# Maternal and Paternal Mental Health: MOOD DISORDERS THAT SHOULD NOT BE MISSED







Child and Adolescent Psychiatrist
Reproductive and Infant Mental Health
UCSD Health Sciences Center/Rady Children's Hospital
Transforming Mental Health



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#### **OBJECTIVES**

- 1. Identify general epidemiology of mood disorders present in the reproductive period
- 2. Identify and explore the origin of Paternal Depression
- 3. Identify and explore Postpartum Psychosis as a true medical emergency





#### **GENERAL STATISTICS**

Maternal Perinatal Depression 15-20%

Maternal Postpartum Depression(PPD) 15% or 1/7

Maternal Perinatal and Postpartum Anxiety Disorders 10-20%

Maternal Peripartum OCD 2-5%

Maternal Postpartum Psychosis 1-2/1000 -Infanticide 4% and Suicide 5%

\*\*Up to 50% of maternal perinatal depression remains undetected

Paternal Postpartum Depression 10%-20%

Paternal Anxiety Disorders up to 18%

\*\*50% of pregnancies nationally unplanned

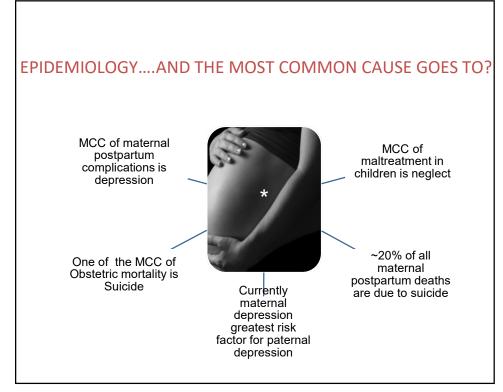
0-3 age range is the most likely to be maltreated

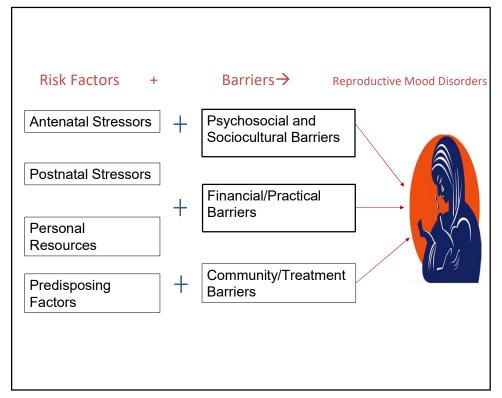
10-14% of kids <5 have social and emotional problems



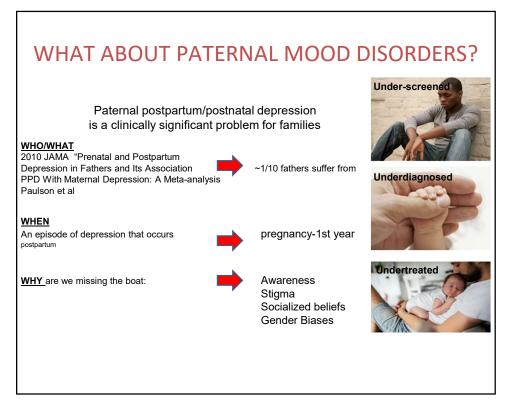
Meltzer-Brody Dialogues in Clinical Neuroscience - 2011
Postpartum Support International
Paulson et al, Jama 2010
Cameron et all, Journal Affective Disorders 2016
US Dept of Health and Human Service 2010
Child Trends-Aces in USA)
Zero to Three

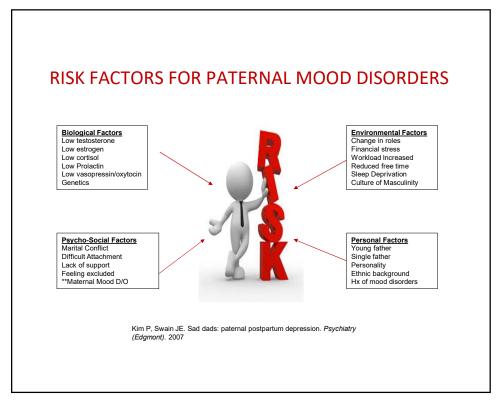
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# WHY THE BIG FUSS?? "HOW WE BEGIN IS WHO WE BECOME" IN UTERO Epigenetics, Unconscious Memories, and The Womb HOW WE BEGIN IS WHO WE BECOME IN UTERO Epigenetics, Unconscious Memories, and The Womb IN UTERO IN UT





#### PATERNAL PERINATAL DEPRESSION-Not So Typical



#### Signs and Symptoms

- · Withdrawal or avoidance
- Detachment
- Indecisiveness
- Cynicism
- Anger attacks/Impulsivity
- Affective rigidity
- Self-criticism
- Irritability
- Helplessness
- · Alcohol/drug use
- Increased marital conflict
- · Decreased intimacy
- · Partner violence
- · Somatic symptoms
- · Negative parenting behaviors

Kim & Swain, 2007; Schumacher, Zubaran, & White, 2008; Wilson & Durbin, 2010. Paternal Postpartum Depression: What Health Care Providers Should Knox. Masset, Anna K. et al. Journal of Pediatric Health Care , Volume 27 , Issue 6, 479 - 485

"That first year left me feeling confused, exhausted, helpless, alone and trapped. There were moments when I felt confident and thankful to be a dad, but for the first year the overarching feeling was that I had been duped into believing I could do this fatherhood thing well.

http://www.postpartumprogress.com/depre ssion-in-men-a-dads-story-of-malepostpartum-depression

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#### **GENERAL SCREENING OPTIONS**

- Tools
  - Edinburgh Postnatal Depression Scale
  - Postpartum Depression Screening Scale
  - PHQ-9
  - GAD-7
  - PTSD Checklist
  - · Mood Disorder Questionnaire
- Diagnostic Interview
- · Physicians
- · Specialty Practitioner
- · Adjunct Providers

Name: Your Date of Birth: Baby's Date of Birth:		Address:					
				As you	are pregnant or have recently had a baby, we wo swer that comes closest to how you have felt IN TH	ald lik	te to know how you are feeling. Please check AST 7 DAYS, not just how you feel today.
				Here is	s an example, already completed.		
have felt happy:   Yes, all the time   Yes, most of the time   This would mean: "I have fe     No, not very often   Please complete the other q		elt happy most of the time" during the past week.					
In the	past 7 days:						
0 0 0 0	Not quite so much now Definitely not so much now Not at all are looked forward with enjoyment to things As much as I ever did		Things have been getting on top of me Yes, most of the time I haven't been able to cope at all Yes, sometimes I haven't been coping as well as usual No, most of the time I have coped gute well No, I have been coping as well as ever				
0 0		-/	Yes, most of the time Yes, sometimes Not very often				

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#### **ANDREA YATES**

Who was she and what did she do?

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#### **ANDREA YATES**

What was her diagnosis?

#### **ANDREA YATES**

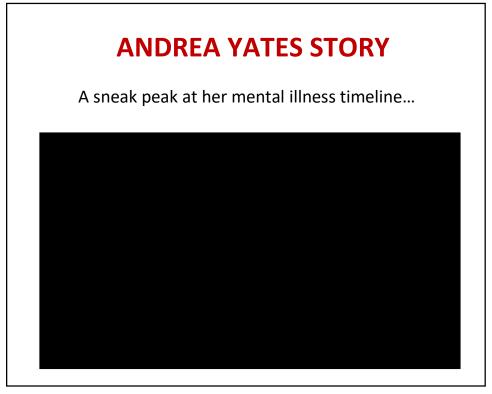
What were her risk factors?

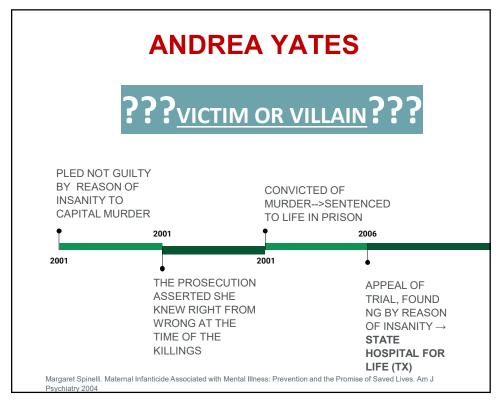
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#### **ANDREA YATES**

What would you have done differently?

This point isn't to be punative or critical...its about being proactive and well informed.





#### **IMPACT OF UNTREATED Postpartum Psychosis**







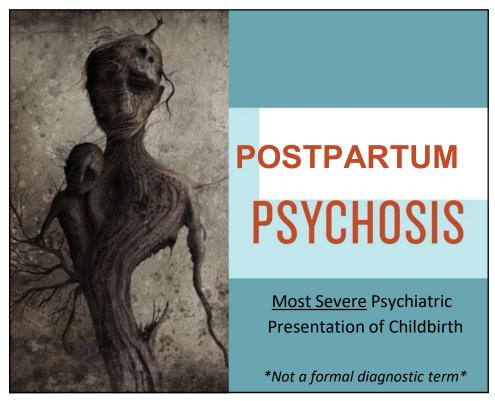






Postpartum Psychosis has no socioeconomic class boundaries & all mothers are at risk

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# POSTPARTUM PSYCHOSIS

**HIPPOCRATES:** DESCRIBED AS A KIND OF MADNESS CAUSED BY EXCESSIVE BLOOD FLOW TO THE BRAIN

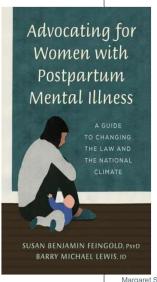
**1838:** ESQUIROL RECOGNIZED A HIGH INCIDENCE OF DELIRIUM IN POSTPARTUM WOMEN WITH DISTURBANCES OF PERCEPTION AND CONSCIOUSNESS, WITH MARKED CHANGEABILITY OF MOOD

FRENCH PSYCHIATRIST, **LOUIS-VICTOR MARCE** "Where subjects are predisposed to mental illness through either hereditary antecedents, previous illness, or through excessive nervous susceptibility, pregnancy, delivery, and lactation can have disastrous repercussions."

Veerle Bergnk. Postpartum Psychosis: Madness, Mania and Melancholia in Motherhood. Am J Psychiatry 173:12, December 2016

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#### **POSTPARTUM PSYCHOSIS**



# NO FORMAL DIAGNOSTIC CATEGORY FOR POSTPARTUM PSYCHOSIS

- PROVIDERS MAY NOT BE AWARE OF THE UNPREDICTABLE NATURE OF THIS PSYCHOSIS, AND LESS CAUTIOUS ABOUT THE POTENTIAL DANGER TO THE INFANT
- WAXING/WANING PRESENTATION MAY BE USED AGAINST THE PATIENT

COURTS USE THE DSM TO LEGITIMIZE A DIAGNOSIS

Margaret Spinelli . Maternal Infant icide Associated with Mental Illness: Prevention and the Promise of Saved Lives. Am J Psychiatry 2004

#### **LEGAL IMPLICATIONS OF A MOTHER'S ACTIONS**

-As a Society when will be ready to accept that a Mother(the protector and bearer of life) could harm harm her children and **NOT** be guilty of the crime in the traditional sense?

???

-Insanity Plea(all states but Idaho, Kansas, Montana, and Utah); Used <1% of criminal cases in USA

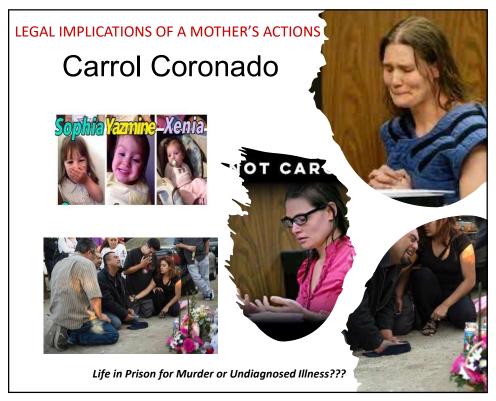
-Criminal Sentences

-Infanticide Legislation: UK(Infanticide Act of 1938), Canada, Australia, USA?





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# LEGAL IMPLICATIONS OF A . MOTHER'S ACTIONS

#### Melanie Blocker Stokes Mother's Act(2008)

Section 2592 of the Patient Protection and Affordable Care Act

Ensure that new mothers and their families are educated about postpartum depression, screened for symptoms, and provided with essential services, and to increase research at the NIH on postpartum mood disorders.

\*Melanie Blocker Stokes(IL-completes suicide from treatment resistant PPP)

#### Illinois(2018) Public Act 100-0574

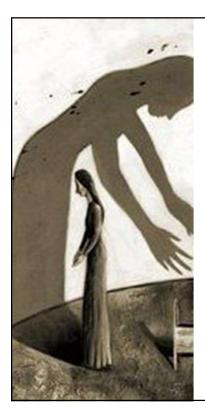
1st criminal law in USA recognizing how perinatal illness can affect the behaviors of mother and considers this in legal culpability

-incorporates a legal definition of postpartum illness(broad)

-postpartum illness as mitigating factor in sentencing -possibility for treatment

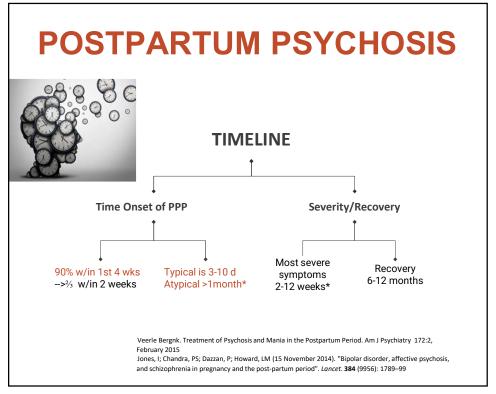


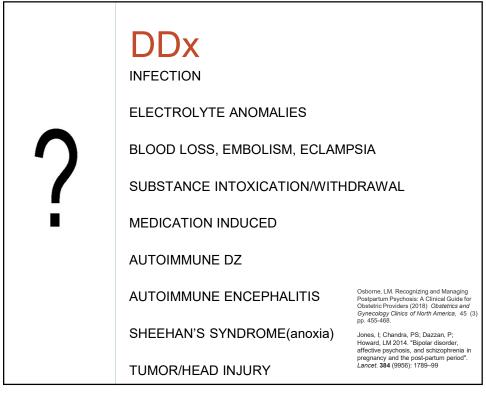
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# COMMON DENOMINATOR?

- No awareness of PPP, risks, dx, tx, rx
- · No pre-pregnancy planning
- · No safety planning
- · Hx of risk factors
- Spouse has some insights
- · Trying to still engage in caregiving role
- · Many sent home after seeking help
- Pregnancy as an underlying risk????





# **DDx**



SCHIZOPHRENIA\*
SCHIZOAFFECTIVE DISORDER\*
BIPOLAR DISORDER\*\*
ISOLATED POSTPARTUM PSYCHOSIS\*
MDD WITH PSYCHOSIS

Osborne, LM. Recognizing and Managing Postpartum Psychosis: A Clinical Guide for Obstetric Providers (2018) Obstetrics and Gynecology Clinics of North America, 45 (3), pp. 455-468.

"Center for Women's Mental Health at MGH". MGH Center for Women's Mental Health.

**OCD WITH PSYCHOSIS** 

Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. *J Womens Health (Larchmt)*. 2006:15:352-368.

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# POSTPARTUM PSYCHOSIS: Sx

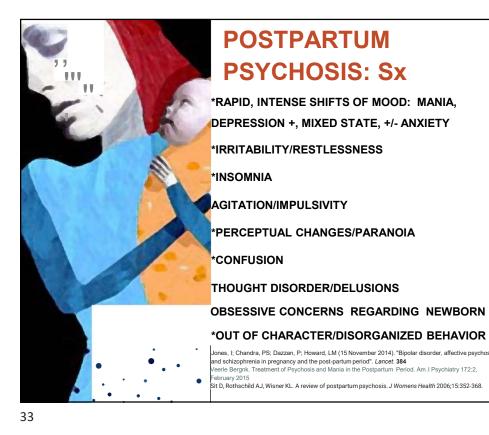
# MARKED **DISTURBANCES**IN COGNITION

DELIRIOUS OR
"PERPLEXED
PRESENTATION"

#### WAXING AND WANING

Veerle Bergnk. Treatment of Psychosis and Mania in the Postpartum Period. Am J Psychiatry 172:2, February 2015

Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. J Womens Health (Larchmt). 2006;15:352-368.





# POSTPARTUM PSYCHOSIS: Sx

#### **DELUSIONS**

- MADEA COMPLEX
- CHANGELINGS
- BABY WAS A DEVIL
- BABY IS ILL-FATED
- SOMEONE ELSE'S BABY
- DELUSIONS OF PERSECUTION OF THE INFANT

P.S. Chandra. Delusions related to infant and their association with mother-infant interactions in postpartum psychosis. Arch Womens Mental Health (2006)



# POSTPARTUM PSYCHOSIS

THOUGHTS OF HARM TO THE INFANT---> <u>EGO-SYNTONIC</u>

ASSOC. W/PSYCHOTIC BELIEFS & LOSS OF REALITY TESTING

COMPULSION TO ACT ON BELIEFS

LACK ABILITY TO ASSESS THE CONSEQUENCES OF ACTIONS

Veerle Bergnk. Treatment of Psychosis and Mania in the Postpartum Period. Am J Psychiatry 172:2, February 2015

Wisner KL, Peindl K, Hanusa BH. Symptomatology of affective and psychotic illnesses related to childbearing. J Affect Disord. 1994;30:77-87.

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## LAB WORK-UP

CBC, ELECTROLYTES

**BUN/CRT** 

**GLUCOSE** 

**AMMONIA** 

VITAMIN B12/FOLATE

THYROID FUNCTION TESTS

**AUTO IMMUNE PANEL** 

**CALCIUM** 

URINALYSIS URINE/CULTURE

**URINE DRUG SCREEN** 

**BRAIN IMAGING** 

**CSF** 

\*\*HCG

Osborne, L.M. Recognizing and Managing Postpartum Psychosis: A Clinical Guide for Obstetric Providers (2018) Obstetrics and Gynecology Clinics of North America, 45 (3) pp. 455-468.

#### **PREGNANCY ANYONE?**

Think PREGNANCY For All Reproductive Aged Women





**About 50% of all pregnancies are UNPLANNED** 

Finer & Zolna Contraception 2011.

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POSTPARTUM PSYCHOSIS: WHY?

Likely MULTIFACTORIAL



#### **RISK FACTORS**

\*PRIMARITY \*HORMONAL SHIFTS

OBSTETRICAL COMPLICATIONS

**AUTOIMMUNE ILLNESS** 

\*FAMILY HISTORY

\*CIRCADIAN RHYTHM/INSOMNIA ENVIRONMENTAL STRESS

\*\*\*DISCONTINUATION MOOD STABILIZER

Jones, I; Chandra, PS; Dazzan, P; Howard, LM (15 November 2014). "Bipolar disorder, affective psychosis, and schizophrenia in pregnancy and the post-partum period". *Lancet.* **384** (9956): 1789–99

(SSSI), A. (Alabed, S.; Guul, A.; Essali, N. (20 May 2013). "Preventive Interventions for Postnatal Psychosis". Schizophrenia Bulletin. 39 (4): 748–750. Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. J Womens Health (Larching Conscincing A).

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## **RISK FACTORS**

SCHIZOPHRENIA (20-25%relapse)

BIPOLAR DISORDER (20-50%relapse)

BPAD +1st DEGREE RELATIVE W/PPP(~70% relapse)

H/O ISOLATED POSTPARTUM PSYCHOSIS (up to ~30% relapse)

RISK OF DEVELOPING PPP W/1st DEGREE RELATIVES W/HX PPP(10-50%)

RATE 100X HIGHER IN BPAD/ISOLATED PPP

Wesseloo, R; Kamperman, AM; Munk-Olsen, T; Pop, VJ; Kushner, SA; Bergink, V (1 February 2016). "Risk of Postpartum Relapse in Bipolar Disorder and Postpartum Psychosis: A Systematic Review and Meta-Analysis". American Journal of Psychiatry. 173 (2): 117–27.

lan Jones. Familiality of the Puerperal Trigger in Bipolar Disorder: Results of a Family Study. Am J Psychiatry 2001



# POSTPARTUM PSYCHOSIS: WHY?

CHILD BIRTH IS A MAJOR STRESSOR THAT CAN TRIGGER OR EXACERBATE A WIDE VARIETY OF MENTAL ILLNESS

\*Do you have pregnancy or young children at home as protective factors in your risk assessment?

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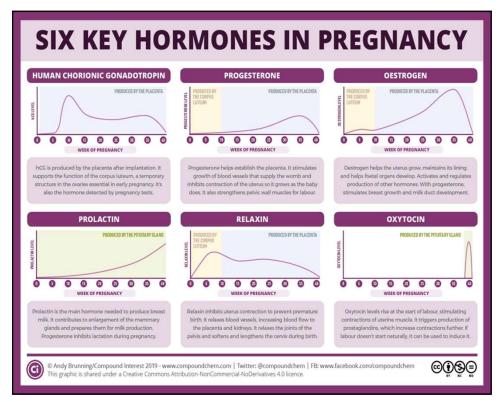
#### WHY? HORMONE SHIFTS

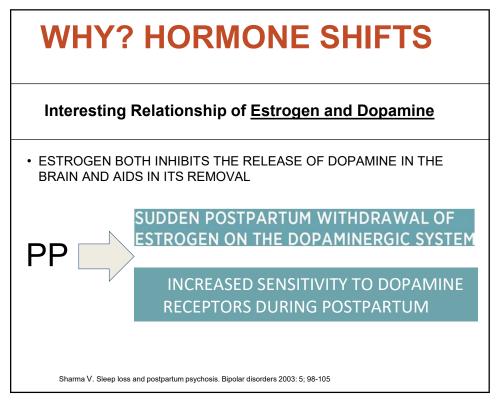
- RAPID FLUCTUATIONS IN THE LEVELS OF
  - **■** ESTROGEN
  - PROGESTERONE
  - OTHER GONADAL HORMONES



SOME HORMONES HAVE INCREASED 200- FOLD OVER THE COURSE OF GESTATION, RAPIDLY DECLINING WITHIN 24 HOURS POSTPARTUM

Veerle Bergnk. Postpartum Psychosis: Madness, Mania and Melancholia in Motherhood. Am J Psychiatry 173:12, December 2016





## WHAT?

#### VARIANT OF BIPOLAR DISORDER

MOST IMPORTANT RISK FACTOR IS A HISTORY OF BIPOLAR DISORDER

95% OF PPP CASES FULFILLED RESEARCH DIAGNOSTIC CRITERIA FOR BIPOLAR DISORDER AT FIVE-YEAR FOLLOW UP-Wisner et al. 1995, Cohort study

Veerle Bergink. Postpartum Psychosis: A Valuable Misnomer. Australian & New Zealand Journal of Psychiatry, 49 (2) Wisner K, Peindl K, Hanusa B. Psychiatric episodes in women with young children. J Affective Disord. 1995;34:1

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#### **WHAT?** POSTPARTUM PSYCHOSIS

AS A UNIQUE DIAGNOSTIC ENTITY

ABSENCE OF MANIC OR PSYCHOTIC SX OUT OF THE POSTPARTUM PERIOD

FOR 20-50% OF WOMEN, THE OCCURRENCE OF A POSTPARTUM EPISODE OF AFFECTIVE PSYCHOSIS WILL REMAIN EXCLUSIVELY LIMITED TO THE POSTPARTUM PERIOD

Verrle Brigink. Postpartum Psychosis. A Valuable Misnomer. Australian and New Zealand Journal of Psychiatry, 49 (2) 2015

#### SCREENING/ASSESSMENT FOR PROVIDERS

#### Screening for <u>current symptom</u> presentation:

- recent pregnancy/delivery
- depression, anxiety, psychosis, mania, substance use
- irritability/agitation
- confusion, out of character behavior, odd beliefs
- perceptual disturbances, paranoias, religious preoccupations
- waxing and waning
- SI/HI/Infanticide
- sleep disturbance (ARE YOU SLEEPING WHEN BABY SLEEPS?)
- current stressors(psychosocial, \$\$, feeding, family death etc)

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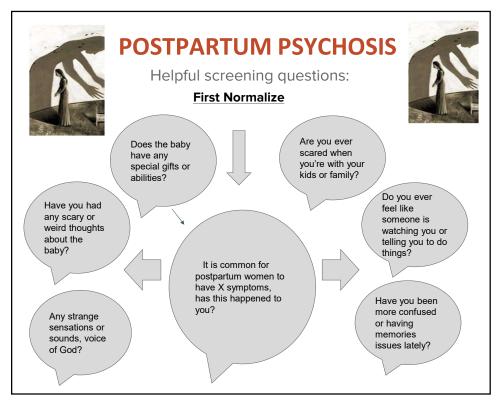
### SCREENING/ASSESSMENT FOR PROVIDERS

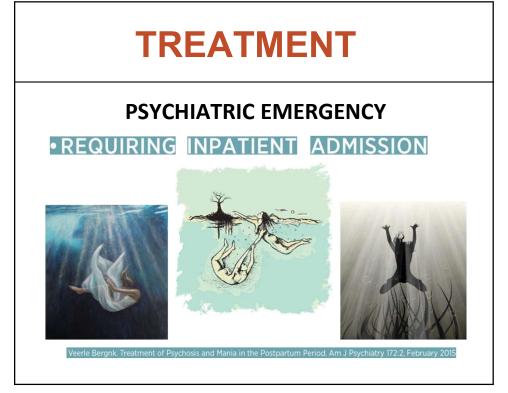
#### Past History:

- PSYCH-general and perinatal/postpartum
- FAMILY -BPAD, Schizophrenia, psychosis
- MEDICAL- Al illness, head injuries, cancers, tumors, inflammatory illnesses, infectious dz etc
- SUBSTANCE USE
- OBSTETRIC- all birth hx, abortions, complications, infections pp, contraception, HCG, future pregnancies, breast feeding, infant/caregiver sleep patterns

#### Collateral information

- Family visit with caretaker or partner
- Phone contact approved by patient
- Medical Records





#### **POSTPARTUM PSYCHOSIS**

#### <u>Law Enforcement/1st Responders/Emergency:</u>

- -Tell the mother it's not their fault you are having these thoughts
- -I am not here to arrest you and take you to jail
- -There is help available and I am here to get you help
- -I've been able to help other mothers in the past
- -I am not here to take away your kids forever
- -Your kids will be safe, you will be back with them soon
- -I know this all must be scary and confusing, I'd like to help you
- -It will get better, sometime our thoughts can be confusing and scary, lets find a safer place to talk about this
- -I am worried about your health, let's get you to an expert

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# TREATMENT MAJORITY OF CASES REQUIRE INPATIENT ADMISSION-->FULL MEDICAL WORK UP



# IN MINORITY OF CASES COULD CONSIDER CLOSE OUTPT FOLLOW UP:

- SPOUSE/CAREGIVER GIVES 24/7 OBSERVATION
- MOTHER NEVER LEFT ALONE WITH CHILDREN
- FIREARMS/SHARPS/MEDS SECURED
- RETURN PRECAUTIONS DISCUSSED
- MEDICATION ADMINISTRATION PLAN/RISKS OF UNTREATED ILLNESS DISCUSSED
- BREAST FEEDING CONSIDERATIONS/PUMPING
- PLANNING FOR SLEEP MAINTENANCE

## **PREVENTION**

# FOR PATIENTS WITH A DIAGNOSIS OF BIPOLAR AFFECTIVE DISORDER

- HIGH RATES OF RELAPSE DURING PREGNANCY
- EFFICACY OF POSTPARTUM PROPHYLAXIS WAS MUCH LOWER
- CONTINUATION OF <u>PROPHYLACTIC</u>
   <u>MEDICATION</u> IS IMPORTANT FOR
   <u>MAINTAINING MOOD STABILITY DURING AND</u>
   AFTER DELIVERY

Veerle Bergnk. Postpartum Psychosis: Madness, Mannia and Melancholia in Motherhood. Am J Psychiatry 173:12, December 2016

Veerle Bergink. Prevention of Postpartum Psychosis and Mania in Women at High Risk. Am J Psychiatry 169:6. June 2012

 $Blackmore\ ER, Rubinow\ DR,\ O'Connor\ TG,\ et\ al.\ Reproductive\ outcomes\ and\ risk\ of\ subsequent\ illness\ in\ women\ diagnosed\ with\ postpartum\ psychosis.\ \textit{Bipolar\ Disord}.\ 2013\ May\ 7;$ 

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## **PREVENTION**

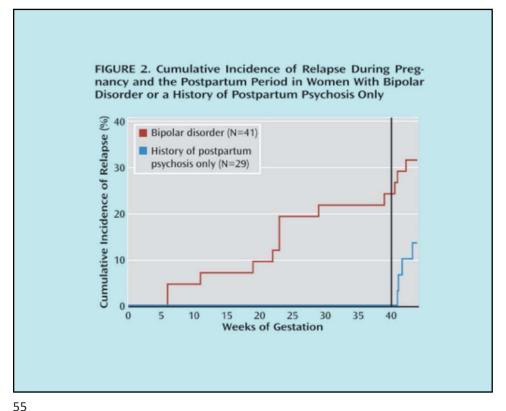
WOMEN WITH A HISTORY OF
POSTPARTUM PSYCHOSIS, BUT
WITHOUT MANIC OR PSYCHOTIC SX
OUTSIDE THE POSTPARTUM PERIOD
MAY NOT REQUIRE PROPHYLAXIS
DURING PREGNANCY



Veerle Bergnk. Postpartum Psychosis: Madness, Mannia and Melancholia in Motherhood. Am J Psychiatry 173:12, December 2016

**FETAL EXPOSURE** 

Essali, A.; Alabed, S.; Guul, A.; Essali, N. (20 May 2013). "Preventive Interventions for Postnatal Psychosis". Schizophrenia Bulletin. 39 (4): 748–750.



# **SAFETY: MOTHER**

- IN THE FIRST YEAR PP, SUICIDE RISK INCREASES 70 FOLD
- SUICIDE IS A LEADING CAUSE OF MATERNAL DEATH UP TO 1 YEAR PP
- OF 1,000 WOMEN W/POSTPARTUM PSYCHOSIS, ~2 COMPLETE SUICIDE
- USE OF MORE AGGRESSIVE AND IRREVERSIBLE MEANS:
  - SELF-INCINERATION
  - JUMPING FROM HEIGHTS
  - LETHAL WEAPONS



Orsolini, L; et al. (12 August 2016). "Suicide during Perinatal Period: Epidemiology, Risk Factors, and Clinical Correlates". Frontiers in Psychiatry. 7: 138.

## **NEONATICIDE <24hrs**

TYPICALLY INVOLVES YOUNG WOMEN FOR WHOM PREGNANCY IS UNWANTED/HIDDEN

## **INFANTICIDE ≤12mo**

- NEGLECT
- SEVERE DISCIPLINE, ABUSE
- MENTAL ILLNESS: SCHIZOPHRENIA, PSYCHOSIS,
   \*DEPRESSION

Margaret Spinelli. Maternal Infanticide Associated with Mental Illness: Prevention and the Promise of Saved Lives. Am J Psychiatry 2004

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## **INFANTICIDE**

- GROSS UNDERREPORTING OF INFANT DEATHS
- THE RATE OF HOMICIDE OF INFANTS UP TO ONE YEAR OF AGE IS 8/100,000 IN THE US
- ESTIMATED THAT ONE INFANT UNDER AGE ONE IS KILLED DAILY(USA)
- 16-29% OF MOTHERS WHO KILL THEIR CHILDREN ALSO KILL THEMSELVES

 $P.S.\ Chandra.\ Delusions\ related\ to\ infant\ and\ their\ association\ with\ mother-infant\ interactions\ in\ postpartum\ psychosis.\ Arch\ Womens\ Mental\ Health\ (2006)$ 

Margaret Spinelli. Maternal Infanticide Associated with Mental Illness: Prevention and the Promise of Saved Lives. Am J Psychiatry 2004

Margaret Spinelli. Maternal Infanticide Associated with Mental Illness: Prevention and the Promise of Saved Lives. Am J Psychiatry 2004

# SAFETY: INFANT



- ALTHOUGH HOMICIDAL BEHAVIOR RARELY OCCURS IN PPP, <u>PPP IS THE BIGGEST RISK FACTOR FOR INFANTICIDE</u>
- MOTHERS W/DELUSIONS THAT THE BABY WAS
  - o A DEVIL
  - o ILL-FATED
  - SOMEONE ELSE'S BABY

\*MORE LIKELY TO HAVE INCIDENTS OF SHOUTING, HITTING, HARMING, OR SMOTHERING BABY

P.S. Chandra. Delusions related to infant and their association with mother-infant interactions in postpartum psychosis. Arch Womens Mental Health (2006)

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#### Be on the Look Out for WHATS HIDDEN IN PLAIN SIGHT

Educate, Educate, Educate

Identify, Identify, Identify

Treat, Treat, Treat

**Treatment WORKS**, but only if we Identify and Educate ourselves and others

DON'T JUST STOP MEDICATIONS BECAUSE Everyone's DOING IT! ③ ③ ③ ⑤ ⑤



## **PROVIDER/PATIENT RESOURCES**

- <u>Reprotox</u> (reprotox.org)

   iphone app, online access on campus
- Hales Medications Mothers Milk
   -iphone app, textbook
- Mother to Baby (mothertobaby.org)

   Psychopharm, education, connection
   with expert
- Postpartum Support International (Postpartum.net)
   -Support, psychoed, local resources,

trainings, connection with experts

- MGH Center for Women's Health (womensmentalhealth.org)
  - -MGH Postpartum Psychosis Project
  - -Educational Material/Trainings
  - -Reviews of latest research/pub
  - -Provider consultations

Action on Postpartum Psychosis- UK (aap-network.org)

- -Psychoeducation, pamphlets, research, survivors, resources
- MCAP For Moms (www.mcpapformoms.org)
  - -building provider capacity
  - -toolkits
  - -resources providers/patients

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# "Quotes" from Survivors of POSTPARTUM PSYCHOSIS

