had not received the epidural she wanted experienced an "agonizing forceps delivery" and was plagued by "extraordinarily realistic nightmares." She vividly described the experience:

Like Lady Macbeth, I became terrified of sleeping! I would go without sleep for about 72–96 hours. I always knew I'd have to fight the nightmares again. I was scared that this time I wouldn't have the strength to fight it, that it would succeed in destroying me. (Beck, 2004b, p. 219)

Theme 2: A Shadow of Myself: Too Numb to Try and Change

Traumatized mothers considered themselves only a shadow of their former selves. Women felt numb and detached. Some women experienced dissociation. One mother who had an emergency cesarean and then experienced a postpartum hemorrhage recalled the experience:

I had a drip, a catheter, and was silent. I felt completely numb. I did what was required, and I felt my head was floating way above my body. I struggled to bring it back onto my shoulders, I still feel dissociated like this sometimes. (Beck, 2004b, p. 220)

Theme 3: Seeking to Have Questions Answered and Wanting to Talk, Talk, Talk

As mothers suffered with PTSD, they often obsessed over the details of their labor and delivery. They wanted answers to their questions regarding what had happened during their childbirth and why it happened. Traumatized mothers wanted to talk excessively about their childbirth but soon discovered clinicians and family members became tired of listening. A woman who had delivered multiples painfully shared:

I was so devastated at people's lack of empathy. I told myself what a bad person I was for needing to talk. I felt like the Ancient Mariner, doomed to forever be plucking at people's sleeves and trying to tell them my story which they didn't want to hear. (Beck, 2004b, p. 221)

Theme 4: The Dangerous Trio of Anger, Anxiety, and Depression: Spiraling Downward

Women experienced anger, anxiety, and depression at heightened levels. Anger turned to rage, anxiety led to panic attacks, and depression left many women considering suicide. Women directed their anger at clinicians, family members, and themselves.

Theme 5: Isolation from the World of Motherhood: Dreams Shattered

Women's PTSD isolated them from their infants and from the support of other mothers. The walls that a traumatic birth erected between a woman and her baby were not temporary. One multiparous mother who had experienced a severe postpartum hemorrhage painfully shared the destructive grip that her PTSD had on her relationship with her child:

My child turned 3 years old a few weeks ago. I suppose the pain was not so acute this time. I actually made him a birthday cake and was grateful that I could go to work and not think about the significance of the day. The pain was less, but it was replaced by a numbness that still worries me. I hope that as time passes I can forge some kind of real closeness with this child. I am still unable to tell him I love him, but I can now hold him and have times when I am proud of him. I have come a long, long way. (Beck, 2004b, p. 222)

Women suffering from PTSD could not tolerate being near other mothers who had not experienced birth trauma. For some mothers, their dreams of having any more children were shattered. Terrified at even the thought of going through another childbirth led some mothers to have tubal ligations because they could not envision having another baby.

Implications for Nursing Practice

Clearly, the best prevention for PTSD due to childbirth is to prevent birth trauma in the first place whenever possible. In addition to providing safe care during labor and delivery, clinicians should demonstrate that they care for the pregnant woman and communicate effectively with women during the childbearing process. Crompton (2003) urged labor and delivery staff to treat every woman as if she were a survivor of a previous traumatic event. Essential to our intrapartum practices, nurses must respect the laboring woman and protect her dignity, provide autonomy and control. Nurses cannot treat invasive procedures as normal and routine. Church and Scanlan (2002) also urged healthcare providers to be vigilant in observing women during the postpartum period for any early trauma symptoms, such as a dazed look or withdrawal.

When women are admitted to the labor and delivery unit, clinicians should take a careful history, focusing on any fears they may have about giving birth. For multiparous women, the admission history should include questions about whether previous births were perceived as traumatic. Debriefing sessions may be helpful in decreasing trauma symptoms in mothers who perceive their births to have been traumatic. Debriefing refers to a structured psychological interview conducted shortly after a traumatic event. Persons who experienced the trauma are asked to describe their experiences, cognitions, and emotional reactions to the trauma. The purpose of a debriefing is to reduce the initial psychological distress and help prevent PTSD (Mitchell & Dyregrov, 1993). Sometimes "debriefing" is the term used loosely to describe when postpartum nurses discuss with a woman her birth experience. The formal structured debriefing, however, is led by mental-health clinicians.

The (TABS) charitable trust can provide key information and support to new mothers and their families regarding PTSD after childbirth (<u>http://www.tabs.org.nz</u>). It was founded by five mothers who had experienced traumatic births to support women who have experienced birth trauma and to educate healthcare professionals and the lay public about PTSD due to childbirth.

ANNIVERSARY OF BIRTH TRAUMA

Olde, van der Hart, Kleber, and van Son (2006) call for more research to focus on the chronic nature of birth trauma, especially childbirth-related posttraumatic stress occurring for more than six months postpartum. Beck (2006) investigated mothers' experiences regarding the anniversary of their birth trauma using an Internet-based sample of 37 mothers who perceived the births of their children as traumatic. About half of the sample (n = 18, 49%) reported having been diagnosed with PTSD due to birth trauma. The study included 20 women from the United States, eight from New Zealand, four from Australia, four from the United Kingdom, and one from Canada. Four themes emerged from the mothers' stories.

Theme 1. The Prologue: An Agonizing Time

For weeks and months before the anniversary, mothers were plagued with distressing thoughts and emotions. The season of the year, calendars, and clocks took center stage as the anniversary neared. Clock-watching consumed the days and nights of some mothers. Illustrating this fixation on time, one mother recalled, "The entire two days before the anniversary I watch the clock and relive all the hell I know that a year or two or three now ago for the first 30-plus hours of labor I was hanging in there, suffering, but dealt with the pain virtually alone." (Beck, 2006, p. 384)

Dread, anxiety, grief, loss, fear, stress, and guilt were among the distressing emotions that filled women's lives. For some mothers, their approaching anniversary of birth trauma took a physical toll, such as a flareup of psoriasis or asthma.

Theme 2. The Actual Day: A Celebration of a Birthday or the Torment of an Anniversary?

What made the anniversary of birth trauma so distressing was the extra burden women felt to enjoy a celebration of their child's birthday. Some mothers shared that they did not know how to celebrate their child's birthday. One woman who had an emergency cesarean delivery vividly explained: "I can't stop seeing images of a woman drugged and strapped down and gutted like a fish. I can't get those or my own images out of my mind. I didn't know how to celebrate my daughter's birthday." (Beck, 2006, p. 386)

To survive the day, some women purposely arranged birthday parties on a different day or week. Fearing that the actual birthday would be a powerful trigger, the mothers chose a date that would not trigger any

traumatic memories. One mother describes that for three years she chose a random day to celebrate her son's birthday:

We made a cake on a random day. I never told my son it was coming up. I bought him things and wrapped them but he doesn't know what they are for. I kissed him and told him before I went to work, "happy birthday," but only when he was asleep. (Beck, 2006, p. 387)

Theme 3: The Epilogue: A Fragile State

Managing to survive the anniversary of traumatic birth took such a heavy toll on the mothers that they needed time to recuperate and heal old wounds that had been freshly opened. One woman admitted,

As hard as I try to move away from the trauma, at birthday anniversary time, I am pulled straight back as if on a giant rubber band into the midst of it all and spend months after trying to pull myself away from it again. (Beck, 2006, p. 387)

Theme 4: Subsequent Anniversaries: For Better or Worse

Women who had experienced multiple anniversaries did not describe one consistent pattern. For some mothers, each successive anniversary was slightly easier to manage. Other women did not experience any improvement with subsequent anniversaries. One mother described the fifth anniversary of her birth trauma:

I can't believe five years later that I feel such strong emotions and that my body responds physically. It is like the birthing trauma and the anxiety, loss, and pain associated with it seem to reside in every cell of my being, with a memory capacity that serves to never let me forget. (Beck, 2006, p. 388)

Implications for Nursing Practice

Nurses should be vigilant around children's birthdays for any signs that mothers may be in distress as anniversaries approach. Clinicians can screen women for traumatic stress symptoms using instruments such as the Posttraumatic Stress Symptom Scale-Self Report (PSS-SR) (Foa et al., 1993). Depending on the severity of symptoms, referral for mental-healthcare follow-up may be appropriate.

Case Study: Lisa

Lisa is a 32-year-old primipara. Her labor had been progressing well, and when she was fully dilated she started pushing. The fetal heart rate dropped suddenly, and the obstetrician tried vacuum extraction to speed up the delivery. The vacuum extraction failed and was followed by a forceps delivery. The neonate's 1- and 5-minute Apgar scores were 8 and 9. Lisa's husband and the labor and delivery staff celebrated a successful delivery of a healthy baby boy. Lisa, however, perceived her delivery as traumatic because no one in the delivery room communicated with her and explained what was happening. Lisa now suffers from PTSD due to birth trauma. She describes the experience:

The doctor turned on this machine that sounded like a swimming pool pump. He proceeded and hurriedly showed me the piece that was to be inserted into me. It

was chrome metal and extremely large in circumference. Next thing he begins to pull on this hose, which was the extension to the suction. He gritted his teeth and pulled. I felt sick. On the end of this machine was our baby's head. He used every ounce of his male strength to pull the baby out. I was horrified. I started to imagine that any minute now a head will come out, ripped off its body. I was really in shock. He had his foot up on the bed, using it as leverage to pull. All of a sudden, the loud sucking machine made an even louder noise, as it broke suction. The doctor fell back and nearly landed on his bum. Blood came spurting out of me, all over him. That was it for me. I thought he ripped the head off. He then swore and said hurriedly, "Get the forceps." I can still remember the feeling of him ripping the baby out of me. It was the most awful, unnatural, devastating feeling ever. Well, finally the baby. I was, by this stage, still stuck in my own private horror movie, visualizing my baby being born dead with half of its head missing. The pediatrician was standing beside the doctor, and I assumed that he would take the dead baby away. But, much to my horror and surprise, the doctor pulled out this blood-red baby and threw it on my tummy. I screamed, "Get him off of me!" I cried my eyes out! (Beck, 2004a, p. 33)

For four months after the delivery, Lisa felt her traumatic delivery movie played over and over in her brain. She explained that she "lived in two worlds, the videotape of the birth and the 'real' world":

The videotape felt more real. I lived in my own bubble, not quite connecting with anyone. I could hear and communicate, but experienced interactions with others as a spectator. The "videotape" ran constantly for four months. (Beck, 2004b, p. 219)

Lisa also suffered with two terrifying nightmares. In the first, her obstetrician was a rapist knocking on her door. In the second, her obstetrician ripped her son's head off as he was delivered. Lisa tried to avoid anything that would trigger memories of her labor and delivery. She isolated herself from other mothers and babies. She would even drive miles out of her way to avoid passing the hospital where she had delivered.

SUBSEQUENT CHILDBIRTH AFTER A PREVIOUS TRAUMATIC BIRTH

Is there a chronic nature of childbirth-related posttraumatic stress lasting more than six months? Does a previous traumatic birth impact subsequent births women go on to experience? In a qualitative study of women's experiences of a subsequent childbirth following a previous birth trauma, Beck and Watson (2010) reported four themes that together described the essence of this experience.

Theme 1: Riding the Turbulent Wave of Panic During Pregnancy

The long nine months of pregnancy waiting for labor and delivery were frequently described as being full of fear, panic, dread, terror, and denial. One mother vividly shared in detail the moment she knew she was pregnant again:

I remember the exact moment I realized what was happening. I was on my lunch break at work, sitting under a large oak tree, watching cars go by my office, talking with my husband. I suddenly knew—I am pregnant again! I remember the exact angle of the sun, the shading of the objects around me. I remember looking into the sun, at that tree, at the windows to the office thinking, 'No! God PLEASE NO!' I felt my chest at once sink inward on me and take on the weight of a 1,000 bricks. I was short of breath, my head seared. All I could think of was 'NOOOOOOOO!' (Beck & Watson, 2010, p. 245)

Theme 2: Strategizing: Attempts to Reclaim Their Bodies and Complete the Journey to Motherhood

Women shared various strategies they used to help them survive the nine anxiety-filled months of pregnancy and help ensure their upcoming births were not traumatic. As one mother explained, "I need to bring a reverence to the process so I won't feel like a piece of meat lost in the system" (Beck & Watson, 2010, p. 246).

Examples of strategies included:

- Writing a detailed birth plan.
- Hiring a doula for labor and delivery.
- Practicing hypnobirth.
- Reading about the birth process.
- Keeping a journal.
- Nurturing self through exercise, yoga, etc.
- Interviewing obstetric healthcare providers.

Theme 3: Bringing Reverence to the Birthing Process and Empowering Women

For the majority of women, the subsequent birth was a healing experience. Women shared what it was about this subsequent birth that made it a healing experience.

I was treated with respect, my wishes and those of my husband were listened to. I wasn't made to feel like a piece of meat this time but instead like a woman experiencing one of nature's most wonderful events. Pain relief was taken seriously. First time around I was ignored. I begged and pleaded for pain relief. Second time around it was offered but because I was made to feel in control, I was able to decline. I wasn't rushed! My baby was allowed to arrive when she was ready. When my first was born, I was told "five minutes or I get the forceps" by the doctor on call. I pushed so hard that I tore badly. Communication with labor and delivery staff was so much better the second time. The first time the emergency cord was pulled but no one told me why. I thought my baby was dead and no one would elaborate. (Beck & Watson, 2010, pp. 246-247)

Some mothers were careful to say, however, that as healing as their subsequent births were, they mourned what they had missed out with the previous traumatic birth and that this healing birth could never change the past.

All the positive, empowering births in the world won't ever change what happened with my first baby and me. Our relationship is forever built around his birth experience. The second birth was so wonderful I would go through it all again, but it can never change the past. (Beck & Watson, 2010, p. 247)

Theme 4: Still Elusive: The Longed-for Healing Birth Experience

Sadly, not all the women had experienced a positive subsequent childbirth. For example, one mother decided to try for a home birth, but experienced postpartum hemorrhage and needed to be transported to the hospital via ambulance.

When the ambulance arrived I felt rescued. I have never been so grateful that hospitals exist. The blue light ambulance journey was terrifying and I was in excruciating pain. By this point I was trying to detach my head from my body, as I had done years earlier when I was being raped.

She went on to vividly describe that as she lay on the operating table:

... with my legs held in the air by two strangers while a third mopped the blood between my legs, I felt raped all over again. I wanted to die. I had failed as a woman. My privacy had been invaded again. I felt sick. (Beck & Watson. 2010, p. 247)

Implications for Nursing Practice

Subsequent childbirth after a prior traumatic birth provides nurses with a golden opportunity to help these traumatized women reclaim their bodies and complete their journey to motherhood. First, however, nurses need to identify those mothers who have had a previous birth trauma. Part of the initial prenatal visit should include a discussion with multiparas about their prior labor and deliveries. Giving traumatized mothers permission and encouragement to share their birth trauma is the start to helping them heal, and also to prepare for their upcoming birth. During pregnancy is a perfect time for nurses to help traumatized mothers deal with any unresolved trauma issues. Nurses can share with the mothers some of the strategies that women in this study used to help them through the nine long months waiting for the birthing process to start. When a woman goes on to have a subsequent birth following a birth trauma, this birth can either help heal or retraumatize a mother. Nurses have a valuable role in determining which direction the mother's subsequent birth will lead her.

IMPACT OF BIRTH TRAUMA ON BREASTFEEDING: A TALE OF TWO PATHWAYS

Does a traumatic childbirth impact mothers' breastfeeding experiences? In Beck and Watson's (2008) qualitative study, they found the answer was yes.

There were, however, two different pathways that a woman could go down: one promoted breastfeeding and the other impeded breastfeeding. There were eight themes that described the experiences of mothers who chose to breastfeed after birth trauma. In Figure 1, these themes are depicted as weights on a scale that, depending on the number of these weights a mother experienced, could tip the breastfeeding scale in one direction or the other. Women's breastfeeding experiences were unique and complex. Each mother experienced a different constellation of these factors.

Three of the eight themes or factors promoted breastfeeding. These three themes are described, followed by the five themes that impeded breastfeeding.

Theme 1: Proving Oneself as a Mother: Sheer Determination to Succeed

Women often perceived that they had "failed" at giving birth since their birth had been so traumatic. These women felt the need to "prove" themselves as mothers by successfully breastfeeding.

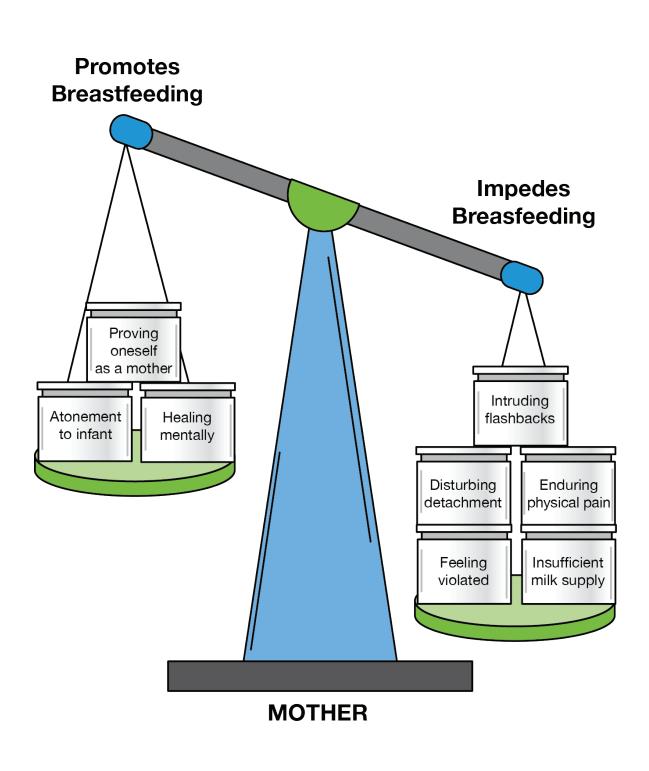
Theme 2: Making Up for an Awful Arrival: Atonement to the Baby

Some mothers had an unyielding resolve to atone to their infants for their "sin" of traumatic birth. A strong need to make amends drove their decision to breastfeed. As one mother revealed: "Breastfeeding became a form of forgiveness for me. Giving my daughter the best possible start, I breastfed her for 27 months" (Beck & Watson, 2008, p. 233).

Theme 3: Helping to Heal Mentally: Time Out From the Pain in One's Head

For some women, breastfeeding their infants was soothing. Breastfeeding helped heal and restore their faith in their bodies. It also helped the mothers feel connected to their infants.

Figure 1. Breastfeeding Scale



The next five themes described were the factors that impeded women's breastfeeding experiences following traumatic births.

Theme 4: Just One More Thing to Be Violated: Mothers' Breasts

Because their traumatic births often left women feeling violated and stripped of their dignity, women became vigilant in protecting their bodies from being violated again. Women did not want nurses or lactation consultants touching their breasts.

Theme 5: Enduring the Physical Pain: Seeming at Times an Insurmountable Ordeal

Women who suffered severe physical trauma from a vaginal birth, such as a shoulder dystocia birth, shared that the pain tipped the scale in their decision to stop breastfeeding early on.

Theme 6: Dangerous Mix: Birth Trauma and Insufficient Milk Supply

Some mothers believed that their birth trauma resulted in an inadequate milk supply. One mother who had a torn pelvic ligament disclosed: "My body was so traumatized by the delivery and days after it that it never fully recovered from it. My milk never really came in well" (Beck & Watson, 2008, p. 234).

Theme 7: Intruding Flashbacks: Stealing Anticipated Joy

When trying to breastfeed, some women shared that intrusive flashbacks of their birth trauma would occur, causing them great distress.

Theme 8: Disturbing Detachment: An Empty Affair

Traumatic childbirth left women at times feeling detached and distanced from their infants. One woman explained: "I hated having to offer my body to my child who felt like a stranger" (Beck & Watson, 2008, p. 234).

Another mother admitted: "I didn't feel like a real mother as I was unable to give my daughter a normal birth. I felt very disconnected from this baby as I breastfed her" (Beck & Watson, 2008, p. 235).

Implications for Nursing Practice

Before mothers are discharged from the hospital, nurses need to explore with them whether they perceived their birth as traumatic. Traumatized mothers may need more intensive one-on-one support to help them establish breastfeeding. Clinicians need to remember that not only can traumatic childbirth negatively impact mothers, but also that it can have damaging impact on the developing mother-infant relationship. Providing women who had traumatic births with support and education to continue breastfeeding is only part of healthcare providers' responsibility. We need to let women know that it is their right to choose not to breastfeed, without any judgment or guilt.

EYE MOVEMENT DESENSITIZATION AND REPROCESSING

Francine Shapiro (2001) developed eye movement desensitization and reprocessing (EMDR) treatment for PTSD. Shapiro explained that traumatic events can seem to get locked in the nervous system with the original feelings and thoughts from when the trauma occurred. While the person focuses on the distressing trauma event, bilateral stimulation such as eye movements back and forth seem to help unlock the nervous system, permitting the brain to process the trauma. These eye movements assist in processing the unconscious material. Negative cognitions of self are replaced by positive cognitions of self when the traumatic experience is thought of. EMDR has been successfully used for years with PTSD in the general population. Limited research exists on the effectiveness of EMDR treatment with women suffering from PTSD due to childbirth (Sandström et al., 2008; Stramrood et al., 2012). In a review of the management of PTSD after childbirth, Lapp et al. (2010) concluded that debriefing was inconclusively effective, but EMDR and cognitive behavioral therapy may improve posttraumatic stress symptoms in mothers. Randomized controlled trials are needed.

Beck and Watson conducted a qualitative study of mothers' experiences of EMDR treatment for their posttraumatic stress symptoms due to traumatic births (Beck, Driscoll, & Watson, 2013). The following is a portion of one woman's story of her EMDR experience. Taylor had been diagnosed with PTSD due to her traumatic emergency cesarean birth.

Case study: Taylor

My therapist asked me to spend the time in between the next session reflecting on the thoughts and experiences that I found particularly troubling and we'd address them through the EMDR. My therapist used the tripod structure with the red light that moves back and forth. She asked me to track the movement of the lights with my eyes. I found that just watching the movement of the light as it goes back and forth helped me to relax a bit and it's almost as if I don't even have to think that hard of the images or thoughts that are causing me emotional discomfort. They just simply come to my awareness as I watch the light's movement. Then once the light is stopped and I talk about what came to mind, it's almost as if that thought helps lead to the next thought and so on and so forth.

The following are the thoughts and feelings I remember addressing in EMDR:

I was devastated that I could not complete a vaginal delivery. Since I could not get my baby out in the final 3 pushes with the vacuum, I felt like I had failed at the childbirth process. I felt the weight of the world on my shoulders when I remembered the doctor telling me I only had 3 more chances and then we were done. The way I heard it was 'three more strikes and you're out!'

Since I had to have the c-section, I did not feel like I had actually given birth to my daughter. While mentally I knew that I had, emotionally it did not feel that way.

Since I had to stop breastfeeding due to the infection, I also felt like I had failed in that area as well.

Through EMDR I experienced a great emotional release. Prior to EMDR I don't know that I would have been able to identify all of these thoughts and feelings and have known truly what was causing all of my distress. I believe the process of EMDR allowed me to fully explore and process these thoughts and feelings and once that occurred, I no longer felt emotionally stuck. I felt like I could put these feelings away in a place that was manageable and think about them differently. I moved from a place of feeling like a victim to recognizing the successes and positive contributions I made to the childbirth and childrearing process.

Overall, EMDR has been an incredibly helpful and powerful tool. It has provided me with a great deal of relief in coping with past traumas, anxiety related to labor, and most recently with PTSD related to childbirth. I am not sure how long it would have taken to recover from such a depressing and traumatic experience but know that without EMDR it would have taken a lot longer. EMDR allowed me to experience an immediate release that made it possible for me to delve deeper into my thoughts and feelings without breaking down and feeling like I couldn't handle them. While it has only been six months since all this occurred, and I still think about what happened, it does not consume me, nor does it feel unresolved. It is still unpleasant to think about, but I do know that I had successes in labor, and I most certainly do not feel like I failed in any way during the labor or delivery. Most importantly, I did give birth to my daughter. (Beck, Driscoll, & Watson, 2013, pp. 189–190)

PTSD IN FATHERS

A limited number of studies have examined prevalence rates of PTSD in fathers. In assessing posttraumatic stress symptoms in couples, Ayers, Wright, and Wells (2007) found that 5% of mothers and fathers reported elevated levels of posttraumatic stress symptoms. Iles, Slade, and Spiby (2011) found that posttraumatic stress levels were significantly related within couples. This concurrence of posttraumatic stress symptoms was also reported in Stramrood et al.'s (2012) study with fathers in pregnancies complicated by preterm preeclampsia or preterm premature rupture of membranes. This early evidence highlights the need for nurses to evaluate both mothers and fathers for posttraumatic stress symptoms. Early identification and intervention may help prevent couples from spiraling downward.

FATHERS' EXPERIENCES WITNESSING PARTNERS' TRAUMATIC CHILDBIRTH

Two excerpts from Beck and Watson's qualitative study on fathers' experiences of being present at their partners' traumatic births are presented to let fathers' own words be heard (Beck, Driscoll, & Watson, 2013).

Case study: Curt

First is Curt's story, which focuses on his wife's severe postpartum hemorrhage. He vividly portrayed this harrowing birth of his son.

I turned back to my wife, she was very pale and her eyes were struggling to stay open. She went lifeless. Her blood pressure had dropped once again and she was no longer conscious. A nurse brought my son over to me just as my wife was regaining consciousness. He was so small and delicate. His face was so perfect with his mommy's nose. I leaned over with our baby so his mommy could see him. I remember my wife's only concern was that our son had a good suck. Through all this, she was still more concerned for her baby than for herself. The anesthesiologist took my camera and snapped a few photos of all of us. I wanted to make sure there was at least one of my son and his mommy, just in case. The anesthesiologist released one of my wife's arms so that she could touch our son. I saw huge tears roll from my wife's eyes as she reached out for her son. To me, I knew this was her acknowledgement of her final moments with him and her sorrow that she will not be there for her son as he grew. I was counting the moments. I heard more individuals coming into the OR. They knocked the screen back to make room for the extra people that just came rushing in. I had been aware that a newborn was only presented to the father for five minutes or so. Then they would take the baby back to ensure he stayed warm. Five, 10, 20, 30 minutes came and went. I still had my son. I knew something was not going right. I heard a doctor ask what else they had that would stop the bleeding and clot. Then I heard someone run out of the OR. A couple of minutes passed and that person came running back into the OR. I was sitting near the suction jug and could see all the blood that had been removed from my wife's stomach. My toes were numb from forcing them into the floor as I tried to maintain my composure. I did not want to be removed from the OR, especially not now. I felt myself weeping uncontrollably. Over an hour had passed and I still had my baby in my arms. My wife was still alert and I began to hear a different chatter from the other side of the screen. I was beginning to believe everything was going to work out. But I still had my doubts; shortly after our doctor came around to our side of the curtain. She told my wife about the surgery and said she would be by in the morning to see how she was doing. I was asked for the baby and handed him off to one of the nurses. I told my wife I didn't want to leave her side. We made it into recovery. I spent the next few minutes crying uncontrollably. I could not get it together. I could not understand what I was feeling. Any thought of what had just happened threw me back into an emotional nightmare. I found it hard to sleep that night. (Beck, Driscoll, & Watson. 2013, pp. 208–209)

Case study: Andrew

Andrew's story painfully describes his wife's traumatic birth when she gave birth to their stillborn daughter.

I remember holding my wife's hand feeling her emotional paralysis. I remember that I forgot who I was. That it didn't matter. I was going to be a father. She was our first so that transcendence of fatherhood turned to a transcendence of horror. I remember the medical staff coming in asking if we wanted to view our daughter's body. We said no but I later changed my mind that evening, which was the right decision. I will never forget holding her. She was beautiful and nothing was wrong with her except she was dead. I was supposed to be there for my wife. To be strong. To be the rock for her grief, her horror, her loss—the worst thing that could happen to a mother and yet as I said before, I am on an island watching my wife drown and I don't know how to swim.

I not only do not know how to swim but I was drowning myself. But I am a man. I do not need help—John Wayne, you know. I was fooling myself at the expense of my wife and myself. Also, a man does not know the grief of losing a child as he has not carried that child in the womb for nine months, so he has no clue to the devastation. I do not disagree with that statement. But, my baby was still my child. My loss is just as relative. And my grief is just as intense but is dismissed as the context of a man's role in the birth is secondary, therefore so is his grief. (Beck, Driscoll, Watson, 2013, p. 212)

POSTPARTUM MOOD DISORDERS Postpartum Psychosis

Postpartum psychosis (PPP) occurs in 1-2 cases per 1,000 births (Kendell, Chalmers, & Platz, 1987). It is a rare but serious disorder that requires urgent attention because it puts the mother and her infant in grave danger. The onset of psychosis is sudden—usually within a few days after delivery, in most cases within the first three weeks (Brockington et al., 1981). Clinical features can include hallucinations; delusions; agitation; inability to sleep; and bizarre, irrational behavior. Significant predictors of PPP are bipolar disorder and a personal or family history of PPP (Jones & Craddock, 2001). Sleep loss is a major precipitant of PPP and mania. Hamilton, Harberger and Parry (1992) write, "The disorder is remarkable for its mercurial changeability, and lucid intervals may give a false impression of recovery" (p. 35).

The Confidential Enquiries into Maternal Deaths report (CEMD, 2001) identified suicide as the leading cause of maternal death during the first year after delivery. Most women died violently by hanging or jumping rather than by medication overdose. The estimated suicide rate for PPP is 2 per 1,000 sufferers (Oates, 2003). Infanticide accounted for one-third of all U.S. deaths caused by injury during the first year of life (Spinelli, 2005).

Mothers' delusions related to their infants in postpartum psychotic disorders have been examined (Chandra, Bhargavaraman, Raghunandan, & Shaligram, 2006). Out of 105 mothers, 53% reported delusions focusing on their infant, including delusions that someone will kill or harm the baby, the baby was a devil, the baby was God, and the baby was someone else's baby. Women who had delusions that their infant would be harmed or killed were more likely to display affectionate behavior toward their infant. Women with delusions that their baby was the devil or someone else's infant were more likely to hit or smother the infant. Mothers who had delusions that their infant was God were more likely to be considered unsafe with the baby.

Engqvist et al. (2011) explored 10 women's experiences of postpartum psychosis. Four themes described the essence of their experiences: unfulfilled dreams, enveloped by darkness, disabling symptoms, and feeling abandoned. Part of their unfulfilled dreams dealt with their fear of their babies. They didn't know how to care for them. Women feared killing their babies. Terrifying obsessive thoughts of harming their infants pervaded their thoughts. Enveloped by darkness consisted of overwhelming fear and of living in an unreal world. Mothers were terrified of being trapped in an insane mind. Deep, dark, and desperate were adjectives used to describe this fear. Delusions were a complicating component of postpartum psychosis. Examples of these delusions included believing the baby was ill or dying, that they had killed someone, and that their infant was Jesus reborn. Women were paranoid that someone or something was controlling them. Imagining that someone wanted to hurt them or their baby terrified the mothers. Some women believed they were possessed and that their houses were possessed by demons. Disabling symptoms of postpartum psychosis included serious loss of sleep; suicidal thoughts; inability to concentrate; and constantly feeling suspicious, restless, and anxious. Feeling abandoned consisted of distrusting everyone: family, friends, and healthcare clinicians. Totally consumed by their psychosis, women were detached from their baby and the world.

www.awhonn.org

Case Study: Maria

Maria is 20 years old. She was born in Mexico and has been living in Texas since she was 4 years old. Within one week after the birth of her first child, Maria started acting very strangely. She couldn't sleep and thought her husband was being unfaithful to her. Maria did a lot of strange things that had religious connotations. She thought God had come into her body. She believed her infant son was Jesus and that she interacted with her husband through the radio. She thought he would come into the room when a certain song would play on the radio. One evening when she was in the bathroom, she filled the bathtub with scalding hot water and was going to get into the tub. She believed her husband would come in any minute and save her from burning herself. When Maria's family realized how serious her condition was, she was hospitalized and began to receive appropriate treatment.

Bipolar II Disorder: The PPD Impostor

Sichel and Driscoll (1999) coined the term postpartum depression impostor in reference to bipolar II disorder. This mood disorder features a "clinical course of recurring mood episodes consisting of one or more major depressive episodes and at least one hypomanic episode. The major depressive episode must last at least two weeks, and the hypomanic episode must last at least four days to meet the diagnostic criteria" (APA, 2013, p. 135). Symptoms of a hypomanic episode can include:

- Inflated self-esteem or grandiosity,
- Decreased need for sleep,
- More talkative than usual or pressure to keep talking,
- Flight of ideas or subjective experience that thoughts are racing,
- Distractibility,
- Increase in goal-directed activity, and
- Excessive involvement in activities that have a high potential for painful consequences (APA, 2013, pp. 132–133).

DSM-5 reports that childbirth can be a specific trigger in new mothers for hypomanic episodes, which can happen in 10-20% of women in nonclinical populations (APA, 2013). The most typical time for a hypomanic episode is early in the postpartum period. *DSM-5* calls for accurate detection of bipolar II disorder in new mothers to reduce the risk of suicide and infanticide.

Often women report treatment-resistant depression because after multiple courses of antidepressants they still have no relief from their symptoms (Beck & Driscoll, 2006). Bipolar II depression in the postpartum period is often misdiagnosed as unipolar major depression. Sharma, Khan, Corpse, and Sharma (2008) examined the diagnostic profile of 56 women with a referral diagnosis of postpartum depression. Fifty-four percent of the women with postpartum depression were found to have a lifetime diagnosis of bipolar spectrum disorders. Only 10% of these women, however, had received a previous diagnosis of bipolar disorder. Diagnosing hypomania is challenging due to symptoms commonly occurring after childbirth such as diminished sleep. Elation from giving birth may be hard to differentiate from the euphoria of

hypomania. New mothers who are depressed may underreport a history of hypomania and remember only previous depressions. Serious consequences of misdiagnosing postpartum bipolar II disorder can occur with treatment with antidepressants, which may precipitate mania or rapid cycling (Sharma, Burt, & Ritchie, 2010).

The prevalence of thoughts of self-harm and suicidal ideation during the one year postpartum period in women with bipolar II or major depressive disorder was examined (Pope, Xie, Sharma, & Campbell, 2013). In their sample of 147 women, 17% reported self-harm thoughts and 6% reported suicidal ideation.

During the postpartum period, women with bipolar disorder are especially vulnerable to developing psychotic and nonpsychotic episodes. In the first month after birth, mothers with bipolar disorder had a relative risk of 23.2 of admission to a psychiatric facility, compared with women at any other period after delivery. Between 30 and 60 days following birth, the risk is 6.3 (Munk-Olsen et al., 2006).

Postpartum Depression

To be diagnosed as a major depressive disorder, *DSM-5* requires five or more of the following symptoms that need to be present during the same two week period. At least one of the five symptoms must be either depressed mood or loss of interest or pleasure. The other symptoms include:

- Significant weight loss when not dieting,
- Either insomnia or hypersomnia,
- Either psychomotor agitation or retardation,
- Fatigue,
- Feelings of guilt or worthlessness,
- Indecisiveness or decrease concentration, and
- Recurrent suicidal ideation (APA, 2013).

DSM-5 now has a peripartum onset specifier for a major depressive episode (APA, 2013). This specifier is applied when the major depression has an onset during pregnancy or within four weeks after birth. A peripartum major depression can occur with or without psychotic features. *DSM-5* reports that postpartum major depression with psychotic features occurs between 1 in 500 and 1 in 1,000 births. If a woman has had a postpartum depression with psychotic features, her risk for recurrence of this mood disorder with her next childbirth is between 30% and 50% (APA, 2013).

DIAGNOSIS AND MANAGEMENT OF POSTPARTUM DEPRESSION

Of all the postpartum mood and anxiety disorders, the most research has been done on postpartum depression. Psychometrically sound instruments are available for nurses to screen for postpartum depression.

PREVALENCE

Postpartum depression is a major public health problem (Wisner, Chambers, & Sit, 2006). In an evidence report for the Agency for Healthcare Research and Quality, Gaynes and colleagues (2005) systematically reviewed studies on the prevalence and incidence of depression during the first 12 months postpartum. Point prevalence refers to the percentage of women with depression at a given point in time (e.g., at four weeks postpartum). Period prevalence is the percentage of women with depression over a period of time (e.g., during the first six months after delivery). Incidence is the percentage of women with depressive episodes that begin during the first 12 months after birth (Gaynes et al., 2005).

During the postpartum period, the point prevalence of major and minor depressive episodes starts rising; it peaks in the third month at 12.9%. From months four through seven postpartum, the prevalence drops slightly to between 9.9% and 10.6% (Gaynes et al., 2005). The point prevalence for major depressive episodes alone peaks at two months (5.7%) and six months (5.6%) after delivery.

In terms of period prevalence, Gaynes et al. (2005) reported that after delivery, up to 19.2% of women have either major or minor depressive episodes during the first three months, with 7.1% having major

depressive episodes. Incidence of a new episode of major or minor depression within the first 3 months postpartum can be up to 14.5%, with 6.5% of those having major depressive episodes.

A two-stage U.S. national survey of postpartum depressive symptoms, *Listening to Mothers II*, was conducted by Beck, Gable, Sakala, and Declercq (2011b). The first stage included 1,573 women who had given birth in the year prior to the survey. Next, six months later, 902 of these women completed the second survey. In this *Listening to Mothers II* sample, 63% of the mothers screened positive for elevated postpartum depressive symptoms using the Postpartum Depression Screening Scale (PDSS) (Beck & Gable, 2002). Six months later, 42% of the women screened positive with the Patient Health Questionnaire-2 (PHQ-2) (Kroenke, Spitzer, & Williams, 2003).

ADOLESCENTS

Adolescents are particularly vulnerable to postpartum depression, as they must contend with developmental tasks and demands of their life stage while coping with new motherhood. Higher rates of postpartum depression have been reported for adolescents compared with adult women. In Yozwiak's (2010) literature review, it was found that up to 61% of adolescent mothers, compared with 38% of adult mothers, experienced elevated postpartum depressive symptoms. In a current prospective study of perinatal depression with 212 adolescents, Meltzer-Brody et al. (2013) reported that 20% screened positive for antenatal depression and 10% for postpartum depression. Among these adolescents, a trauma history strongly predicted both antenatal and postpartum depression. Gavin, Lindhorst, and Lohr (2011) reported that 19.8% of their sample of adolescent mothers experienced elevated depressive symptoms during the first 18 months after birth. Intimate partner violence and antepartum depressive symptoms were significantly related to increased postpartum depressive symptoms in adolescents.

ADOPTIVE MOTHERS

Research on depressive symptoms among adoptive mothers has only recently begun. Do women who adopt infants experience a similar level of depression to women who have given birth? Mott et al. (2011) compared levels of depressive symptoms among 147 adoptive mothers and 147 postpartum mothers. Using the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987), both postpartum and adoptive mothers were found to have had comparable levels of depressive symptoms. Among postpartum mothers, 7.5% scored above the cutoff score on the EPDS and 8.8% of adoptive mothers did the same. In an earlier study, Senecky et al. (2009) found that 15.4% of 39 adoptive mothers experienced elevated levels of depressive symptoms on the Beck Depression Inventory. In the most recent study, reported depressive symptom rates were 29% and 21% of adoptive mothers as measured by the CES-D and EPDS, respectively (Hebdon, Foli, South, & Lim, 2012).

ONSET

The onset of PPD can occur anytime during the first 12 months after delivery. For most women, the onset begins sometime in the first three months postpartum. The classic epidemiologic study by Kendell et al. (1987) indicated an increase in the rate of psychiatric admission in the first three months postpartum,

with a definite peak in the first month after delivery. In this study, of 257 mothers who had psychiatric admissions to hospitals in the first year after childbirth, 68 (26%) were admitted during the first month after birth.

Hendrick, Altshuter, Strouse, and Grosser (2000) reported that the onset of PPD most often occurred within a month after delivery. In women with a history of major PPD with previous deliveries, the timing and pattern of recurrence of this mood disorder during the first 12 months postpartum was studied prospectively (Wisner, Perel, Peindl, & Hanusa, 2004). Of the 51 women in the sample who had experienced PPD with previous births, 21 (41%) had recurrences of major PPD. Nineteen of the 21 recurrences happened in the first seven months postpartum. The remaining two cases occurred at weeks 50 and 52.

In a study of 209 consecutive referrals to a mental-health program for women who met the criteria for major PPD, 66.5% reported early postpartum onset (mean = 2.2 weeks) and 22% reported late postpartum onset (mean = 13.3 weeks) (Stowe, Hostetter, & Newport, 2005). Stowe and colleagues (2005) recommend PPD screening not only at six week postpartum checkups but also at pediatric visits during the first six months after delivery. Of 49 women who were monitored for the first 12 months after delivery at well-child visits, 26% developed high depressive symptom levels after the first three months postpartum (Chaudron, Kitzman, Szilagyi, Sidora-Arcoleo, & Anson, 2006).

CAUSES

During the first few months after delivery, a woman is more likely to develop a severe mental disorder than in any other period in her lifetime. After birth, one of the most notable changes is the dramatic decrease in estradiol and progesterone. This hormonal withdrawal is one of the explanations offered for postpartum depression. However, since all women experience this striking reduction in hormones, why is it that only a small percentage of new mothers develop postpartum depression?

There is no clear consensus on the cause of PPD. Many questions remain unanswered. This mood disorder is highly complex and multifactorial. It is difficult to point to a single cause. It is theorized that there is a complicated interaction between biochemical, genetic, psychosocial, and situational life-stress factors.

A disruption of neurotransmitters in the brain is postulated as another biochemical condition related to PPD (Sichel & Driscoll, 1999). Neurotransmitters are chemical messengers that brain cells use to communicate with each other. An individual brain cell releases its neurotransmitter in the space between itself and other brain cells. The neurotransmitter binds to the cell next to it at a place called a receptor. Electrochemical activity occurs in the receptor cell. A critical part of this communication is that the first cell conserves the neurotransmitter by taking it back inside itself. In this way it is reused. This process is called reuptake of the neurotransmitter. In depression, there is a deficiency of neurotransmitters, such as serotonin.

Some researchers are turning to advances in gene mapping to help explain the differential vulnerability and sensitivity of some women to postpartum depression. Segman et al. (2010), for example, in their genetic study compared 9 mothers with postpartum depression and 10 nondepressed mothers. Global gene expression profiles correctly categorized 84% of the women as depressed or nondepressed. Segman and colleagues concluded that their findings of a distinctive gene expression signature in women who develop postpartum depression provides initial evidence that sampling blood cells shortly after birth may yield valuable prognostic information.

In a genome-wide study of 1,210 women with a history of pregnancy, any mood disorder, and postpartum mood symptoms, Mahon et al. (2009) reported that their data suggest that variations in genes on chromosomes 1q21.3-q32.1 and 9p24.3-p22.3 may increase vulnerability to mood disorders after birth. Pilot data from El-Ibiary et al.'s study (2013) suggest that DNA variations in the HTR2A gene may be associated with postpartum depression.

Case Study: Ora

Ora is a 32-year-old African American. For seven years before giving birth she had been strongly focused on her career. When she and her husband decided it was the right time to have a child, Ora recalled, she got pregnant right away. They were both delighted. Ora had "one of those pregnancies where I never got sick." However, Ora vividly remembered that her PPD began immediately after delivering her son:

I had a C-section, and when I woke up they brought the baby to me. I didn't want him. I just didn't want to have anything to do with him. Later they brought him to me to breastfeed, which all through my pregnancy I had been determined to do. I refused to breastfeed him. I said, "Leave me alone." The next day we were at the nursery window looking at our baby, and I just started screaming, "Just get rid of him. I don't want him." I just cried the whole time I was in the hospital. The first time my parents saw me, they said, "You just were different." And the pictures of me while I was in the hospital — my eyes — it was like they were wild. It was like I was on the verge of being psychotic but never lost that total touch with reality. It was just like I was not there. It was like nothing was real.

Case Study: Denise

Denise was 27 years old and single when she gave birth to her first child, a daughter. Denise said her daughter was planned and very much wanted by her and her partner. Denise had a "textbook pregnancy, no problems." She recalled that her PPD began, however, within 24 hours of delivery:

It was very subtle, but within 24 hours of delivery it started. I was weirding out bigtime in my head. I remember not feeling like myself. I started to feel kind of wired not horrible, not like that, just kind of drugged up or something. I was weirding out with thoughts that something was going to happen to the baby. I was feeling more anxiety coming on.

Case Study: Min

Min is a 29-year-old Asian mother of three: a five year-old, a three year-old, and a newborn. Her PPD began three weeks after delivery of her third child:

I was just fine for the first three weeks, and then at the end of the third week it hit, with the crying and the feeling like I was literally losing my mind. I guess then the insomnia, too, and the fear of not being able to sleep.

Case Study: Jasmine

Jasmine is a 23-year-old married primipara of Puerto Rican descent. The first five months after delivery, Jasmine experienced no problems. During the sixth month postpartum, her depression began:

My first six months I was telling everyone that this is wonderful. Motherhood is terrific. Everyone needs to try it. I just can't imagine anything greater. My family and friends were amazed that I was such a good mother because I was always little miss businesswoman, on track, very positive, very busy, and very up. And for me to turn around and be a mother was a very big change. Everyone was real surprised that I did so well.

Then, about the sixth month, things just started to change. I think my husband noticed it first. Things started happening, like I would burst out, and it would come out in anger. When I sat down to try and explain it, the only way I could explain it was that it was like every nerve in my body was exploding. Like little fireworks were going off all over my body. Not that I was in pain but it was like something inside me was just exploding. There was no way for me to portray it or to exhibit it other than anger. Not necessarily violent, I mean I never hit anyone. But there were times I was really afraid that I would. There were times I was real thankful that my husband was there to take care of the baby because for the first time in my life I was really scared about what I might do.

DURATION

Of women who experience PPD, 25% to 50% have episodes that last six months or longer (O'Hara, 1987). England, Ballard, and George (1994) reported that the most significant factor in the duration of PPD was the length of delay of adequate treatment. Women with duration of PPD less than six months received adequate treatment sooner than mothers whose duration of illness was longer than six months. Campbell, Cohn, Flanagan, Popper, and Meyers (1992) reported that the mean duration of PPD in their sample was 15 weeks. Cooper et al. (1988) found that about 50% of the mothers they studied experienced PPD for four to eight weeks. In summary, the average duration of PPD reported in studies is a minimum of several months.

TRANSCULTURAL PERSPECTIVES OF PPD

The question of whether PPD is a universal experience or limited to Western industrialized countries has been debated for decades. In 1983, Stern and Kruckman (1983) suggested that PPD occurs in Western cultures only because of the absence of a social support structure. Evidence is mounting, however, from over two decades of transcultural research, that the prevalence of PPD is fairly consistent throughout the world. Oates et al. (2004), for example, investigated whether this postpartum mood disorder is a universal experience with common attributions. Their study included women from 11 countries: the United States, the United Kingdom, France, Italy, Sweden, Ireland, Japan, Australia, Switzerland, Portugal, and Uganda. Postpartum depression, called morbid unhappiness in some countries, was reported to be a common experience after birth. In some countries, though, it was not recognized as a mental illness with a specific label like PPD. The characteristics of PPD in all countries closely approximated the Western concept of the signs and symptoms of this mental illness.

Another study conducted focus groups of mothers two to four months postpartum in nine countries: the United States, Australia, Finland, Guyana, India, Italy, Korea, Sweden, and Taiwan (Horowitz, Chang, Das, & Hayes, 2001). The descriptions of their postpartum depressive symptoms across countries were remarkably consistent. The most common emotional symptoms included tearfulness, irritability, anger, sadness, depression, anxiety, guilt, Ioneliness, inadequacy, and fear. Commonly experienced cognitive symptoms were indecisiveness, worry, and poor concentration.

Table 2 gives examples of international rates of postpartum depressive symptomatology. The variations among countries may result from the use of different screening scales and the timing of the measurements, which was not standardized.

Table 2.

Rates of Postpartum Depression Symptoms Outside the United States

Authors/Year Collection	Country	Instruments	Sample	Prevalence (%)	Data Collection
Maia et al./2011	Portugal	PDSS	380	3.9-12.7	2 weeks pp
Glasser et al./2012	Arab women in Israel	EPDS	2,326	16.3	6 weeks pp
Bener, Burgut et al./2012	Qatar	EPDS	1,379	17.6	within 6 mos pp
Cheng et al./2013	Taiwan	CESD	238	35.3	within 12 mos pp
Quelopana et al./2011	Chile	PDSS	116	54.2	at least 2 wks pp
Hamdan & Tamim/2011	United Arab Emirates	EPDS	137	16.8	2 mos pp
Lucero et al./2012	Hispanic immigrants	PDSS	116	54.2	2-48 wks pp
Bener, Gerber & Sheikh/2012	Qatar	(DASS-) 21	1,659	18.6	within 6 mos pp
Taheriford et al./2013	Iran	EPDS	197	34.8	6-8 wks pp
Motzfeldt et al./2013	Greenland	EPDS	174	8.6	3 mos pp
Husain et al./2012	Pakistani mothers in UK	EPDS	208	22.6	6 mos pp
Yehia et al./2013	Jordan	EPDS	300	44	within 12 mos pp
Saleh et al. /2013	Egypt	EPDS	60	17.9	within 12 mos pp
Al Dallal & Grant/2012	Bahrain	EPDS	237	37.1	8 wks pp
Youn & Jeong/2013	Korea	EPDS	215	36.7	6 wks pp
Ekeroma et al./2012	Samoan & Tongan women in NZ	EPDS	170	16.6	4 wks pp
Cheng et al./2013	Taiwan	CESD	238	35.3	within 1 year pp
Mathisen et al./2013	Argentina	EPDS	86	18.6	4-12 wks pp
Panyayong/2013	Thailand	EPDS	1,731	8.4	within 1 year pp

Notes: EPDS = Edinburgh Postnatal Depression Scale; DASS-21 = Depression Anxiety Stress Scale-21; CESD = Center for Epidemiologic Studies Depression Scale; pp = postpartum

RISK FACTORS FOR POSTPARTUM DEPRESSION

Risk factors are variables that have been reported to increase the probability of developing PPD. However, they may or may not be directly related to the cause of PPD. Often, a combination of risk factors places a woman at risk. The presence of risk factors does not predict that a mother will experience this mood disorder, nor does the absence of risk factors ensure that PPD will not occur.

Four meta-analyses summarized the findings of studies that investigated predictors of PPD (Beck, 1996a, 2001; O'Hara & Swain, 1996; Robertson, Grace, Wallington, & Stewart, 2004). The following predictors of PPD were identified in Beck's meta-analyses: prenatal depression, low self-esteem, childcare stress, life stress, low social support, prenatal anxiety, maternity blues, marital satisfaction, history of previous depression, infant temperament, marital status, socioeconomic status, and unplanned/unwanted pregnancy. Depression during pregnancy is the strongest predictor of PPD (Beck, 2001).

Other meta-analyses (O'Hara & Swain, 1996; Robertson et al., 2004) confirmed the risk factors identified by Beck's (1996a, 2001) quantitative literature reviews. The strongest predictors of PPD identified by O'Hara and Swain (1996) were past history of psychopathology and psychologic disturbance during pregnancy, poor marital relationship, low social support, and stressful life events. In addition, indicators of low socioeconomic status showed a small but significant predictive relationship to PPD. O'Hara and Swain (1996) provided the following composite description of a typical pregnant woman at risk for developing PPD:

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 experienced 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 stress 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. 46)

Robertson et al. (2004) also confirmed that the strongest predictors of PPD were prenatal depression, prenatal anxiety, stressful life events, low levels of social support, and a previous history of depression. Some demographic variables, such as age, have not been consistently reported in the literature as significant risk factors for PPD.

Evidence is accumulating that mothers of preterm infants, and low-birth-weight infants, and mothers of multiples experience a higher rate of PPD than mothers of healthy, full-term infants (Beck, 2003). Vigod et al. (2010) conducted a systematic review of 26 studies. They reported that the rates of postpartum depression were as high as 40% in the early postpartum period for women with premature infants. A recent study of 114 mothers of high-risk infants discharged from an NICU reported prevalence rates of elevated depressive symptoms of 35% at two weeks, 23% at six months, and 49% at 12 months post

www.awhonn.org

discharge (Northrup, Evans, & Stotts, 2013). Out of 60 mothers completing the PDSS (Beck & Gable, 2002) at approximately one month after their infants' admission to the NICU, 39% screened positive for major postpartum depression while an additional 16% of the mothers reported minor depression (Lefkowitz, Baxt, & Evans, 2010). An alarming 32% of these mothers experienced suicidal thoughts within the two weeks before completing the screening scale.

Intimate partner violence is another risk factor for postpartum depression. Two meta-analyses have confirmed this relationship. Wu, Che, and Xu (2012) conducted a meta-analysis of six studies involving 3,950 women. Mothers who had experienced violence were 3.47 times more likely to have postpartum depression than mothers who had not experienced intimate partner violence. In Beydoun et al.'s (2012) meta-analysis the results of 37 studies were included. The meta-analysis found a two to three times higher risk of postpartum depression among mothers exposed to intimate partner violence relative to nonexposed mothers.

A meta-analysis of domestic violence and postpartum depression from longitudinal studies revealed a three times increase in the odds of women experiencing elevated depressive symptom levels in the postpartum period if they had experienced domestic violence at some point in their pregnancy (Howard et al., 2013).

Many of the risk factors for postpartum depression identified in these meta-analyses can be readily identified in the prenatal period and interventions started before delivery. These high-risk women need to be monitored more closely during the postpartum period to try to prevent postpartum depression from developing or to start treatment as early as possible.

Case Study: Min

Min's profile for risk factors in relation to developing PPD included both risks and counteracting strengths. Min came from a large family, members of which all lived close to each other. Min's two older sisters and her mother were of tremendous help to her in caring for her children. Min did not have any history of psychiatric disorders.

During her most recent pregnancy, Min became depressed about having a third baby, who was unplanned. She felt that she was already under enough stress caring for her first two children. Min experienced dissatisfaction with her marriage and felt as if she and her husband never communicated anymore.

When Min's risk for developing PPD was assessed, three predictors for this mood disorder were revealed: prenatal depression, childcare stress, and marital dissatisfaction. All three of these risk factors can be the target of nursing interventions initiated during Min's pregnancy. Healthcare professionals should not wait to start these interventions until after she delivers. Delayed action may occur too late to prevent her from developing PPD.

THE EXPERIENCE OF PPD: TEETERING ON THE EDGE

Women suffering from PPD move through a four-stage process. Beck (1993) identified the process as part of the grounded theory study of PPD, and referred to it as the "teetering on the edge" theory. The four stages are encountering terror, dying of self, struggling to survive, and regaining control.

Loss of control is the basic problem that women grapple with when suffering from PPD (Beck, 1993). Women lacked control over their emotions, thought processes, and actions. As one mother said:

It was like I was rooted in my spot. I wanted to reach out to my husband and my son, yet I couldn't. Instead, I had this other behavior that was happening. It was like I couldn't control what was going on.

Ora

I just kept blaming myself, and the guilt just got so out of control in my thoughts. I felt like such a failure. I had failed at the most important thing you've been told since you're a little girl. There is so much guilt inside of you that you can't control this feeling of being in a closet. You can't take care of your baby, and there is nothing you can control.

STAGE 1: ENCOUNTERING TERROR

Mothers described this initial stage as a terrifying onslaught of horrifying anxiety, relentless obsessive thinking, and enveloping fogginess.

Anxiety

When the anxiety attacks hit, some women felt like they were losing their minds and at times they believed they were dying.

When it first hit me at seven months I had a major anxiety attack. It came out of the blue. I just felt numb all over and I started to hyperventilate. I felt this pain in my chest, so I started to think, "Oh my God. I'm having a heart attack. I'm dying!" (Beck, 1993, p. 45)

The anxiety some mothers experienced was not in the form of an attack but was rather more insidious, permeating their day-to-day activities.

Denise

I was afraid to be left alone. I was scared of dying. It was horrible. I couldn't watch any news. Everything scared me. No one could talk to me about anything that would even have the least bit of anxiety attached to it. I would get anxious over stuff that never, never bothered me before. It made me feel very weak. The whole thing just really gave me a horribly miserable life and made me someone I totally did not want to be!

Relentless Obsessive Thinking

The loss of control women experienced affected their thought processes. Mothers were constantly bombarded with obsessive thoughts they could not stop no matter how much they tried.

Min

I would have these compulsive thoughts like, "I'm not a good mother. What if I flip out? What if I try to kill my baby?" A lot of paranoid, obsessive thinking, which is totally different than what type of person I am. I would judge the thoughts. "Oh, I'm having that thought, I'm crazy".

Denise

I'd have these flashing, racing thoughts that I was going to drop the baby. I don't care that I'm going to drop her. Why did I think I don't care? Of course I care if I'm going to drop her. And this would all be like rapid-fire in my mind. What it would translate into is a very draining thing for me because I would immediately start feeling horrible that the whole thought thing happened.

Enveloping Fogginess

During this initial stage, mothers repeatedly used the image of fog rolling in or the fogginess settling in to describe the cognitive impairment they experienced. Mothers experienced loss of concentration to the extent that some could not concentrate even long enough to read a page in a book.

Jasmine

If I went grocery shopping it was like I was in a fog. I would do it, and it would take me four hours to unload the bags and put them away. It's like I wasn't efficient at anything. Everything was a big, big, deal to do.

In addition to this inability to concentrate, some women described the irrational thinking they experienced at times while they were in the midst of their depression.

Min

I had these irrational thoughts. I knew they were irrational. Like I was thinking that the baby was the Antichrist and he was trying to kill me. But I knew this wasn't true but I was thinking it anyway.

STAGE 2: DYING OF SELF

As a result of the conditions in the first stage of PPD, in the second stage, women described feeling that their normal selves were dying. This stage consisted of three consequences: alarming unrealness, isolating oneself, and contemplating and attempting self-destruction.

Alarming Unrealness

Women described feeling that their normal selves were no longer present. They did not know who they had become. They repeatedly reported that they did not feel real, but instead like robots just going through the motions of taking care of their babies. Any caring emotions or joy were missing from their lives.

Ora

It's like you're just not real. You're there and you're not there. You just don't feel anything good for your baby. I don't feel real.

Min

It was like a withdrawal of emotions. I didn't feel real. I felt like I was acting. It was like someone gave me something horrible. I went through the motions of my life without any of the joy.

Jasmine

It was just so weird. There's this picture of me shrinking back with dead eyes looking afraid and not talking to people. And that's totally not like me. I'm outgoing. I like people. I'm confident.

Isolating Oneself

Mothers said they felt alone because they believed no one really understood the living nightmare they were going through. They lost all interest in their usual concerns and goals. Some women even started to isolate themselves from their infants as the following quote illustrates: I had these really weird feelings towards my baby. I couldn't be around him. He gave me anxiety as if he were something bad. I couldn't walk past the door of his room without becoming anxious" (Beck, 1993, p. 45).

Contemplating and Attempting Self-Destruction

Not only were some mothers pondering death, a small percentage also attempted to take their own lives.

Alexandra

It was like going to the gates of hell and back. It was terrifying. I felt there was absolutely no way out of it. I thought, this was it. I was very suicidal. I loved my baby, but I thought that if this is the quality of life that I was going to have, there is no way. There is absolutely no way anybody can endure the kind of pain that I was going through for a long period of time. That's why shock therapy was necessary.

Denise

I thought about a razor blade to my wrists every day toward the end, if it weren't for my maternal instinct. See, my maternal instincts never left. I would feel like, God, this poor child growing up knowing his mother killed herself because of him. You know, that was the biggest thing that kept me from killing myself.

Ora

I'd just think everybody was looking at me and telling me that I was a bad mom. It was my voice, but I thought everyone was staring at me and saying I was a bad mom. I was just so exhausted mentally and physically. My husband had to break down the bathroom door when he got home from work because I went in and was cutting my wrists. So I ended up in a psychiatric hospital.

Ora tried to end her life a second time while she was an inpatient:

One night I was in my room, and I was losing it. So I got my sharps out to go and take a shower that night. I knew that between the evening shift and the night shift they don't check you. I was on 15-minute checks, and I knew that I wasn't being checked or anything, so I just started cutting my wrists. I can remember that it was just peaceful. It was like it's finally going to be over. When I woke up the next morning and realized I was still alive I was screaming at my doctors that I hated them for saving me.

STAGE 3: STRUGGLING TO SURVIVE

In this third stage, mothers employed three different strategies to survive: battling the system, praying for relief, and seeking solace in a PPD support group.

Battling the System

Battling the system refers to the disappointment, frustration, humiliation, and anger mothers can experience as they begin their attempts to seek professional help. Finding appropriate treatment is far from easy. This quest, in fact, followed a torturous path, as one woman described:

I picked up my phone and called my obstetrician. He never returned the phone call. Three days later I called again, and he told me there's nothing he could do for me and not to waste my time coming there just to talk.

I was very, very disappointed in my obstetrician's response to me. He patted me on the back and was very patronizing and said, "You're only a mild case. I've had women come in here who were 10 times worse" (Beck, 1993, p. 46).

Once mothers found a healthcare professional who would provide the appropriate care, some women with severe PPD still had to grapple with the reality of being admitted to a psychiatric hospital and perhaps even receiving electroshock therapy if antidepressants did not successfully treat their depression.

Praying for Relief

Some women turned to prayer to help them survive. Women said that their God (no matter what their religion) truly helped them get through this ordeal. As one mother shared:

I used to go to church and pray for hours: My God, how much more can I endure! You're not a vindictive or hateful God, but why is this happening to me? You have to get me out of this because I cannot take this any longer. (Beck, 1993, p. 46)

Min

I was driving myself absolutely insane. I had a lot of my sleep disturbed, broken up. I'd wake up almost every hour. I would pray to God, "Please help me sleep," because sleeping was the only escape.

Seeking Solace in a Support Group

The strategy of seeking solace in a support group led to many valuable benefits for the women. Being with other mothers suffering from PPD helped to counter the isolation and feelings of loneliness. At the support group meetings, some mothers who had recovered from PPD returned to offer their support to women who were still struggling with this devastating illness. Their presence provided hope to these fragile mothers that they could overcome this depression and regain control of their lives again:

My doctor never told me about other women with PPD. I was in the total dark the whole time. It wasn't until I started going to the support group that I realized, for God's sake, that other women went through this! (Beck, 1993, p. 47)

STAGE 4: REGAINING CONTROL

In this final stage of teetering on the edge, mothers experienced unpredictable transitioning, mourning lost time, and guarded recovery.

Unpredictable Transitioning

The gradual resolution of mothers' depression was very unpredictable. Mothers would experience "good days" and "bad days," but when they first woke up in the morning they could not tell what kind of a day it would be. Gradually the good days outnumbered the bad days.

Mourning Lost Time

A painful step in the process of recovering from PPD was grieving the lost time that they would never be able to recapture with their infants. One mother said, "I felt robbed of the first six months of my daughter's life. I never really got to hold her as a baby, and I feel cheated" (Beck, 1993, p. 47).

Ora

Ora said that to this day she cannot go past the newborn section in the children's clothing department in stores without her eyes welling up with tears. When she sees the newborn sizes of clothing, she is made painfully aware of the time she lost with her newborn because of PPD. Seeing those tiny clothes is like opening up an old wound.

Guarded Recovery

Even as mothers felt they had essentially recovered from their depression, they recognized that PPD had left an indelible mark on their lives. Mothers felt fragile after fighting their battle with PPD. As one mother tried to explain: Postpartum depression makes you feel very, very vulnerable. You still feel like you're on a fine line between sanity and insanity, because when it first happened it came out of nowhere. You're normal and then the next thing you know, you're crazy (Beck, 1993, p. 47).

PPD EXPERIENCES IN OTHER CULTURES

Beck (2007) modified her "teetering on the edge" theory to include findings from 10 qualitative studies on PPD in mothers from other cultures that had been published since her original 1993 study. Postpartum depressed women in other cultures were used as comparison groups, because the 1993 study sample was limited to middle-class, Caucasian women living in the United States. Five years later, Beck (2012) did a second grounded theory modification of her theory of PPD. Since 2007, 17 new transcultural qualitative studies of postpartum depressed mothers had been published and these additional studies were included in this second modification. Figures 2 through 5 highlight the continuing modifications made to Beck's theory. Under each of the categories in these figures are listed the countries, other than the U.S., where the qualitative research studies had been conducted and the mothers in those countries had endorsed the categories. These lists include countries from both the first and second modifications.

In Stage 1, Encountering Terror, two new categories were added: emotional lability and somatic expressions. In the original "teetering on the edge" theory, emotional lability had been included under the basic social psychological problem of loss of control. Due to so many mothers from across the world sharing how they suffered from distressing emotions they were not able to control, a decision was made to pull this out as a separate category. The second new category added to Stage 1 was somatic expressions. Mothers in the following countries used somatic expressions to describe their postpartum depression: Democratic Republic of Congo, Indonesia, Taiwan, Bangladesh, and India. One example of the use of somatic terms was provided by a mother in Taiwan who described her postpartum depression in the following terms:

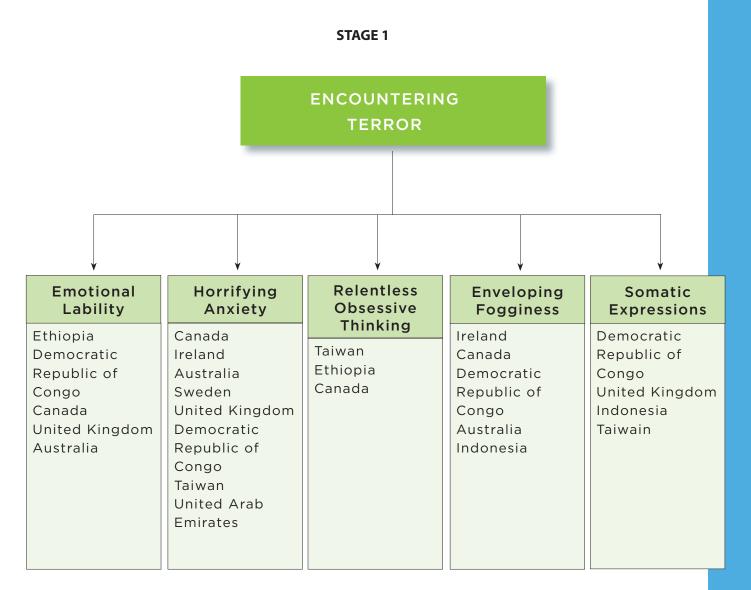
I lost strength in my arms. Then, I felt the strength also from my legs. I couldn't even stand on my own. My heart didn't seem to be working properly and all the muscles shrank together, my head ached, and I sweated all over. (Chen et al., 2006, p. 453)

The other modification made to Beck's postpartum depression theory occurred in Stage 3, Struggling to Survive. The original category of Seeking Solace at Support Groups was expanded based on the new findings from the additional 17 qualitative transcultural studies. This category was renamed Seeking Support from Multiple Sources. Mothers across the globe explained the value of support, not only from support groups, but also from their family, friends, and healthcare providers in helping to recover from their postpartum depression.

This second modification of the "teetering on the edge" theory has wider applicability since the properties of its categories in the four stages were expanded from data from various cultural orientations.

Figure 2.

Second Modification of the Grounded Theory Postpartum Depression*

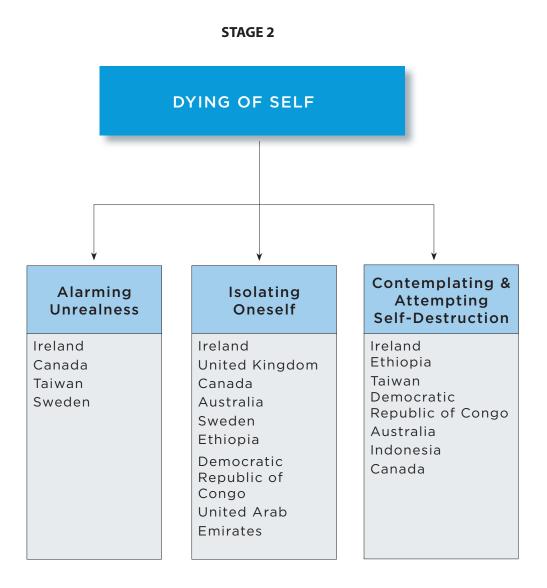


*Under each category of the four stages of Teetering on the Edge are listed the cultures from which women suffering from PPD confirmed experiences similar to those of U.S. Caucasian mothers.

Note. From: "Nursing research: A qualitative perspective," by C. T. Beck in *Nursing research: A qualitative perspective*, P. L. Munhall (Ed.) (pp. 284). Copyright 2012 by Jones & Bartlett Learning. Reprinted with permission.

Figure 3.

Second Modification of the Grounded Theory Postpartum Depression*



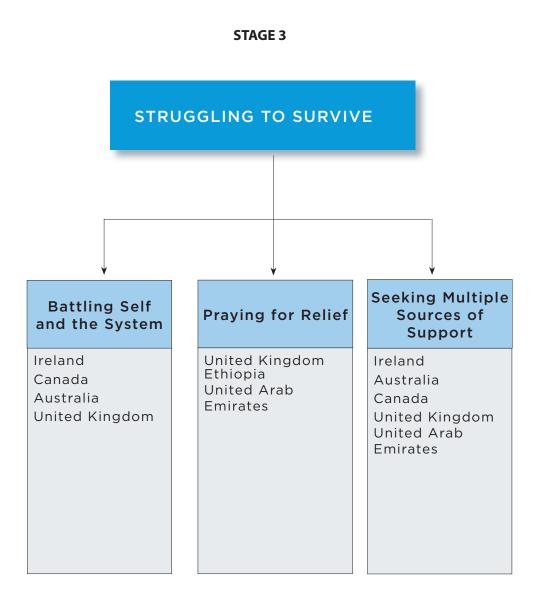
*Under each category of the four stages of teetering on the edge are listed the cultures from which women suffering from PPD confirmed experiences similar to those of U.S. Caucasian mothers.

Note. From: "Nursing research: A qualitative perspective," by C. T. Beck in *Nursing research: A qualitative perspective*, P. L. Munhall (Ed.) (pp. 257-284). Copyright 2012 by Jones & Bartlett Learning. Reprinted with permission.

Postpartum Mood and Anxiety Disorders

Figure 4.

Second Modification of the Grounded Theory Postpartum Depression*

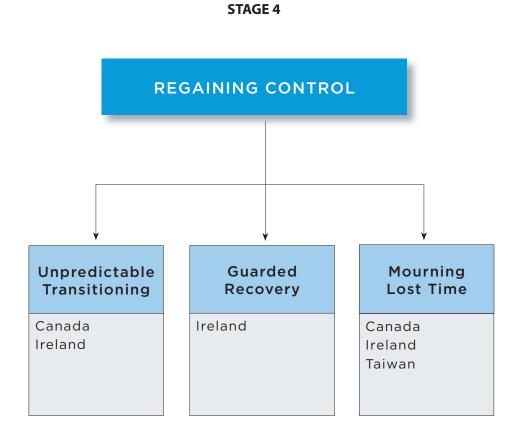


*Under each category of the four stages of teetering on the edge are listed the cultures from which women suffering from PPD confirmed experiences similar to those of U.S. Caucasian mothers.

Note. From: "Nursing research: A qualitative perspective," by C. T. Beck in *Nursing research: A qualitative perspective*, P. L. Munhall (Ed.) (pp. 257-284). Copyright 2012 by Jones & Bartlett Learning. Reprinted with permission.

Figure 5.

Second Modification of the Grounded Theory Postpartum Depression*



*Under each category of the four stages of teetering on the edge are listed the cultures from which women suffering from PPD confirmed experiences similar to those of U.S. Caucasian mothers.

Note. From: "Nursing research: A qualitative perspective," by C. T. Beck in *Nursing research: A qualitative perspective*, P. L. Munhall (Ed.) (pp. 257-284). Copyright 2012 by Jones & Bartlett Learning. Reprinted with permission.

POSTPARTUM DEPRESSIVE SYMPTOMS AND BREASTFEEDING

There are equivocal findings in the published literature regarding an association between breastfeeding and postpartum depression (Figueiredo et al., 2013). For example, Gagliardi et al. (2012) reported that women with higher levels of depressive symptoms immediately after birth had a higher likelihood at three months postpartum of bottle-feeding their infants. Akman et al. (2008) also reported that at four months after birth, women who had higher depression scores at one month postpartum were more likely not to be breastfeeding, compared with women with lower depression scores at one month after birth.

On the other hand, in a prospective study from pregnancy to two years postpartum, Hahn-Holbrook et al. (2013) found that mothers who breastfed more frequently at three months after birth had a greater decrease in depressive symptoms over time, as compared with mothers who breastfed less frequently. Ystrom (2012) reported that depressive symptom levels increased at six months postpartum after breastfeeding cessation, suggesting that early cessation of breastfeeding may contribute to postpartum depression. As is apparent, there are not consistent findings regarding the association between breastfeeding and postpartum depression.

EFFECTS OF POSTPARTUM DEPRESSION ON FAMILIES

Postpartum depression can have consequences beyond the personal suffering of the mothers, such as disturbing mother-infant relationships and impairing cognitive and emotional development of the children. The relationship between the father and mother also may be strained.

EFFECTS OF PPD ON THE MOTHER-INFANT RELATIONSHIP

Field (2010) reviewed studies from the last decade on the effects of postpartum depression on maternalinfant interactions. Postpartum-depressed mothers tended to use two different styles of interacting with their infants: intrusive and overstimulation, or withdrawn and understimulating. Field concluded that "the interaction disturbances of depressed mothers and their infants appear to be universal across differing cultures and socioeconomic status groups and include less sensitivity of the mothers and responsivity of the infants" (p.1).

The magnitude of the effect of PPD on mother-infant interaction during the first 12 months after delivery was determined by a meta-analysis of 19 studies (Beck, 1995a). Mother-infant interaction studies were divided into three categories: maternal interactive behavior, infant interactive behavior, and dyadic interactive behavior. Maternal interactive behaviors were behaviors exhibited by the mothers in the studies and were coded or rated separately from the infants' behaviors. Infant interactive behaviors were behaviors exhibited by the infants that were coded or rated separately from their mothers' behaviors. Dyadic interactive behaviors were pattern of interactions or shared states between mothers and their infants. Results of the meta-analysis revealed that PPD has a moderate adverse effect on maternal and infant interactive behaviors and a large adverse effect on their dyadic interactive behaviors. In view of these findings, more attention needs to be paid to these troubled dyads. Rapidly developing infants experience the world through the people who care for them. Most often it is their mothers who constitute the primary

www.awhonn.org

social environment in the first months after delivery. Early identification of these troubled mother-infant dyads is imperative.

To complement and enrich the quantitative findings on the adverse effects of PPD on maternal-child interactions, Beck (1996b) conducted a phenomenologic study to explore the meaning of postpartum-depressed mothers' experiences during interactions with the infants and older children. From the mothers' interviews, several themes emerged that described the essence of this experience.

Mothers felt that PPD overtook their minds and bodies, preventing them from reaching out to their infants and depriving them of any feelings of joy. Mothers were overwhelmed by the responsibilities of caring for their children and were petrified that they would not be able to cope. To survive, some mothers erected a wall to separate themselves emotionally and physically from their children. These mothers were stripped of a strong desire to interact with their children and many times failed to respond to their infants' cues.

Oversensitivity to noise, light, and other stimuli also contributed to some mothers' lack of response to their infants' cues. Sounds and light were magnified so much that at times, some women tried to block out these stimuli. Guilt and irrational thinking pervaded women's minds during their daily interactions with their children. Uncontrollable anger erupted periodically toward the children, to the extent that at times mothers feared they might harm them. As PPD engulfed the mothers, they perceived that relationships detrimental to their older children were developing. The mothers grieved over the lost relationships with their children as any sense of normalcy in the coveted role of mother was lost. Always striving to minimize the negative effects of PPD on their children, mothers attempted to put their children's needs above their own.

Case Study: Patricia

Throughout her pregnancy, Patricia looked forward to the birth of her first child. She often would daydream about how wonderful it would be when she could hold her longed-for baby in her arms and rock him for long periods of time, talking to him and telling him how much he was loved. Her PPD shattered those dreams. Patricia painfully remembered how her baby would smile and coo at her but she was not able to interact with him. Patricia would just look at him, stare at him without smiling back. When her baby would start to cry as he woke up from his nap, Patricia said, she would feel a chill go up her spine. She did not want to have to interact with her son.

EFFECTS OF PPD ON CHILD DEVELOPMENT

Longitudinal research has been conducted to investigate whether the children of women with PPD suffer long-term sequelae. Research is confirming that PPD is associated with cognitive, emotional, and behavioral adjustment problems in children of mothers who suffered from this mood disorder. Beck (1998b) summarized the research to determine the magnitude of the effect of PPD on the cognitive and emotional development of children over one year of age in a meta-analysis of nine studies. Results indicated that PPD had a small but significant adverse effect on children's cognitive and emotional development.

In O'Hara and McCabe's (2013) systematic review, they reported that postpartum depression had predicted

poor language and lower IQ development in children across the childhood years into adolescence. This effect was more pronounced in boys than girls.

In their longitudinal, prospective study, Hay, Pawlby, Angold, Harold, and Sharp (2003) reported that 11-year-old children whose mothers had PPD displayed more violent behaviors than children of nondepressed women. Violent behaviors such as fighting, kicking, and punching occurred more often among boys than girls. Analysis revealed that children's violent behavior was predicted by their mother's PPD even when controlling for a mother's later depression and socioeconomic status.

Avan et al.'s (2010) longitudinal birth cohort study found a significant association between postpartum depression at six months after birth and children's behavior problems at two years of age, independent of socioeconomic status. Boys were found to have more behavior problems than girls. In one of the longest prospective longitudinal studies of children of mothers who were depressed postpartum and mothers who were not depressed after birth, Murray et al. (2011) reported on the developmental risk pathway of children up to 16 years of age. Children of postpartum-depressed mothers showed more insecure attachment in infancy (Murray, 1992), depressive cognitions at five years of age (Murray, Woolgar, Cooper, & Hipswell, 2001), and anxiety by 13 years of age (Halligan, Murray, Martins, & Cooper, 2007). In their latest study, Murray and her team (2011) found that children of postpartum-depressed mothers were more likely than children of nondepressed mothers to experience depression by 16 years of age than children of nondepressed mothers.

Case Study: Alexandra

When Alexandra delivered her second baby, her daughter was a year-and-a-half old. When Alexandra was pregnant, she and her daughter "played together a lot and really enjoyed being with each other." Once her PPD set in, Alexandra said, all that changed. She wanted to get away from her daughter and everybody else. She wanted to withdraw into her own little world. Alexandra said that she thought this change in her behavior confused her daughter a lot. Her daughter could not understand why, all of a sudden, her mother didn't want to play with her anymore. Her daughter started acting out.

EFFECTS OF PPD ON FATHERS

While postpartum depression in mothers has received increased attention, much less is known about this mood disorder in fathers. Fathers are an essential part of the parental dyad in promoting the growth and development of their children. If mothers are suffering from postpartum depression, fathers can buffer their children from the negative effects of the mothers' mood disorder. Fathers also play a significant role in supporting their depressed partners. Reported prevalence worldwide of paternal postpartum depression ranges from 1.8% (Serhan et al., 2012) to 17.8% (Tran et al., 2012) (Table 3).

Paulson and Bazemore (2010) conducted a meta-analysis of prenatal and postpartum depression in fathers and its association with maternal depression. This meta-analysis included data from 43 studies involving 28,004 fathers. The overall prevalence rate of paternal depression between the first trimester and one year postpartum was 10.4%. Variability was observed in reported rates of paternal depression according

www.awhonn.org

to timing of the measurement and study location. The highest rate (25.6%) occurred within the three-tosix month postpartum period and the lowest rate (7.7%) during the first three months postpartum. When focusing on national origin, U.S. studies reported an average prevalence rate of 14.1%, while international studies average rate was 8.2%. Some recent rates of elevated postpartum depressive symptoms in fathers can be found in Table 3.

Correlates of antepartum and postpartum depression in fathers were the focus of Wee et al.'s (2011) systematic review. Twenty-five quantitative studies met the criteria to be included in this review. In 11 of the 25 studies that used a cross-sectional design, the most common correlate of postpartum depression in fathers was having a partner with depression. Other significant risk factors were low satisfaction with the marital relationship and low social support. Fourteen studies used a longitudinal design from antenatal through the postpartum period. In these studies the most common risk factors of paternal postpartum depression were poor social support, neuroticism, increased stressful life events, poor relationship with partner, and depression in their partner.

Table 3.

Authors/Year Collection	Country	Instruments	Sample	Prevalence (%)	Data Collection
Kerstis et al./2013	Sweden	EPDS*	308	8.7	3 mos pp
Wynter et al./2013	Australia	EPDS	172	17	6 mos pp
deMontigny et al./2013	Canada	EPDS	205	8.2	11 mos pp
Serhan et al./2012	Turkey	EPDS	110	1.8	2-6 mos pp
Escribá-Agüir & Artazcoz/ 2011	Spain	EPDS	409	3.4 4	3 mos pp 12 mos pp
Tran et al./2012	Vietnam	EPDS	231	17.8	4-6 wks pp
Roubinov et al./2014	Mexican American	EPDS	92	9	15 wks pp
Fisher et al./2012	USA	EPDS-Partner	199	12.6	3 years pp

Prevalence of Elevated Postpartum Depressive Symptoms in Fathers

*Notes: EPDS = Edinburgh Postnatal Depression Scale; pp = postpartum

In a Canadian study of postpartum depressed fathers, Letourneau et al. (2012) explored the types of support fathers needed. Men desired increased public and professional awareness of postpartum depression in both mothers and fathers. Fathers also said greater awareness of postpartum depression by their employers would have helped in being more understanding of the issues the men were dealing with at home. Fathers revealed that they felt the healthcare system was inadequate in educating couples about this devastating mood disorder and in screening not only mothers but also fathers for postpartum depression.

Case Study: Bob

Bob's wife suffered from severe postpartum depression after the birth of their second child. She was hospitalized three times for her depression. Within six months depression had really started to set in for Bob. He started on antidepressants then. Up to this point he had been resistant to medication. He said that for him the depression had been much more hidden than his wife's. He suffered silently. He felt he had to be strong for his family. Bob called his depression his friend who had led him down an ugly path. Bob explained:

So why have I called this my friend depression?

- 1. Depression is constant—always there. Even now I need to be mindful of not allowing myself to be led into a depressive mood.
- 2. Depression just doesn't go away—it has ways of changing itself. It is powerful and comes with some outworkings that can require medical intervention.
- 3. You can learn to live with the better side of depression and people do get better from depression.

Bob went on to describe the keys for him—just what it was that had helped pull him through his depression. These keys were prayer, his children, his wife, and writing. He said that since his teenage years he has written poetry. This became a strong area of expression for him during his depression after the birth of his second child. Bob ended by saying that it was "my kids—above all else they brought me through. No way could I give up for them."

TREATMENT Primary Prevention

Psychosocial and psychological interventions for prevention of PPD have been tested. Psychosocial interventions include prenatal and postpartum classes, home visits by professionals, home visits by lay persons, and early postpartum follow-up. Psychological interventions include interpersonal psychotherapy (IPT), cognitive-behavioral therapy (CBT), and debriefing. Dennis and Dowswell (2013) conducted a Cochrane review of psychosocial and psychological interventions for preventing postpartum depression. Their review included data from 28 randomized controlled trials involving almost 17,000 women. The authors concluded that overall, women who had psychosocial or psychological interventions were significantly less likely to develop postpartum depression, compared with women who had standard care (average relative risk 0.78, 95% confidence interval 0.66 to 0.93). Promising interventions included professionally based postpartum home visits provided by midwives or public health nurses, lay or peerbased telephone support during the postpartum period, and interpersonal psychotherapy.

www.awhonn.org

A meta-analysis of preventive interventions to decrease the severity of postpartum depressive symptoms or decrease the prevalence of postpartum depressive episodes was done by Sockol, Epperson, and Barber (2013). The studies included in the meta-analysis represented a range of interventions, such as psychotherapy (CBT and IPT), group or individual psychotherapy, social support, antidepressant medications, educational programs, and hormonal interventions. Twenty-four studies measuring postpartum depressive symptoms and 28 studies assessing postpartum depression diagnosis were included. For the 24 studies assessing postpartum depressive symptoms closest to 6 months after birth, the significant average effect size was Hedges' g = 0.18 (95% confidence interval 0.09-0.27, p< .001). The various interventions resulted in a small but significant decrease in depressive symptoms. The results of Sockol and colleagues' meta-analysis for postpartum depression diagnosis resulted in the overall effect size of 0.73 (95% confidence interval 0.56-0.95), which indicated a significant 27% reduction in the risk for women in the treatment groups, compared with control groups.

Dennis (2014) reviewed 13 trials of psychosocial treatment interventions for postpartum depression to determine their effectiveness. Treatment strategies of the included studies were peer support, partner support, non-directive counseling, and home visits by mental-health nurses. Because of methodological limitations of these trials, Dennis concluded that the effectiveness of these psychosocial interventions for treating postpartum depression is equivocal. She recommends large, multisite randomized controlled trials comparing different treatment strategies to determine which are most effective for new mothers. If we focus on home visits as a psychosocial strategy, here is an example of the varying interventions studied. Letourneau et al. (2011) used both home visits and telephone calls for 12 weeks by peers who were mothers who had recovered from postpartum depression. Tamaki's (2008) intervention, on the other hand, involved 4 weekly home visits over 8 weeks by either a nurse or midwife trained in providing support.

Secondary Prevention

Once a mother develops PPD, secondary prevention takes center stage. The aim of secondary prevention is to limit the severity of this mood disorder and to prevent complications. Interventions can be categorized as psychosocial, psychological, pharmacologic, or a combination of these strategies. When focusing on treatments for women diagnosed with postpartum depression, Sockel, Epperson, and Barker (2011) conducted a meta-analysis. It included 27 studies in which changes from pretreatment to posttreatment or comparing interventions to control groups were assessed. At posttreatment, women in the intervention groups had significantly greater decrease in depressive symptoms, compared with mothers in the control groups with an effect size (Hedges' g) of 0.65. Sockel et al. also reported that individual psychotherapy was superior to psychotherapy in groups in reducing depressive symptoms. IPT interventions had larger effect sizes, compared with CBT.

Psychological Strategies

IPT

Interpersonal psychotherapy is a time-limited form of psychotherapy based on the premise that interpersonal distress is related to depressive symptoms. IPT is based on attachment and interpersonal theory (Stuart, 2012). The specific targets of IPT are the biological, psychological, and social determinants of the woman's distress. IPT focuses on the interpersonal problem areas of role transitions, grief and loss, and interpersonal disputes. Some of the techniques used in IPT are communication analysis, use of content and process affect, interpersonal incidents, and role playing.

CBT

Cognitive-behavioral therapy focuses on increasing cognitive and social skills, evaluating and modifying dysfunctional thought patterns, encouraging self-reinforcement, and developing positive coping statements and problem-solving techniques.

Pharmacologic Strategies Classes of Antidepressants

Several classes of antidepressants are available for treatment of PPD. Selective serotonin reuptake inhibitors (SSRIs) are the drugs used most often for treatment of PPD. Serotonin plays a critical role in mood and emotional stability. Examples of SSRIs are fluoxetine hydrochloride (Prozac), sertraline hydrochloride (Zoloft), and paroxetine (Paxil).

Tricyclic antidepressants (TCAs) are the second class of antidepressants used in PPD. Desipramine hydrochloride (Norpramin) and nortriptyline hydrochloride (Pamelor) are two examples of TCAs prescribed for women with PPD.

Monoamine oxidase (MAO) inhibitors are rarely used for treating PPD. An important concern when prescribing this class of antidepressants is interactions with other drugs, such as decongestants. Use of MAO inhibitors also requires a tyramine-restricted diet. Red meats, aged cheeses, beer, and wine can cause potentially life-threatening increases in blood pressure (Nonacs, 2006). Examples of MAO inhibitors are phenelzine sulfate (Nardil) and isocarboxazid (Marplan).

Antidepressant Treatment and Breastfeeding

Many mothers suffering from postpartum depression may want to breastfeed. How safe are the newer antidepressants during breastfeeding? A 2013 Motherisk Update on antidepressant use during breastfeeding reported that the newer selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors transfer into breast milk in low amounts, with few reaching 10% of the maternal weight-adjusted dose (Chad, Pupco, Bozzo, & Koreb, 2013). An infant dose in breast milk of less than 10% is generally considered safe. Chad et al. identified paroxetine and sertraline as producing the lowest relative infant doses, in the 0.5% to 3% range. Fluoxetine, venlafaxine, and citalopram produced the highest relative infant doses which were near or at times above the 10% limit.

Weissman et al. (2004) pooled analysis of 57 studies on the concentration of antidepressants in infant plasma, which is a more direct measure of infant exposure. Nortriptyline, paroxetine, and sertraline were found to produce undetectable plasma levels in more than 200 infants.

Many authors are recommending sertraline and paroxetine for use during the postpartum period because of lower infant plasma ratios and lack of adverse effects (Berle & Spigset, 2011).

Hale's *Medications and Mothers' Milk* (2012) is an excellent resource for healthcare providers, and includes a lactation risk category index:

- L1: Safest
- L2: Safer
- L3: Probably safe
- L4: Possibly hazardous
- L5: Hazardous

Hale (2012) recommends using the relative infant dose (RID) to estimate risk. To calculate the relative infant dose, the infant's dose via milk (mg/kg/day) is divided by the mother's dose (in mg/kg/day).

Hale's (2012) key points about breastfeeding and medications include:

- Avoid using medications that are not necessary. Herbal drugs, high dose vitamins, unusual supplements, etc. that are simply not necessary should be avoided.
- If the Relative Infant Dose (RID) is less than 10%, most medications are quite safe to use. The RID of vast majority of drugs is <1%.
- Choose drugs for which we have published data, rather than those recently introduced.
- Evaluate the infant for risks. Be slightly more cautious with premature infants or neonates.
- Medication used in the first 3 to 4 days generally produce subclinical levels in the infant due to the limited volume of milk.
- Recommend that mothers with symptoms of depression or other mental disorders seek treatment. Most of the medications used to treat these syndromes are safe.
- Most drugs are quite safe in breastfeeding mothers. Discontinuing breastfeeding for some hours/days may be required, particularly with radioactive compounds.
- Choose drugs with short half-lives, high protein binding, low oral bioavailability, or high molecular weight. (Hale, 2012, p.10)

Because information on breastfeeding and antidepressants is constantly changing based on new research, it is essential that clinicians be familiar with the current literature. The potential risks of medication exposure to the nursing infant should be weighed against the risks of untreated maternal depression. Clinicians should help mothers assess the risks and benefits. Additional sources of information regarding breastfeeding and medications can be found online:

Massachusetts General Hospital Center for Women's Mental Health: www.womensmentalhealth.org

Motherisk Program (Toronto, Canada): www.motherisk.org

Developmental and Reproductive Toxicology (DART) database: <u>www.toxnet.nlm.nih.gov</u> (allows users to search free the literature regarding the effects of different drugs during pregnancy and postpartum)

Electroconvulsive Therapy

Some mothers suffering from severe PPD may require inpatient hospitalization, particularly women who are suicidal. Electroconvulsive therapy (ECT) is a possible treatment for these women, but it is an option that can provoke their anxiety. Education and reassurance of the mothers and their families about use of ECT are critical.

For some mothers who have not improved adequately with other treatments, such as antidepressants, ECT is an alternative. Usually, a series of ECT treatments is required. During the treatments, a woman receives general anesthesia and a muscle relaxant to decrease muscle contractions. Short-term memory loss is a side effect of ECT.

Case Study: Katie

Katie is a 22-year-old married African American who had given birth to her first baby. She underwent ECT at three months postpartum.

I only had six shock treatments. For my first treatment I was hospitalized in a psychiatric hospital. It was an awful experience. The hospital made me absolutely crazy even though it was more like a home or a retreat. I was there Thursday and Friday. I had my first treatment Saturday. They let me go out for half a day and all day Sunday because I was throwing a fit. I said, "You gotta get me out of this hospital because it was making me really crazy." And then I just went on an outpatient basis for the next five shock treatments. At first, I was very terrified about shock treatments. I felt like, "What is my life coming to?" but the treatments turned out to be harmless. It didn't hurt. The only thing I had was that I would sleep all day. The shock treatments really knock you out. You just have a bad headache when you wake up. I would take a couple of aspirin. I expected to be weird after the treatments, but they didn't change my personality at all. I just had a little bit of short-term memory loss. People would say, "Don't you remember it?" The shock treatments kind of made me forget everything. It's like your brain just kind of forgot about how horrible the depression was. The depression just seemed to fade away.

Complementary and Alternative Medicine Therapies

Women who prefer not to take antidepressants are increasingly seeking out complementary and alternative medicine (CAM) therapies for postpartum depression. Some of the more commonly used CAM therapies include omega-3 fatty acids, massage, and acupuncture (Deligiannidis & Freeman, 2014).

Use of omega-3 fatty acids for perinatal depression has been studied using randomized controlled trials. A systematic review of these studies demonstrated a significant antidepressant benefit of omega-3 fatty acids, but due to heterogeneity of the studies' results, Freeman (2006) recommended that they be best used as an augmentation treatment rather than a single treatment for postpartum depression.

A meta-analysis of 17 randomized controlled trials of massage therapy in depressed individuals in the general population revealed a significant reduction in depressive symptoms (Hou et al., 2010). Massage therapy for postpartum depression, however, has not been studied extensively. Field et al. (2009) reported in their study that massage reduced postpartum depressive symptoms. For mothers with mild postpartum depressive symptoms, massage therapy may be a reasonable consideration to help ease their symptoms. Massage should not at this time replace more standard therapies. It can be used to augment first-line therapies.

Acupuncture has also not been studied extensively as a treatment for postpartum depression. In one study, Chung et al. (2012) conducted a small randomized noninvasive sham controlled pilot of electroacupuncture for postpartum depression. Chung and colleagues found that both treatments resulted in decreased depressive symptoms in new mothers. In their review of CAM therapies, Deligiannidis and Freeman (2014) concluded that acupuncture may be an attractive option to some mothers but it is premature to recommend CAM therapy as a first-line treatment for postpartum depression.

Barriers to Seeking Treatment

Researchers are finding that the majority of mothers experiencing postpartum depression do not seek help. Barriers to women's help seeking can be categorized on three levels: individual, social network, and health system (Sword et al., 2008). In their qualitative study, Sword and her colleagues reported that individual level barriers included normalizing of depressive symptoms, limited understanding, waiting for symptoms to improve, discomfort discussing mental-health concerns, and fears. On the social network level, barriers included normalizing of symptoms and limited understanding. Normalizing of symptoms was also a barrier on the health-system level in addition to offering unacceptable interventions and disconnected care pathways.

Seeking formal help for postpartum depressive symptoms in low-income, ethnic minority mothers was investigated by Abrams, Dornig, and Curran (2009). Mothers' views of their postpartum depressive symptoms included normalizing or minimizing their symptoms and hiding them. Women shared that "people tell me it's normal," "good mothers don't get depressed," and "postpartum depression means you're crazy." Mothers who eventually did seek help most often contacted family members first rather than healthcare providers. Some mothers did not seek formal mental-health services due to past experiences with mental-health providers who favored "medication first." Without seeking formal care, mothers described using a variety of self-help practices such as religious practices. Behavioral practices used included focusing on their physical health by exercising and good nutrition, and writing in a journal. Some of their cognitive practices entailed positive thinking, self-talk, and focusing attention on their children.

Postpartum Mood and Anxiety Disorders

Well-educated, high-income, married women (N = 509) were the focus of another study on attitudes, preferences, and perceived barriers to treatment for perinatal depression (Goodman, 2009). When asked about perceived potential barriers to treatment, 65% of the sample said lack of time, 43% stigma, and 33% childcare issues. Most mothers preferred individual therapy (92%) over group therapy for depression. Only 35% of the mothers said they would likely take medication if it were recommended for treatment of postpartum depression. The majority of women preferred to receive mental-health treatment from their obstetric providers or from a mental-health provider at their obstetric clinics.

What can help facilitate women to seek treatment for their postpartum depressive symptoms? Sword et al. (2008) suggested education interventions to increase symptom awareness not only for the mothers, but also for their family members. Family members can encourage mothers to seek care. Established and supportive relationships with healthcare providers are essential. Healthcare clinicians can legitimize postpartum depression and take mothers' symptoms seriously. Also, timeliness of providing care is critical.

Providing childcare so mothers can attend treatment is another facilitator to enabling women to receive treatment for their postpartum depression. Efforts to decrease stigma surrounding depression in new mothers and mental-health treatment are needed. Logistical barriers such as transportation and language also need to be addressed to facilitate universal treatment regardless of socioeconomic level or language spoken (Goodman, 2009).

SCREENING INSTRUMENTS

One of the greatest obstacles to diagnosing PPD is the failure of healthcare professionals to question new mothers about affective symptoms during the postpartum period. Despite multiple contacts with clinicians by mothers during the postpartum period, many women go without much-needed treatment because their postpartum mood disorders often are not diagnosed. Reported barriers that prevent healthcare providers from screening for PPD include insufficient training/knowledge and lack of time.

Barriers to women seeking help for their emotional distress in the postpartum period are numerous. In their qualitative study, Bilszta et al. (2010) identified the following barriers: stigma, denial, lack of knowledge about postpartum depression, fear of failure, façade of coping with the demands of motherhood, and unrealistic expectations of motherhood. Despite low rates of seeking help by depressed mothers, screening for postpartum depression is acceptable and viewed as desirable by the majority of women in the perinatal period (Brealey et al., 2010).

In outlining the best practices in screening for postpartum depression Milgrom and Gemmill (2014) included the following practice points:

- Screening in isolation will have no beneficial effect and must be part of an integrated, well
 resourced process with clear pathways to diagnostic assessment and effective accessible treatment
 for those diagnosed with depression.
- Screening is best conducted in the context of broader psychosocial factors with consideration given to common co-morbid conditions (e.g. anxiety).

- Providing women with prior notification of the screening and assessment process will increase its acceptability.
- Systematic follow-up of all positive screening results with the offer of a diagnostic stage procedure is imperative.
- Sufficient training for health professionals in screening and wider psychosocial assessment is essential. (Milgrom & Gemmill, 2014, p. 20)

In 2013 the Agency for Healthcare Research and Quality (AHRQ) published its report on the efficacy and safety of screening for postpartum depression in 40 studies. Multiple studies that included estimates for both sensitivity and specificity were available only for two screening scales: the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987; Cox et al., 2014) and the Postpartum Depression Screening Scale (PDSS) (Beck & Gable, 2002). Both sensitivity and specificity for both instruments were in the 80% to 90% range, and no substantial differences between scales were noted. Serial tests were almost always favored over a single test for screening. Referral and treatment rates for mothers who screened positive for postpartum depression were substantially higher in the two studies where the screening, diagnostic interview, and treatment were all provided in the same setting. The AHRQ report concluded: "The potential effectiveness of screening for postpartum depression appears to be related to the availability of systems to ensure adequate follow-up of women with positive results" (Myers et al., 2013, p. ix).

Clinicians need to keep in mind that since there is a comorbidity between PPD and PTSD after childbirth (Beck, Gable, Sakala, & Declercq, 2011a,b), when a mother screens positive for PPD, she should be engaged in dialogue about her perception of her previous births. Does she perceive her previous births as traumatic?

Postpartum Depression Predictors Inventory-Revised

The Postpartum Depression Predictors Inventory-Revised (PDPI-Revised) (Beck, Records, & Rice, 2006) can be used prenatally and postpartum to identify women who are at risk for developing PPD (see Appendix A). The items in this inventory are based on the 13 PPD risk factors identified in Beck's (2001) updated metaanalysis. During pregnancy, the first 10 predictors can be assessed (prenatal version). After a mother has given birth, the last three risk factors—childcare stress, infant temperament, and maternity blues—also can be assessed (postpartum version). Appendix A lists guide questions for each risk factor on the PDPI-Revised that a nurse or other healthcare provider can use during an interview. These guide questions can help clinicians determine whether each predictor applies to the woman being interviewed.

The PDPI-Revised was originally designed to be administered as an interview conducted by a healthcare provider. This interview format allows a woman to discuss any problems she may have with regard to the specific predictors. The PDPI-Revised has since been adapted so women can complete the inventory themselves (Hanna, Jarman, Savage, & Layton, 2004). Nurses and midwives perceived that the self-administered PDPI "greatly enhanced its usability and was a timesaver" (Hanna et al., 2004, p. 195).

In 2006, a new item coding and scoring system for the PDPI-Revised was developed, with a recommended cutoff point (Beck, Records, & Rice, 2006). The predictive validity of the PDPI-Revised was assessed in a longitudinal study with 139 women from the Pacific Northwest who completed the inventory in their third

trimester of pregnancy and again at two and six months postpartum. When using the inventory during pregnancy, the recommended cutoff score is 10.5, which yielded a sensitivity of 0.76 and specificity of 0.54. The PDPI-Revised did not perform as well in the postpartum period. Further research is needed before a cutoff score can be recommended for use of the inventory during the postpartum period.

When a woman scores above the recommended cutoff score of 10.5 on the prenatal version, she should be monitored closely after delivery for any signs of PPD. Using the PDPI-Revised to identify targeted predictors, healthcare providers can develop interventions that focus on the woman's specific problems.

The PDPI-Revised has been translated and used successfully in Italy (Oppo et al., 2009; Ferretti et al., 2013), Japan (Ikeda & Kamibeppu, 2013), and Korea (Youn & Jeong, 2011).

Postpartum Depression Screening Scale

The Postpartum Depression Screening Scale (PDSS) is a 35-item self-report scale developed to assess the presence, severity, and type of postpartum depressive symptoms (Appendix B) (Beck & Gable, 2002). The PDSS is written at a third-grade reading level. It consists of statements about how a mother may be feeling after the birth of her infant and uses a five-point Likert response format (i.e., answers range from 1 = strongly disagree to 5 = strongly agree). All 35 statements are negatively worded so that agreement with a statement indicates endorsement of the depressive symptoms. Higher PDSS scores indicate higher levels of postpartum depressive symptoms.

The PDSS yields a total score indicative of overall severity of postpartum depressive symptoms. The scale consists of seven symptom content subscales: sleeping/eating disturbances, loss of self, anxiety/insecurity, guilt/shame, emotional lability, mental confusion, and suicidal thoughts. Each subscale has five items. All were developed from Beck's (1992, 1993, 1996b) series of qualitative studies. The PDSS total score has a possible range of 35 to 175. A score of 80 or above is considered a positive screen for major PPD. This cutoff score yielded a sensitivity of 94% and specificity of 98% (Beck & Gable, 2002). Women who score in this range are in need of psychiatric evaluation and should be referred as soon as possible for mental-health follow-up and treatment.

When a woman scores a positive screen for major PPD with the PDSS, it is recommended that the clinician examine the scores for the seven symptom content subscales to determine whether a pattern of symptoms can be identified. Just as with the total PDSS score, Beck and Gable (2002) have determined cutoff scores for each of the seven subscales.

Beck and Gable (2001) compared the performance of the PDSS with the EPDS in a sample of 150 new mothers about 6 weeks after delivery. In identifying women with major PPD, the PDSS had a sensitivity of 94% and specificity of 98%, while the EPDS yielded a sensitivity of 78% and specificity of 99%.

In 2005 Beck & Gable translated and evaluated the psychometrics of the Spanish version of the PDSS. The PDSS has been used successfully to screen for PPD in a number of translated versions such as a Spanish version with Chilean women (Quelopana, 2012), a Chinese version (Li et al., 2011), a Hungarian version (Hegedus & Beck, 2012), a Portuguese version (Pereira et al., 2013), and a Spanish version with Mexican women (Lara et al., 2013).

To purchase the PDSS and its psychometric manual: Western Psychological Services 12031 Wilshire Boulevard Los Angeles, CA 90025 www.wpspublish.com

Edinburgh Postnatal Depression Scale (EPDS)

The EPDS is a self-report questionnaire that consists of 10 short statements of common depressive symptoms with four possible replies to each statement (Cox, Holden, & Sagovsky, 1987). The mother chooses the response that best describes the way she has felt in the past seven days. Each statement is rated on a scale of 0 to 3, with possible total scores ranging from 0 to 30. The symptoms included in the EPDS include inability to laugh, inability to look forward to things with enjoyment, blaming oneself unnecessarily, feeling anxious or worried, feeling scared or panicky, feeling that things have been "getting on top of me," difficulty sleeping because of unhappiness, feeling sad or miserable, crying, and thoughts of harming oneself.

The EPDS is used internationally. There is no cost involved in using it. The EPDS may be photocopied by individual researchers or clinicians for their own use without permission from the publishers. The scale must be copied in full, and all copies must acknowledge the following source:

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987) Detection of postnatal depression. Developmental of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, *150*, 782-786.

The copyright is held by the Royal College of Psychiatrists, and written permission must be obtained from the Royal College of Psychiatrists to copy and distribute the EPDS to others or for republication (in print, online, or by any other medium).

NURSING CARE

Early recognition is one of the major challenges of dealing with PPD. One of the troublesome characteristics of this mood disorder is how covertly it is suffered by women. Mothers experiencing this devastating illness may find it difficult to confide their feelings to healthcare professionals. One explanation for this hesitancy is the popular myth that equates motherhood with total happiness. Joy and other positive feelings of new motherhood are stressed, while sadness and other negative emotions are minimized. In our society it is culturally acceptable for a person to be depressed after a death, losing a job, or a divorce, but not after the birth of a baby. Because of the social stigma of PPD, women may experience shame or fear in sharing their negative feelings.

The onus is on nurses and other healthcare providers to dispel this harmful cultural myth. Nurses need to give mothers permission to share any negative emotions they may experience. Nurses can explain to women how early motherhood can include feelings of loss and grief. Loss is an important theme in PPD. A woman may experience many losses, such as loss of self, loss of control, loss of energy, loss of relationships, and loss of social roles.

Nurses who provide care during the antepartum period need to assess women for risk factors for postpartum depression. For many of the predictors, such as prenatal depression or low social support, nurses can initiate interventions during pregnancy and not wait until after an at- risk woman gives birth. Postpartum nurses need to prepare mothers for self-monitoring of symptoms of postpartum depression and be told what steps they need to take if they experience such symptoms (Logsdon et al., 2012).

Once mothers are identified as suffering from PPD, appropriate referrals should be made. Nurses should keep abreast of resources in the community for treating PPD so they can quickly refer women for help. A list of support groups and local mental-health professionals who specialize in PPD is invaluable information that nurses can provide to women. In addition, nurses need to advocate more for resources in their communities. Nurses can support legislation and public-health initiatives regarding postpartum mood and anxiety disorders. Encouraging private and public health insurance plans to provide relevant treatment options for mothers experiencing these disorders is also part of nursing's role.

Postpartum Support International (PSI) was founded in 1987 by Jane Honikman in Santa Barbara, California, to eliminate denial and ignorance of emotional health related to childbirth. It is an international network that concentrates on postpartum mental health and social support. The organization's purpose is to increase awareness among healthcare professionals and the lay public regarding emotional changes mothers frequently experience during pregnancy and after delivery. Its headquarters is in Portland, Oregon. There are area PSI support coordinators in all 50 U. S. states, Canada, and Mexico, and in more than 36 other countries around the world.

Postpartum Support International <u>www.postpartum.net</u>

PSI Postpartum Depression Helpline: 1-800-944-4PPD (available in English and Spanish)

Self-help groups can play a major role in the prevention and treatment of postpartum mood and anxiety disorders (Honikman, 1999). The following four characteristics are common to self-help groups: experiences are shared and knowledge and effects are joined together in a dynamic process of mutual help; participants share a common problem and let others know they are not alone; little or no fees are charged and participation is voluntary in nature; and control belongs to the group, not to professionals (Madara, 1990). Postpartum depression support groups convey a universal message to mothers that their postpartum experience is not unique but shared by many other women, they are not responsible for the feelings and emotions they are experiencing, and mothers will again feel like themselves.

Additional nursing interventions can be gleaned from the results of a study on the perceptions of mothers experiencing PPD (Beck, 1995b). Seven themes emerged that illustrated nurses' caring for mothers experiencing PPD. These themes will help to sensitize nurses to issues to consider in caring for mothers experiencing this mood disorder (Beck, 1995b, p. 823):

- Having sufficient knowledge about PPD to make a quick, correct diagnosis is viewed as an essential aspect of caring.
- Using astute observations and intuition leads to an awareness that something might be wrong with the mothers.
- Nurses provide hope that the mothers' living nightmares will end.
- A nurse who readily shared her valuable time was perceived as caring.
- Caring involved making the appropriate referrals so the mother was started on the right path to recovery.
- Caring involved the nurse making an extra effort to provide continuity of care for the mother.
- Understanding what the mother was experiencing provided much-needed comfort.

This symposium ends with words from a mother who is a survivor of a postpartum mood disorder and who has gone on to be the coordinator of the Post Natal Psychosis Charitable Trust in Auckland, New Zealand:

I do remember, however, a friend who came to visit me in intensive care. He stood at the end of my bed with a lighted candle and I heard him say, "The most horrific and intense battlefield is the battlefield of the mind, but there is always light at the end of the tunnel." As a veteran who carries many invisible wounds from a war for which I will receive no medals, I know what he means. My work for the (Post Natal Psychosis) Trust, I hope, is part of the light at the end of that long dark tunnel, something I can offer to other women who find themselves in a battlefield all of their own.

As nurses we must be knowledgeable and caring enough to help mothers who are engaged in an unrelenting war on the battlefield of their minds.

REFERENCES

Abrams, L. S., Dornig, K., & Curran, L. (2009). Barriers to service use for postpartum depression symptoms among low-income ethnic minority mothers in the United States. *Qualitative Health Research*, *19*(4), 535–551. doi:10.1177/1049732309332794

Adewuya, A., Ologun, Y. A., & Ibigbami, O. S. (2006). Post-traumatic stress disorder after childbirth in Nigerian women: Prevalence and risk factors. BJOG: *An International Journal of Obstetrics & Gynaecology*, *113*(3), 284–288.

Akman, I., Kuscu, M. K., Yurdakul, Z., Ozdemir, N., Solakoğlu, M., Orhon, L.,... Ozek, E. (2008). Breastfeeding duration and postpartum psychological adjustment: Role of maternal attachment styles. *Journal of Paediatrics and Child Health*, *44*(6), 369–373. doi:10.1111/j.1440-1754.2008.01336.x

Al Dallal, F. H., & Grant, I. N. (2012). Postnatal depression among Bahraini women: Prevalence of symptoms and psychosocial risk factors. *Eastern Mediterranean Health Journal*, *18*(5), 439–445.

American Psychiatric Association. (1952). Diagnostic and statistical manual of mental disorders. Washington, DC: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Ayers, S., Harris, R., Sawyer, A., Parfitt, Y., & Ford, E. (2009). Posttraumatic stress disorder after childbirth: Analysis of symptom presentation and sampling. *Journal of Affective Disorders*, *119*(1), 200–204. doi:10.1016/j.jad.2009.02.029

Avan, B., Richter, L. M., Ramchandani, P. G., Norris, S. A., & Stein, A. (2010). Maternal postnatal depression and children's growth and behaviour during the early years of life: Exploring the interaction between physical and mental health. *Archives of Disease in Childhood, 95*(9), 690–695. doi:10.1136/adc.2009.164848

Ayers, S., & Pickering, A. D. (2001). Do women get posttraumatic stress disorder as a result of childbirth? A prospective study of incidence. *Birth*, *28*(2), 111–118. doi:10.1046/j.1523-536X.2001.00111.x

Ayers, S., Wright, D. B., & Wells, N. (2007). Symptoms of post-traumatic stress disorder in couples after birth: Association with the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology, 25*(1), 40–50. doi:10.1080/02646830601117175

Bandelow, B., Sojka, F., Broocks, A., Hajak, G., Bleich, S., & Rüther, E. (2006). Panic disorder during pregnancy and postpartum period. *European Psychiatry*, *21*(7), 495–500.

Beck, C. T. (1992). The lived experience of postpartum depression: A phenomenological study. *Nursing Research*, 41(3), 166–170.

Beck, C. T. (1993). Teetering on the edge: A substantive theory of postpartum depression. *Nursing Research, 42*(1), 42–48.

Beck, C. T. (1995a). The effects of postpartum depression on maternal-infant interaction: A meta-analysis. *Nursing Research*, 44(5), 298–304.

Beck, C. T. (1995b). Perceptions of nurses' caring by mothers experiencing postpartum depression. *Journal of Obstetric, Gynecologic and Neonatal Nursing, 24*(9), 819–825.

Beck, C. T. (1996a). A meta-analysis of predictors of postpartum depression. Nursing Research, 45(5), 297–303.

Beck, C. T. (1996b). Postpartum depressed mothers' experiences interacting with their children. *Nursing Research*, 45(2), 98–104.

Beck, C. T. (1998a). Postpartum onset of panic disorder. Image: Journal of Nursing Scholarship, 30(2), 131–135.

Beck, C. T. (1998b). The effects of postpartum depression on child development: A meta-analysis. *Archives of Psychiatric Nursing*, *12*(1), 12–20.

Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research, 50*(5), 275–285.

Beck, C. T. (2003). Recognizing and screening for postpartum depression in mothers of NICU infants. *Advances in Neonatal Care*, *3*(1), 37–46.

Beck, C. T. (2004a). Birth trauma: In the eye of the beholder. Nursing Research, 53(1), 28–35.

Beck, C. T. (2004b). Post-traumatic stress disorder due to childbirth: The aftermath. Nursing Research, 53(4), 216–224.

Beck, C. T. (2006). The anniversary of birth trauma: Failure to rescue. Nursing Research, 55(6), 381–390.

Beck, C. T. (2007). Exemplar: Teetering on the edge: A continually emerging theory of postpartum depression. In P. L. Munhall (Ed.), *Nursing research: A qualitative perspective* (4th ed., pp. 273–292). Sudbury, MA: Jones & Bartlett Publishers.

Beck, C. T. (2012). Exemplar: Teetering on the edge: A second grounded theory modification. In P. L. Munhall (Ed.), *Nursing research: A qualitative perspective* (5th ed., pp. 257–284). Sudbury, MA: Jones & Bartlett Learning.

Beck, C. T., & Driscoll, J. W. (2006). *Postpartum mood and anxiety disorders: A clinician's guide*. Sudbury, MA: Jones & Bartlett Publishers.

Beck, C. T., Driscoll, J. W., & Watson, S. (2013). Traumatic childbirth. New York, NY: Routledge.

Beck, C. T., & Gable, R. K. (2001). Comparative analysis of the performance of the Postpartum Depression Screening Scale with two other depression instruments. *Nursing Research*, *50*(4), 242–250.

Beck, C. T., & Gable, R. K. (2002). *Postpartum depression screening scale manual*. Los Angeles, CA: Western Psychological Services.

Beck, C. T., & Gable, R. K. (2005). Screening performance of the postpartum depression screening scale–Spanish version. *Journal of Transcultural Nursing*, *16*(4), 331–338.

Beck, C. T., Gable, R. K., Sakala, C., & Declercq, E. R. (2011a). Posttraumatic stress disorder in new mothers: Results from a two-stage U.S. national survey. *Birth, 38*(3), 216–227. doi:10.1111/j.1523-536X.2011.00475.x

Beck, C. T., Gable, R. K., Sakala, C., & Declercq, E. R. (2011b). Postpartum depressive symptomatology: Results from a two-stage U.S. national survey. *Journal of Midwifery & Women's Health, 56*(5), 427–435. doi:10.1111/j.1542-2011.2011.00090.x

Beck, C. T., Records, K., & Rice, M. (2006). Further development of the Postpartum Depression Predictors Inventory-Revised. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *35*(6), 735–745.

Beck, C. T., & Watson, S. (2008). Impact of birth trauma on breast-feeding: A tale of two pathways. *Nursing Research, 57*(4), 228–236. doi:10.1097/01.NNR.0000313494.87282.90

Beck, C. T., & Watson, S. (2010). Subsequent childbirth after a previous traumatic birth. *Nursing Research, 59*(4), 241–249. doi:10.1097/NNR.0b013e3181e501fd

Bener, A., Burgut, F. T., Ghuloum, S., & Sheikh, J. (2012). A study of postpartum depression in a fast developing country: Prevalence and related factors. *International Journal of Psychiatry in Medicine*, *43*(4), 325–337.

Bener, A., Gerber, L. M., & Sheikh, J. (2012). Prevalence of psychiatric disorders and associated risk factors in women during their postpartum period: A major public health problem and global comparison. *International Journal of Women's Health, 4*, 191–200. doi:10.2147/IJWH.S29380

Berle, J. O., & Spigset, O. (2011). Antidepressant use during breastfeeding. Current Women's Health Review, 7(1), 28–34.

Beydoun, H. A., Beydoun, M. A., Kaufman, J. S., Lo, B., & Zonderman, A. B. (2012). Intimate partner violence against adult women and its association with major depressive disorder, depressive symptoms and postpartum depression: A systematic review and meta-analysis. *Social Science & Medicine, 75*(6), 959–975. doi:10.1016/j.socscimed.2012.04.025

Bilszta, J., Ericksen, J., Buist, A., & Milgrom, J. (2010). Women's experience of postnatal depression – beliefs and attitudes as barriers to care. *Australian Journal of Advanced Nursing*, *27*(3), 44–54.

Brealey, S. D., Hewitt, C., Green, J. M., Morrell, J., & Gilbody, S. (2010). Screening for postnatal depression: Is it acceptable to women and healthcare professionals? A systematic review and meta-synthesis. *Journal of Reproductive and Infant Psychology, 28*(4), 328–344.

Brockington, I. F., Cernik, K. F., Schofield, E. M., Downing, A. R., Francis, A. F., & Keelan, C. (1981). Puerperal Psychosis. Phenomena and diagnosis. *Archives in General Psychiatry*, *38*(7), 829–833.

Campbell, S. B., Cohn, J. F., Flanagan, C., Popper, S., & Meyers, T. (1992). Cause and correlates of postpartum depression during the transition to parenthood. *Development and Psychopathology, 4*(1), 29–47. doi:10.1017/S095457940000554X

Confidential Enquiries into Maternal Deaths. (2001). *Why mothers die 1997–1999: Executive summary and key recommendations*. London, UK: Royal College of Obstetricians and Gynaecologists.

Chad, L., Pupco, A., Bozzo, P., & Koren, G. (2013). Update on antidepressant use during breastfeeding. *Canadian Family Physician*, *59*(6), 633–634.

Chandra, P. S., Bhargavaraman, R. P., Raghunandan, V. N., & Shaligram, D. (2006). Delusions related to infant and their association with mother–infant interactions in postpartum psychotic disorders. *Archives of Women's Mental Health, 9*(5), 285–288.

Chaudron, L. H., Kitzman, H. J., Szilagyi, P. G., Sidora-Arcoleo, K., & Anson, E. (2006). Changes in maternal depressive symptoms across the postpartum year at well childcare visits. *Ambulatory Pediatrics,* 6(4), 221–224.

Chen, C. H., Wang, S. Y., Chung, U. L., Tseng, Y. F., & Chou, F. H. (2006). Being reborn: The recovery process of postpartum depression in Taiwanese women. *Journal of Advanced Nursing*, *54*(4), 450–456.

Cheng, C. Y., Walker, L. O., & Chu, T. P. (2013). Physical conditions and depressive symptoms of Chinese postpartum mothers in the United States and Taiwan. *Health Care for Women International, 34*(7), 539–555. doi:10.1080/07399332.2 012.655389

Chung, K. F., Yeung, W. F., Zhang, Z. J., Yung, K. P., Man, S. C., Lee, C. P., ... Taam Wong, V. (2012). Randomized noninvasive sham-controlled pilot trial of electroacupuncture for postpartum depression. *Journal of Affective Disorders, 142*(1), 115–121. doi:10.1016/j.jad.2012.04.008

Church, S., & Scanlan, M. (2002). Post-traumatic stress disorder after childbirth: Do midwives have a preventative role? *The Practising Midwife*, *5*(6), 10–13.

Cooper, P. J., Campbell, E. A., Day, A., Kennerley, H., & Bond, A. (1988). Non-psychotic psychiatric disorders after childbirth: A prospective study of prevalence, incidence, course and nature. *British Journal of Psychiatry*, *152*, 799–806.

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, *150*, 782–786.

Cox, J., Holden, J., & Henshaw, C. (2014). *Perinatal mental health: The Edinburgh Postnatal Depression Scale (EPDS) manual* (2nd ed.). London, UK: RC Psych Publications.

Creedy, D. K., Shochet, I. M., & Horsfall, J. (2000). Childbirth and the developing of acute trauma symptoms: Incidence and contributing factors. *Birth*, *27*(2), 104–111.

Crompton, J. (2003, Summer). Post-traumatic stress disorder and childbirth. *Childbirth Educators New Zealand Education Effects*, 25–31.

Davis, L., Edwards, H., Mohay, H., & Wollin, J. (2003). The impact of very premature birth on the psychological health of mothers. *Early Human Development*, 73(1–2), 61–70. doi:10.1016/S0378-3782(03)00073-2

DeBofsky, M. D., & Hamilton, J. A. (1995). *Rights of postpartum patients*. Santa Barbara, CA: Postpartum Support International.

Deligiannidis, K. M., & Freeman, M. P. (2014). Complementary and alternative medicine therapies for perinatal depression. *Best Practice and Research Clinical Obstetrics and Gynaecology, 28*(1), 85–95. doi:10.1016/j. bpobgyn.2013.08.007

Dennis, C. L. (2014). Psychosocial interventions for the treatment of perinatal depression. *Best Practice and Research Clinical Obstetrics and Gynaecology*, 28(1), 97–111. doi:10.1016/j.bpobgyn.2013.08.008

Dennis, C. L., & Dowswell, T. (2013). Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database of Systematic Reviews, 2013*(2). doi:10.1002/14651858.CD001134.pub3

Derogatis, L. R. (1993). Brief Symptom Inventory (BSI): Administration, scoring and procedures manual. Minneapolis, MN: National Computer Systems, Inc.

deMontigny, F., Girard, M. E., Lacharité, C., Dubeau, D., & Devault, A. (2013). Psychosocial factors associated with paternal postnatal depression. *Journal of Affective Disorders, 150*(1), 44–49. doi:10.1016/j.jad.2013.01.048

Ekeroma, A. J., Ikenasio-Thorpe, B., Weeks, S., Kokaua, J., Puniani, K., Stone, P., & Foliaki, S. A. (2012). Validation of the Edinburgh Postnatal Depression Scale (EPDS) as a screening tool for postnatal depression in Samoan and Tongan women living in New Zealand. *The New Zealand Medical Journal*, *125*(1355), 41–49.

El-Ibiary, S. Y., Hamilton, S. P., Abel, R., Erdman, C. A., Robertson, P. A., & Finley, P. R. (2013). A pilot study evaluating genetic and environmental factors for postpartum depression. *Innovations in Clinical Neuroscience*, *10*(9–10), 15–22.

England, S., Ballard, C., & George, S. (1994). Chronicity in postnatal depression. *European Journal of Psychiatry*, 8(2), 93–96.

Engqvist, I., Ferszt, G., Ählin, A., & Nilsson, K. (2011). Women's experience of postpartum psychotic episodes–analysis of narratives from the Interent. *Archives of Psychiatric Nursing*, *25*(5), 376–387. doi:10.1016/j.apnu.2010.12.003

Escribá-Agüir, V., & Artazcoz, L. (2011). Gender differences in postpartum depression: A longitudinal cohort study. *Journal of Epidemiology and Community Health*, *65*(4), 320–326. doi:10.1136/jech.2008.085894

Esquirol, J. E. D. (1838). *Des maladies mentales considerées sous les rapports médical, hygiènique et médico-légal* (Vol. 1). Paris: Chez J. B. Baillière.

Ferretti, F., Franca, A., & Folin, M. (2013). Risk factors associated with postnatal depressive symptomatology: A study conducted in the Southern Area of the Local Health Unit of Modena. *Epidemiologia e Prevenzione*, *37*(2–3), 138–144.

Field, T. (2010). Postpartum depression effects on early interventions, parenting, and safety practices: A review. *Infant Behavior & Development*, 33(1), 1–6. doi:10.1016/j.infbeh.2009.10.005

Field, T., Diego, M., Hernandez-Reif, M., Deeds, O., & Figueiredo, B. (2009). Pregnancy massage reduces prematurity, low birthweight and postpartum depression. *Infant Behavior & Development*, *32*(4), 454–460. doi:10.1016/j. infbeh.2009.07.001

Figueiredo, B., Dias, C. C., Brandão, S., Canário, C., & Nunes-Costoa, R. (2013). Breastfeeding and postpartum depressison: State of the art review. *Jornal de Pediatria, 89*(4), 332–338. doi:10.1016/j.jped.2012.12.002

Fisher, S. D., Kopelman, R., & O'Hara, M. W. (2012). Partner report of paternal depression using the Edinburgh Postnatal Depression Scale-Partner. *Archives of Women's Mental Health*, *15*(4), 283–288. doi:10.1007/s00737-012-0282-2

Foa, E. B., Riggs, D. S., Dancu, C. V., & Rothbaum, B. O. (1993). Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. *Journal of Traumatic Stress*, 6(4), 459–473. doi:10.1002/jts.2490060405

Gagliardi, L., Petrozzi, A., & Rusconi, F. (2012). Symptoms of maternal depression immediately after delivery predict usuccessful breast feeding. *Archives of Disease in Childhood*, *97*(4), 355–357.

Gavin, A. R., Lindhorst, T., & Lohr, M. J. (2011). The prevalence and correlates of depressive symptoms among adolescent mothers: Results from a 17-year longitudinal study. *Women & Health, 51*(6), 525–545. doi:10.1080/03630242 .2011.606355

Gaynes, B. N., Gavin, N., Meltzer-Brody, S., Lohr, K. N., Swinson, T., Gartlehner, G., . . . Miller, W. C. (2005). *Perinatal depression: Prevalence, screening, accuracy, and screening outcomes: Evidence Report/Technology Assessment No. 119.* Rockville, MD: Agency for Healthcare Research and Quality.

Glasser, S., Tanous, M., Shihab, S., Goldman, N., Ziv, A., & Kaplan, G. (2012). Perinatal depressive symptoms among Arab women in Northern Israel. *Maternal Child Health Journal, 16*(6), 1197–1205. doi:10.1007/s10995-011-0845-2.

Goodman, J. H. (2009). Women's attitudes, preference, and perceived barriers to treatment for perinatal depression. *Birth*, *36*(1), 60–69. doi:10.1111/j.1523-536X.2008.00296.x

Hahn-Holbrook, J., Haselton, M. G., Dunkel Schetter, C., & Glynn, L. M. (2013). Does breastfeeding offer protection against maternal depressive symptomatology? A prospective study from pregnancy to 2 years after birth. *Archives of Women's Mental Health*, *16*(5), 411–422. doi:10.1007/s00737-013-0348-9

Hale, T. W. (2012). Medications and mothers' milk (15th ed.). Amarillo, TX: Hale Publishing.

Halligan, S. L., Murray, L., Martins, C., & Cooper, P. J. (2007). Maternal depression and psychiatric outcomes in adolescent offspring: A 13-year longitudinal study. *Journal of Affective Disorders, 97*(1–3), 145–154.

Hamdan, A., & Tamim, H. (2011). Psychosocial risk and protective factors for postpartum depression in the United Arab Emirates. *Archives in Women's Mental Health*, *14*(2), 125–133. doi:10.1007/s00737-010-0189-8

Hamilton, J. A., Harberger, P. N., & Perry, B. L. (1992). The problem of terminology. In J. A. Hamilton & P. N. Harberger (Eds.), Postpartum psychiatric illness: A picture puzzle (pp. 33–40). Philadelphia, PA: University of Pennsylvania Press.

Hanna, B., Jarman, H., Savage, S., & Layton, K. (2004). The early detection of postpartum depression: Midwives and nurses trial a checklist. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *33*(2), 191–197.

Hay, D. F., Pawlby, S., Angold, A., Harold, G. T., & Sharp, D. (2003). Pathways to violence in the children of mothers who were depressed postpartum. *Developmental Psychology*, *39*(6), 1083–1094.

Hebdon, M., Foli, K., South, S., & Lim, E. (2012). Personality traits, unmet expectations, and depressive symptoms in adoptive mothers. *Western Journal of Nursing Research*, *34*(8), 1070–1071. doi:10.1177/0193945912453688

Hegedus, K. S., & Beck, C. T. (2012). Development and psychometric testing of the Postpartum Depression Screening Scale: Hungarian version. *International Journal for Human Caring*, *16*(1), 54–58.

Hendrick, V., Altshuler, L., Strouse, T., & Grosser, S. (2000). Postpartum and nonpostpartum depression: Differences in presentation and response to pharmacologic treatment. *Depression and Anxiety*, *11*(2), 66–72.

Honikman, J. I. (1999). Role of self-help techniques for postpartum mood disorders. In L. J. Miller (Ed.), *Postpartum mood disorders* (pp. 195–215). Washington, DC: American Psychiatric Press.

Hou, W. H., Chiang, P. T., Hsu, T. Y., Chiu, S. Y., & Yen, Y. C. (2010). Treatment effects of massage therapy in depressed people: A meta-analysis. *Journal of Clinical Psychiatry*, 71(7), 894–901. doi:10.4088/JCP.09r05009blu

Howard, L. M., Oram, S., Galley, H., Trevillion, K., & Feder, G. (2013). Domestic violence and perinatal mental disorders: A systematic review and meta-analysis. *PLoS Medicine, 10*(5), e1001452. doi:10.1371/journal.pmed.1001452

Horowitz, J. A., Chang, S. S., Das, S., & Hayes, B. (2001). Women's perceptions of postpartum depressive symptoms from an international perspective. *International Nursing Perspectives*, *1*, 5–14.

Husain, N., Cruickshank, K., Husain, M., Khan, S., Tomenson, B., & Rahman, A. (2012). Social stress and depression during pregnancy and in the postnatal period in British Pakistani mothers: A cohort study. *Journal of Affective Disorders, 140*(3), 268–276. doi:10.1016/j.jad.2012.02.009

Ikeda, M., & Kamibeppu, K. (2013). Measuring the risk factors for postpartum depression: Development of the Japanese version of the Postpartum Depression Preditctors Inventory-Revised. *BMC Pregnancy and Childbirth, 13*, 112–122. doi:10.1186/1471-2393-13-112

Iles, J., Slade, P., & Spiby, H. (2011). Posttraumatic stress symptoms and postpartum depression in couples after childbirth: The role of partner support and attachment. *Journal of Anxiety Disorders, 25*(4), 520–530. doi:10.1016/j. janxdis.2010.12.006

Jones, I., & Craddock, N. (2001). Familiarity of the puerperal trigger in bipolar disorder: Results of a family study. *American Journal of Psychiatry*, *158*(6), 913–917.

Kantrowitz-Gordon, I. (2013). Internet confessions of postpartum depression. *Issues in Mental Health Nursing*, 34(12), 874–882. doi:10.3109/01612840.2013.806618

Kendell, R. E., Chalmers, J. C., & Platz, C. (1987). Epidemiology of puerperal psychoses. *British Journal of Psychiatry*, 150, 662–673.

Kerstis, B., Engström, G., Edlund, B., & Aarts, C. (2013). Association between mothers' and fathers' depressive symptoms, sense of coherence and perception of their child's temperament in early parenthood in Sweden. *Scandinavian Journal of Public Health*, *41*(3), 233–239. doi:10.1177/1403494812472006

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire–2: Validity of a two-item depression screener. *Medical Care*, *41*(11), 1284–1292.

Lapp, L. K., Agbokou, C., Peretti, C. S., & Ferreri, F. (2010). Management of post traumatic stress disorder after childbirth: A review. *Journal of Psychosomatic Obstetrics & Gynecology*, *31*(3), 113–122. doi:10.3109/0167482X.2010.503330

Lara, M. A., Navarrete, L., Navarro, C., & Le, H. N. (2013). Evaluation of the psychometric measures for the Postpartum Depression Screening Scale-Spanish version for Mexican women. *Journal of Transcultural Nursing*, *24*(4), 378–386. doi:10.1177/1043659613493436

Lefkowitz, D. S., Baxt, C., & Evans, J. R. (2010). Prevalence and correlates of posttraumatic stress and postpartum depression in parents of infants in the Neonatal Intensive Care Unit (NICU). *Journal of Clinicial and Psychological Medical Settings*, *17*(3), 230–237. doi:10.1007/s10880-010-9202-7

Letourneau, N., Stewart, M., Dennis, C. L., Hegadoren, K., Duffett-Leger, L., & Watson, B. (2011). Effect of home-based peer support on maternal-infant interactions among women with postpartum depression: A randomized, controlled trial. *International Journal of Mental Health Nursing*, *20*(5), 345–357. doi:10.1111/j.1447-0349.2010.00736.x

Letourneau, N., Tryphonopoulos, P. D., Duffett-Leger, L., Stewart, M., Benzies, K., Dennis, C. L., & Joschko, J. (2012). Support intervention needs and preferences of fathers affected by postpartum depression. *Journal of Perinatal and Neonatal Nursing*, *26*(1), 69–80. doi:10.1097/JPN.0b013e318241da87

Li, L., Liu, F., Zhang, H., Wang, L., & Chen, X. (2011). Chinese version of the Postpartum Depression Screening Scale: Translation and validation. *Nursing Research*, *60*(4), 231–239. doi:10.1097/NNR.0b013e3182227a72

Logsdon, C., Tomasulo, R., Eckert, D., Beck, C. T., & Dennis, C. L. (2012). Identification of mothers at risk for postpartum depression by hospital-based perinatal nurses. MCN: *The American Journal of Maternal/Child Nursing*, *37*(4), 218–225. doi:10.1097/NMC.0b013e318251078b

Lucero, N. B., Beckstrand, R. L., Callister, L. C., & Sanchez Birkhead, A. C. (2012). Prevalence of postpartum depression among Hispanic immigrant women. *Journal of the American Academy of Nurse Practitioners, 24*(12), 726–734. doi:10.1111/j.1745-7599.2012.00744.x

MacDonald, J. (1847). Puerperal insanity. American Journal of Insanity, 4, 113–163.

Madara, E. J. (1990). Maximizing the potential for community self-help through clearinghouse approaches. *Prevention in Human Services, 7*(2), 109–138. doi:10.1300/J293v07n02_07

Maggioni, C., Margola, D., & Filippi, F. (2006). PTSD risk factors, and expectations among women having a baby: A two-wave longitudinal study. *Journal of Psychosomatic Obstetrics & Gynecology, 27*(2), 81–90.

Mahon, P. B., Payne, J. L., MacKinnon, D. F., Mondimore, F. M., Goes, F. S., Schweizer, B., ... Potash, J. B. (2009). Genomewide linkage and follow-up association study of postpartum mood symptoms. *American Journal of Psychiatry*, *166*(11), 1229–1237. doi:10.1176/appi.ajp.2009.09030417

Maia, B. R., Marques, M., Bos, S., Pereira, A. T., Soares, M. J., Valente, J., . . . Azevedo, M. H. (2011). Epidemiology of perinatal depression in Portugal: Categorical and dimensional approach. *Acta Médica Portuguesa, 24* (Suppl. 2), 443–448.

Marcé, L. V. (1858). Traité de la folie des femmes enceintes, des nouvelles accouchées et des nourrices. Paris: J. B. Bailliére et Fils.

Mathisen, S. E., Glavin, K., Lien, L., & Lagerløv, P. (2013). Prevalence and risk factors for postpartum depressive symptoms in Argentina: A cross-sectional study. *International Journal of Women's Health, 5*, 787–793. doi:10.2147/IJWH. S51436

McDonald, S., Slade, P., Spiby, H., & Iles, J. (2011). Post-traumatic stress symptoms, parenting stress and mother-child relationships following childbirth and at 2 years postpartum. *Journal of Psychosomatic Obstetrics & Gynecology*, *32*(3), 141–146. doi:10.3109/0167482X.2011.596962

McDougle, C. J., Barr, L. C., Goodman, W. K., & Price, L. H. (1999). Possible role of neuropeptides in obsessive compulsive disorder. *Psychoneuroendocrinology*, 24(1), 1–24.

Meltzer-Brody, S., Bledsoe-Mansori, S. E., Johnson, N., Killian, C., Hamer, R. M., Jackson, C., . . . & Thorp, J. (2013). A prospective study of perinatal depression and trauma history in pregnant minority adolescents. *American Journal of Obstetrics & Gynecology, 208*(3), 211. e1–211.e7. doi: 10.1016/j.ajog.2012.12.020

Metz, A., Sichel, D. A., & Goff, D. C. (1988). Postpartum panic disorder. *Journal of Clinical Psychiatry*, 49(7), 278–279.

Milgrom, J., & Gemmill, A. W. (2014). Screening for perinatal depression. *Best Practice & Research Clinical Obstetrics and Gynaecology*, *28*(1), 13–23. doi:10.1016/j.bpobgyn.2013.08.014

Mitchell, J. T., & Dyregrov, A. (1993). Traumatic stress in disaster workers and emergency personnel: Prevention and intervention. In J. P. Wilson, & B. Raphael (Eds.). *International handbook of traumatic stress syndromes* (pp. 905–914). New York, NY: Plenum Press.

Mott, S. L., Schiller, C. E., Richards, J. G., O'Hara, M. W., & Stuart, S. (2011). Depression and anxiety among postpartum and adoptive mothers. *Archives of Women's Mental Health*, *14*(4), 335–343. doi:10.1007/s00737-011-0227-1

Motzfeldt, I., Andreasen, S., Pedersen, A. L., & Pedersen, M. L. (2013). Prevalence of postpartum depression in Nuuk, Greenland–A cross-sectional study using Edinburgh Postnatal Depression Scale. *International Journal of Circumpolar Health*, *72*, 1–6. doi:10.3402/ijch.v72i0.21114

Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of Child Psychology and Psychiatry*, 33(3), 543–561.

Murray, L., Arteche, A., Fearon, P., Halligan, S., Goodyer, I., & Cooper, P. (2011). Maternal postnatal depression and the development of depression in offspring up to 16 years of age. *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(5), 460–470. doi:10.1016/j.jaac.2011.02.001

Murray, L., Woolgar, M., Cooper, P., & Hipswell, A. (2001). Cognitive vulnerability to depression in 5-year-old children of depressed mothers. *Journal of Child Psychology and Psychiatry*, *42*(7), 891–899.

Myers, E. R., Aubuchon-Endsley, N., Bastian, L. A., Gierisch, J. M., Kemper, A. R., Swamy, G. K., . . . Sanders, G. D. (2013). Efficacy and safety of screening for postpartum depression. Comprative effectiveness review No.106. AHRQ Publication No. 13-EHC064-EF. Rockville, MD: Agency for Healthcare Research and Quality.

Namouz-Haddad, S., & Nulman, I. (2014). Safety of treatment of obsessive compulsive disorder in pregnancy and puerperium. *Canadian Family Physician*, *60*(2), 133–136.

Nonacs, R. (2006). A deeper shade of blue: A woman's guide to recognizing and treating depression in her childbearing years. New York, NY: Simon & Schuster.

Northrup, T. F., Evans, P. W., & Stotts, A. L. (2013). Depression among mothers of high-risk infants discharged from a neonatal intensive care unit. MCN: *American Journal of Maternal/Child Nursing*, *38*(2), 89–94. doi:10.1097/NMC.0b013e318270f8b8

Oates, M. (2003). Suicide: The leading cause of maternal death. British Journal of Psychiatry, 183, 279–281.

Oates, M. R., Cox, J. L., Neema, S., Asten, P., Glangeaud-Freudenthal, N., Figueiredo, B., . . . Yoshida, K. (2004). Postnatal depression across countries and cultures: A qualitative study. *British Journal of Psychiatry Supplement, 46*, S10–S16.

O'Hara, M. W. (1987). Postpartum 'blues,' depression, and psychosis: A review. *Journal of Psychosomatic Obstetrics and Gynecology*, 7(3), 205–227.

O'Hara, M. W., & McCabe, J. E. (2013). Postpartum depression: Current status and future directions. *Annual Review of Clinical Psychology, 9,* 379–407. doi:10.1146/annurev-clinpsy-050212-185612

O'Hara, M. W., & Swain, A. M. (1996). Rates and risk of postpartum depression—a meta-analysis. *International Review of Psychiatry*, 8(1), 37–45.

Olde, E., van der Hart, O., Kleber, R., & van Son, M., (2006). Posttraumatic stress following childbirth: A review. *Clinical Psychology Review*, *26*(1), 1–16.

Oppo, A., Mauri, M., Ramacciotti, D., Camilleri, V., Banti, S., Borri, C., . . . Cassano, G. B. (2009). Risk factors for postpartum depression: The role of the Postpartum Depression Predictors Inventory-Revised (PDPI-R). Results from the Perinatal Depression-Research & Screening Unit (PNDReScU) study. *Archives in Women's Mental Health*, *12*(4), 239–249. doi: 10.1007/s00737-009-0071-8

Ord, W. M. (1888). Report of a committee of the clinical society of London to investigate the subject of myxoedema. *Transactions of the Clinical Society of London, 21* (Suppl.), 1–215.

Panyayong, B. (2013). Postpartum depression among Thai women: A national survey. *Journal of the Medical Association of Thailand*, *96*(7), 761–767.

Paulson, J. F., & Bazemore, S. D. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: A meta-analysis. *JAMA*, *303*(19), 1961–1969. doi:10.1001/jama.2010.605

Pereira, A. T., Bos, S., Marques, M., Maia, B., Soares, M. J., Valente, J., . . . Macedo, A. (2013). Short forms of the Postpartum Depression Screening Scale: As accurate as the original form. *Archives of Women's Mental Health*, *16*(1), 67–77. doi:10.1007/s00737-012-0319-6

Polachek, I. S., Harari, L. H., Baum, M., & Strous, R. D. (2012). Postpartum post-traumatic stress disorder symptoms: The uninvited birth companion. *Israeli Medical Association Journal*, *14*(6), 347–353.

Pope, C. J., Xie, B., Sharma, V., & Campbell, M. K. (2013). A prospective study of thoughts of self-harm and suicidal ideation during the postpartum period in women with mood disorders. *Archives in Women's Mental Health. 16*(6), 483–488. doi:10.1007/s00737-013-0370-y

Quelopana, A. M. (2012). Violence against women and postpartum depression: The experience of Chilean women. *Women* & *Health, 52*(5), 437–453. doi:10.1080/03630242.2012.687443

Quelopana, A. M., Champion, J. D., & Reyes-Rubilar, T. (2011). Factors associated with postpartum depression in Chilean women. *Health Care for Women International*, *32*(10), 939–949. doi:10.1080/07399332.2011.603866

Rambelli, C., Montagnani, M. S., Oppo, A., Banti, S., Borri, C., Cortopassi, C., . . . Mauri, M. (2010). Panic disorder as a risk factor for post-partum depression. Results from the Perinatal Depression Research & Screening Unit (PND-ReScU) study. *Journal of Affective Disorders, 122*(1–2), 139–143. doi:10.1016/j.jad.2009.07.002

Robertson, E., Grace, S., Wallington, T., & Stewart, D. E. (2004). Antenatal risk factors for postpartum depression: A synthesis of recent literature. *General Hospital Psychiatry, 26*(4), 289–295.

Ross, L. E., & McLean, L. M. (2006). Anxiety disorders during pregnancy and the postpartum period: A systematic review. *Journal of Clincial Psychiatry, 67*(8), 1285–1298.

Roubinov, D. S., Luecken, L. J., Crnic, K. A., & Gonzales, N. A. (2014). Postnatal depression in Mexican American fathers: Demographic, cultural, and familial predictors. *Journal of Affective Disorders, 152*–154, 360–368. doi:10.1016/j. jad.2013.09.038

Russell, E. J., Fawcett, J. M., & Mazmanian, D. (2013). Risk of obsessive-compulsive disorder in pregnant and postpartum women: A meta-analysis. *Journal of Clinical Psychiatry*, 74(4), 377–385. doi:10.4088/JCP.12r07917

Saleh, E.-S., El-Bahei, W., Del El-Hadidy, M. A., & Zayed, A. (2013). Predictors of postpartum depression in a sample of Egyptian women. *Neuropsychiatric Disease and Treatment, 9*, 15–24. doi:10.2147/NDT.S37156

Sandström, M., Wiberg, B., Wikman, M., Willman, A. K., & Högberg, U. (2008). A pilot study of eye movement desensitisation and reprocessing treatment (EMDR) for post-traumatic stress after childbirth. *Midwfery, 2*(1), 62–73.

Sawyer, A., & Ayers, S. (2009). Post-traumatic growth in women after childbirth. *Psychology and Health*, 24(4), 457–471. doi:10.1080/08870440701864520

Segman, R. H., Goltser-Dubner, T., Weiner, I., Canetti, L., Galili-Weisstub, E., Milwidsky, A., . . . Hochner-Celnikier, D. (2010). Blood mononuclear cell gene expression signature of postpartum depression. *Molecular Psychiatry, 15*(1), 93–100, 2. doi:10.1038/mp.2009.65

Senecky, Y., Agassi, H., Inbar, D., Horesh, N., Diamond, G., Bergman, Y. S., & Apter, A. (2009). Post-adoption depression among adoptive mothers. *Journal of Affective Disorders*, *115*(1–2), 62–68. doi:10.1016/j.jad.2008.09.002

Serhan, N., Ege, E., Ayranci, U., & Kosgeroglu, N. (2012). Prevalence of postpartum depression in mothers and fathers and its correlates. *Journal of Clinical Nursing, 22*(1–2), 279–284. doi:10.1111/j.1365-2702.2012.04281.x

Shaban, Z., Dolatian, M., Shams, J., Alavi-Majd, H., Mahmoodi, Z., & Sajjadi, H. (2013). Post-traumatic stress disorder (PTSD) following childbirth: Prevalence and contributing factors. *Iranian Red Crescent Medical Journal, 15*(3), 177–182. doi:10.5812/ircmj.2312

Shapiro, F. (2001). *Eye movement desensitization and reprocessing (EDMR): Basic principles, protocols, and procedures* (2nd ed.). New York, NY: Guilford Press.

Sharma, V., Khan, M., Corpse, C., & Sharma, P. (2008). Missed bipolarity and psychiatric comorbidity in women with postpartum depression. *Bipolar Disorders*, *10*(6), 742–747. doi:10.1111/j.1399-5618.2008.00606.x

Sharma, V., Burt, V. K., & Ritchie, H. L. (2010). Assessment and treatment of bipolar II postpartum depression: A review. *Journal of Affective Disorders*, *125*(1–3), 18–26. doi:10.1016/j.jad.2009.09.014

Sichel, D. A., Cohen, L. S., Dimmock, J. A., & Rosenbaum, J. F. (1993). Postpartum obsessive compulsive disorder: A case series. *Journal of Clinical Psychiatry*, *54*(4), 156–159.

Sichel, D., & Driscoll, J. W. (1999). *Women's moods: What every woman must know about hormones, the brain, and emotional health*. New York, NY: William Morrow and Company.

Sockol, L. E., Epperson, C. N., & Barber, J. P. (2011). A meta-analysis of treatments for perinatal depression. *Clinical Psychology Review*, *31*(5), 839–849. doi:10.1016/j.cpr.2011.03.009

Sockol, L. E., Epperson, C. N., & Barber, J. P. (2013). Preventing postpartum depression: A meta-analytic review. *Clinical Psychology Review*, 33(8), 1205–1217. doi:10.1016/j.cpr.2013.10.004

Söderquist, J., Wijma, B., & Wijma, K. (2006). The longitudinal course of post-traumatic stress after childbirth. *Journal of Psychosomatic Obstetrics & Gynecology, 27*(2), 113–119.

Spinelli, M. G. (2005). Infanticide: Contrasting views. Archives of Women's Mental Health, 8(1), 15–24.

Stern, G., & Kruckman, L. (1983). Multi-disciplinary perspectives on post-partum depression: An anthropological critique. *Social Science & Medicine, 17*(15), 1027–1041.

Stowe, Z. N., Hostetter, A. L., & Newport, D. J. (2005). The onset of postpartum depression: Implications for clinical screening in obstetrical and primary care. *American Journal of Obstetrics & Gynecology*, *192*(2), 522–526.

Stramrood, C. A., van der Velde, J., Doornbos, B., Paarlberg, K. M., Weijmar Schultz, W. C., & van Pampus, M. G. (2012). The patient observer: Eye-movement desensitization and reprocessing for the treatment of posttraumatic stress following childbirth. *Birth*, *39*(1), 70–76. doi:10.1111/j.1523-536X.2011.00517.x

Stramrood, C. A., Wessel, I., Doornbos, B., Aarnoudse, J. G., van der Berg, P. P., Weijmar Schultz, W. C., & van Pampus, M. G. (2011). Posttraumatic stress disorder following preeclampsia and PPROM: A prospective study with 15 months follow-up. *Reproductive Science*, *18*(7), 645–653. doi:10.1177/1933719110395402

Strecker, E. A., & Ebaugh, F. G. (1926). Psychoses occurring during the puerperium. *Archives of Neurology and Psychiatry,* 15(2), 239–252. doi:10.1001/archneurpsyc.1926.02200200090006

Stuart, S. (2012). Interpersonal psychotherapy for postpartum depression. *Clinicial Psychology and Psychotherapy*, 19(2), 134–140. doi:10.1002/cpp.1778

Sword, W., Busser, D., Ganann, R., McMillan, T., & Swinton, M. (2008). Women's care-seeking experiences after referral for postpartum depression. *Qualitative Health Research*, *18*(9), 1161–1173. doi: 10.1177/1049732308321736

Taherifard, P., Delpisheh, A., Shirali, R., Afkhamzadeh, A., & Veisani, Y. (2013). Socioeconomic, psychiatric, and materiality determinants and risk of postpartum depression in border city of Ilam, Westerm Iran. Depression Research and Treatment. doi:10.1155/2013/653471

Tamaki, A. (2008). Effectivensss of home visits by mental health nurses for Japanese women with post-partum depression. *International Journal of Mental Health Nursing*, *17*(6), 419–427. doi:10.1111/j.1447-0349.2008.00568.x

Tran, T. D., Tran, T., & Fisher, J. (2012). Validation of three psychometric instruments for screening for perinatal common mental disorders in men in the north of Vietnam. *Journal of Affective Disorders*, *136*(1–2), 104–109. doi:10.1016/j. jad.2011.08.012

Verreault, N., Da Costa, D., Marchand, A., Ireland, K., Banack, H., Dritsa, M., & Khalifé, S. (2012). PTSD following childbirth: A prospective study of incidence and risk factors in Canadian women. *Journal of Psychosomatic Research*, *73*(4), 257–263. doi:10.1016/j.jpsychores.2012.07.010

Vigod, S. N., Villegas, L., Dennis, C. L., & Ross, L. E. (2010). Prevalence and risk factors for postpartum depression among women with preterm and low-birth-weight infants: A systematic review. *BJOG*, *117*(5), 540–550. doi:10.1111/j.1471-0528.2009.02493.x

Wee, K. Y., Skouteris, H., Pier, C., Richardson, B., & Milgrom, J. (2011). Correlates of ante- and postnatal depression in fathers: A systematic review. *Journal of Affective Disorders*, *130*(3), 358–377. doi:10.1016/j.jad.2010.06.019

Weissman, A. M., Levy, B. T., Hartz, A. J., Bentler, S., Donohue, M., Ellingrod, V. L., & Wisner, K. L. (2004). Pooled analysis of antidepressant levels in lactating mothers, breast milk, and nursing infants. *American Journal of Psychiatry*, *161*(6), 1066–1078.

Wenzel, A. (2011). Anxiety in childbearing women: Diagnosis and treatment. Washington, DC: American Psychological Association.

Wijma, K., Söderquist, J., & Wijma, B. (1997). Posttraumatic stress disorder after childbirth: A cross sectional study. *Journal of Anxiety Disorders*, *11*(6), 587–597.

Wisner, K. L., Chambers, C., & Sit, D. K. (2006). Postpartum depression: A major public health problem. *JAMA*, 296(21), 2616–2618.

Wisner, K. L., Perel, J. M., Peindl, K. S., & Hanusa, B. H. (2004). Timing of depressive recurrence in the first year after birth. *Journal of Affective Disorders, 78*(3), 249–252.

Wu, Q., Chen, H. L., & Xu, X. J. (2012). Violence as a risk factor for postpartum depression in mothers: A meta-analysis. *Archives of Women's Mental Health*, *15*(2), 107–114. doi:10.1007/s00737-011-0248-9

Wynter, K., Rowe, H., & Fisher, J. (2013). Common mental disorders in women and men in the first six months after the birth of their first infant: A community study in Victoria, Australia. *Journal of Affective Disorders*, *151*(3), 980–985. doi:10.1016/j.jad.2013.08.021

Yehia, D. B. M., Callister, L. C., & Hamdan-Mansour, A. (2013). Prevalence and predictors of postpartum depression among Arabic Muslim Jordanian women serving in the military. *Journal of Perinatal and Neonatal Nursing*, 27(1), 25–33. doi:10.1097/JPN.0b013e31827ed6db

www.awhonn.org

Youn, J.-H., & Jeong, I. S. (2011). Predictive validity of the Postpartum Depression Predictors Inventory-Revised. *Asian Nursing Research*, *5*(2011), 210–215. doi:10.1016/j.anr.2011.11.003

Youn, J. H., & Jeong, I. S. (2013). Predictors of postpartum depression: Prospective cohort study. *Journal of Korean Academy of Nursing*, 43(2), 225–235. doi:10.4040/jkan.2013.43.2.225

Yozwiak, J. A. (2010). Postpartum depression and adolescent mothers: A review of assessment and treatment approaches. *Journal of Pediatric and Adolescent Gynecology*, *23*(3), 172–178.

Ystrom, E. (2012). Breastfeeding cessation and symptoms of anxiety and depression: A longitudinal cohort study. *BMC Pregnancy and Childbirth*, *12*, 36.

Appendix A.

Postpartum Depression Predictors Inventory-Revised and Guide Questions for Its Use

Prenatal Version	Assigning Scores	Total Possible Score Per Item	Total Possible Score Per Predictor Group	Cum Total
Marital Status	Range = 0-1		1	1
Single, Married, Separated, Divorced, Widowed, Partnered?	Married/partnered = 0 All single status = 1	1		
Socioeconomic Status	Range = 0-1		1	2
Low, Middle, High	Middle or High = 0 Low=1	1		
Self Esteem	Range = 0-3		3	5
Do you feel good about yourself?	Yes = 0 No = 1	1		
Do you feel worthwhile?	Yes = 0 No = 1	1		
Do you have good qualities?	Yes = 0 No = 1	1		
Prenatal Depression	Range = 0-1		1	6
Have you felt depressed during your pregnancy?	No = 0 Yes = 1	1		
If yes when and how long	Not used			
If yes how mild or severe	Not used			
Prenatal Anxiety	Range = 0-1		1	7
Have you been feeling anxious dur- ing your pregnancy?	No = 0 Yes = 1	1		
If yes how long	Not used			
Unplanned/unwanted pregnancy	Range = 0-2		2	9
Was the pregnancy planned?	Yes = 0 No = 1	1		
Was the pregnancy unwanted?	No = 0 Yes =1	1		
History of Previous Depression	Range = 0-1		1	10
Before this pregnancy, have you ever been depressed?	No = 0 Yes = 1	1		
If yes when did you experience this depression?	Not used			
If yes have you been under the care of an MD?	Not used			

Scoring Directions for the PDPI-Revised

Prenatal Version	Assigning Scores	Total Possible Score Per Item	Total Possible Score Per Predictor Group	Cum Total
If yes did the MD prescribe medica- tion?	Not used			
Social Support Partner	Range = 0-4 for each area of partner, family, and friends		4	22
Do you feel you receive adequate emotional support from your part- ner?	Yes = 0 No = 1	1		
Do you feel you can confide in your partner?	Yes = 0 No = 1	1		
	Above 2 items = affective partner support			
Do you feel you can rely on your partner?	Yes = 0 No = 1	1		
Do you feel you receive adequate instrumental support from your partner?	Yes = 0 No = 1	1		
Family	Above 2 items = partner instrumental support		4	
Do you feel you receive adequate emotional support from your fam- ily?	Yes = 0 No = 1	1		
Do you feel you can confide in your family?	Yes = 0 No = 1	1		
	Above 2 items = family affective support			
Do you feel you can rely on your family?	Yes = 0 No = 1	1		
Do you feel you receive adequate instrumental support from your family?	Yes = 0 No = 1	1		
Friends	Above 2 items= family Instrumental support		4	
Do you feel you receive adequate emotional support from your friends?	Yes = 0 No = 1	1		
Do you feel you can confide in your friends?	Yes = 0 No = 1	1		
	Above 2 items = friend affective support			
Do you feel you can rely on your friends?	Yes = 0 No = 1	1		
Do you feel you receive adequate instrumental support from your friends?	Yes = 0 No = 1	1		

Prenatal Version	Assigning Scores	Total Possible Score Per Item	Total Possible Score Per Predictor Group	Cum Total
	Above 2 items = friend instrumental support			
Marital/partner satisfaction	Range = 0-3		3	25
Are you satisfied with your marriage or living arrangement?	Yes = 0 No = 1	1		
Are you currently experiencing any marital/relationship problems?	No = 0 Yes = 1	1		
Are things going well between you and your partner?	Yes = 0 No = 1	1		
Life stress	Range = 0-7		7	32
Are you currently experiencing any stressful events in your life such as:				
Financial problems?	No = 0 Yes = 1	1		
Marital problems?	No = 0 Yes = 1	1		
Death in family?	No = 0 Yes = 1	1		
Unemployment?	No = 0 Yes = 1	1		
Serious illness in family?	No = 0 Yes = 1	1		
Moving?	No = 0 Yes = 1	1		
Job change?	No = 0 Yes = 1	1		
Postpartum Version				
Child Care Stress	Range = 0-3		3	35
Is the infant experiencing any health problems?	No = 0 Yes = 1	1		
Are you having problems feeding the baby?	No = 0 Yes = 1	1		
Are you having problems with the baby sleeping?	No = 0 Yes = 1	1		
Infant Temperament	Range = 0-3	3	3	38
Would you consider the baby irritable?	No = 0 Yes = 1	1		
Does the baby cry a lot?	No = 0 Yes = 1	1		
Is your baby difficult to console or soothe?	No = 0 Yes = 1	1		
Maternity Blues	Range 0-1		1	39
Did you experience a period of tearfulness the first week after delivery?	No = 0 Yes = 1	1		

Note: From: "Further development of the postpartum depression predictors inventory-revised," by C. T. Beck, K. Records, and M. Rice (2006). *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35*, pp 740–742. Copyright 2006 by the Association of Women's Health, Obstetric, and Neonatal Nurses. Reprinted with permission.

www.awhonn.org

Appendix B.

Postpartum Depression Screening Scale: Selected Items by Dimension

During the past 2 weeks...

Sleeping/Eating Disturbances

I had trouble sleeping even when my baby was asleep.
 I lost my appetite.

Loss of Self

19: I did not know who I was anymore.5: I was afraid that I would never be my normal self again.

Anxiety/Insecurity

23: I felt all alone.9: I felt really overwhelmed.

Guilt/Shame

20: I felt guilty because I could not feel as much love for my baby as I should. 27: I felt like I had to hide what I was thinking or feeling toward the baby.

Emotional Lability

3: I felt like my emotions were on a roller coaster.31: I felt full of anger and ready to explode.

Mental Confusion

11: I could not concentrate on anything.4: I felt like I was losing my mind.

Suicidal Thoughts

14: I started thinking I would be better off dead.28: I felt that my baby would be better off without me.

Selected items from the PDSS copyright ©2002 by Western Psychological Services. Reprinted by permission of the publisher, Western Psychological Services, 12031 Wilshire Boulevard, Los Angeles, California, 90025, U.S.A. (www.wpspublish.com). Not to be reprinted in whole or in part for any additional purpose without the expressed, written permission of the publisher. All rights reserved.

80

SCREENING MOTHERS FOR POSTPARTUM DEPRESSION

- **Purpose:** To provide guidelines to hospital based perinatal nurses for assessment and screening, education, and referral of new mothers for postpartum depression (PPD).
- **Policy:** Obstetric patients are assessed for PPD and suicide risk factors during admission. Screen postpartum mothers for PPD **the day before anticipated discharge** using the Edinburgh Postnatal Depression Scale Screen (EPDS).

Procedure:

A. Assessment for Risk Factors

- Identify and document risk factors for PPD and suicide during admission to the labor and delivery unit and during the entire hospital stay. Use information in the prenatal record, when available, and take into consideration the cultural and ethnic background of the mother. Risk factors may include, but are not limited to, low social support, low socioeconomic status, a history of depression or mental illness, and previous suicide attempts.
- 2. Report that a patient was identified to be at risk for suicide immediately to the obstetric provider and during handoffs.
- 3. Follow the suicide prevention policy and procedure when the patient is identified as at risk for suicide.
- 4. Report any identified risk factors for PPD to the obstetric provider and during handoffs.

B. Screening, Education, and Referral

- 1. Review identified patient risk factors for PPD when the mother is admitted to the postpartum floor or mother baby unit.
- 2. Follow the suicide prevention policy and procedure when the mother is identified as at risk for suicide.
- 3. Screen postpartum mothers for PPD **the day before anticipated discharge** using the Edinburgh Postnatal Depression Scale (EPDS) or another standard measuring instrument. If the patient's score on the EPDS is 13 or greater, the patient is at risk for PPD. The higher the score, the greater the risk.
- 4. Report an EPDS score of 13 or greater to the obstetric provider, social services, and during handoffs, and include other identified risk factors, if present.
- 5. Review the results of the depression screen with the mother and her support persons, and give them a copy of the screening tool.
- 6. Discuss PPD symptoms, how to self-monitor symptoms and steps to take if experiencing symptoms.
- 7. Provide a list of community resources if further information or referral is needed; include the National Suicide Prevention Lifeline for those in crisis phone number 1-800-273-TALK (8255).

Copyright AWHONN 2014; All Rights Reserved. Individual use only. Email requests for other uses at permissions@awhonn.org

RESOURCES

<u>www.afsp.org</u> The American Foundation for Suicide Prevention. Promotes community awareness of suicide.

<u>www.mededppd.org</u> National Institute of Health website with scientific information for consumers and health care professionals.

<u>www.nami.org</u> National Alliance for Mental Illness. Nonprofit grassroots mental-health organization. Provides education, advocacy, and family support.

www.postpartum.net Postpartum Support International.

<u>www.samhsa.gov</u> Substance Abuse and Mental Health Services Administration. Leads the public health efforts to advance behavioral health in the United States.

American College of Obstetricians and Gynecologists. (2010). *Screening for depression during and after pregnancy* (Committee Opinion No. 453). *Obstetrics & Gynecology*, *115*, 394–395. doi: 10.1097/AOG.0b013e3181d035aa

Association for Women's Health, Obstetric and Neonatal Nurses. (2008). The role of the nurse in postpartum mood and anxiety disorders (Position Statement). Retrieved from: <u>https://www.awhonn.org/awhonn/</u> content.do?name=07 PressRoom/07 PositionStatements.htm

McQueen, K., Montgomery, P., Lappan-Gracon, S., Evans, M., & Hunter, J. (2008). Evidence based recommendations for depressive symptoms in postpartum women. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *37*, 127–136.

Purnell, L. D. (2009). Guide to Culturally Competent Health Care (2nd ed.) Philadelphia: FA Davis.

AWHONN THANKS THE FOLLOWING MEMBERS FOR CONTRIBUTING THIS POLICY AND PROCEDURE:

M. Cynthia Logsdon, PhD, WHNP-BC, FAAN Diane Eckert, BSN, RN Roselyn Tomasulo, MSN, RNC, EFM-C

This policy and procedure in this publication is protected by copyright. All rights reserved. Selected portions of this policy and procedure may be subject to fair use by maternity services units that purchase this monograph. Other than adaptation by the purchaser of the book, this material may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy recording without the permission in writing from the Association of Women's Health, Obstetric and Neonatal Nurses.

Specific screening tools mentioned in this policy and procedure, form herein were used solely as an example to the user of this book. The mention of such screening tools does not constitute an endorsement by AWHONN and none should be inferred. In this publication, AWHONN does not recommend or endorse any screening tools.

Postpartum Mood and Anxiety Disorders

Copyright AWHONN 2014; All Rights Reserved. Individual use only. Email requests for other uses at permissions@awhonn.org



Association of Women's Health, Obstetric and Neonatal Nurses 2000 L Street NW, Suite 740, Washington, DC 20036 • www.awhonn.org Main 1.800.673.8499 • 1.800.245.0231 (Canada) • Fax 202.728.0575 ITEM: PMAD3-14 • ISBN-13: 978-1-938299-06-3.