Identifying Postpartum Depression
During the Well-Child Visit:
Resources for Screening, Referral, and Treatment
Pam Shaw MD

Disclosure Information
- I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity.
- I do not intend to discuss commercial products or services and unapproved/investigative uses of a commercial product/device in my presentation.

Learning Objectives
- Understand the difference between normal “baby blues,” postpartum depression, and postpartum psychosis.
- Gain knowledge about the impact of postpartum depression on children and families.
- Identify risk and protective factors for maternal depression.
- Become familiar with maternal depression screening tools.
- Learn referral possibilities
**Definition and Impact**

- Approximately 500,000 of the 4 million American women giving birth each year experience postpartum depression (PPD).
- PPD is under detected and under treated.
- Many barriers exist to detection and treatment.
- In the United States, depression is the leading cause of non-obstetric hospitalizations among women aged 18-44.
- In the year 2000, 205,000 women aged 18-44 were discharged with a diagnosis of depression.

**Screening**

- Symptoms (e.g., sleep problems, fatigue, and appetite changes) similar to those of normal pregnancy.
- Depression differs from “baby blues” or postpartum sadness, a normal condition that does not require treatment.
- Untreated gestational depression is associated with:
  - Difficulty in self-care during pregnancy
  - Poor diet and inadequate weight during pregnancy
  - Missed prenatal visits
  - Use of tobacco, alcohol, or illicit drugs
  - Delivery of an underweight baby or premature infant.

**Billing Guidelines**

- Implementing a Solution
Perinatal Depression: Prevalence

<table>
<thead>
<tr>
<th></th>
<th>Pregnancy</th>
<th>Postpartum</th>
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</thead>
<tbody>
<tr>
<td>Kumar &amp; Robeson 1984</td>
<td>13.4%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Watson &amp; Elliott 1984</td>
<td>9.4%</td>
<td>12.0%</td>
</tr>
<tr>
<td>O’Hara et al., 1984</td>
<td>9.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Cooper et al. 1988</td>
<td>6.0%</td>
<td>8.7%</td>
</tr>
<tr>
<td>O’Hara et al., 1990</td>
<td>7.7%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Evans et al., 2001</td>
<td>13.6%</td>
<td>9.2%</td>
</tr>
</tbody>
</table>

Maternal Mental Health

- “Baby Blues”
- Postpartum Depression
- Postpartum Psychosis

Postpartum Blues

- Normal condition in postpartum mothers
- Occurs in 50-80% of new mothers
- Symptoms include feelings of loss, anxiety, confusion, fear, or being overwhelmed
- Symptoms peak ~5 days after birth and resolve within a few weeks
- Does not disrupt function or daily routines
  - May represent the initial stages of PPD/PPP
Postpartum Psychosis

- Relatively uncommon (1-3 out of 1000 women)
- Onset as early as 1 day after delivery, through baby's first year
- Onset may be abrupt
- Characterized by hallucinations, paranoia, possible suicidal/infanticidal thoughts
- Requires immediate treatment and possible hospitalization
- Risk Factors:
  - History Bipolar Affective Disorder/Psychosis
  - Family history of psychosis
  - Having first child

Postpartum Depression

- Not as mild or transient as the blues
- Not as severely disorienting as psychosis
- Range of severity
- Often undetected

ETIOLOGY OF POSTPARTUM DEPRESSION

- Other theories cite numerous psychosocial factors associated with PPD:
  - Marital conflict
  - Child-care difficulties (feeding, sleeping, health problems)
  - Perception by mother of an infant with a difficult temperament
  - History of family or personal depression
THE ETIOLOGY OF POSTPARTUM DEPRESSION

- Various theories based in physiological changes have been postulated:
  - hormonal excesses or deficiencies of estrogen, progesterone, prolactin, thyroxine, tryptophan, among others

Risk Factors for Postpartum Depression

- Previous history/family history of depression
- Domestic violence
- Lack of quality social support
- Environmental factors (lack of food, inadequate housing and/or income)
- Substance abuse
- Stressful major life events or traumatic experiences
- Immigrant status

Making the diagnosis
-usually presents up to 4-6 months postpartum

- **Symptoms**: depressed mood, lack of pleasure or interest, sleep disturbance, weight loss, loss of energy, agitation, feelings of worthlessness or inappropriate guilt, diminished concentration, thoughts of death or suicide
- **Social Hx**: depressed mood during pregnancy, life stress, postpartum anxiety, poor marital adjustment, infant sleep problems
- **Physical**: poor eye contact, tearfulness, blunt affect, inattention to personal appearance
- **Diagnosis**: DSM-V criteria for major depression
  SIGECAPS
  **symptoms which may be considered normal experiences after childbirth**

Source: Miller LJ. *JAMA* 2002;287:762-765.

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Post-Partum Depression Diagnosis

- Important to rule out medical causes of depression, such as anemia or thyroid dysfunction
- Check medical history
- Perform physical examination/lab tests

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Behaviors of Depressed Mothers*

- Less responsive to baby’s cues¹,²
- Less aware of baby’s needs¹,²
- Reduced ability to communicate range of emotions¹,²
- Reduced care and stimulation of baby¹,²
- Less empathy¹,²
- Less interactive behavior³
- Less likely to obtain preventive healthcare for baby⁴

*In some instances, maternal depression has no effect on parenting.

**Face-to-Face/Still-Face Paradigm**

Studies parent-child relationship
- Focuses on infant's reactions during structured interactions
- Mothers asked to
  - Engage spontaneously
  - Turn away, return with still-face
  - Turn away again, reunite/re-engage spontaneously with infant

http://www.youtube.com/watch?v=apxXGEbZht0

**LONG TERM CONSEQUENCES OF PMD**

- Negative impact on the infant's social, emotional and cognitive development
- 2 month old infants of mothers with PPD had decreased cognitive ability and expressed more negative emotions during testing

**LONG TERM CONSEQUENCES OF PMD**

- Babies of mothers with PMD were perceived by their mothers as more difficult to care for and more bothersome.
  - Make harsh judgments of their infants
  - Feelings of guilt, resentment, and ambivalence toward child
  - Loss of affection toward child
Effects of Maternal Depression

- Infants - lowered Brazelton scores, frequent looking away, fussiness
- Toddlers - poorer cognitive development, insecure attachment
- Children - cognitive development of boys in poverty
- Adolescents - higher cortisol levels

Protective Factors Against Poor Outcomes

- Child's disposition
- Familial cohesiveness and warmth
- Support from other family members

Overview of Maternal Mental Health

<table>
<thead>
<tr>
<th>Maternal Mental Health</th>
<th>“Baby Blues”</th>
<th>Postpartum Depression</th>
<th>Postpartum Psychosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence: 50-80%</td>
<td>Prevalence: 8-20%</td>
<td>Prevalence: &lt; 1% (0.1-0.2%)</td>
<td></td>
</tr>
<tr>
<td>Usually resolves without treatment</td>
<td>Clinically significant</td>
<td>Serious illness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Requires treatment</td>
<td>Treat immediately</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>May require hospitalization</td>
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What Can Be Done?

ROUTINE SCREENING

REFERRAL TO TREATMENT

Why Screen for Perinatal Depression?

Which Mother is Depressed?
You can’t tell by looking.

Perinatal Foundation
Madison, WI
June 2003

Why Screen for Perinatal Depression?

- Screening is associated with increased detection

- Georgiopulos et al., 1999, 2001
  - EPDS screening resulted in increased chart-based diagnosis of PPD from 3.7% to 10.7% after one year of universal screening – Rochester, MN
Barriers to Detection

- Women will present themselves as well as they are ashamed and embarrassed to admit that they are not feeling happy
- Media images contribute to this phenomena

Reality for New Mothers

- Tired
- Alone at home
- Lots of care for the baby
- Often there are other young children who need care
- No time for self (can’t even fit in a shower)
- Complete loss of control over time
“I Was Depressed But Didn’t Know It.”

Commonalities in the Experience of Non-depressed and Depressed Pregnant and Postpartum Women

- Changes in appetite
- Changes in weight
- Sleep disruption/insomnia
- Fatigue/low energy
- Changes in libido

Barriers to Detection (cont)

- Lack of knowledge about range of postpartum disorders
- They don’t want to be identified with Andrea Yeats
- They may also genuinely feel better when they see them (they got dressed, out of house, lots of attention, not isolated)

Barriers that Limit Diagnosis and Management of Maternal Depression

Survey of Primary Care Pediatricians (n=508)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient time: Education/counseling</td>
<td>73%</td>
</tr>
<tr>
<td>Insufficient time: Adequate history</td>
<td>79%</td>
</tr>
<tr>
<td>Insufficient knowledge: Diagnosis</td>
<td>64%</td>
</tr>
<tr>
<td>Insufficient knowledge: Treatment</td>
<td>48%</td>
</tr>
</tbody>
</table>

### Importance of Screening: Why Screen Mom during Well-Child Visits?

- Well-child care providers see mothers with regularity in child's first year of life
- Mother’s mental health affects well-being of baby and family
- Child’s development influenced by early relationship history

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### What is Required for Effective Screening?

- A screening tool
- A schedule for screening
- A plan for implementation
  1. Who does the screening?
  2. Where is it done?
  3. How is the primary care health provider informed of the results if not done in their office?

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### What is Required for Effective Screening?

- What to do with a positive screen?
  1. Implement or refer for diagnostic assessment

- Arrange for treatment
  1. Antidepressant medication
  2. Psychotherapy (individual or group)

- Arrange for follow-up
Maternal Depression Screening Tools

- Edinburgh Postpartum Depression Scale (EPDS)
- Primary Care Evaluation of Mental Health Disorders Patient Health Questionnaire (PHQ-9)
- Beck Depression Inventory (BDI)

Note: All of the above tools are available in Spanish-language format and are eligible for reimbursement.

What is the Edinburgh Postnatal Depression Scale (EPDS)?

- John Cox, Jenifer Holden & Ruth Sagovsky
- 10 item depression screening tool (reliable and valid)
- Simple to complete
- Acceptable to mothers and health workers

The Edinburgh Postnatal Depression Scale (EPDS)

- 10-item self-report questionnaire
- Identifies depressive symptoms in pregnant women/new mothers
- Does not diagnose postnatal depression
- Validated cross-culturally
- Available in 21 languages

EPDS Scoring

- Each question ranked on four-point scale (e.g., 0-3)
- Maximum score = 30
- Consider action/referral when score ≥ 10 (indicates possible depression)
- A score ≥ 13 indicates likely depression
- Review answers to individual questions
- Discuss items with high scores

The Edinburgh Postnatal Depression Scale (EPDS)

Advantages:
- Easy to administer (usually requires 5 minutes for patient to complete)
- Easy to score (“positive” cut-off 10 - 13 out of 30)
- Designed & well-validated for peripartum use
- Cross-cultural; available in 21 languages

Disadvantages:
- Not linked with formal (DSM-IV) diagnostic criteria
- Cannot be used for assessment or treatment tracking

Bottom Line: Good choice for clinics that only serve peripartum patients and those that follow “screen & refer” model

Using EPDS to Determine Risk of Harm

Any patient who scores >1 on question #10 (“The thought of harming myself has occurred to me”) should be asked about the following:
- Severity of depression
- Plans for self-harm
- Availability of support systems
If EPDS Suggests Depression

- Screen for suicide ideation, planning, or previous attempts
- Assess risk for ideation-positive patients through office interview before referral
- Determine immediate risk by asking mother what will become of her fetus, child, children if she kills herself
- Ask about domestic violence or threat of same

Discussing EPDS Results

When discussing EPDS results:
- Reinforce how mother’s health impacts her child
- Recognize sensitivity of issue
- Consider cultural attitudes toward depression
- Provide a supportive environment
- Reinforce without increasing/promoting feelings of guilt

Screening: Edinburgh Scale

AAFP recommends universal screening at 6-wk postpartum visit

A score higher than 12 is 100% sensitive and 95.5% specific in detecting major depression
One study showed that postpartum women residing in the inner city had a prevalence rate of 22% when screened with EPDS
When to Screen Using the EPDS

Recommendations

- Screen all mothers
- Develop practice guidelines for frequency
  - At least once during pregnancy
  - At least twice postpartum
  - Initial screen when child is 4-6 weeks old
  - Subsequent screen(s) at 2-, 4-, or 6-month visits

*Note: The American Academy of Pediatrics have issued specific maternal depression screening guidelines in 2010.

Primary Care Evaluation of Mental Health Disorders Patient Health Questionnaire (PHQ-9)

- 9-item self-report questionnaire
- Screening tool for clinical depression (peripartum and otherwise)
- Advantages:
  - Easy to score
  - Items & scores linked to DSM-IV depression criteria
  - Can use to assess & track treatment response
  - Same tool can be used for all patients in clinic
- Disadvantages:
  - Not designed for PPD; less well-validated peripartum
- Bottom Line: Good choice for primary care clinics and clinics that wish to treat onsite

PHQ-9 Scoring

<table>
<thead>
<tr>
<th>Total PHQ-9 Score</th>
<th>Assessment of Depression Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>Minimal</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderately severe</td>
</tr>
<tr>
<td>20-27</td>
<td>Severe</td>
</tr>
</tbody>
</table>

Coding and Billing for Screening Procedures

- 99240-
  Administration and interpretation of health risk assessment instrument
- 99216-
  Developmental screening; limited with interpretation and report

Models for Treating Postpartum Depression

- Screen and Refer
  - Screen using EPDS
  - Refer to mental health services for assessment & treatment
- Screen and Treat
  - Screen & assess using PHQ-9
  - Identify onsite treatment candidates (those with mild to moderate depression, not bipolar or suicidal)
  - Treat with medication; track with PHQ-9
  - If response is inadequate, refer for mental health care

Who ya gonna call?

- Most doctors other than those in urban settings don’t have ready referrals
- Kansas Chapter of AAP recognizes this problem
- Developed a resource for clinicians: KidLink which is an online resource to find out who is available in their area
Treatment

- Prognosis—may last 6-12 months; women at risk for postpartum depression and depression in the future
- Professional and/or social support
- Counseling
- Antidepressants
- Transdermal estrogen

Counseling

- Psychosocial and psychological interventions may reduce depressive symptoms (ex. Group therapy)
- Interpersonal psychotherapy-focuses on patient’s interpersonal relationships and changing roles
- Multi-component intervention associated with improved short-term improvements for low-income women
- Partner participation
Hormonal Therapy

- Transdermal estrogen: effective in severe postpartum depression
  - women treated for 6 months
  - estrogen patch more effective than placebo for treating postpartum depression, effect occurred by 1st month and remained statistically significant
  - for last 3 months, women given progesterone 12 days/month to reduce risks of unopposed estrogen

- Sublingual 17-beta estradiol
  - effective in 2 case reports and uncontrolled series of 23 cases

Post-Partum Depression Treatment

- Medications:
  - First-line choices are SSRIs such as fluoxetine (Prozac) 10-60 mg/d, sertraline (Zoloft) 50-200 mg/d, paroxetine (Paxil) 20-60 mg/d, citalopram (Celexa) 20-60 mg/d, or escitalopram (Lexapro) 10-20 mg/d
  - SNRIs such as venlafaxine (Effexor) 75-300 mg/d or duloxetine (Cymbalta) 40-60 mg/d, are also highly effective for depression and anxiety.
  - ECT is effective for those with severe depression/psychosis

Post-Partum Depression Treatment

- In addition to counseling or talk-therapy (individual or group therapy), other steps can be taken by the mother to fight the depressive symptoms:
  - Exercise
  - Eat healthy
  - Use an outlet, such as a diary, a family member, or a friend.
  - Try not to isolate one’s self
  - Promote sleep
  - Take breaks, and make time to do the things you enjoy
Prevention

- Group psychotherapy may reduce risk of depression for up to 3 months postpartum
- Insufficient evidence regarding prophylactic antidepressants postpartum
- Music therapy may reduce prenatal stress, anxiety, and postpartum depression

Support Networks

<table>
<thead>
<tr>
<th>Resource</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression After Delivery</td>
<td><a href="http://www.depressionafterdelivery.com">www.depressionafterdelivery.com</a></td>
</tr>
<tr>
<td>National Alliance for the Mentally Ill</td>
<td><a href="http://www.nami.org">www.nami.org</a>; 800-346-4572</td>
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<tr>
<td>Postpartum Stress Center</td>
<td><a href="http://www.postpartumstress.com">www.postpartumstress.com</a></td>
</tr>
<tr>
<td>Postpartum Support International</td>
<td><a href="http://www.postpartum.net">www.postpartum.net</a></td>
</tr>
<tr>
<td>Postpartum Education for Parents</td>
<td><a href="http://www.sbpep.org">http://www.sbpep.org</a></td>
</tr>
<tr>
<td>The National Women’s Health Information</td>
<td><a href="http://www.4women.gov-pregnancy-after-the-baby">http://www.4women.gov-pregnancy-after-the-baby</a></td>
</tr>
<tr>
<td>Information Center</td>
<td>is born-PPD</td>
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Summary and Conclusions

- Postpartum depression is a clinically significant illness that may have long-lasting effects on the well-being of the mother and her family.
- Postpartum depression differs from “baby blues,” a normative condition that resolves within 2 weeks following birth.
- Postpartum depression is treatable and can be easily screened during well-child visits and routine checkups.
- Establishing a culturally-effective office will help the provider to screen and assist women whose cultural milieu may discourage the admission of mental illness.