Perinatal Mood Disorders

Psychiatric Illnesses During Pregnancy and Postpartum

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Objectives

At the end of this presentation the participant should be able to:

– Understand the prevalence and seriousness of perinatal mood disorders.

– Be familiar with methods of screening for perinatal mood disorders.

– Accurately diagnose and treat or refer women with perinatal mood disorders.
Perinatal Mood Disorders Overview

- Historical
- General observations
- Clinical presentation
  - Pregnancy
  - Postpartum
- Risk factors
- Effects
- Screening
- Treatment & resources
Historical Perspective

- **1838**: First Recognized in France
- **1847**: Continued in NY by Mac Donald
- **1858**: Hospital specific for postpartum mental illnesses founded in France
- **1888**: True link found between the postpartum experience and mental illness
- **1926**: True link between postpartum and mental illness
- **1952**: True link between postpartum and mental illness
- **1994**: 4th Edition postpartum appears as a specifier

First edition of DSM: no postpartum related illnesses listed
Psychiatric Illnesses in Women of Childbearing Age

65% of these women will have Major Depression, OCD, or Panic Disorder

Depression Across the Female Reproductive Cycle

Childbearing years

Menarche
- Premenstrual dysphoric disorder
- Depression associated with infertility, miscarriage, or perinatal loss

Pregnancy
- Depression during pregnancy
- Depression during the Postpartum period

Menopause
- Depression during the perimenopausal period
Depression: Age At First Onset

Weissman et al. JAMA. 1996;276:293.

Age At First Onset (y)

Rate Per 100

0-14 15-24 25-34 35-44 45-54 55-64

Male

Femal
> **Myth:** Pregnancy is time of emotional well-being

- Major depression: same rate or higher as nongravid women\(^1-3\)

- No decreased frequency or severity in women with preexisting anxiety disorders\(^4-6\)

Major Depression During Pregnancy

- Often *underdiagnosed* and *undertreated*
- **Good opportunity** for clinicians to screen for depression during pregnancy because of the frequency of health care visits
Syndromes of the Postpartum Period

- Postpartum or maternity "blues"
- Adjustment disorder in the postpartum period
- Major depression in the postpartum period
- Mania in the postpartum period
- Psychosis in the postpartum period
Severity of Postpartum Mood Symptoms

Postpartum Blues
50% to 70%
†risk for MDD

Postpartum Depression
2/3 have onset by 6 wks postpartum

Postpartum Psychosis
70% are affective (bipolar, MDD)
10%
0.01%

# Postpartum Mood Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Incidence</th>
<th>Treatment</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity blues</td>
<td>26 to 85%</td>
<td>Support and reassurance</td>
<td>80% resolve by week 2; 20% evolve to PPD</td>
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<tr>
<td>Adjustment disorder</td>
<td>About 20%</td>
<td>Support/reassurance Psychotherapy</td>
<td>Excessive difficulties adjusting to motherhood</td>
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<tr>
<td>Postpartum depression</td>
<td>10 to 20%</td>
<td>Antidepressants, mood stabilizers &amp; psychotherapy</td>
<td>Onset within 1 year Agitated Major depression often with obsessions</td>
</tr>
<tr>
<td>Postpartum psychosis/mania</td>
<td>0.2%</td>
<td>Hospitalization; antipsychotics; mood stabilizers; benzodiazepines; antidepressants; ECT</td>
<td>Onset after PP day 3. Mixed/rapid cycling. Risk of infanticide.</td>
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References:
Maternity “Blues”

“Blues” = heightened reactivity, not depression

- Mood lability, tearfulness, heightened reactivity
- Occurs within 3-5 days after delivery
- Reported by 50-80% of women
- Present in all cultures studied
- Appears unrelated to environmental stressors
- Probably physiologically based
- Predisposes to postpartum depression
Maternity “Blues”

> Normal biologically/hormonally mediated postpartum reactivity
  - Appears to facilitate maternal attachment to the infant
> Mediated by oxytocin effect on the cingulate gyrus

Miller, L., Primary Psychiatry, April, 1996:35-39
Postpartum Depression
Common Symptoms

- Sadness or down mood
- Diminished interest/pleasure
- Appetite problems or unexplained weight change
- Sleep problems
- Agitation and anxiety
- Fatigue or low energy
- Feeling worthless or guilty
- Suicidal or infanticidal ideation

Myths about Postpartum Depression

> Depression in new mothers is not serious
> Postpartum depression is more common in white middle class women
> Postpartum depression will go away on its own
> Women with postpartum depression cannot breastfeed
New Jersey Statistics on Postpartum Depression (Annual)

> 110,000 live births
> 800 fetal deaths

> Assuming a 10-15% incidence of PPD:
  - Between 11,000-16,620 cases of Postpartum Depression would be expected annually

Governor’s Work Group on Postpartum Depression, Spring, 2005
Postpartum Prophylaxis

> In high risk women:
  – Women with a premorbid psychiatric illness
  – Women with symptoms during pregnancy
  – Women with previous postpartum disorder

> Newer data indicating that adequate prevention may involve medication start during late pregnancy

> Make decision based on history, and desire to breast feed, then consider data
Postpartum Psychosis or Mania
Common Symptoms

**Psychosis**
- Delusions
- Hallucinations
- Disorganized speech
- Disorganized behavior

**Mania**
- Euphoria
- Decreased need for sleep
- More talkative
- Racing thoughts
- Distractibility
- Increased involvement in activities
- Excessive involvement in pleasurable but risky activities

Postpartum Psychosis

> Occurs at rate of **1-3 cases** per 1000 deliveries
  > - Rarely develops within first 3 days after delivery
  > - 72% develop symptoms within 2 weeks, 83% within 4 weeks

> Most postpartum psychosis is a **mood disorder**
  > - Psychotic depression or mania
  > - Only 5% have schizophrenia (primary psychotic disorder)

> For woman with history of **bipolar or postpartum psychosis:**
  > - Risk of postpartum hospitalization increases 100-fold

Antenatal Risk Factors for Postpartum Mood Disorders

- Major risk factors
- Minor risk factors
  - Obstetrical risk factors
- Other risk factors

Antenatal Risk Factors for Postpartum Mood Disorders

**Major Risk Factors**
- Depression during pregnancy
- Anxiety during pregnancy
- Previous history of depression
- Teen pregnancy
- Lack of social support
- Conflict with spouse/significant other
- Stressful life events outside of pregnancy

**Minor Risk Factors**
- Socioeconomic factors
- Obstetrical Complications

Adapted from Gaynes, Gavin, et al. AHRQ
Psychiatric Admissions:
2 Years Pre and Post Delivery

Psychiatric History Predicts Risk of Major Depression in the Postpartum Period

<table>
<thead>
<tr>
<th>Incidence (%)</th>
<th>Risk in general population(^1)</th>
<th>History of major depression(^2)</th>
<th>MDD during pregnancy(^2)</th>
<th>History of postpartum depression(^2)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>11%</td>
<td>25%</td>
<td>33%</td>
<td>50%</td>
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Relapse of Major Depression During Pregnancy and Medication Use

Social Isolation

- Woman perceives herself as **not supported**; has low self esteem
- **Family lives at a distance**, physically unavailable or culturally in conflict
- **Cut off** from friends
- **Marital discord**, including emotional or physical abuse; desertion of spouse
- History of **childhood sexual abuse**

Bulst & Janson, 2001
Crockenberg & Leerkes, 2003
Impact of Sexual Abuse on Depression

- A 3 year follow-up of mothers who had MDD during postpartum period
- 50% had a history of childhood sexual abuse
- Sexually abused women had significantly higher depression and anxiety scores and greater life stresses
- Partners rated their children as more disturbed
- Less improvement in symptoms over time

(Buist & Janson, 2001)
Among 192 low-SES inner city women, 23.4% suffered from postpartum depression

- Single women w/out a cohabitating partner were at highest risk
- Rates for African American and white women did not differ

(Hobfoll et al., 1995)
Obstetrical Risks

- Complications during the present pregnancy
- Frequent visits to the antenatal clinic
- Lack of prenatal care
- Increased # sick days
- History of 2 or more elective terminations
- Delivery by cesarean section
- Hyperemesis
- Preterm labor (not delivery)
- Depression in antenatal period
- Multiple births in assisted pregnancies

Ellison, MA e al., 2005
Multiple births

Risk factor for PPD increases with numbers of multiples

- Trauma related to difficult conception
- Raised possibility of low birth weight/health problems
- Heightened exhaustion for care
- Difficulty breast feeding
Sleep Loss and Fatigue

> Late pregnancy and early postpartum characterized by **sleep disruption**
  - Less restorative sleep
  - More frequent awakenings

> **Hormonal** protective mechanisms

> **Sleep loss** may trigger mania
  - Assurance of proper sleep wake cycles
  - Timing of delivery

Other Risk Factors

- Unplanned pregnancy
- Maternity blues
- Infant temperament

Not Risk Factors

> Maternal age (beyond 18)
> Level of education
> Number of children
> Length of relationship with partner
> Gender of child

Effects of Untreated Perinatal Mood Disorders
Effects of Untreated Depression During Pregnancy

- Poor Self-Care, Nutrition, Sleep
- Noncompliance With Prenatal Care
- Postpartum Depression
- Higher Risk of Obstetrical Complications
- Unknown Effects On Fetal Development
- Effects Of Untreated Depression During Pregnancy
- Negative Effect on Bonding
- Suicide or Termination of Pregnancy
- Drug, Alcohol, Tobacco Use

Effects Of Postpartum Mood Disorders

- Mother/Infant Relationship
- Child Development
- Partner Relationship
Maternal Depression and Infant Well Being

- Impaired attachment/poor synchrony (24 studies, N=2,809)
- Cognitive disturbances (13 studies N=1,032)
- Infant stress responsivity (23 studies, N=2,192)
- Infant behavioral changes (26 studies, N=10,898)

Stowe, Z; Understanding the Challenges of Bipolar Disorder Throughout the Female Life Cycle. 
Effects of Maternal Depression on Children
Long-term Effects of Maternal Depression on Children

Longitudinal study of 5,000 mother/child pairs

- Severity and chronicity of maternal depression related to child behavior problems and lower vocabulary scores at age 5

Brennan, PA et al. (2000). Developmental Psychology, 36, 759-766
How Depression Can Influence Breastfeeding

Depression can:

- decrease maternal sensitivity and responsiveness
- cause a lack of persistence in the face of difficulties
- be related to some maladaptive cognitions regarding the baby (e.g., “the baby is sucking the life out of me”)
Current Practical Screening Guidelines

> Two universal questions*
  
  – “During the past month, have you often been bothered by feeling down, depressed, or hopeless?”
  
  – “During the past month, have you been often bothered by having little interest or pleasure in doing things?”

> If either answered affirmatively
  
  – Complete the Edinburgh Postnatal Depression Scale

> Listen with your third ear

> How have things been going for you at home?
> Are you feeling particularly unhappy - moody?
> How’s your sleep? Can you sleep when baby sleeps? Can you nap? Sleep 4-5 hrs at night?
> Do you find yourself worrying about things? Baby’s health – About other things?
> Are you having any unusual scary thoughts about yourself or the baby?
> What kind of support do you have at home? Husband, family, friends?
> Do you have periods of time when you enjoy the baby?
> What is your definition of a good mother?
Current Recommended Screening Guidelines

- POPRAS intake tool in prenatal visits
- Distribute Edinburgh Post Natal Depression Scale to prenatal mothers
- Complete Edinburgh Scale at first 3 Pediatric visits
- Complete Edinburgh Scale at first OB/GYN postpartum visit
- Conduct psycho educational groups during pregnancy and postpartum

Screening and Referral Committee Final Recommendations
Governor’s Work Group on Postpartum Depression, Spring, 2005
False Negatives Despite Screening

> **Inaccurate** self-report
  > Undiagnosed mood disorders
  > Denial of illness

> **Fear of involvement** of child protection agencies

> **Ability to mask symptoms** especially if highly functional

> Motherhood **myth**
Laboratory Testing in Postpartum Mood Disorders

> CBC with differential
  - Rule out anemia
  - Rule out infection

> Comprehensive metabolic panel
  - Rule out concomitant medical illness

> Thyroid function tests (TSH, T3, T4, antimicrosomal antibody titers)
  - Rule out postpartum thyroiditis or other thyroid dysfunction
Treatment Approaches for Postpartum Mood Disorders

- Consumer education
- Psychiatric medications
- Psychotherapy
- Referral
- Self help groups

Ugaririza, DN;ArchPsychNurs:2004:39-48
Consumer must participate in the treatment decision
Steps Toward Intervention

> **Listen** carefully to what the mother says

> **Talk** with her about the many factors that could be influencing her emotional state without “explaining away” her symptoms

> **Teach** some specific strategies that can help

> **Help** her mobilize her own support system. This includes offering referrals to people or organizations that can offer long-term support
Not every depressed mother needs medication, but some cannot function without it.

Ask about her current level of functioning and her feelings about medication.

Discuss risks of breastfeeding with medications vs. risks of not breastfeeding.

If mother is unsure or negative about medications, ask if she would be willing to give non-medication choices a try.
Perinatal Depression

- All syndromes respond to **selective serotonin reuptake inhibitors** (SSRIs or SNRIs)
- SSRIs or SNRIs are **first line agents**
- **Mood stabilizers** should be considered
- **Antipsychotics** and **minor tranquilizers** should be considered
Preferred Antidepressants

- Selective Serotonin Reuptake Inhibitors (SSRI’s)
  - Paroxetine (Paxil)
  - Sertraline (Zoloft)
  - Citalopram (Celexa)
  - Escitalopram (Lexapro)
  - Fluoxetine (Prozac)
  - Fluvoxamine (Luvox)

- Serotonin Norepinephrine Reuptake Inhibitors (SNRI’s)
  - Venlafaxine (Effexor)
  - Duloxetine (Cymbalta)
Placental Passage of the Selective Serotonin Reuptake Inhibitors

Ratio of Cord blood concentration/
Maternal blood concentration

- **Celexa**
  - Ratio: 0.71

- **Prozac**
  - Ratio: 0.69

- **Paxil**
  - Ratio: 0.51

- **Zoloft**
  - Ratio: 0.26

Neonatal Signs After Late In Utero Exposure to Serotonin Reuptake Inhibitors

- **Medline review** 1966-2005 and *PsychINFO* 1974-2005
- **18 cases** considered in study
- **Increased risk** for neonatal behavioral syndrome
  - Mild CNS, motor, respiratory and GI symptoms
  - Spontaneously abates in about 2 weeks
- **Paxil** (11 cases) and **Prozac** (4 cases) most often implicated

Antidepressant Use During Pregnancy

Selective Serotonin Reuptake Inhibitors (SSRI’s)

- **3,562 in utero exposures** documented in the literature
- **No increased risk** in congenital malformations or negative obstetrical outcomes

Adapted from: Briggs, Freeman, Yafee; *Drugs in Pregnancy & Lactation, sixth edition*, 2002. Multiple other sources
Prevalence of Breastfeeding 1926-2001

80%  49%  28%  20%  37%  52%  61%*  67%*


Briggs, Freeman, Yafee, *Drugs in Pregnancy and Lactation*, 1998
* Maternity Survey, *Parents Express*, Phil., PA., 4/01, 4/02
Psychotropic Drugs During Lactation

> **All** psychotropic drugs to date are excreted in human breast milk

> **More data** in breast-feeding than any other class of medication

> By contrast, negative impact of maternal mental illness is **well documented**

  – Published studies:
    – Impact of maternal stress/depression on infant well-being

  – Overriding majority:
    – Adverse effects on the infant

Hale, T.W. Medications and Mothers’ Milk, 2004
Psychotropic Medication During Breast Feeding

Antidepressants

- Sertraline (Zoloft) and paroxetine (Paxil) are good choices
- Fluoxetine (Prozac), citalopram (Celexa) and fluvoxamine (Luvox) may not be primary treatment options
- Any antidepressant is appropriate if infant has already been exposed in utero

Psychotropic Medication During Breast Feeding

Antianxiety and sleep agents

– Occasional doses of short acting benzodiazepines
– Temazepam (Restoril), oxazepam (Serax), lorazepam (Ativan) are probably safe
– Diazepam (Valium) and alprazolam (Xanax) are not primary treatment options

Treatment of Postpartum Psychosis/Mania

- Emergency hospitalization and/or referral
- Medication
  - Antipsychotics
  - Mood stabilizers
  - Benzodiazepines
  - Antidepressants
- Electro Convulsive Therapy (ECT)
- Family counseling
- Social supports
Psychotherapy Interventions

> Individual Therapy
  – Interpersonal psychotherapy

> Group Therapy

Referral Considerations

Multidisciplinary approach is imperative

- Obstetrician
- Pediatrician
- Nurse
- Primary Care Provider
- Psychiatrist
- Psychologist/Social Worker/Psychotherapist
- Endocrinologist
It is essential to integrate a psychiatric dimension into this network to break the vicious circle of mood disorders that women experience during pregnancy and motherhood.

- Harris, Bryan (2002)
The efficacy of postpartum support groups

“A psychoeducation group for women with low post partum mood can significantly reduce depressive symptoms,”

“A program of supportive group therapy for post partum mothers can significantly lower or eliminate depressive episodes,”
- Lane, B., Roufeil, M.M., Williams, S., Tweedie, R..(2001)

“Post partum mothers attending a group integrating supportive educational and cognitive behavioral components yielded significant reductions in symptom frequency and intensity after 4 – 6 weeks.”
Support for partners

> Ongoing demands to run the house, care for the new baby, the mother and other children

> Jealousy

> “...Marital problems which appear to have emanated from PPD often persist long after symptoms are abated...”

- Hickman, (1982)
Self Help and Clinical Resources

> **Family Health Line**, 1-800-328-3838
> **Crisis Hotline**, 1-877-294-HELP
> **Postpartum Support International**, 1-805-967-7636
> **NJ Self Help Clearinghouse**, 1-800-367-6274 or http://www.mjgroups.org
> **Postpartum.nichd.nih.gov**
> **4woman.gov/faq/postpartum.htm**
### REIMBURSEMENT
Applicable Diagnostic Codes

- **296.2X** Major depressive disorder, single episode
- **296.3X** Major depressive disorder, recurrent episode, in the postpartum
- **296.4** Bipolar disorder, manic
- **298.8** Brief psychotic disorder
- **300.4** Dysthymic disorder
- **311** Depressive disorder, not otherwise classified
Key Points

> Perinatal mood disorders (excluding “blues”) are **highly prevalent and serious**

> The majority of perinatal mood disorders are **manifestations of:**
  - a first episode of a then recurrent psychiatric disorder
  - an active but previously undiagnosed psychiatric disorder
  - an exacerbation of a previously diagnosed psychiatric illness

> They can have **serious negative effects** on the family system, not only the mother

> **Prompt diagnosis** and **effective treatment** are imperative and cost effective