



Perinatal Mental Health : Disorders and treatment considerations

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ECHO 2019

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Session Objectives



- Understand the symptoms, prevalence, and impact of perinatal mood & anxiety disorders
- Describe prevention strategies, treatment options, and provider resources

+ Disclosures

- I have no actual or potential conflict of interest or financial gain in relation to this program/presentation

+ Postpartum Support International Utah chapter

- www.psiutah.org
- Utah Resources
- Utah Chapter www.postpartum.net
- Multi-agency stakeholders
- Legislative arm
- Policy & Project development
- Social Support expansion
- Meets bi-monthly on first Fridays 8:30-10:30 am @ U of U





Defining the issue:

What is Maternal Mental Health?

PMADS?

Emotional Health complications

Not only depression

Not only postpartum!

Perinatal Mood, Anxiety, Obsessive,
Trauma, & Psychotic disorders

Why is it relevant to medical, birth, and
mental health professionals?





How is Tx any different than for
“regular” depression & anxiety??



- Essentially, **EVERYTHING** is different about perinatal mental health treatment due to context!

+ How is Tx any different than for “regular” depression & anxiety??

- Physiologically unique timeframe~ etiology, hormonal regulation, metabolism etc.
- We are treating TWO people- mom & baby
- Symptomatology unique to time frame-may be outside diagnostic language and personal bias/experience
- Physical/emotional/psychological/relational stressors related to pregnancy, birth, postpartum adjustment, identity, pain & healing, losses etc. all relevant multi-factorial contributors

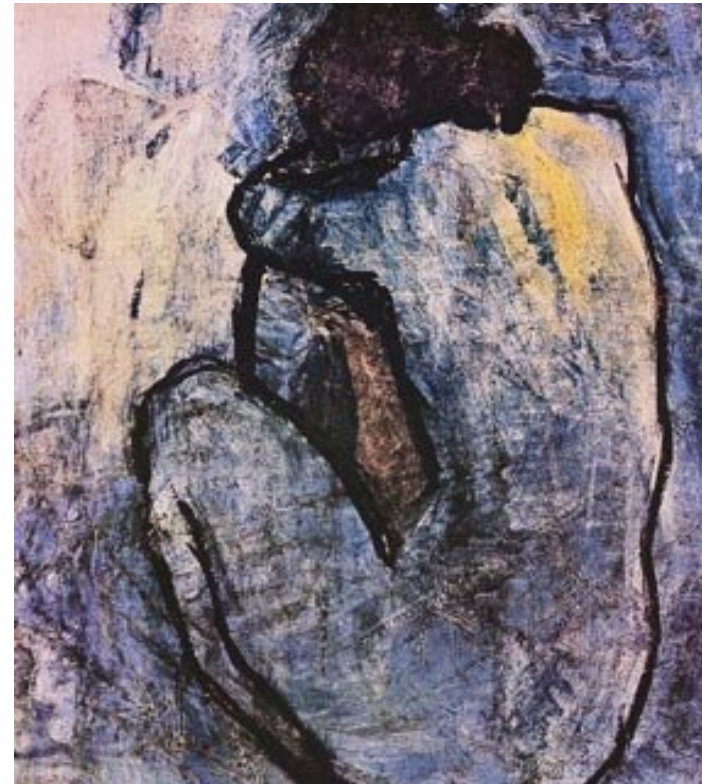
+ Issues in primary, obstetric, pediatric, & psychiatric care

- 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



+ What don't we learn in graduate education?

- No perinatal mental health training programs in US
- DSM makes little/no distinction between perinatal psychiatric illness and others
- “Postpartum Onset” specifier limited to first 4 weeks PP.
- No specifier for pregnancy
- Old myths perpetuate





DEPRESSION IN WOMEN

- Leading cause of disease-related disability
- Reproductive years-highest risk





Did you know...

- 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 more new cases of mothers suffering from Maternal Depression each year as women diagnosed with breast cancer.
- 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.

+ Maternal Mortality

Suicide is the second
leading cause of death
in the first year
postpartum



Perinatal Mood, Anxiety, Obsessive, & Trauma related Disorders

Pregnancy and the First year Postpartum

- ❑ Psychosis- Thought Disorder or Episode~ 1-3%
- ❑ Major Depressive Disorder~ 21%
- ❑ Bi-Polar Disorder~ 22% of PPD
- ❑ Generalized Anxiety~ 15%
- ❑ Panic Disorder~ 11%
- ❑ Obsessive Compulsive Disorder~ 5-11%
- ❑ Post Traumatic Stress Disorder ~ 9%



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 Disorders

- Baby Blues – Not a disorder
- Major Depressive Disorder
 - Most researched
- Bipolar Disorder
 - Mania high risk for Psychosis
 - Immediate Assessment





Baby Blues

- 80%
- Transient.
- Overwhelmed, tearful, exhausted, hypo-manic, 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”
- Also a newer PPD hypothesis related to Zulresso- first PPD specific tx

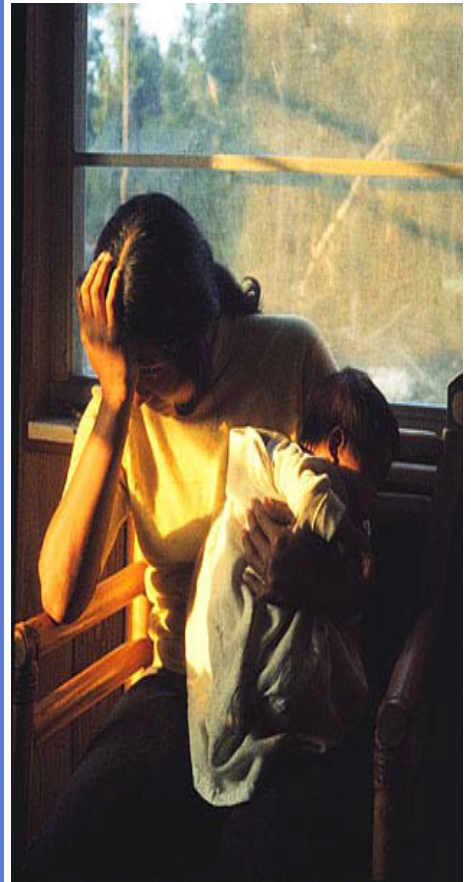
(Altemus, et al., 2004)



Antenatal Depression Prevalence 10-20%

➤ 14%

(JAMA 2013)





JAMA 2013

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- 1 in 7 women = PPD
- 30% episode before pregnancy
- 40% >1 during pregnancy
- One in five of the women had thoughts of harming themselves
- **Nearly two-thirds had comorbid anxiety disorders**
- **Notable- 22.6% had bipolar disorders**
- Takeaway- Beware of comorbid anx (may trouble mom more than depressive sx)
- Screen for Bipolarities before initiating Tx, particularly SSRI Tx

Wisner et al 2013

Onset Timing, Thoughts of Self-harm, and Diagnoses in Postpartum Women With Screen-Positive Depression Findings

JAMA Psychiatry. 2013;70(5):490-498

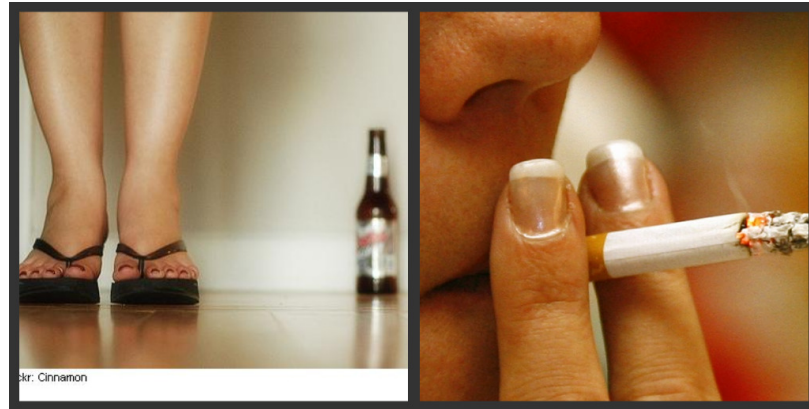
+ Antenatal Depression Characteristics

- 60%+ PMADs begin in pregnancy
- Starts 1-3 months postpartum, up to first year
- **Timing may be influenced by weaning**
- 60%+ PMADs start in first 6 weeks
- Lasts months or years, if untreated
- Symptoms present most of the time
- Can occur after birth of any child-not just 1st
- DSM V recognizes episodes in pregnancy and in the first 4 weeks PP with “peripartum onset” specifier

+ PMADs

Common Comorbid Disorders

- Alcohol abuse
- Substance abuse
- Smoking
- **Eating disorders**
- **Anxiety disorders most common comorbid dx perinatally**



The Doctor said I needed
to start drinking more wine.

Also, I'm calling
myself "The
Doctor" now.

someecards
user card





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

Perinatal Specific

- **Agitated depression**
- **Usually an anxious component**
- Anhedonia typically not regarding infant and children
- Looks “Too good”
- Scary thoughts

Perinatal Specific

- Often highly functional
- Will hide sx
- Intense shame
- Passive/Active suicidal ideation
- Sleep disturbances beyond “normal”
- Typically highly functional

+ Perinatal Depression cont.: **Most overlooked sx**

Perinatal Specific

- Anger
- Rage
- Irritability
- Discord with partner
- Impatience
- Guilt

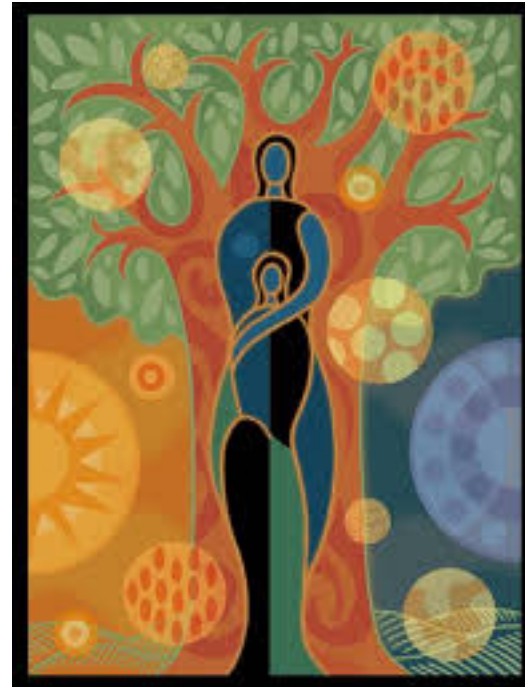
Perinatal Specific

- Internalized blame and shame
- May have some sx of OCD/PTSD/GAD
- May or may not also meet full criteria
- Sx may be taken out on older children primarily

+ Perinatal Depression cont.

Perinatal Specific

- Disinterest in Baby
- Inadequacy
- Disinterest in sex
- Over-concern for baby
- Hopelessness & shame related to help-seeking





Coding ~ DSM V & ICD-10

- **“With anxious distress” ~ Common is perinatal presentations**
- “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.



Coding ~ DSM V & ICD-10

- “**with anxious distress**” specifier may only be used with patients who exhibit at least two of the following symptoms during most of an episode:
- Feeling keyed up or tense
- Feeling unusually restless
- Difficulty concentrating due to worry
- Fear that something awful may happen
- Feeling loss of control of himself or herself

+ Bipolar Disorders

Bi-Polar I

- Manic episodes and possible depressive
- Mania is high risk for Psychosis
- Immediate Psychiatric Assessment
- Bipolar I vs. Bipolar II “Hypomanic episodes”
- **Bipolar II “PPD Imposter”**



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

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% (Bleharet al., 1998)

50% (Freeman et al., 2002)

- High relapse rates with Lithium treatment discontinuation:

50% (about same as non-pregnant)

(Viguera & Newport, 2005)

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Looking at FEPP

- First episode of postpartum depression (FEPP)
- Vs FENPP (non-postpartum)
- Compared to FENPP depressive patients, women with FEPP depression had higher rates of bipolar disorders
- More hypo/mania in first degree relatives
- Psychotic symptoms, atypical features, mixed depression, younger age at onset, high number of prior episodes, episodes of short duration, switches on antidepressants, seasonality of mood episodes as well as mood episodes with free intervals were found to be more frequent in FEPP depressives

(J Affect Disord. 2012 Feb)



The takeaway

- A psychiatric episode in the immediate postpartum period significantly predicted conversion to bipolar affective disorder during the follow-up period
- Results indicate that the presentation of mental illness in the early postpartum period is a marker of possible underlying bipolarity

[Arch Gen Psychiatry](#). 2012 Apr;69(4):428-34. doi: 10.1001/archgenpsychiatry.2011.157. Epub 2011 Dec 5 **Psychiatric disorders with postpartum onset: possible early manifestations of bipolar affective disorders.** [Munk-Olsen T](#), [Laursen TM](#), [Meltzer-Brody S](#), [Mortensen PB](#), [Jones I](#).



Real moms speak...BP I & II

- I've been on several anti-depressants but never thought they helped much so I just stopped".
- "I always worried about it since my sister and aunt have it but I thought I'd get lucky. It wasn't until I became psychotic two weeks after he was born that I finally could see it. I'll never get that time back and I feel so angry."
- "I called them my "up times and down times" before- it never stopped me from living my life. But I carry so much shame from things I did while "up". Things my husband and friends don't know about. I don't want my children to see it either."
- "I'm just so afraid of passing it to her. But I wanted a child badly."

+ 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 any 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)



OCD - General

■ Obsessions

- Intrusive thoughts/ images
- Ignore or suppress
- Awareness

■ Compulsions

- Repetitive behaviors/ mental acts
- Reduce stress
- Prevent dreaded event

+ Perinatal OCD

- Pregnancy: 0.2 –1.2%
- Postpartum: 2.7 –3.9%
- (Gen. Pop. 2.2%)
- 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

(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 to 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”

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 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



+ Other perinatal considerations...

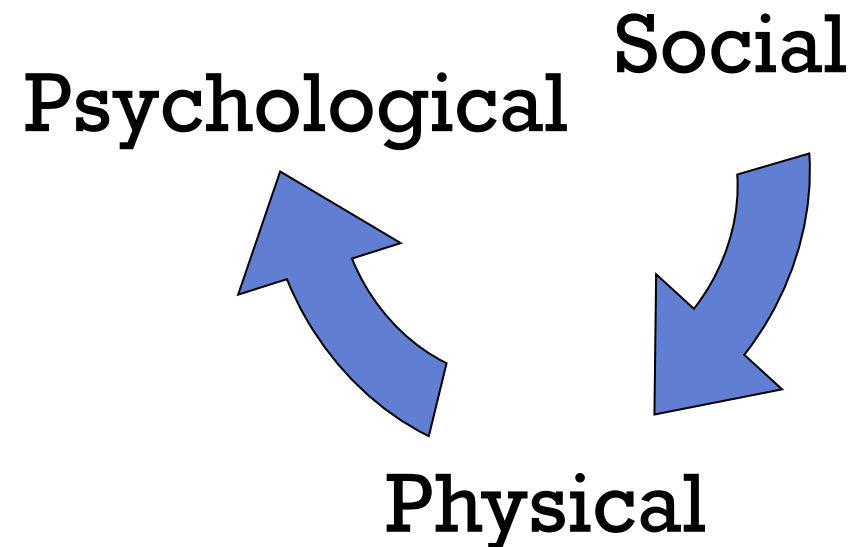
Although not well researched or included in most data set, the following populations and reproductive health events also experience and represent risk for PMADs.

- Same-sex parents
- Fathers
- Miscarriage (Any length of pregnancy)
- Stillbirth
- Adoption
- Infertility
- Abortion



+ 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



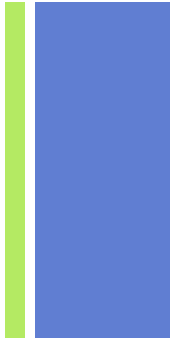


Etiology- Current theories

- Neuroendocrine vulnerability/sensitivity
- Progesterone withdrawal
- Retroviral reactivation
- Stressors combined with the above = HPA axis dysregulation



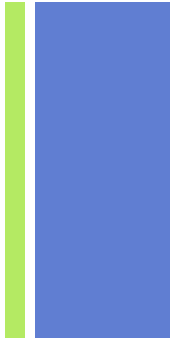
Folate and the MTHFR ~ methylenetetrahydrofolate reductase



- Folate, available as folic acid, folinic acid and 5-methyltetrahydrofolate (5-MTHF) or L-methylfolate,
- Functions as a coenzyme in the synthesis of nucleic acids and amino acid metabolism.
- An important folate-dependent reaction is the conversion of homocysteine to methionine in the synthesis of S-adenosyl-methionine.
- Folate undergoes transformation to L-methylfolate, a biologically active form of folate which crosses the blood-brain barrier;
- 5-MTHF is biologically active.



Folate and the MTHFR ~



- Folic acid and folinic acid are synthetic forms of dietary folate (Prenatal vitamins) which require the enzyme methylenetetrahydrofolate reductase (MTHFR) for conversion into bioactive forms
- This enzyme is affected by a polymorphism common in patients with depression which impairs transformation to L-methylfolate and is associated with MDD
- Some patients with depression may exhibit relatively low folate levels and experience impaired methylation and monoamine neurotransmitter metabolism.
- Most, but not all, studies report an association of low folate levels and an increased risk of depression
- Low blood folate has been associated with a poorer response to treatment with antidepressants in MDD and higher folate levels at baseline appear associated with a better response
- [Kristina M. Deligiannidis](#), M.D.^a and [Marlene P. Freeman](#), M.D. 2013



Folate and the MTHFR- Supplemental L-methylfolate



- There has been one study published on the efficacy of folate monotherapy or augmentation therapy for perinatal depression.
- Epidemiological data do not demonstrate that higher folate intake during pregnancy mitigates against the development of postnatal depression
- Folate has been studied in a placebo-controlled trial an adjunctive treatment to fluoxetine, with significantly greater improvement in the folate group, a difference most pronounced in women [[43](#)].
- 94% of women who received fluoxetine with the addition of folate 500 mcg per day were treatment responders, compared to 61% of those who received fluoxetine and placebo.
- More recently, results were mixed from two multicentre placebo-controlled RCTs examining the use of L-methylfolate with on-going antidepressant therapy for MDD; improvement was found with 15mg per day but not the 7.5 mg per day dose



EnBrace HR/MF

- A prenatal supplement with methylfolate for the treatment and prevention of depression in women trying to conceive and during pregnancy.

Freeman MP, Savella GM, Church TR, Góez-Mogollón L, Sosinsky AZ, Noe OB, Kaimal A, Cohen LS. Ann Clin Psychiatry. 2019 Feb;31(1):4-16.

+ EnBrace HR/MF cont.

- Many women are folate deficient or lack the enzyme (5,10-methylenetetrahydrofolate reductase or MTHFR) which converts folic acid to its active form, L-methylfolate.
- Previous reports suggest that people with lower folate levels are at higher risk of major depression or may experience more severe depressive symptoms.
- Other studies indicate that in folate deficient patients, antidepressants may be less effective or may take longer to take effect.
- Several clinical trials have shown that folic acid and related compounds (i.e., folinic acid and L-methylfolate) may reduce depressive symptoms, either when taken alone or in combination with an antidepressant

+ EnBrace HR/MF cont.

- Open-trial
- Participants received EnBrace-HR for 12 weeks.
- Prescription prenatal supplement containing 5.53 mg L-methylfolate, 1 mg folic acid and 2.2 mg folinic acid.
- At enrollment, women in Group 1 were euthymic and planned to discontinue antidepressants during pregnancy.
- The women in Group 2 were depressed.

+ EnBrace HR/MF cont.

- MDD was confirmed using the Mini-International Neuropsychiatric Interview, and the severity of depressive symptoms was assessed with the Montgomery-Åsberg Depression Rating Scale (MADRS).
- Group 1 participants (N = 11) experienced lower rates of depressive relapse (27.3%; $P = .005$) than what would be expected in women who discontinue antidepressants during pregnancy. Compared to data from a previous study which measured rates of relapse in women with histories of MDD, about 67.7% of those women relapsed after discontinuing antidepressant.

+ EnBrace HR/MF cont.

- Group 2 participants (N = 6), who were depressed at the time of enrollment, experienced significant improvements in the severity of depressive symptoms. Five of the women (83.3%) experienced an improvement in depression of > 50%, and one improved by 33.3%. One adverse event was reported, a hospitalization for depression.
- This pilot study suggests that EnBrace HR may be helpful for not only for preventing depressive relapse during pregnancy but may also have antidepressant effects

+ 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

American Academy of Child
Adolescent Psychiatry. 2007 Jun;
46(6):737-46.

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; Rini et al., 1999; Sandman et al., 1994; Wadhwa et al., 1993)



IMPACT OF POSTPARTUM DEPRESSION: Infant Development

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- 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:

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Potential Mediating variables:

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



IMPACT OF POSTPARTUM DEPRESSION: Older Children

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Children exposed to maternal depression as infants:

- More conduct problems

(Beck C.T., 1999: Meta-analysis of 33 studies)

- Lower perceptual performance scores at age 4

(Brennan et al., 2000)

- More behavior problems and lower vocabulary scores at age 5

(Brennan et al., 2000)

- More likely to express negative cognitions of hopelessness, pessimism and low self-worth at age 5

(Murray, Woolgar, Cooper, & Hipwell, 2001)

- Lower levels of social competence at ages 8-9





IMPACT OF POSTPARTUM DEPRESSION cont.

- More frequent non-routine pediatrician visits (Cheet al., 2008)
- Current depression is associated with larger effect than past depression
- Infants of depressed mothers experience more impaired parenting than older children of depressed mothers
- Economically disadvantaged mothers experience negative effects of their depression to a greater extent (Lovejoy et al., 2000)
- Significantly more likely to discontinue breastfeeding between 4 and 16 weeks postpartum. (Field 2008) (Ystrom 2012)
- PPD and low support leads to early weaning (Mathews et al JHL 30(4) 480-487 2017)

+ Protective benefits of breastfeeding

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

Dennis & McQueen, (2009), Hale (2007)

Kendall-Tackett, Cogig & Hale, (2010)

Kendall-Tackett (2015)



+ Universal Primary Prevention in practice

- Educate “If you’re not feeling like yourself”
- Screen - EPDS or PDQ 9
- Refer – www.psiutah.org
- Provide info/resources – PSI/EE Brochure
- Wellness planning - SUNSHINE



SCREENING –What tool?

■ Edinburgh Postnatal Depression Scale (EPDS)

(Cox, Holden & Sagovsky, 1987)

- 10 item self-screen
- Pre & postnatal use
- Copyright-free
- Not a diagnostic tool
- Not to override clinical assessment
- Available in 23 languages

■ Postpartum Depression Screening Scale (PDSS)

(Beck & Gable, 2000)

■ Patient Health Questionnaire (PHQ-9)

+ 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 Reactions to hormonal changes

- Puberty, PMS, hormonal birth control, pregnancy loss



Risk Factors cont.

■ Endocrine Dysfunction

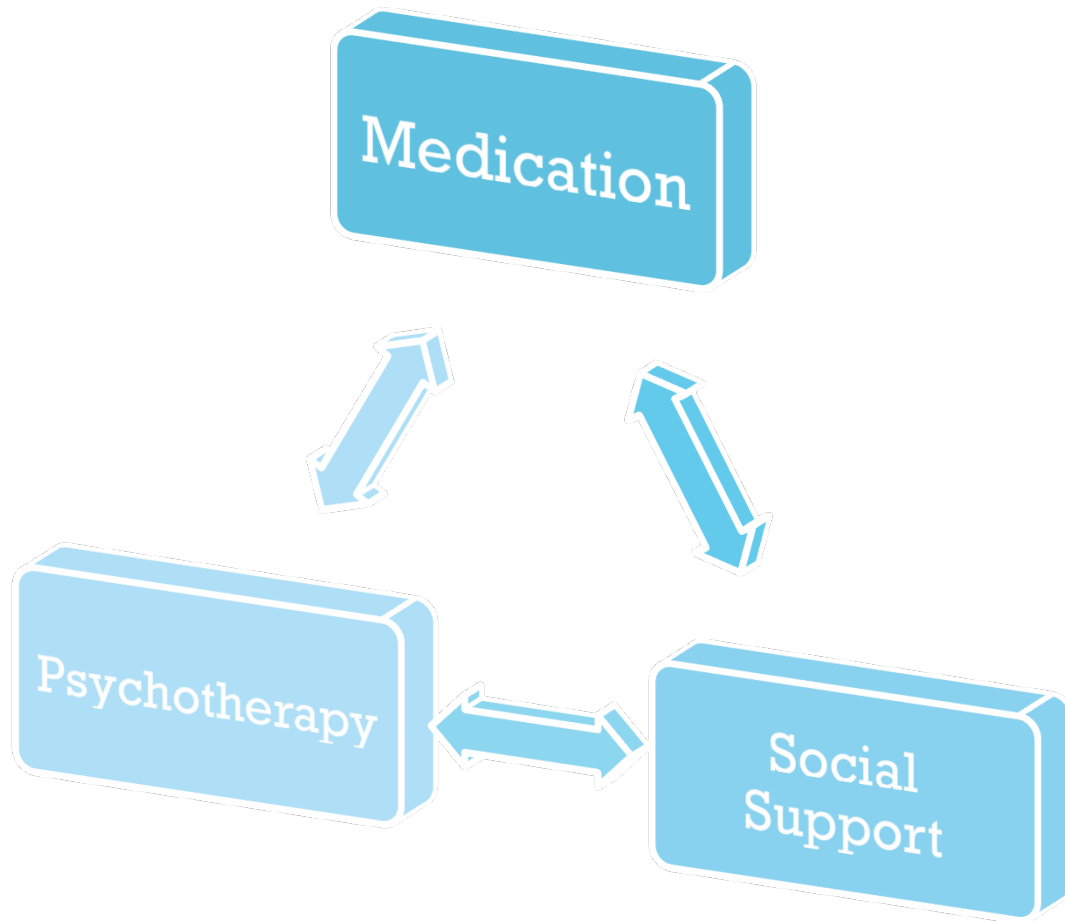
- Hx of Thyroid Imbalance
- Other Endocrine Disorders
- Decreased Fertility

■ Social Factors

- Inadequate social support
- Interpersonal Violence
- Financial Stress/Poverty



+ Treatment: The Gold Standard:





BEHAVIORAL & SOCIAL SUPPORT TREATMENT

Psychotherapy:

Crisis intervention

IPT, CBT, MCBT, DBT

Individual, couples, family

Support groups

Phone/ email support



+ HOSPITALIZATION

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- When safety/functioning level warrant
- Outpatient care
- Multiple factors should be considered while inpatient
- Always necessary for psychosis and often for 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

+ Zulresso- FDA approval March 2019

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 extra-synaptic 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>.



Non-Pharmacological Tx

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

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
2007

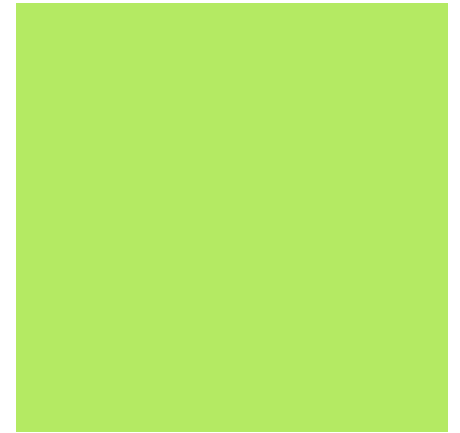


- For information on medication while breastfeeding, call Pregnancy RiskLine:
~ Mother-to-Baby

Salt Lake: 1-800-822-BABY (2229)

CULTURAL CONSIDERATIONS

- Language Barriers
 - 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



Prevention & Tx:
CONCRETE STRATEGIES



Prevention & Treatment Wellness Planning ~ SUNSHINE!

- **S**leep
- **U**nderstanding
- **N**utrition
- **S**upport
- **H**umor
- **I**nformation
- **N**urture
- **E**xercise



See www.psiutah.org



SUNSHINE

- **SLEEP-** Encourage a 4-6 hour stretch of sleep once baby can go this long and/or be fed by another support person. This may require being in another room, a sound machine, ear plugs, eye mask, and/or sleep aid. The first part of the night often works best
- **UNDERSTANDING-** Help patients seek qualified mental health care. Cognitive behavioral therapy & interpersonal therapy have been shown most effective in preventing and treat PMADs. Psychoeducation is an important part of this process
- **NUTRITION-** Patients will benefit from continuing on a high quality prenatal with methycobalamim or adenosylcobalamin (overrides the MTHFR polymorphism), balancing insulin levels with fats and high quality protein, and drinking at least two pitchers of water daily. Omega-3 fatty acids are proven treatments at 1000-3000 mg combined EPA and DHA



SUNSHINE cont.

- **SUPPORT-** Connect patients to local support groups which help de-stigmatize and minimize the isolation of PMADS. (Help Me Grow UT or www.postpartum.net). Prescribe pts ask for help with household tasks and baby care.
- **HUMOR-** When women cannot connect to their joyful, playful side or find humor like they used to, this can be an indicator more intervention is warranted. Explore ways mothers can find levity and laughter
- **INFORMATION-** Provide copies or a link to the EPDS for self-assessment very two weeks so patients can monitor their progress over time and know to reach out if they have thoughts of self-harm.



SUNSHINE cont.

- **NURTURE-** Mothers will be more likely to take care of themselves when a provider “prescribes” at least an hour to oneself daily, time in nature, and/or engaging in any restorative activities they enjoy such as yoga, spirituality, time with friends etc.
- **EXERCISE-** Encourage at least 20 minutes of gentle walking as well as any exercise that the patient enjoys. Movement is essential and can also be a part of retaining personal identity, helpful for recovery from depression and anxiety



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

+ Best options in Utah

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- 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- high risk

- Ideally makes a safety plan for 24 hr care while waiting for an assessment with a specialist
- Help Me Grow ~ www.helpmegrowutah.or
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.psiutah.org
- www.postpartum.net
- 1-800-PPD-MOMS
- Encourage checking ins panel and UMMHC website as well as PSI



Psychiatric Hospitalization: Key Considerations

- R/o psychosis
- Undiagnosed Bi-Polar
- OCD vs Psychosis
- PPD vs. PTSD
- Pts that look “too good”
- Careful suicide screening
- Prescriber ed 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



Provider Resources

- www.mededppd.com – CDC sponsored site for providers and families. Excellent current research and free CEs.
- 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.
- (800-944-4773) -Postpartum Support International. Largest perinatal volunteer organization with free phone support/groups in every state and most developed countries.
www.postpartum.net
- St Marks Perinatal IOP - (801) 268-7438

+ PMAD resources



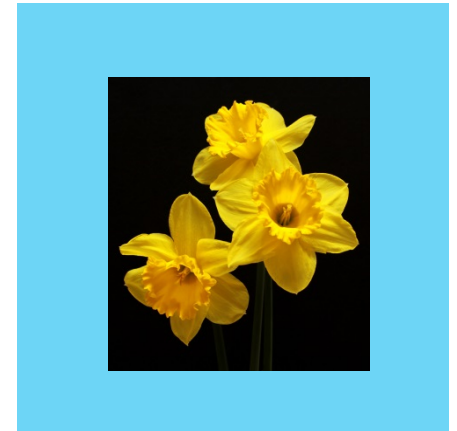
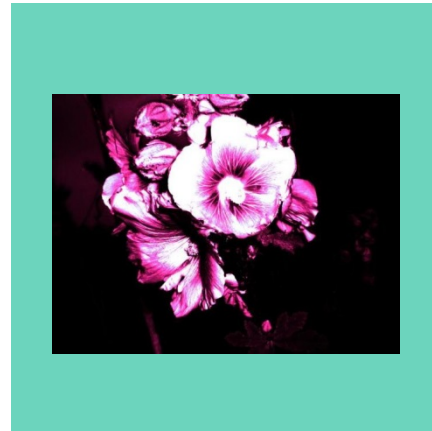
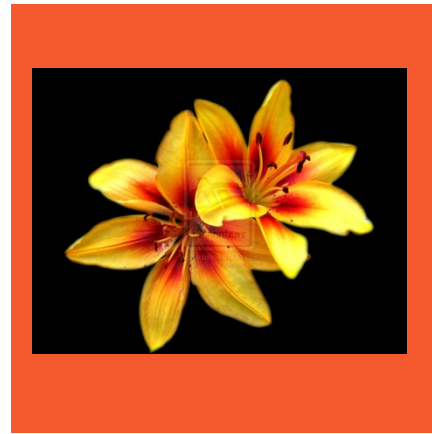
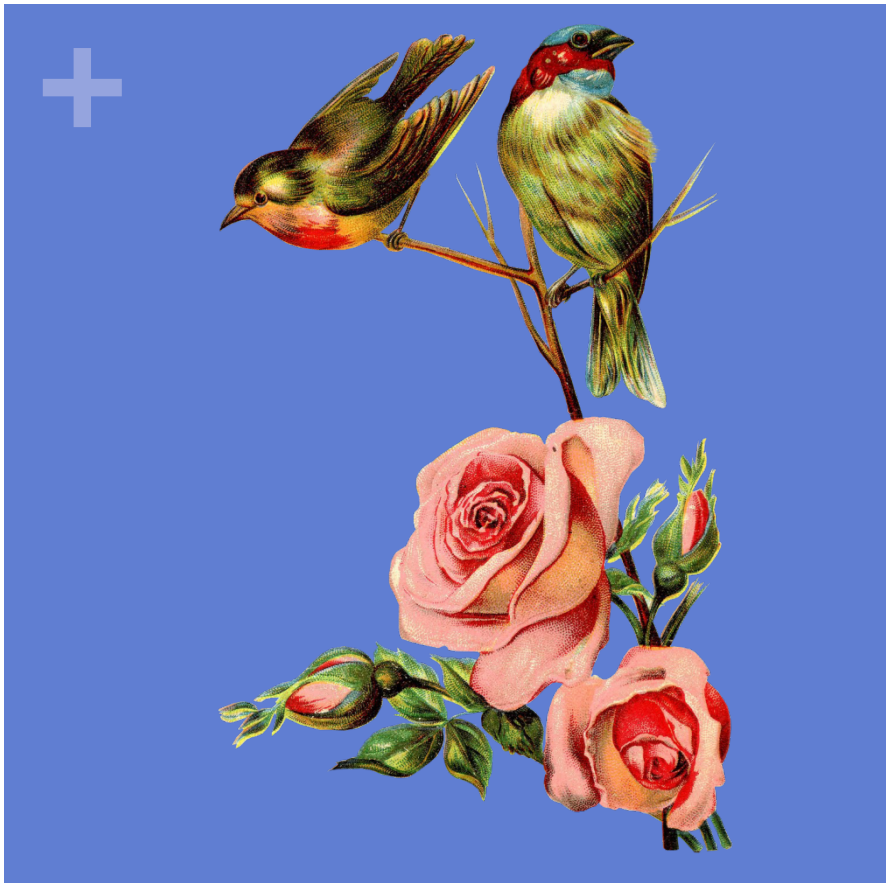
- www.psiutah.org - PSI Utah/Utah Maternal Mental Health Collaborative. Interagency networking, resource and policy development. See website for many resources, free support groups, etc.
- www.postpartum.net - Postpartum Support International. 2020mom partner and largest perinatal support organization. Resources and training for providers and families. Free support groups, phone, and email support in every state and most countries.
- <http://www.mmhcoalition.com> -National Coalition for Maternal Mental Health- Social Media Awareness Campaign, ACOG, private & non-profit.



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- What will YOU do in your scope of practice to increase detection and treatment?





Additional Resources

The following slides are for additional information for help and support

+ PSI Support for Families

90

- **PSI Support Coordinator Network**
- www.postpartum.net/Get-Help.aspx
 - 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

- www.postpartum.net/Get-Help/PSI-Chat-with-an-Expert.aspx

- **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

PSI Public Awareness Posters

"You are not alone"



You are not alone.

1 in 7 Mothers
experience depression or anxiety
during pregnancy or postpartum

exhaustion, appetite or sleep disturbances, mood swings, anxiety, feeling overwhelmed

Call your healthcare provider or
Contact us for support and resources
1-800-944-4PPD
www.postpartum.net



"Cómo me hubiera gustado saber que."

Una de cada siete madres
experimenta depresión • ansiedad
durante el embarazo • posparto

Consumo, cambios en el apetito y el sueño, cambios en el estado de ánimo, ansiedad, sentirse abrumada

Llama a tu médico o a un profesional de salud •
Llámenos para recibir apoyo y referencias a
varios recursos que te pueden ayudar
1-800-944-4PPD



Did you know?
Fathers can get depressed and anxious
after the birth of a child, too

*sadness, irritability and anger, low motivation,
distancing, sleep or appetite disturbances*

Call your healthcare provider or
Contact us for support and resources
1-800-944-4PPD
www.postpartum.net



Sabías que?
Papás también pueden estar deprimidos
después del nacimiento de un bebé

*Tristeza, irritabilidad y enojo, baja motivación,
distanciamiento, cambios en el apetito y el sueño*

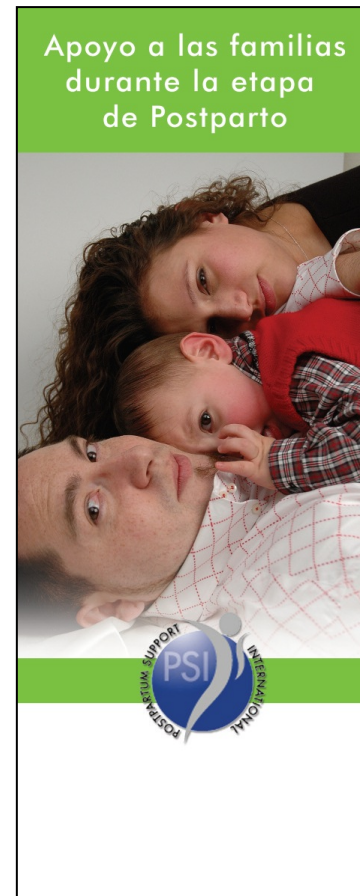
Llama a un profesional de salud •
Recibir apoyo y referencias a
recursos que te pueden ayudar
1-800-944-4PPD
www.postpartum.net



<http://postpartum.net/Resources/PSI-Awareness-Poster-.aspx>

+PSI Educational Brochures English & Spanish

www.postpartum.net/Resources/PSI-Brochure.aspx



PSI Educational DVDs

95



Healthy Mom, Happy Family

13 minute DVD

Information, Real Stories, Hope

1-800-944-4773

www.postpartum.net/Resources

+ Support for Fathers



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- 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

+ Provider Resources



- www.2020momproject.org -California Maternal Mental Health Collaborative.
- 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> -National Coalition for Maternal Mental Health- Social Media Awareness Campaign, ACOG, private & non-profit.
- 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.

