Perinatal Mood & Anxiety Disorder Fundamentals
Screening, identification, treatment & triage in medical settings
Amy-Rose White LCSW
Executive Director:
Utah Maternal Mental Health Collaborative
Perinatal Psychotherapist

(541) 337-4960
arwslctherapist@gmail.com
Utahmmhc@gmail.com
Utah Maternal Mental Health Collaborative

- www.utahmmhc.com
- Utah Resources
- Utah PSI Chapter
- Multi-agency stakeholders
- Ideas, information exchange
- Project development

Meets Bi-monthly on first Fridays 8:30-10am
Motherhood is exactly what I thought it would be.

Said no one ever.
Session Objectives

- Understand the symptoms, prevalence, & impact of mood & anxiety disorders in perinatal women
- Describe evidenced based treatment options and concrete wellness tools
- Become familiar with utilizing screening instruments
- Have familiarity with response and referral protocols in Utah
- Describe resources for families and providers
FILM:
Healthy Mom, Happy family:
Understanding Pregnancy & Postpartum Mood & Anxiety Disorders
Postpartum Support International
www.postpartum.net
Defining the issue:

What is Maternal Mental Health?
Not only depression
Not only postpartum!
Perinatal Mood, Anxiety, Obsessive, Trauma, & Psychotic disorders
Why is it relevant to medical professionals?
Issues in primary, obstetric, and pediatric care

- ICD-10
- DSM V
- Who is the patient?
- Little mental health training
- Lack of familiarity with perinatal literature
- Separation ~ medical and mental health
- Personal bias
- Stigma
Women in their childbearing years account for the largest group of Americans with Depression.

Postpartum Depression is the most common complication of childbirth.

There are as many new cases of mothers suffering from Maternal Depression each year as women diagnosed with breast cancer.

The American Academy of Pediatrics has noted that Maternal Depression is the most under diagnosed obstetric complication in America.

Despite the prevalence Maternal Depression goes largely undiagnosed and untreated.
DEPRESSION IN WOMEN

- Leading cause of disease-related disability
- Reproductive years - highest risk
- Most amenable to Tx
Maternal Mortality

Suicide is the second leading cause of death in the first year postpartum.
PMADs
Demographics & Statistics

Every:
- Culture
- Age
- Income level
- Educational level
- Ethnic group
- Religious affiliation
JAMA 2013 ~ 22%

- 1 in 7 women = PPD
- 30% episode before pregnancy
- 40% >1 during pregnancy
- Over two-thirds of the women also had signs of an anxiety disorder
- One in five of the women had thoughts of harming themselves
- 20 percent of the group studied was diagnosed with bipolar disorder

http://seleni.org/advice-support/article/largest-postpartum-depression-study-reveals-disturbing-statistics#sthash.CI8AwKFJ.dpuf
PMADs

15-20%

• 800,000 women a year in U.S.
• 1/3 PMADs begin in pregnancy
• Teenage & low income mothers
**Prevalence and Incidence of Maternal Depression:**


<table>
<thead>
<tr>
<th>Depression Type</th>
<th>During Pregnancy</th>
<th>Postpartum (after 3 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression</td>
<td>12.7 percent</td>
<td>7.1 percent</td>
</tr>
<tr>
<td>Major and Minor depression combined</td>
<td>18.4 percent</td>
<td>19.2 percent</td>
</tr>
</tbody>
</table>

**Incidence**

<table>
<thead>
<tr>
<th>Depression Type</th>
<th>During Pregnancy</th>
<th>Postpartum (after 3 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major depression</td>
<td>7.5 percent</td>
<td>6.5 percent</td>
</tr>
<tr>
<td>Major and Minor depression combined</td>
<td>14.5 percent</td>
<td>14.5 percent</td>
</tr>
</tbody>
</table>
Utah PRAMS data 2000-2001 ~ 60%

Self-Reported Postpartum Depression

- None: 31%
- Slightly depressed: 4%
- Moderately depressed: 18%
- Very depressed: 44%
- Very depressed and needed help: 3%
Percentage of Utah Women Who Reported PPD Symptoms, PRAMS 2004-2008
Percentage of Utah Women Who Experienced Postpartum Depression Symptoms and Did Not Seek Help, 2004-2008
PRAMS data cont.: Barriers to help-seeking

- A lack of awareness of what depression feels like and how to seek help
- Negative attitudes and misconceptions about depression
- Lack of affordable and appropriate treatment

(SAMHSA); Mental Health America. Maternal Depression: making a difference through community action: a planning guide. SAMHSA monograph 2008.
PPD in Utah 2007-2008

Highest Risk in UT:

- Older: >40
- Not college educated
- Other than white race
- Unmarried
- Low birth-weight infant
- Had unintended pregnancies
- Were experiencing domestic violence
- Had poor social support

(Utah PRAMS data report 2007-2008)
“In addition, women whose prenatal care was covered by Medicaid were twice as likely to report PPD as were women whose prenatal care was covered by private insurance. Because most women lose Medicaid coverage within 60 days of delivery, many women suffering PPD are left without a source of payment for needed services.”
PMADs
Common Comorbid Disorders

- Alcohol abuse
- Substance abuse
- Smoking
- Eating disorders
- Personality disorders

- Frequently referenced, poorly researched (Stone, 2008)

- In women with MDD in general population, up to 60% suffer from comorbid disorders

(US Dept. of Health and Human Services, 1999)
Disparities in prenatal screening and education

Preterm birth (<36wk): 11.39%
(National Vital Statistics 2013)

Low birth weight (<2500 g): 8.02%
(National Vital Statistics 2013)

Preeclampsia/eclampsia: 5-8%
(Preeclampsia Foundation, 2010)

Gestational Diabetes: 7%
(NIH, National Diabetes Information Clearinghouse, 2009)
Perinatal Mood, Anxiety, Obsessive, & Trauma related Disorders

- Psychosis: Thought Disorder or Episode
- Major Depressive Disorder
- Bi-Polar Disorder
- Generalized Anxiety
- Panic Disorder
- Obsessive Compulsive Disorder
- Post Traumatic Stress Disorder

Pregnancy and the First year Postpartum
Perinatal Mood Disorders

Baby Blues – Not a disorder

Major Depressive Disorder - Most researched

Bipolar Disorder
I went to the doctor for fatigue and forgetfulness, and I was diagnosed with Motherhood.
Depression/anxiety during pregnancy is a strong predictor of postpartum mood and anxiety disorders

**MYTH:**

Pregnancy protects women from psychological disorders
PREGNANCY DEPRESSION/ANXIETY Risk Factors

- Prior depression/anxiety
- Unwanted pregnancy
- Domestic violence
- Substance abuse
- Abuse
- Discord with partner
- Medical complications in mother

- Prior perinatal loss
- Complications in baby
- Social isolation
- Poor support
- Discontinuing anti-depressant (50-75% relapse)

10%
**Trauma Hx and risk**

- Statistically significant link between childhood sexual abuse and antenatal depression
- Atenatal depression predicted by trauma Hx – dose-response effect.
- > 3 traumatic events = 4 fold increased risk vs. no Thx
- Long-term alterations in concentrations of corticotropin-releasing hormone (CRH) and cortisol
- Dysregulation of the HPA axis + neuroendocrine changes of pregnancy
- Increasing levels of CRH = Mood
- ACES Questionnaire significant


**PREGNANCY DEPRESSION/ ANXIETY Impact**

Illness crosses the placenta

- Anxiety → Uterine Artery Resistance → Decreased blood flow to placenta
- Low birth weight/lower APGAR scores/smaller size
- Miscarriage
- Pre-term delivery/other obstetric complications
- Heightened startle response
- Relationship with partner
- Postpartum Mood & Anxiety Disorders (↑ by 80%)
Etiology of fetal impact hypothesis:

Potential Mediating variables:

- Low prenatal maternal dopamine and serotonin
- Elevated cortisol and norepinephrine
- Intrauterine artery resistance
- Heritability - ADHD, anti-social behavior
Trimesters of pregnancy:
1st: Sick and tired.
2nd: Awww baby kicks!
Baby Blues

Not a disorder

- 80%
- Transient
Baby Blues

- 3rd - 5th day
- Few hours/ days
- Good periods
- Overwhelmed, tearful, exhausted, hypo-maniac, irritable

With support, rest, and good nutrition, the Baby Blues resolve naturally.

Persisting beyond 2 weeks, likely PPD or related disorder.
Postpartum “Blues”: Hormone Withdrawal Hypotheses

Estrogen receptors concentrated in the limbic system

“Blues” correlate with magnitude of drop

- Progesterone metabolite (allopregnanolone) GABA agonists; CNS GABA levels & sensitivity may decrease during pregnancy as an adaptation

- The reduced brain GABA may recover more slowly in women with “blues”

(Altemus, et al., 2004)
You're making it difficult for me to be the parent I always imagined I would be.
Postpartum Depression Prevalence
15-20%

22%
(JAMA 2013)
JAMA 2013

- 1 in 7 women = PPD
- 30% episode before pregnancy
- 40% >1 during pregnancy
- Over two-thirds of the women also had signs of an anxiety disorder
- One in five of the women had thoughts of harming themselves
- 20 percent of the group studied was diagnosed with bipolar disorder

http://seleni.org/advice-support/article/largest-postpartum-depression-study-reveals-disturbing-statistics#sthash.CI8AwKFJ.dpuf
POSTPARTUM DEPRESSION/ ANXIETY Characteristics

- Starts 1-3 months postpartum, up to first year
- **Timing may be influenced by weaning**
- 60%+ PMADs start in first 6 weeks
- DSM recognizes in the first 6 weeks with a PP specifier
- Lasts months or years, if untreated
- Symptoms present most of the time
- Can occur after birth of any child—not just 1st
DSM V ~ Five or more out of 9 symptoms (including at least one of depressed mood and loss of interest or pleasure) in the same 2-week period. Each of these symptoms represents a change from previous functioning, and needs to be present nearly every day:

- Depressed mood (subjective or observed); can be irritable mood in children and adolescents, most of the day;
- Loss of interest or pleasure, most of the day;
- Change in weight or appetite. Weight: 5 percent change over 1 month;
- Insomnia or hypersomnia;
- Psychomotor retardation or agitation (observed);
- Loss of energy or fatigue;
- Worthlessness or guilt;
- Impaired concentration or indecisiveness; or
- Recurrent thoughts of death or suicidal ideation or attempt.

b) Symptoms cause significant distress or impairment.

c) Episode is not attributable to a substance or medical condition.

d) Episode is not better explained by a psychotic disorder.

e) There has never been a manic or hypomanic episode. Exclusion e) does not apply if a (hypo)manic episode was substance-induced or attributable to a medical condition.
Perinatal Depression

- Agitated depression
- Always an anxious component
- Anhedonia usually not regarding infant and children
- Looks “Too good”

- Often highly functional
- Hidden illness
- Intense shame
- Passive/Active suicidal ideation
- Sleep disturbances
Perinatal Depression

- Disinterest in Baby
- Inadequacy
- Disinterest in sex
- Over-concern for baby
- Hopelessness & shame
Coding ~ DSM V & ICD-10

- “With anxious distress”
- “With peripartum onset” ~ pregnancy finally included
- Defined as the most recent episode occurring during pregnancy as well as in the four weeks following delivery.
- Note discrepancy between known clinical presentation and our diagnostic and coding systems
- ICD-10-CM code F53 (puerperal psychosis) should be reported for a diagnosis of postpartum depression. Though the description of ICD-10 code mentions the term “puerperal psychosis,” a more severe form of postpartum illness, it can still be used to report postpartum depression.
Postpartum Depression Risk

- All cultures and SES
- First year postpartum
- Higher rates:
  - Multiples
  - Infertility
  - Hx Miscarriage
  - Preterm infants
  - Teens
  - Substance abuse
  - Domestic Violence
  - Neonatal complications
Predictive Risk Factors

- Previous PMADs
  - Family History
  - Personal History
  - Symptoms during Pregnancy

- History of Mood or Anxiety Disorders
  - Personal or family history of depression, anxiety, bipolar disorder, eating disorders, or OCD

- Significant Mood Reaction to hormonal changes
  - Puberty, PMS, hormonal birth control, pregnancy loss
Risk Factors, cont.

- **Endocrine Dysfunction**
  - Hx of Thyroid Imbalance
  - Other Endocrine Disorders
  - Decreased Fertility

- **Social Factors**
  - Inadequate social support
  - Interpersonal Violence
  - Financial Stress/Poverty
  - Trauma Hx
Postpartum Depression/Anxiety
Risk Factors

- Perceived fatigue/Sleep deprivation
- Personal/family hx
- PMS, PMDD
Bipolar Disorders

Bi-Polar I

- Depression + Manic Episodes
- Mania is high risk for Psychosis
- Immediate Psychiatric Assessment
- Bipolar I vs. Bipolar II “Hypomanic episodes”
- Bipolar II “PPD Imposter”
BIPOLAR DISORDER in Pregnancy

7x more likely to be hospitalized for first episode of Postpartum Depression (Misri, 2005)

• High relapse rates with continued treatment:
  45% (Blehar et al., 1998)
  50% (Freeman et al., 2002)

• High relapse rates with Lithium treatment discontinuation: 50% (about same as non-pregnant) (Viguera & Newport, 2005)
Bipolar II

- Depression + Hypomanic Episodes
- More common in women
- More fluctuating moods than Bipolar I
- ↑ risk for severe depressive symptoms postpartum
- ↑ unstable, temperamental
- Often first diagnosed after years of “treatment resistant” depression
- Importance of empathetic health care team
Bi-Polar disorder in Pregnancy

- High rates of postpartum mental health difficulties
- Importance of proper diagnosis to assure proper treatment
- Early intervention to avoid psychiatric emergency
- Close monitoring by psychiatrist & OB
- Rule out thyroid disorders
- Medication use: psychiatrist & OB to weigh risks-benefit ratio
- Physician experience or willingness to learn is crucial
- 50% relapse rate in pregnancy if untreated
Bipolar disorder postpartum

- High risk of exacerbation postpartum
- Sleep deprivation can trigger manic symptoms
- Risk for psychotic symptoms
- Link between Bipolar Disorder & Postpartum Psychosis
  - 260 episodes of Postpartum Psychosis in 1,000 deliveries in women with Bipolar Disorder (Jones & Craddock, 2001)
- Important to consider Bipolar Disorder in differential diagnosis with new onset of affective disorder postpartum
Bipolar Disorder - Postpartum Psychosis Link

- 100x more likely to have Postpartum Psychosis (Misri, 2005)

- 86% of 110 women with Postpartum Psychosis subsequently diagnosed with Bipolar Disorder (Robertson, 2003)

- 260 episodes of Postpartum Psychosis in 1,000 deliveries in women with Bipolar Disorder (Jones & Craddock, 2001)
Screening for Bi-Polar Disorders

- Careful Hx essential
- Mis-diagnosed MDD will present as tx resistant
- Inappropriate prescription of SSRIs may trigger a manic episode putting ct at risk for psychosis
- Teasing out hypomania most difficult
- Over multiple sessions
- Family members involved important
Perinatal Anxiety Disorders

Generalized Anxiety Disorder
Panic Disorder
Risk: Thinking styles correlated with perinatal anxiety disorders

- Perfectionistic tendencies
- Rigidity (an intolerance of grey areas & uncertainty)
- An erroneous belief and pervasive feeling that worrying is a way of controlling or preventing events

(Kleiman & Wenzel, 2011)

- An erroneous belief that thoughts will truly create reality
- An underlying lack of confidence in one’s ability to solve problems
- Intrusive thoughts - such as from post-traumatic stress
- Poor coping skills
Perinatal GAD 8-15%

**General**
- Constant worry
- Racing thoughts
- Overwhelm
- Tearfulness
- Tension
- Irritability
- Insomnia
- Panic attacks

**Perinatal Specific**
- Ruminating thoughts on baby’s well-being
- Difficulty leaving the house
- Controlling parenting style
- Intrusive attachment patterns
Postpartum Panic Disorder

~11%
Perinatal Panic disorder

- Panic attacks
  - severe anxiety with physiological symptoms
  - fear of losing control or dying
  - poss. agoraphobia
- Related to fetus/infant
Postpartum Panic Disorder

Characteristics

• Panic attack may wake her up at night
• Poss. Agoraphobia

Three Greatest Fears
1. Fear of dying
2. Fear of going crazy
3. Fear of losing control
Additional perinatal considerations

- Women with Hx of mild sx may have worsening in first 2-3 week pp
- R/o mitral valve prolapse and hyperthyroidism

**Primary Themes**

- Greater impairment in cognition during attacks
- Panic management exacerbates fatigue
- Preventing further attacks becomes paramount
- Negative impact on lifestyle and self-image
- Fear of permanent impact on family (Beck & Driscoll 2006).
Perinatal Posttraumatic Stress Disorder (PTSD)

Trauma & Stressor related Disorders
18-34% of women report that their births were traumatic. (PTSE) A birth is said to be traumatic when the individual (mother, father, or other witness) believes the mother’s or her baby’s life was in danger, or that a serious threat to the mother’s or her baby’s physical or emotional integrity existed.

POSTPARTUM PTSD
Three primary influences:

1. Traumatic labor/delivery
2. Prior traumatic event
3. Neonatal complications

(Beck 2004)
POSTPARTUM PTSD Secondary to labor/ delivery

- “In the eye of the beholder” (Beck, 2004)
- Full PTSD in 0.2-9% of births
- Partial symptoms in about 25%-35% of births
- Often mistaken for PPD
- Not a separate diagnostic category in the DSM V
Risk Factors

Higher risk populations:

- African-American women
- Non-private health insurance
- Unplanned pregnancies
- Trauma survivors

Simkin (2011)
Risk Factors cont.

- Infertility & Loss
  - Increased rates of all PMAD sx
  - Similar sx-no psycho-ed
  - PTSD- 50%
  - Abortion
  - Miscarriage
  - Isolation
  - Minimization
Intrusion symptoms

- Repetitive re-experiencing of the birth trauma through flashbacks, nightmares, distressing recollections of the birth experience, and psychological distress following birth
Avoidance symptoms

- Attempts to avoid reminders of the birth experience such as doctors offices as hospitals, people associated with birth experience (sometimes including the baby), thoughts about the birth experience
Increased arousal symptoms

- Difficulty sleeping, heightened anxiety, irritability, and concentration challenges, mood swing (Looks like BPI or II)

(Beck et al. 2011)
Affective sx

- Feelings of impending doom or imminent danger
- Difficulty concentrating
- Guilt
- Suicidal thoughts
- Depersonalization - Feeling a sense of unreality and detachment
Trapped in flight, flight or freeze...

**Lizard Brain**
- Limbic system over-activated
- Difficulty accessing self-soothing strategies

**Wizard Brain**
- Prefrontal cortex engaged. Central nervous system soothed
Risk factors related to delivery

- Major hemorrhage
- Severe hypertensive disorders (preeclampsia/ecclampsia)
- Intensive care unit admission
- NICU stay
- Unplanned Cesarean

Contributing risk factors cont.

- Unexpected hysterectomy
- Perineal trauma (3rd or 4th degree tear)
- Cardiac disease.
- Prolapsed cord
- Use of vacuum extractor or forceps
POSTPARTUM PTSD
Risk cont.

- Feeling out of control during labor
- Blaming self or others for difficulties of labor
- Fearing for self during labor
- Physically difficult labor
- Extreme pain
- Fear for baby’s well-being
- High degree of obstetrical intervention

(Furuta, Sandall, Cooper, & Bick (2014))
POSTPARTUM PTSD
Risk factors secondary to prior trauma

- Sx related to past trauma triggered by childbirth
- Hx of emotional, physical abuse or neglect
- Hx of sexual abuse
- Hx of rape
- Hx of PTSD
- ACEs score significant
NICU Families at risk

- PTSD preterm delivery 7.4%
- PTSD and major depressive disorder is 4 fold increase in prematurity 2654 women
- Mothers- 15%-53%
- Fathers- 8%-33%
- [http://www.preemiebabies101.com](http://www.preemiebabies101.com)
PTSD or Depression? Or both?

Symptoms for post-traumatic-stress disorder, or PTSD, differ from post-partum depression, and can be severe.

PTSD

- The person persistently re-experiences the traumatic event (in this case childbirth) in one or more of the following ways: recurrent and intrusive distressing recollections of the event; recurrent distressing dreams and nightmares; flashbacks; intense psychological distress and/or physiological reactivity on exposure to cues that resemble the traumatic event.

- Persistent avoidance of stimuli associated with the traumatic event and numbing of general responsiveness as indicated by efforts to avoid thoughts/activities/places or people that arouse recollections of the trauma; feelings of detachment.

- Persistent symptoms of increased arousal, including difficulty falling or staying asleep; irritability or outbursts of anger; difficulty concentrating; hypervigilance; exaggerated startle response.

Post-partum depression:

- Depressed mood
- Diminished interest or pleasure in activities
- Sleeping/eating disturbances
- Anxiety/insecurity
- Emotions on a roller coaster
- Fatigue or loss of energy
- Guilt
- Diminished ability to concentrate
- Loss of self (not normal self, don’t feel real)
- Recurrent thoughts of death, suicidal ideation

Sources: DSM IV-Text Revision (2000); American Psychiatric Association; Cheryl Beck of University of Connecticut School of Nursing.
**POSTPARTUM PTSD Impact**

- Avoidance of aftercare and related trigger
- Primary reminder of the birth?? The infant
- Impaired mother-infant bonding
- Sexual dysfunction
- Avoidance of further pregnancies
- Symptom exacerbation in future pregnancies
- Elective C-sections in future pregnancies

POSTPARTUM PTSD

Subsequent Pregnancy

- Different care providers
- Different birthing location
- Emphasis on relationship development with providers
- Comprehensive birth planning around unique needs

(Beck & Driscoll, 2006)
Impact of birth trauma on breast-feeding

Major themes:

- Proving oneself as a mother: sheer determination to succeed
- Making up for an awful arrival: atonement to the baby
- Helping to heal mentally: time-out from the pain in one's head
- Just one more thing to be violated: mothers' breasts
- Enduring the physical pain: seeming at times an insurmountable ordeal
- Dangerous mix: birth trauma and insufficient milk supply
- Intruding flashbacks: stealing anticipated joy
- Disturbing detachment: an empty affair

(Beck & Watson, 2008)
Perinatal Obsessive Compulsive Disorder (OCD)

\sim OCD and related disorders
Perinatal OCD

- (Gen. Pop. 2.2%)

5-11%
Thanks for always thinking about me to the detriment of your own mental health.
OCD - General

- Obsessions
  - Intrusive thoughts/ images
  - Ignore or suppress
  - Awareness

- Compulsions
  - Repetitive behaviors/ mental acts
  - Reduce stress
  - Prevent dreaded event
POSTPARTUM OCD
(Often misdiagnosed as psychosis)

Obsessive thoughts
- Content related to baby
- Mother extremely distraught
- Ego-dystonic
- “Am I going crazy?”
- “Is this Postpartum Psychosis?”
- “Am I going be that mother on the news?”

Compulsive behaviors
- Keep baby safe
- Repetitive, excessive
- Reduce distress
- Order, control
POSTPARTUM OCD Characteristics

- No intent to act on thoughts
- Mother rarely discloses
- Usually does not describe content
- Suggestibility
- Functioning/ infant care compromised
- Only obsessions or only compulsions or both
- Lifelong mild symptoms
- Obsession with safety vs harm
- “But it could happen”
Ego-dystonic obsessional thoughts about harming the baby (Abramowitz et al., 2003)

No documented case of infanticide (Ross et al., 2006)

Careful assessment & close monitoring if:
- severe comorbid depression
- family or personal history of Bipolar Disorder, Thought Disorders or Postpartum Psychosis
Postpartum OCD
Theory on Etiology

- Oxytocin, implicated in bonding and nurturing, has been found to be elevated in the cerebrospinal fluid of patients with OCD.

- Cingulate gyrus, which is part of the OCD brain circuitry, is rich in oxytocin receptors.

- Maternal behavior resembles an obsession in that mothers are preoccupied with the care and protection of infants.

- Oxytocin may impact the obsessional nature of mothers’ behaviors. In women with PP OCD, the brain may "overshoot" this process, causing hypervigilance, excessive fear of harm and excessive triggering of protective instincts.

(Patricia Perrin, PhD, Presentation at Postpartum Support International Conference, Houston, 2008)
Perinatal Psychosis

- As part of:
- Major Depressive Disorder
- Bipolar Disorder – a variant of?
- Psychotic Disorder
- 4% Infanticide
- 5% Suicide
Perinatal Psychosis
1-3 per thousand births

- Agitation
- Swift detachment from reality
- Visual or auditory hallucinations
- Usually within days to weeks of birth

- Etiology: Manic phase of Bi-polar I or II
- High risk
- Suicide 5%
- Infanticide 4%
- Immediate Hospitalization
Postpartum Psychosis

Symptoms

- Extreme agitation
- Paranoia, confusion, disorientation
- Inability to sleep/ eat
- Losing touch with reality
- Distorted thinking
- Delusions
- Hallucinations (tactile, auditory, visual)
- Disorganized behavior
- Psychomotor agitation
- Incoherent speech, irrational thinking
POSTPARTUM OCD vs. PSYCHOSIS

- OCD: overprotective mother
- PSYCHOSIS: danger to harm
- Obsessing about becoming psychotic

**Myths:**
- Postpartum OCD is great risk to harm baby
- OCD may turn into psychosis

**Issues:**
- Misdiagnosis by untrained professionals
- Reporting, hospitalization = victimization
Shower Schizophrenia:
The constant belief that you hear a child crying while you're trying to take a shower.
D-MER
Dysphoric Milk Ejection Reflex

- Dysphoric Milk Ejection Reflex (D-MER) is an anomaly of the milk release mechanism in lactating women. A lactating woman who has D-MER experiences a brief dysphoria just prior to the milk ejection reflex.

- These emotions usually fall under three categories, including despondency, anxiety and aggression.

- Physiological, not psychological.

- Not a PMAD.

- Majority of mothers with D-MER report no other mood disorders.

- Can be co-morbid with PMADs.
D-MER
Dysphoric Milk Ejection Reflex

- Hollow feelings in the stomach
- Anxiety
- Sadness
- Dread
- Introspectiveness
- Nervousness

- Nervousness
- Anxiousness
- Emotional upset
- Angst
- Irritability
- Hopelessness
- Something in the pit of the stomach.
“Postpartum” Fathers

- ~10%
- 10.1% (Matthey et al., 2000)
- 28.6% (Areias et al., 1996)
- With spousal postpartum depression:
  - 24% (Zelkowitz & Milet, 2001)
  - 50% (Lovestone & Kumar, 1993)
- Depression in fathers during the postnatal period:
  - Emotional & behavioral problems in 3-5 yo children
  - Increased risk of conduct problems in boys (Ramchandani, 2005)
PMADs in Fathers cont.

~10%

- Typical symptoms:
  - Overwhelm
  - Anger
  - Confused
  - Concerned with mother and baby

- Any symptom mothers have
When mother screens positive \( >12 \)

Screen Father!!!
Post-Adoption Depression Syndrome (PADS)

No:
- Hormonal changes
- Pregnancy

Additional concerns:
- Adoption process related stress
- Issues re: inadequacy
- Financial
- “Whose baby?”

~50%?
Other perinatal considerations...

Although not well researched or included in most data sets, the following populations and reproductive health events also experience and represent risk for PMADs.

- Same-sex parents
- Birth Mothers
- Miscarriage (Any length of pregnancy)
- Stillbirth
- Adoption
- Infertility
- Abortion
Etiology
Etiology of PMADs

- **Genetic** Predisposition
- **Sensitivity** to hormonal changes
- **Psychosocial Factors**
  - Inadequate social, family, financial support
- **Concurrent Stressors**
  - Sleep disruption
  - Poor nutrition
  - Health challenges
  - Interpersonal stress
  - TRAUMA
Ruling Out Other Causes

- PTSD
  - Birthing Trauma
  - Undisclosed trauma or abuse
  - ACE questionnaire
- Thyroid or pituitary imbalance
- Anemia
- Side effects of other medicines
- Alcohol or drug use/abuse
- Hormone imbalance
- Adrenal Fatigue
Perinatal hormone changes

- Estrogen: 50x higher by last 3 mo
  - Drops to near pre-pregnancy levels within 72 hrs
- Progesterone: 1-x higher by end of preg
  - Drops to normal levels by 1st week
- Cortisol: 2-3x higher during preg
  - Slowly decreases after birth
- Prolactin: 7x higher during pregnancy
  - Declines during 3 mo PP, weaning
Oxytocin (OT): Peripheral Effects

- Uterine contraction
- Milk ejection
OT as a Neuropeptide Neurotransmitter

- Receptors concentrated in limbic system
- New receptors are induced by estrogen during pregnancy
- OT induces intense maternal behavior
- OT antagonists block initiation of maternal behavior
Posited Relationships Between the “Blues” and PPD

- A subset of women may be vulnerable to mood disorders at times of hormonal flux (premenstrual, postpartum, perimenopausal) regardless of environmental stress.

- The normal heightened emotional responsiveness caused by OT may predispose to depression in the context of high stress and low social support.
Naturopathic considerations

- Dramatically rising progesterone and Estrogen levels followed by a dramatic drop.
- Estrogen may remain high while progesterone stays low.
- Result is estrogen dominance.
- Estrogen dominance causes the liver to produce increasing levels of thyroid-binding globulin (TBG) - binds thyroid hormone.
- Once thyroid hormone is bound in the blood, it is no longer free to enter the cells to be used as energy for the body = postpartum thyroiditis and the symptoms of low thyroid prior to giving birth.
R/o Thyroid disorders

Thyroid dysfunction occurs in about 10%

Lab work to rule out thyroditis:

- Free T4
- TSH
- Anti-TPO
- Anti-Thyroglobulin antibodies
  (Bennett & Indman, 2006)
Inflammation and PPD: The new etiology paradigm

- Psychoneuroimmunology (PNI) = new insights
- Once seen as one risk factor; now seen as THE risk factor underlying all others
- Depression associated with inflammation manifested by ↑ pro-inflammatory cytokines
- Cytokines normally increase in third trimester: ↑ vulnerability
- Explains why stress increases risk
- Psychosocial, Behavioral & Physical
- Prevention and treatment to ↓ maternal stress & inflammation

(Kendall-Tackett 2015)
Pro-inflammatory Cytokines

- Third Trimester
- Risk
- Pre-term Birth
- Preeclampsia
The Impact of PPD:

Nationally, suicide is the second leading cause of maternal death

The first is homicide

Center for Disease Control (2011)
Untreated maternal depression is associated with...

- Increased risk of substance abuse
- Increased rates of pre-eclampsia/preterm
- Increased rates of infant neglect and poor mother-infant attachment/bonding
- Increased risk of ER visits, psychiatric hospitalizations, and suicide
- Increased rates of infanticide
- Poor developmental impact on all children in the family
- Increase risk of abortion or adoption
- Negative long-term impact on maternal well-being and self-esteem
- Negative effects on marriage stability
- Lowered ability for mother and partner to return to work
LINK BETWEEN DEPRESSION AND ALCOHOL

- 15% of women from 2002-2003 data reported binge alcohol use
- 8.5% reported illicit drug use
- Women who experienced depression showed higher rates of use
- Women who used previously showed higher rates of depression

(Chapman and Wu, 2013)
EATING DISORDERS DURING PREGNANCY

- 1 in 20 pregnant women
- 25-30% show signs of disordered eating
- Many cases not identified – up to 93.3% in one study!
- Reduction in symptoms? Binge Eating Disorder Bulimia → BED
IMPACT OF DEPRESSION DURING PREGNANCY

- Prematurity
- Low birth-weight
- Disorganized sleep
- Less responsiveness
- Excessive fetal activity
- Chronic illness in adulthood

- Growth Delays
- Difficult temperament
- Impacted development:
  - Attention
  - Anxiety and depression

IMPACT OF ANXIETY DURING PREGNANCY

- **Stress, Anxiety (↑cortisol)**
  - Maternal vasoconstriction
  - Decreased oxygen and nutrients to fetus
    - (Copper et al., 1996)

- **Consequences on fetal CNS development**
  - (Monk et al., 2000; Wadhwa et al., 1993)

- **Pre-term delivery (<37wks)**
  - (Kendall-Tackett 2015; Dayan et al., 2006; Hedegaard et al., 1993; Rinieri et al., 1999; Sandman et al., 1994; Wadhwa et al., 1993)
IMPACT OF POSTPARTUM DEPRESSION: Infant Development

- Poor infant development at 2 months
  (Whiffen & Gotlib, 1989)

- Lower infant social and performance scores at 3 months
  (Galleret al., 2000)

- Delayed motor development at 6 months
  (Galleret al., 2000)

- More likely to have insecure attachment styles
  (Martins & Gaffan, 2000)
Etiology of fetal impact hypothesis:

Potential Mediating variables:

- Low prenatal maternal dopamine and serotonin
- Elevated cortisol and norepinephrine
- Intrauterine artery resistance
- Heritability – ADHD, anti-social behavior
Protective factors

Lowered cortisol levels and improved developmental outcomes associated with:

- High levels of positive maternal engagement
- Treatment in the first year – effect may not be enduring
- Serve return
- Fathers
- Grandparents

- Importance of parent infant interaction guidance!

Bad moments don't make bad mamas.

—Lysa Terkeurst—
Unglued
**Postpartum Depression and Breastfeeding: The impact**

- Significantly more likely to discontinue breastfeeding between 4 and 16 weeks postpartum. (Field 2008) (Ystrom 2012)

- More likely to give infants water, cereal, and juice during that time.

- More likely to experience feeding difficulties.

- More likely to report being “unsatisfied” with breastfeeding and lower rates of self-efficacy.

- PPD and low support leads to early weaning
  Mathews et al JHL 30(4) 480-487
Impact of sx on rates of exclusive breastfeeding:

- Anxiety at 3 months reduced odds of Ex BF by 11% at 6 mos. Adedinsewo et al. JHL 2014 30(1) 102-109
- Complex pregnancy ~ greater than 30% lower odds of EBF.
- Supportive hospital increased the odds by 2-4 times
  - Birth interventions matter
  - Elective cesarean increased depression and anxiety
  - Planned cesarean is higher than emergency and nearly double unplanned
Protective benefits of breastfeeding

- Attenuates stress
- Modulates inflammatory response
- Protective effect on the neural development of infants

Dennis & McQueen, (2009), Hale (2007)
Kendall-Tackett, Cogig & Hale, (2010)
Kendall-Tackett (2015)
Potential negative impact of nursing on depressed mothers

- PNI research suggests that the natural inflammatory response on pregnancy, combined with inflammatory process such as stress and pain, i.e.: nipple pain, can increase risk and severity of symptoms.

- When nursing is going well = protective.

- When nursing is very stressful and/or painful = increased risk.

Kendall-Tackett (2015)
Lactation Issue!

Maternal Mood Disorders and Lactation are NOT incompatible

Lactation can help with healing if addressed with sensitivity
Infant Feeding

- Mothers' tx will be impacted by every interaction with medical professionals.
- The decision to nurse or not must not be made for her.
- Ignorance about medication and nursing abounds.
- More women nurse exclusively when their sx are caught early and treated appropriately.
“There are several ways to feed a baby but only one YOU.”
Infant Feeding cont.

- Weaning—especially early and abrupt can be related to and increase in sx
- Dramatic decrease in prolactin and oxytocin
- Beware the hormone sensitive brain!
Infant Feeding cont.

“Babies were born to be breastfed”
(U.S. Dept. of Health and Human Services 2004)

OR

“Babies were born to be loved by a mother who felt supported”

(letter to the editor, Herald-Sun by William Meyer, Associate clinical professor in Dept. of Psychiatry at Duke University Medical Center)
We must balance what we know to be optimal nutrition for babies with what we now know to be optimal for the survival of mothers and the well-being of the family:

Sound Maternal Mental Health
PREVENTION
Primary Prevention Model

- Risk factors are known
- Screening is inexpensive
- Many risk factors amenable to change
- Known, reliable, effective treatments exist
- Risk factors for PMADs are well-documented
- Some are genetic, others are psychosocial and thus can be impacted with primary prevention strategies
PREVENTION

All women need:

- Information
- Exercise
- Rest
- Sound nutrition
- Social support
PREVENTION Research

- Mixed results examining interpersonal therapy, group support, home visits

- Prophylactic psychopharmacology:

- PPD prevented with use of Sertraline immediately postpartum for 24 women w/history of PPD.

- Initial dose 25mg, Maximum dose 75mg
Global goals for prevention and treatment

- Reduce maternal stress
- Reduce inflammation
- Below support/treatment strategies generally considered anti-inflammatory
Prenatal Psychoeducation

* Doula care
* Childbirth classes
* Prenatal visits
* Normalize
* Give it a name
* Explain reality
* Handouts/EPDS
* Resources/Websites
PSYCHOEDUCATION: an Ethical Obligation?

Women and their families deserve accurate information on risks, signs & treatment prenatally.
Treatment of Perinatal Mood and Anxiety Disorders
Treatment: The Gold Standard
HOSPITALIZATION

- When safety/functioning level warrant
- Outpatient care
- Multiple factors should be considered while inpatient
- Always needed for psychosis and active suicidality
Treatment Options for Perinatal Patients with moderate-severe sx

- Ideal - specialized out-pt and in-pt options
- Mother-baby day tx offers high-profile tx while promoting attachment and the infant/mother relationship.
- Lowers impact of trauma of PPD
- Assures safety
- Contextualized tx much more appealing to new moms
Hospital-based prevention programs

- 16 states currently offer hospital-based prevention and treatment programs for PMADs
- Screening all PP women
- Follow-up phone calls
- Referrals to MDs
- In-hospital support groups
BEHAVIORAL &
SOCIAL SUPPORT TREATMENT

IPT, CBT, DBT
MBCT
Support groups
ECT
Phone/ email support

Short term CBT as effective as Fluoxetine
Social Support: Prevention & Intervention

- New Canadian research
- 9 phone call model
- RN supervised peer support training program
- RN’s provided Debriefing and clinical assessment re: suicidality

- Mean depression significantly declined from baseline, 15.4 (N = 49), to mid-point, 8.30 and end of the study, 6.26.
- At mid-point 8.1% (n = 3/37) of mothers were depressed
- At endpoint 11.8% (4/34) were depressed suggesting some relapse.
- Perceptions of social support significantly improved and higher support was significantly related with lower depression symptoms.
MEDICATION

- Prescribed by
  - Psychiatrist
  - Primary Care Physician
  - Psychiatric Nurse Practitioner
  - OB

- Potential effects weighed while pregnant or nursing

- Often a process

- Multiple types of PMAD medications

- Adjunctive use of benzodiazepines ~ cloazapam, lorazepam
PHARMACOLOGICAL TREATMENT OPTIONS

- SSRIs
- Anti-anxiety agents
- Mood stabilizers
- Anti-psychotic agents

“I have spent the last 10 years of my career worrying about the impact of medications. I’ve been wrong. I should have been worrying more about the impact of illness.”

-Zachary Stowe, MD. Department of Psychiatry, Emory University
Non-Pharmacological Tx

- Mindfulness CBT
- Omega 3s
- Acupuncture
- Doula Care
- Bright light
- Yoga
- SAM-E
- St. Johns Wort
- Hypnotherapy
- Meditation
- Herbs
- Massage
- Homeopathy
- Placental Encapsulation?
OMEGA 3 FATTY ACIDS

- Safe for pregnancy and nursing
- Proven effective for depression and bipolar disorder
- Supports proper brain function and mood
- Omega 3s related to mood found mostly in fish oil
- EPA & DHA
- Combined therapeutic dosage: 1,000-3,000 mg (up to 9000)
- Must be high quality supplement source

(Kendall-Tackett, 2008)
Rule outs & Tx resistant considerations

- **Thyroid**
- **Nutritional deficiencies** (Omega 3-s, B vitamins, low iron, magnesium, calcium)
- **Glucose intolerance**
- **Other biological causes**
  - Food allergies
  - Adrenal fatigue
  - Serotonin imbalance (amino acids, 5-HTP)
  - Hormone imbalance (Progesterone, Estrogen, Testosterone)
Patient/Family Barriers

Why women and Families may not seek help...

- Confused about symptoms- “I’m just a bad mom”, “My doctor said it’s just the blues”, “My midwife says this is normal”, “I don’t feel depressed”.

- General stigma of mental health

- Fear of medications as only option

- Supermom Syndrome

- Fear removal of children

- Don’t understand impact on fetus/infant health

When moms do speak up, help often isn't available or harm is inflicted by provider ignorance.
The ACES Study

Depression during pregnancy:

- A child’s first adverse life event?

The ACES Study

- There was a direct link between childhood trauma and adult onset of chronic disease, as well as mental illness, doing time in prison, and work issues, such as absenteeism.

- About two-thirds of the adults in the study had experienced one or more types of adverse childhood experiences. Of those, 87 percent had experienced 2 or more types. This showed that people who had an alcoholic father, for example, were likely to have also experienced physical abuse or verbal abuse. In other words, ACES usually didn’t happen in isolation.

- More adverse childhood experiences resulted in a higher risk of medical, mental and social problems as an adult.
Consider:

PAST

PRESENT

FUTURE

Trauma Informed Birth Practices

- [www.samhsa.gov/nctic/trauma-interventions](http://www.samhsa.gov/nctic/trauma-interventions) ~ Trauma informed care federal guidelines

- ACE Study ~ Adverse Childhood Events Study > Development of health and mental health disorders

- [http://www.acestudy.org](http://www.acestudy.org)

- Research on early stress and trauma now indicates a direct relationship between personal history, breakdown of the immune system, and the formation of hyper- and hypocortisolism and inflammation.
PSYCHOTROPIC MEDICATIONS IN PREGNANCY & LACTATION Why Many Women Don’t Seek Treatment
PSYCHOTROPIC MEDICATIONS IN PREGNANCY & LACTATION
Why Many Women Don’t Seek Treatment

- Afraid they will be told to stop breastfeeding
  - Most women know that breastfeeding is best for their infant
  - Rather “get through it” than give up nursing

- Afraid of impact on neonate

- Stigma

- Are not given:
  - Adequate information about risks/ benefits
  - Chance to discuss it with others
  - Authority to make final decision
PSYCHOTROPIC MEDICATIONS IN PREGNANCY & LACTATION
The Unknown

- Clinical significance of medications transferred via breastmilk
- Long-term effects
- No large randomized trials- primarily case studies
- Constantly changing information
- Drugs can get “demoted” the more they’re studied
- Safety classes can be misleading
PSYCHOTROPIC MEDICATIONS IN PREGNANCY & LACTATION

SSRI Use in Pregnancy

- Commonly cited adverse short-term adverse effects: infant irritability, poor-quality sleep & poor feeding
- Most of these effects documented in case studies
- Larger sample sizes generally find no adverse effects
- Neonates whose mothers used anti-depressants during pregnancy had increased rates of respiratory distress, feeding difficulties, low birth-weight due, in part due to neonatal withdrawal

(Cipriani et al., 2007; Looper, 2007; Louik et al., 2007)
SSRIs do not significantly increase risk of birth defects overall

(Sloan Epidemiology Center Birth Defects Study: Louik et al., 2007)

Women who discontinue anti-depressants during pregnancy are more than twice as likely to relapse

(Looper, 2007)

Risks associated with untreated maternal depression

Risks associated with not breastfeeding
“Given the extent to which depression during pregnancy predicts risk for postpartum depression with its attendant morbidity, and in light of the robust data describing the adverse effects of maternal psychiatric morbidity on long-term child development, clinicians will need to broaden the conceptual framework used to evaluate relative risk of SSRI use during pregnancy as they navigate this clinical arena with patients making individual decisions to match patient wishes.”

~ Lee S. Cohen, MD; Ruta Nonacs, MD, PhD 2016

http://jamanetwork.com/journals/jamapsychiatry/article-abstract/2566201
Perinatal clients and medication- Report:

- Provider ambivalence and anxiety
- Total ignorance around pregnancy, lactation, and psychotropics
- Zoloft not compatible with pregnancy & breastfeeding
- Discontinue mood-stabilizers cold-turkey
- Black and white decision making
- No information about risks/benefits
- “You’re no longer postpartum-not my patient”

Our role-give a competent referral and warn clients about the process!!!! Be a resource for medication information w/o giving medical advice.
“Maternal psychiatric illness, if inadequately treated or untreated, may result in poor compliance with prenatal care, inadequate nutrition, exposure to additional medication or herbal remedies, increased alcohol and tobacco use, deficits in mother-infant bonding, and disruptions within the family environment.”

ACOG 2008
“Which is greater: the risks of medicating or the risks of not medicating?”
When symptoms are severe, the benefits most likely outweigh the risks. (Geddes et al., 2007)
For information on medication while breastfeeding, call Pregnancy RiskLine:

~ Mother-to-Baby

Salt Lake: 1-800-822-BABY (2229)
Sage Reports Positive Top-line Results Including Demonstration of 30-Day Durability from Phase 2 Clinical Trial of SAGE-547 in Severe Postpartum Depression

- SAGE-547 is an allosteric modulator of both synaptic and extrasynaptic GABA_A receptors.

- Intravenous agent administered via inpatient treatment as a continuous infusion for 60 hours.

- Primary endpoint achieved with statistical significance at 60 hours maintained through 30 days

- 70% remission achieved at 60 hours of SAGE-547 treatment and maintained at 30-day follow-up

- Company expects to pursue further development of SAGE-547 and SAGE-217 for PPD in a global clinical program

- Samantha Meltzer-Brody, M.D., M.P.H., Associate Professor and Director of the UNC Perinatal Psychiatry Program of the UNC Center for Women's Mood Disorders ~ primary investigator for the PPD-202 Trial. [https://clinicaltrials.gov/show/NCT02614547](https://clinicaltrials.gov/show/NCT02614547).
Screening: Psychoeducation and triage indications

Assessing for severity and suicide risk
National Screening Recommendations


- ACOG recommends that clinicians screen patients at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool. (2015)

- The U.S. Preventive Services Task Force recommends screening for depression in the general adult population, including pregnant and postpartum women. “Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up.” Jan. 26th 2016
On May 11, 2016, the Centers for Medicare and Medicaid Services (CMS) issued an informational bulletin on maternal depression screening and treatment, emphasizing the importance of early screening for maternal depression and clarifying the pivotal role Medicaid can play in identifying children with mothers who experience depression and its consequences, and connecting mothers and children to the help they need.

State Medicaid agencies may cover maternal depression screening as part of a well-child visit.
+ **Barriers in Utah**

- Low screening rates and high variability in screening protocols
- Lack of referral/training system
- Only two specialized women’s mental health clinics in UT
- Very few resources for lower income and rural families
- PSI warm line only known resource for Spanish speaking women
- Poor provider/prescriber awareness
- Wide variability for Rx tx protocols for pregnant and nursing women
- “Supermom” syndrome anecdotally significant
- High birth rate potentially related to increase in hormone/nutritional imbalances.
Vicious Cycle of Inadequate Care

- shortage of treatment
- low screening rates
- very little awareness
Barriers to Care

- Individual Provider Systems
- Poor disclosure rates
- Low rates of treatment seeking
- Unprepared providers
- Few referral paths
- Treatment under-utilized
- Poor outcomes
5%-6% screened by OB
Less than $\frac{1}{4}$ of all women receive treatment
Only 6% sustain treatment!

- Untreated Women: 75%
- Treated Women: 25%
SCREENING

Who?

* Early interventionists
* Home visitors
* Nurses
* Social workers
* Midwives
* Doulas
* Childbirth educators
* Parent educators
* Pediatricians
* OBs
* PCPs
SCREENING IN PREGNANCY

- Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden & Sagovsky, 1987)

- Postpartum Depression Predictors Inventory (PDPI) Revised (Beck, 2002)

- PDQ 2 or 9
Screening: When?

Every Prenatal Visit → EPDS sent home with mom → Every well-baby check for the first year
EPDS 3 ~ Less could be more

- Better sensitivity and negative predictive value
- In the two studies to date numbers of women with probable depression increased 16% & 40% more
- I have blamed myself unnecessarily when things went wrong
- I have been anxious or worried for no good reason
- I have felt scared or panicly for no very good reason

Kabir K, Sheeder J, Kelly LS. Identifying postpartum depression: are 3 questions as good as 10? Pediatrics 2008; Sep;122(3): e696-702.

Bodenlos KL, Maranda L, Deligiannidis KM. Comparison of the Use of the EPDS-3 vs. EPDS-10 to Identify Women at Risk for Peripartum Depression. Obstetrics & Gynecology 2016; May 127: 89S-90S.
Risk Factor Check List
From Oregon Prenatal and Newborn Handbook 2015

Check the statements that are true for you:

- It’s hard for me to ask for help.
- I’ve had trouble with hormones and moods, especially before my period.
- I was depressed or anxious after my last baby or during my pregnancy.
- I’ve been depressed or anxious in the past.
- My mother, sister, or aunt was depressed after her baby was born.
- Sometimes I don’t need to sleep, have lots of ideas and it’s hard to slow down.
- My family is far away and I don’t have many friends nearby.
- I don’t have the money, food or housing I need.

If you checked three or more boxes, you are more likely to have depression or anxiety after your baby is born (postpartum depression).
PERINATAL SCREENING

Edinburgh Postnatal Depression Scale (EPDS):

- Not a diagnostic tool
- Not to override clinical assessment
- What it identifies accurately
- What it does not identify
- Useful to track Tx efficacy concretely
SCREENING – How?

- Do not make assumptions
- Educate
- Ask every woman: “At least 10% of pregnant and postpartum women have depression and or anxiety. They are the most common complications of childbearing.”
- More than once - ideally every trimester, 6 week check & well baby visit
- Give screening tool with other paperwork
- Ask about personal and family history of depression & anxiety
- Document
- Give printed resources with phone numbers and websites
Screening: EPDS

- Edinburgh Question #10: “The thought of harming myself has occurred to me.”
- If she answers with anything other than 0, the provider must follow up to address threat of harm
- Ask questions, clarify
- [http://www.mededppd.org/CarePathwaysAlgorithm.pdf](http://www.mededppd.org/CarePathwaysAlgorithm.pdf)
- Immediate Perinatal Mental Health assessment
- Do not avoid questions that are uncomfortable
EPDS cont.

- Assess, refer & follow up
- Give concrete ed and plan for engaging system
- Repeat Edinburgh at 6 week check-up, lactation visits, wellbaby visits, home visits etc.
- Concrete for patient
- Vital for records
ACOG Screening toolkit guidelines:

- A follow-up telephone call shortly after the initial EPDS that scored over the set threshold or 1 or more on question 10.

- An initial follow-up appointment within a few weeks of the EPDS that scored over the set threshold or 1 or more on question 10.

- Follow-up appointments or telephone calls every few weeks until the patient is stable or improving.

- Regular follow-up appointments or telephone calls until the first postpartum year is completed.

http://mail.ny.acog.org/website/DepressionToolKit.pdf
Be aware of suicide risk potential in every patient
“Often times the difference between the mother who kills herself and the one who doesn’t is whether it’ll be better for the baby. The thing that raises the hair on the back of my neck is the mother who tells me she thinks her baby will be better off without her. She is at very high risk for suicide.”

(Valerie Raskin, “This isn’t What I Expected”)

Risk Assessment
Assessing for Risk: Suicide

- Leading cause of maternal death in 1st year postpartum
- Higher risk associated with prior inpatient admission
- Psychosis: 5% suicide 4% infanticide
- Assess risk with very interaction
- First contact significant
<table>
<thead>
<tr>
<th>A</th>
<th>Assess risk of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Listen non-judgementally</td>
</tr>
<tr>
<td>G</td>
<td>Give reassurance</td>
</tr>
<tr>
<td>E</td>
<td>Encourage appropriate help</td>
</tr>
<tr>
<td>E</td>
<td>Encourage self-help/support</td>
</tr>
</tbody>
</table>
Suicide Assessment cont.

- Frequency
- Hx of thoughts or attempt
- Family Hx
- Coping w/thoughts
- Support system
- Degree of isolation
- Ego dystonia
- Assess intent and plan
- Verbal/written contract
Suicide Risk – cont.

- Can you describe the thoughts to me?
- Differentiate between active and passive
- Who could you plan to tell if the thoughts change? If you can’t stop yourself?
- What do you think you need to be safe?
- What would that look like for your baby, partner?
- Are there weapons in your home?
- Other means to hurt yourself?
- Does anyone know how you feel?
Infanticide: Assess for Severe Depression vs. Psychosis

- We can’t prevent if we don’t ask
- We can’t prevent if we don’t know the signs
- Remind clients about mandatory reporting laws and their exceptions (OCD vs. active plan)
- Every question is essentially psychoeducation
- “Are you having any thoughts that are scaring you?”
- “It’s not unusual for the women we see to have thoughts of harming their child, so, I ask everyone.”
- “Some feel so angry, anxious and overwhelmed they just want the baby/child to go away sometimes. Have you ever felt this way?”
- Then assess for level of risk and plan for safety
- Look for observable signs of abuse/neglect
Empowering Through Safety Planning

- “Do you think it would be helpful to remove these items/have your partner remove them?”
- “Would being in the hospital for a while help you feel safer?”
- Give every opportunity for patient input before directive planning
- Does your family know how bad you are feeling?
- Bringing family on board: in session, on phone, meet at ED
- Follow-up!!
- Do not leave patient alone if she is unable to assure safety
- Make a plan for 24 hr care until assessed
Beware of harm to pts ~ know the difference

No/Low risk

- OCD sx with no active plan – clearly ego dystonic
- Graphic dreams of harm with ego dystonia
- Appears oriented to self and others
- Clear mental status exam
- No severe co-morbid depression
- No hx or fam hx of thought disorders or bi-polar
Beware of harm to pts ~ know the difference

- Moderate/high
- Severe comorbid depression plus reported feelings of rage, out of control, high reactivity
- Severe insomnia
- Pt reports feelings of harming baby are disturbing and she wants help
Beware of harm to pts ~ know the difference

- High
- Thoughts of harming baby with active plan to do so – not willing to safety plan
- Ego syntonic thoughts of harming self or others
- Uncontrolled anger towards baby with poor insight, evidence of past abuse, resistant to intervention and treatment
- Hx or fam hx of psychosis, thought disorder, or BP I or II
Beware of harm to pts ~ know the difference

High - time to hospitalize

- Psychotic sx

- Active plan to harm self or others - unwilling or unable to safety plan

- Severe depression, functioning highly impacted, mother does not feel safe for herself or others

- Pt cannot commit to safety plan

- Unless there is clear evidence of child abuse, DCFS reports may do more harm than good ~ enlist 211 and Help Me Grow to refer to needed services ~ parenting, CD etc.
Safety Planning

- “It’s a symptom of the illness.”
- “Let’s make a plan for you both to be safe.”
- Thoughts vs actions
- “Your baby is so lucky to have a mom brave enough to reach out for help.”
Psychosis

- Any signs of psychosis =>
  - Immediate Psychiatric Hospitalization!
  - Nearest ER
POSTPARTUM OCD vs. PSYCHOSIS

- OCD: overprotective mother
- PSYCHOSIS: danger to harm
- Obsessing about becoming psychotic

Myths:
- Postpartum OCD is great risk to harm baby
- OCD may turn into psychosis

Issues:
- Misdiagnosis by untrained professionals
- Reporting, hospitalization = victimization
Hotlines

1-800-PPD-MOMS
www.1800ppdmoms.org/

National Hopeline Network
1-800-784-2433 (800-SUICIDE)
www.hopeline.com/

National Suicide Prevention Lifeline
1-800-273-8255
Never fear!

- Most often:
  - Assess for active plan
  - Attend to serious nature of depression
  - Facilitate warm handoff (HMG) and follow up plan
  - Give resources - UMMHC brochure/handouts PSI warmline coordinators
  - “Please call and leave a message with our RN”
  - Follow up appointment
  - “Do not settle for not feeling like yourself. Keep reaching out until we find a plan that works!”
Treatment Options for Perinatal Patients at high risk for suicide

- Ideal - specialized out-patient and in-patient options
- Mother-baby day tx offers high-profile tx while promoting attachment and the infant/mother relationship.
- Lowers impact of trauma of PPD
- Assures safety
- Contextualized tx much more appealing to new moms
Psychiatric Hospitalization: Key Considerations

- R/o psychosis
- Undiagnosed Bi-Polar
- OCD vs Psychosis
- PPD vs. PTSD
- Pts that look “too good”
- Careful suicide screening
- Prescribed re: pregnancy and lactation
- Support for family

Consider pt demographics
- Breast pump available
- Lactation support
- Support choices
- Baby visits
- SLEEP
- Careful d/c planning
- Specialized referrals
In Patient Hospitalization

Key considerations:

- Careful case coordination
- D/c planning
- F/u appointment made
- Linked up with local support groups
- PSI coordinator
- List of resources, websites etc.
- Wellness plan in writing
- Given to family etc.
- Concrete strategies
2020 Mom current hospital recommendations:

- Childbirth education curriculum addresses maternal mental health disorders: Sx, risk factors, treatment, resources etc.

- Discharge/resource info to every patient.

- Protect maternal sleep surrounding delivery!

- L&D/NICU/Ped staff all trained on PMADs.
2020 Mom Insurer recommendations:

- Identify mental health providers with specialized and on-going training in PMADs in their directories. (Not a specialty in any health plan)

- Prevention/wellness materials sent to patients and providers with risk, screening tool, and treatment/consultation info.

- Measure rate of screening. (As with mammography)
2020 Mom Physician recommendations:

- Awareness posters in exam rooms (PSI etc.)
- Provide newly pregnant women with palm card or brochure.
- Familiarize staff with local resources. (Support groups, PSI reps, specialized mental health providers.)
- Take online training on PMADS.
Making referrals

What? When? Where? How??
Best options in Utah - Active suicide plan

- Nearest ER
- 911
- Give options
- Know limits of role
- Let go of outcome

- SLC
- UNI Mobile Crisis Team-
- Assessment in home
- (801) 587-3000
No imminent danger - scores > 10
> 6 for fathers

- Warm hand-off

- Help Me Grow ~
  www.helpmegrowutah.org
  801.691.5322

- Plan to check back in with in 24-48 hrs

- Utilize PSI coordinators list for safety planning and follow up

- See www.utahmmhc.com

- www.postpartum.net

- 1-800-PPD-MOMS

- Encourage checking ins panel and UMMHC website as well as PSI

- Ideally makes a safety plan for 24 hr care while waiting for an assessment with a specialist
ACCESS COMMUNITY RESOURCES

- Medicaid/ OHP
- Food Stamps
- Domestic violence support
- Alcohol and drug recovery programs
- Additional financial reserves for emergencies/ take-out food/ paid help
MAKING REFERRALS

- Helping a client obtain proper mental health referral can be extremely difficult.

- It is important to support the client through this process. Help her understand:
  
  - It may take some time to find the right professional.
  
  - Trust your instincts. If you feel uncomfortable, look for someone else.

- Keep reaching out!
MAKING REFERRALS

Important Considerations

- Making the call for the client may reinforce her feelings of helplessness and inadequacy, but:
- Helping client make first call to a mental health professional can significantly ease stress
- Give multiple referral options (support group, therapist, phone support, physician if medication indicated)
- UMMHC brochure
Perinatal Psychotherapists in UT

- See [www.utahmmhc.com](http://www.utahmmhc.com)
- Stay tuned for DOH database holdings
- November training will increase numbers
- Clients may need to ask therapists to get training, website etc.
- Ins lists, Medicaid providers = barrier
- Remind pt not to give up, keep reaching out, call back!
ADVOCACY

- Education for whole family
- Support for partners/children
- Help navigate systems
- Empower clients to seek appropriate treatment
- Educate peers and colleagues
- Implement policies at agency level
PHONE & EMAIL SUPPORT

- Often first line of support/contact
- Less intimidating for some

- [www.postpartum.net](http://www.postpartum.net)
- 1.800.944.4773
- [www.utahmmhc.com](http://www.utahmmhc.com)
SUPPORT GROUP

- Often led by PMD survivor
- Proven efficacy
- Provides education and concrete skills

www.postpartum.net

1.800.944.4773
Concrete Strategies for Support
How do I help her???
CULTURAL CONSIDERATIONS

- Beliefs/ traditions re: pregnancy, childbirth, postpartum
- Concepts of “mental health”
- Concepts of “mental health treatment”
- Seeking help outside of the family
- Beliefs re: “paths to wellness”
- Variation among individuals
- Degree of acculturation
- Your own cultural biases

(Munoz & Mendelson, 2005)
CULTURAL CONSIDERATIONS

• Language Barrier
  - PSI website www.postpartum.net translatable
  - EPDS available in 22 languages
  - “Beyond the Blues” in Spanish
  - “Healthy Moms, Happy Families” video - PSI. www.postpartum.net

• Other barriers

• Local community resources
CULTURAL CONSIDERATIONS

Culturally Relevant Interventions

1. Therapeutic principles & techniques with universal relevance
   (e.g., CBT, IPT, Support Groups)

2. Culturally appropriate intervention approaches
   - Involve members of culture in planning/development
   - Address relevant cultural values (e.g., familism, collectivism)
   - Religious & spiritual traditions
   - Acculturation
   - Acknowledge reality & impact of racism, prejudice, discrimination

3. Empirical evaluation of intervention outcomes
   (Munoz & Mendelson, 2005)
National CLAS Standards—Culturally & Linguistically Appropriate Services in Health Care

- The National CLAS Standards are a set of 15 action steps intended to advance health equity, improve quality, and help eliminate health care disparities by providing a blueprint for individuals and health and health care organizations to implement culturally and linguistically appropriate services.

- https://www.thinkculturalhealth.hhs.gov/elas
Sign That You're a Mom: You have to write "take a shower" on your to do list.
THERAPEUTIC RELATIONSHIP
Unique needs of the perinatal pt

- Important regardless of role
- Key messages;
  - While well- “I want you to tell me if you don’t feel like yourself”
  - When symptomatic- “I know what this is & I know how to help you get better”
- Holding environment
- Solution focused
- Practical
- Establish presence of “expert”
- “You are not alone”, “You are not to blame”, “You will recover”
PRIORITYING NEEDS & SERVICES

- Safety
- Needs of mother & family
- Recognize own scope of practice & role
- Implement threat of harm protocol
- Recognize potential for suicide with every patient
- Identify concrete ways to offer appropriate help
Everyone's all like "Look at my garden, made-from-scratch cake, and respectful children."
I'm over here like "We're breathing."
PRACTICAL HELP

- Mobilize/ Expand support network
- Family/ Friends
- Postpartum Doula/ Mom’s helpers
- Healthy Start-home visitation program
- Support groups
- Professional resources
- Wellness planning
HOUSEHOLD HELP

- Engage partner in support
- Housework re-prioritize
- Respite from baby care
- Arrange transportation to appointments
- Help her avoid detrimental influences
- Mom-baby groups often not helpful
SELF CARE

- Re-prioritize
- Change/ lower expectations
- Hydration
- Nutrition
- Sleep
- Exercise and sunlight
- Non-baby focused activity
SUPPORT FOR MOTHER-CHILD RELATIONSHIP

- Educate clients about effect of PMADs on children with compassion
- Model & encourage appropriate interactions
- Provide info on normal child development
- Encourage other caregivers to interact/care for baby
- Refer to resources which support attachment & early child education
- Circle of Security
- 211 & Help Me Grow
TREATMENT
Start with Wellness Plan

- Sleep
- Nutrition
- Omega-3
- Walk
- Baby breaks
- Adult time
- Liquids
- Laughter
- Spirituality

See www.utahmmhc.com
Sleep

Nutrition

Omega-3

- 4-6 hr stretch ~ Eye mask, ear plugs, sounds machine, sleep aid?
- Protein & fat @ every snack and meal, prenatals, Vit D & B-12?
- 1-9000 mg combined epa/dha through fish oils ~ Barleans, Carlsons etc
SNOWBALL

- Walk
- Baby breaks
- Adult time

- Daily gentle exercise, don’t push self
- 30-60 minutes of downtime alone
- Social support, calling friends, groups, online support, FB etc, Dates with partner!
**SNOWBALL**

- **Liquids**
  - Two large pitchers of H2O daily, avoid alcohol & caffeine

- **Laughter**
  - Funny movies, comedy on spotify, what used to make you laugh...if not any longer...seek help!

- **Spirituality**
  - What nourishes you – may have changed or not. Don’t make assumptions, get creative here, nature, scripture, church, mediation, yoga etc.
Key Point:

“You are not alone”
“You are not to blame”
“You will get better”
**PMAD resources- providers**

- [http://mail.ny.acog.org/website/DepressionToolKit.pdf](http://mail.ny.acog.org/website/DepressionToolKit.pdf) - ACOG Provider Toolkit and CME

- [www.MedEdppd.com](http://www.MedEdppd.com) - CDC sponsored research, training opportunities, care algorithms and a portal for patients

- [www.womensmentalhealth.org](http://www.womensmentalhealth.org) - The MGH Center for Women’s Mental Health - Reproductive Psychiatry Information Resource Center provides critical up-to-date information for patients in the rapidly changing field of women’s mental health.

- [https://www.mcpapformoms.org](https://www.mcpapformoms.org) - MCPAP for Moms promotes maternal and child health by building the capacity of providers serving pregnant and postpartum women and their children up to one year after delivery to effectively prevent, identify, and manage depression
PMAD resources

- [www.utahmmhc.com](http://www.utahmmhc.com) - Utah Maternal Mental Health Collaborative. Interagency networking, resource and policy development. See website for many resources, free support groups, etc.

- [www.postpartum.net](http://www.postpartum.net) - Postpartum Support International. 2020mom partner and largest perinatal support organization. Resources and training for providers and families. Free support groups, phone, and email support in every state and most countries.

- [http://www.mmhcoalition.com](http://www.mmhcoalition.com) - National Coalition for Maternal Mental Health- Social Media Awareness Campaign, ACOG, private & non-profit.
Local resources

  ~ Screens all callers with the EPDS and makes referrals

  ~ Home visiting services for eligible families support child development

- Early Childhood Utah: http://childdevelopment.utah.gov
  ~ Provides a variety of early intervention and developmental services
PMAD Resources


- www.womensmentalhealth.org - MGH Center for Women’s Mental Health: Reproductive Psychiatry Resource and Information Center. Harvard Medical School.

- www.motherisk.org - Medication safety and resources.
PMAD resources for families

- [www.utahmmhc.com](http://www.utahmmhc.com) - Utah Maternal Mental Health Collaborative. Interagency networking, resource and policy development. See website for many resources, free support groups, etc.

- Therapists

- Support groups

- Self-test

- Resources - training, posters, handouts etc.
PMAD resources for families

Crisis:

- University Of Utah Neuropsychiatric Unit Crisis Line (801) 587-3000. Free confidential support, including a mobile crisis team able to come to a residence when needed

Parenting babies:

- Erikson Fussy Baby Network (888) 431-BABY (431-2229) – Provides both Spanish and English support and advice for parents regarding infant fussiness, crying, and sleep issues

Fathers:

- www.postpartummen.com - This website is for fathers who are experiencing symptoms of postpartum anxiety and depression which is often called Paternal Postnatal Depression
PMAD resources for families

- **Adoption:**
  - [www.adoptionissues.org/post-adoption-depression.html](http://www.adoptionissues.org/post-adoption-depression.html)

- **For Birth Mothers:**
  - [http://www.lifeafterplacement.org](http://www.lifeafterplacement.org)
  - Provides support resources for women after placing a baby with adoptive parents. Also offers resources for hospitals to facilitate emotional healing for birth mothers at the time of placement.
PMAD resources for families

- PTSD-
  - [http://pattch.org](http://pattch.org) ~ Prevention and Treatment of Traumatic Birth – PATTCh
  - [www.tabs.org.nz](http://www.tabs.org.nz) ~ Trauma and Birth Stress New Zealand
  - [www.solaceformothers.org](http://www.solaceformothers.org) ~ Support groups, stories, referrals etc.
  - [www.samhsa.gov/nctic/trauma-interventions](http://www.samhsa.gov/nctic/trauma-interventions) ~ Trauma informed care federal guidelines
  - [http://pattch.org](http://pattch.org) ~ Prevention and Treatment of Traumatic Birth
  - [https://blogs.city.ac.uk/birthptsd/](https://blogs.city.ac.uk/birthptsd/) ~ International network for perinatal PTSD research
PMAD resources for families

Online Support

- [www.postpartumprogress.com](http://www.postpartumprogress.com) – by Katherine Stone, member of Postpartum Support International. Most widely read blog in the US on maternal mental health.

- [www.ppdsupportpage.com](http://www.ppdsupportpage.com) – Provides online support groups for women suffering from Pregnancy and Postpartum Mood & Anxiety difficulties.

Childcare:

- **Family Support Center** – 801-955-9110
  : [www.familysupportcenter.org/](http://www.familysupportcenter.org/)

- Free 24/7 care for children when parents are overwhelmed (Crisis Nursery). Three locations in Midvale, Sugarhouse, and West Valley
Support for Fathers

- Chat with an Expert for Dads: First Mondays
- Dads Website www.postpartumdads.org
- Fathers Respond DVD 8 minutes

Contact psioffice@postpartum.net to purchase DVD
Healthy Mom, Happy Family

13 minute DVD

Information, Real Stories, Hope

1-800-944-4773

www.postpartum.net/Resources
PSI Support for Families

- **PSI Support Coordinator Network**
  - Every state and more than 40 countries
  - Specialized Support: military, dads, legal, psychosis
  - PSI Facebook Group

- **Toll-free Helpline 800-944-4PPD** support to women and families in English & Spanish

- **Free Telephone Chat with an Expert**
PSI Chat with an Expert


- Every Wednesday for Moms
- First Mondays for Dads
- New Chats in development
  - Spanish-speaking
  - Lesbian Moms
PSI Membership
www.postpartum.net/Join-Us/Become-a-Member.aspx

- Discounts on trainings and products
- Professional and Volunteer training and connection
- PSI Chapter development
- Members-only section of website
  - List your practice or group, find others
  - Conference Presentations
  - Worldwide networking
- Professional Membership Listserves
  - PSI Care Providers; International Repro Psych Group
- Special student membership discount
- Serve on PSI Committees
“Perinatal Mood Disorders are not just the mother’s problem; they are not just the father’s problem; they are not just the family’s problem. Rather, Perinatal Mood Disorders are the community’s problem. We must begin to treat these disorders with a ‘community team’ approach - each supporter playing its part - if we are to truly ease the suffering of our postpartum families. This process begins with each of us today.”

Christina Hibbert, Psy.D., Arizona Postpartum Wellness Coalition
What could YOU do in your scope of work to support maternal mental health?
(541) 337-4960
arwslctherapist@gmail.com
Utahmmhc@gmail.com
Utahmmhc@gmail.com
www.utahmmhc.com
Appendix: Medication Literature Review
Reviewing the Literature: Cardiac Teratogenicity

Reading the Literature Critically with Our Patients and Our Colleagues
The Concept of “Confounding by Indication”
Malm et al Case Control Study:

- Study suggests confounding by indication with depression may have predisposed to adverse outcome rather than SSRI itself.

- Problem with study design: SSRI-exposed depressed women were compared with unexposed non-depressed women.

- Study that needs to be done: Randomized control data where depressed women are randomized to SSRI or placebo – but unethical in pregnancy

- This is the problem with case control data-based linked studies.

Vivien K. Burt MD PhD The Women’s Life Center Resnick Neuropsychiatric Hospital at UCLA
June 2016
Conclusion: Antidepressants and Risk for Cardiac Defects- (NEJM 2014)

- When adjusted for diagnosis of depression AND depressive-equivalent markers:
  - No statistically significant risk of any cardiac malformation with first trimester exposure to any antidepressants (SSRIs, SNRIs, bupropion)

- SSRIs
  - No significant association between use of paroxetine and right ventricular outflow tract obstruction

- No significant association between sertraline and ventricular septal defect

Vivien K. Burt MD PhD The Women’s Life Center Resnick Neuropsychiatric Hospital at UCLA
June 2016
Reviewing the Literature: Yet Another Issue - Autism
If ADs increase ASD risk, this information must be told!

- Keep in mind: Although studies do not prove that ADs increase ASD risk, women deciding whether or not to take ADs while pregnant understandably concerned.

- Although case-control studies may identify associations, they often overestimate magnitude of risk.

- Depressed women more likely to smoke, drink alcohol, take illicit drugs (generally not controlled).

- Apparent risk may actually be a result of confounding by indication.

- What we explained and discussed:
  No study is perfect - all are subject to confounders - including presence and severity of maternal illness (i.e., confounding by indication).

- Expectant mother’s health is important for health of mother and baby in pregnancy and the postpartum, and throughout the lives of mother and child.
Revisiting Issue of Autism

- New large Danish registry study
- Data from >600,000 children born 1996-2006. Nearly 9000 prenatal exposures to SSRIs, over 6000 with maternal affective history.
- Autism outcomes:
  - With prenatal SSRI ≈ 2%, without SSRI ≈ 1.5%
- If data restricted to children of mothers with prenatal affective disorder: no statistically significant risk in ASD with prenatal SSRI exposure.
- Comparing siblings with and without ASD, prenatal SSRI exposure not significant contributor to ASD risk.
- Conclusion: After controlling for confounding factors, no significant association between prenatal SSRI exposure and ASD in offspring.
Revisiting Issue of Autism

- Second new Danish study also suggests no risk of ASD
- Large cohort study
- 1996-2005 (f/u through 2009)
- Found that SSRIs prior to pregnancy rather than during pregnancy was statistically significantly associated with increased ASD risk.
- Conclusion- any increased risk was due to confounding by indication rather than by effect of SSRIs – i.e., maternal depression, not ADs increase risk for ASD

Other Issues to Consider

- No increased risk of miscarriage (Large systematic review and meta-analysis of pregnancy and delivery outcomes after exposure to antidepressants)
- No increased risk of stillbirth, neonatal mortality, post-neonatal mortality with antenatal SSRIs
- SSRIs and untreated maternal depression do not cause clinically significant lower birth weight.
- There is small statistically significant but probably not clinically significant reduction in length of gestation (about 3 days) with antidepressants and/or depression exposure in pregnancy

Neonatal Adaptability – 3rd Trimester Use of ADs

- Poor adaptability* (15-30%): Transient perinatal adverse events*: jittery, muscle tone, resp distress, suck – mostly mild, transient

- Infants exposed to antidepressants should be monitored after birth for 48 hours for additional care as needed.

- Prospective follow-up of affected infants: no adverse impact on intelligence, aberrant behaviors, depression, anxiety) at ages 4-5

- 12/14/2011: FDA update: after review of different studies, it is premature to reach any conclusion about a possible link between SSRI use in pregnancy and PPHN.

- Recommendation: FDA advises healthcare professionals not to alter their current clinical practice of treating depression during pregnancy.