

Perinatal Mood Disorders Nancy Roberts, RN, CCE, CBC **Community of Practice Webinar 2019**



Lecture Objectives

- 1. Differentiate between the **Symptoms** of the 6 Perinatal Mood Disorders
- 2. Describe at least 6 Risk Factors for Perinatal Mood Disorders
- 3. Identify recommended **Screening Measures** for Perinatal Mood Disorders
- 4. State at least 3 different **Treatment Options** for Perinatal Mood Disorders
- 5. Describe **Resources** available for Perinatal Mood Disorders





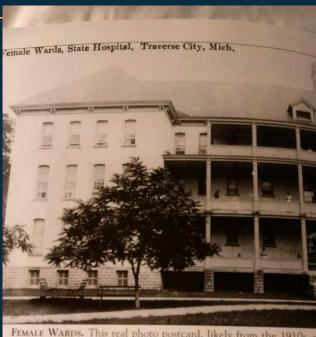
Many names for the same condition

- Puerperal Psychosis 1800's
- Maturity Blues 1970s
- Baby Blues 1980-90's
- PPD Postpartum Depression
- PMD Perinatal Mood Disorders
- PMAD- Perinatal Mood And Anxiety Disorders (PSI)
- MMH Maternal Mental Health Disorders (2020 Moms)
- Perinatal Mental Health (Society of North America 2017)

Who does this affect?

PMD knows NO boundaries: it affects all races, all ages, all professions, all economic status levels.

Strong, intelligent women have PMD.



FEMALE WARDS. This real photo postcard, likely from the 1910s, s the very north end of Building 50. This is the section where the female patients resided. The first floor is Hall 5, the second floor is floor is Hall 17. The main reasons for admission to the asylum (from puerperal (after childbirth), epilepsy, ill health, and intemperan obscure reasons for patient admission included business reversal seduction, and nostalgia. (Courtesy of Heidi Johnson.)



Introduction

- PMD occurs in 10-20% of all new mothers who give birth
- One out of every 5-10 postpartum mothers
- 400,000 per year reported nationally, making this the most under diagnosed obstetric complication in America Pediatrics 2010
- •22,018 in Michigan (110,093 births in 2018 x 20%)

Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) Study www.michigan.gov/PRAMS

When screening is based on clinical observation only, 50% are missed
 Misunderstood. Misdiagnosed. Mistreated.
 Only 3 of 4 women with depressive symptoms seek professional help

Marcus. Depressive symptoms among pregnant women screened in OB settings. J Womens Health 2003



What are the true PMD Stats?

- 1 in 7 (referring to the Wisner study) The published paper doesn't say 1 in 7, but Dr. Wisner has helped the field translate the numbers into the 1 in 7 reference.
- 1 in 5 (referring to an earlier <u>study from Meltzer-Brody</u>) and this <u>Australian</u> <u>study</u>/survey.
- 1 in 9 (recently changed from 1 in 10) from the <u>CDC</u>. This rate comes from selfreported Pregnancy Risk Assessment Monitoring System (PRAMS) data. Most states use this standardized survey.
- Research like this study suggests, women living in poverty face rates of nearly 50%.



The Myth









The Reality







Maternal Effects of **Untreated** Depression

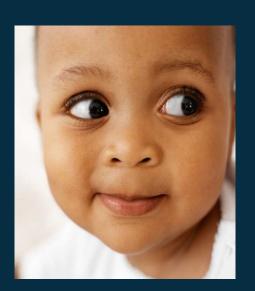
- Poor prenatal behaviors-nutrition, prenatal care, substance abuse
- Poor parenting behaviors
- Longer persistence of symptoms
- Increased risk of PMD with subsequent children
- Increased risk of relapse
- Poor pregnancy outcomes: insufficient weight gain, decreased compliance with prenatal care, premature labor, SGA
- Guilt and anxiety about parenting
- Loss of love for baby and difficulty enjoying baby, less active interactions, inability or lack of attempt to soothe baby, refusal to look at or hold baby





Effects of **Untreated** PMD on Children

- Poor mother-infant attachmentIrritability, lethargic, poor sleep
- Language delays
- Behavioral difficulties
- Lower cognitive performance
- Mental health disorders
- Attention problems
- Withdrawn/fussy/crying/temper
- Sleep/feeding/eating disruptions





During Pregnancy

- Pregnancy is not protective Prevalence: 9%-15%
- Stress hormones, such as cortisol pass through the placenta
- If untreated 60% of these women will go on to experience Postpartum MDs
- Existing psychological disorders either stay the same or worsen during pregnancy (especially Anxiety Disorders and OCD)
- PMD is twice the rate of gestational diabetes (6-8%) and gestational hypertension (6-8%) of which universal screening for both of these illnesses occurs routinely at each prenatal office visit
- Increased risk for Pre-term delivery, Cesarean section, Low birth weight, SGA,
 NICU infants, Inadequate weight gain, Preeclampsia, Elevated maternal cortisol and neonatal cortisol





Baby Blues and Matrescence

Onset: First 1-2 weeks Peaks 3-5 days. Subsides in time with support.

Prevalence: 50 – 85%

- Hormone changes
- Adjustment period
- Lack of sleep

If every day and all day, it may be a risk factor for PMD

Intermittent Symptoms:

- Crying, tearfulness
- Fatigue
- Mood swings
- Anxiety / Overwhelmed



**Matrescence: "Normal" Transition from Adulthood to Motherhood www.ted.com/talks/alexandra_sacks_a_new_way_to_think_about_the_transit_ion_to_motherhood



Postpartum Depression

Onset: **Anytime** in the first year

Peaks: 3-6 months

Prevalence: 10 %- 21.9%

Etiology: A biologic and life stressors illness

Prognosis: Favorable with appropriate treatment

Treatment: Meds, psychotherapy, support, self help



PMD Symptoms

Depressive mood/sadness/crying

Anxiety

Sleep disturbances

Appetite changes

Poor concentration

Confusion

Irritability

Unable to take care of self /family

Numerous Losses, ie: self, spontaneity, body image, sexual, etc.

Isolation

Worthlessness

Shame

Guilt

Anger





What PMD Feels like

https://www.youtube.com/watch?v=U8ZSUzJ0KqU&t=6s



National Coalition for Maternal Mental Health 2:05 min



Postpartum Panic/Anxiety Disorder

Onset: first month Symptoms include:

Prevalence: Panic attacks

Postpartum: 8-20% Anxiety

Panic disorder: 2% Agitation

Etiology: unknown Insomnia

Treatment: meds, Self doubts therapy, support

Extreme constant worry



Symptoms of Anxiety/Panic Attacks

Chest pain Hot and cold flashes

Muscle tension

Shortness of breath

Tingling hands and feet

Extreme worries and fears

Fear of dying

Fear of going crazy

Fear of being alone

Fear of losing control

Hot and cold flashes

Faintness

Irritability- anger and rage

Feeling trapped

Racing heartbeat

Hyperventilating/ Difficulty breathing

Nausea /Vomiting

Dizziness/Trembling

Feeling of choking/smothering



Postpartum Obsessive Compulsive Disorder

Onset: first month Prevalence: 3-4% postpartum and 2 % prenatally

Intrusive thoughts: These are recurring, persistent, disturbing thoughts and ideas (scary images of accidents, abuse, harm to self or baby)

**The woman understands that to act on these thoughts would be wrong and are horrified by these thoughts, causing tremendous guilt and shame. Women rarely will not share these thoughts, so we must ask about scary thoughts. We must educate Moms that thought does not equal action.

Hyper vigilant (i.e. can't sleep for fear that something awful will happen to baby, constantly checking on baby)

Ritual behaviors done to avoid harming baby (put away knives) or to create protection for baby (will not leave the home)

Often misdiagnosed as psychosis

Treatment: meds, therapy, thought stopping techniques, support



Post Traumatic Stress Disorder (PTSD) Due to Childbirth

Onset: soon after birth

Prevalence:

9% postpartum met PTSD criteria

18% report increased stress

34% report a traumatic birth -some

with amazing resilience

Etiology: birth trauma or recent or past trauma

Treatment: meds, counseling-debriefing, support

Re-experiencing over and over in one's mind (sensations of "being in the trauma" now)

Nightmares/Flashbacks

Increased arousal/anxiety/anger

Emotional numbing/detachment/isolation



Examples of Perinatal Trauma

- Emergency Cesarean Delivery
- Postpartum Hemorrhage
- Premature birth
- Infant in the NICU
- Forceps/vacuum Extraction
- Severe Pre eclampsia
- 3rd or 4th degree laceration
- Hyperemesis Gravidarum
- High risk Pregnancy
- Traumatic Vaginal Birth
- More...





Postpartum Psychosis – rare and severe

Onset: first 1 - 3 weeks (months)

Prevalence: 1 – 2 per 1000 births or 4,000 per year nationally

Etiology: unknown – 70% have significant history of mental illness

If untreated: 5% commit suicide

4% infanticide

Treatment: Inpatient hospitalization for close observation - a true psychiatric emergency

If concerned, call the supervisor to discuss

911 may be recommended

Symptoms:

- Delusions
- Hallucinations
- Paranoia
- Loss of reality
- Agitation
- Irrational statements
- Mania
- Insomnia



Biological Risk Factors

All normal physical changes of pregnancy and childbirth

Sensitivities to Hormone changes

Brain chemical changes

Thyroid imbalance (5-10% during first postpartum year)

Multiple Births (25%)

Infertility Hx

Family Hx of Mental Illness

Hx PMS- PMDD (premenstrual dysphoric disorder)

Personal history of mental illness (3-4 times the risk)

Hx prenatal depression (33%)

Hx PMD (50-70%)

Complicated pregnancy or delivery including PTSD



Psychological Risk Factors

Normal psychological changes that always occur with childbirth

Unplanned pregnancy: ambivalence

Expectations of motherhood

Personality characteristics : "the perfectionist"

Significant Lifestyle changes first time mothers

Adoptive mothers not excluded

Unresolved losses:

especially reproductive in nature: miscarriage, abortion, infertility, PP sterilization.

Recent stresses:

illness, divorce, move, job change, death, finances

Negative childhood experiences : Hx abuse, neglect, PTSD



Relationship Risk Factors

Relationship with the significant other/partner/husband
The "Quality "of the partnership

Mothers social support system

Single mothers at higher risk

Quality of relationship with BABY

High Need infant: ill, colic, NNICU

Mothers relationship with OTHER children





Dads get Postpartum Depression too!

Virginia Medical School Study 5/10 - 28,000 New Dads screened

10.4% Scored positive using standardized depression tools

Tx: Similar as for Mom. Couples therapy. Meds. Self Help

www.postpartum.net PSI chat with Dads

www.postpartumdads.org Closed Facebook Group

www.postpartumdadsproject.org

www.postpartummen.com

www.bootcampfornewdads.org





Fathers/Partners

Peaks 6-9 months

Anger/Frustration/Irritability

Workaholic/Financial worries

Withdraws from social events/friends

Alcohol/substance abuse

Wants to FIX it-NOW

Questioning himself-his new role

Feeling overwhelmed, exhausted and insecure

Sadness

Hopelessness

Repetitive fears/worries



Predictors

Spouse with PMD

Hx of Depression/Mental health

Unintended pregnancy

Unreasonable expectations

Poor social support/social isolation

Infant issues (NICU, medially fragile, colic, poor sleep, multiples)

Couples relationship conflict

Lower education level

Financial stress



Fathers Respond

Dads Personal Postpartum Experience

http://postpartum.org/videos/video/allens-journey/ 6:04 min





Screening Recommendations

US Preventive Services Task Force 2016 - "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."

Use validated screening tools (such as the PHQ-2 or EPDS, etc)

- 1. "During the past month have you been bothered by feeling down, depressed or hopeless?"
- 2. "During the past month, have you often been bothered by having little interest or pleasure in doing things that you previously enjoyed?"

American College of Obstetricians and Gynecologists 2015 - Once perinatal

American Academy of Pediatrics 2017 - 1,2,4,6 month well child visits

Barriers: Lack of time, inadequate knowledge of tools and how to document, insufficient reimbursement, fears of legal implications, etc.



PMD Assessment Tools

- Edinburgh Postnatal Questionnaire (EPDS) by Cox
- Postpartum Depression Screening Tool (PDSS) by Cheryl Beck
 Western Psychological Services 310-478-2061 www.wpspublish.com
- Patient Health Questionnaire (PHQ-9) by Spitzer Linked to DSM- www.pfizer.com/phq-9
- Postpartum Depression Checklist (PDC) by C. Beck Identifies 11 symptoms
- Beck Depression Inventory (BDI) by A. Beck 21 items, self report, 3 versions
- Others for clinical depression:

CES-D Center for Epidemiologic Studies/Depression MHI-5 Mental Health Inventory



Edinburgh Postnatal Depression Scale - EPDS

Brief - 10 questions

Easily read and understandable - 6th grade reading level

Self administered : 2-4 minutes to complete

Published in many languages and used internationally

https://www.mcpapformoms.org with 36 languages

No cost - unless for electronic documentation

Can be used both prenatal or postpartum

Validated by research -Reliable

Sensitivity: 78% Specificity 99%

In use since 1987

Explores mood symptoms in PP period and less physical and somatic symptoms



SC	OF	RE					

SPECTRUM HEALTH

EDINBURGH POSTNATAL DEPRESSION SCALE

Today's Date:	/	/	Name:	Baby's Age:			
As you have recently had a baby, we want to know how you are feeling now.							
Please underline the answers which come closest to how you have felt in the past seven days, not just how you feel today.							
IN THE PAST SEVEN DAYS:							

- A. I have been able to laugh and see the funny side of things . . .
 - 0 As much as I always could
 - Not quite so much now
 - 2 Definitely not quite so much now
 - 3 Not at all
- I have looked forward with enjoyment to things . . .
 - 0 As much as I ever did
 - Rather less than I used to
 - 2 Definitely less than I used to
 - 3 Hardly at all
- I have blamed myself unnecessarily when thing went wrong . . .
 - 3 Yes, most of the time
 - 2 Yes, some of the time
 - Not very often
 - No, never
- I have been anxious or worried for no good reason . . .
 - 0 No, not at all
 - 1 Hardly ever
 - 2 Yes, sometimes
 - 3 Yes, very often
- E. I have felt scared or panicky for no very good reason . . .
 - 3 Yes, quite a lot
 - 2 Yes, sometimes
 - No, not much
 - No, not at all

- F. Things have been getting on top of me . . .
 - 3 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 quite well
 - No, I have been coping as well as ever
- G. I have been so unhappy that I have had difficulty sleeping . . .
 - 3 Yes, most of the time
 - 2 Yes, sometimes
 - Not very often
 - Not at all
- H. I have felt sad or miserable . . .
 - 3 Yes, most of the time
 - 2 Yes, quite often
 - 1 Not very often
 - 0 No, not at all
- I have been so unhappy that I have been crying . . .
 - 3 Yes, Most of the time
 - 2 Yes, Quite often
 - Only occasionally
 - No. Never
- The thought of harming myself has occurred to me . . .
 - 3 Yes, Quite often
 - 2 Sometimes
 - Hardly ever
 - Never

Edinburgh Postnatal Depression Scale



Interpretation of the EPDS score

- Follow the MIHP algorithm and protocol
- A score of 10-12 or more MAY indicate "major depression" and suggests further assessment for intervention to take place. 20 or more requires immediate action.
- Confirmation of a "major depression" requires 2 consecutive scores of
 12 or more separated by 2 weeks plus a professional interview.
- Always intervene with #10 question if marked positive

To Normalize Screening, say...

"PMD are very common and we want to make sure <u>you</u> are healthy and well!" (Offers an opportunity for discussion)

"We screen everyone for PMD" (Universal screening decreases stigma)



Red Flags: Mothers may reply...

- "I have not slept at all in 48 hours or more"
- "I have lost a lot of weight without trying to "
- "I do not feel loving towards my baby and can't even go through the motions to take care of him/her"
- "I feel like such a bad mother"
- "I am afraid I might harm myself in order to escape this pain"
- "I am afraid I might actually do something to hurt the baby"
- "I hear sounds or voices when no one is around"
- "I feel that my thoughts are not my own or that they are totally out of my control"
- "Maybe I should have never become a mother, I think I may have made a mistake"



Tips for Professional and Family Support:

- Do not assume that if she looks good, she is fine.
- Do not assume this will get better on its own.
- Do encourage her to get a comprehensive evaluation if you are concerned.
- Do take her concerns seriously.
- Do let her know you are available if she needs you and inform her of support resources for PMD.
- Normalize, Validate, and Provide Hope
- Universal Message from PSI "You are not alone, You are not to blame, and with help you will be well"





Why aren't mothers always honest?

The Bottom Line is....

"I never let others know how bad I felt. I was so afraid people would think I was crazy and take my baby away."





PMD and Treatment: The Path to Wellness

PMD Education

Family support

Social support / Support Groups

Self Care

Counseling / Therapy

Medications

Complementary Alternative Medicine (CAM) Treatments





Medication and Breastfeeding Resources

- <u>www.emorywomensprogram.org</u>-Women's Mental Health Program, Emory Univ
- <u>www.womensmentalhealth.org</u>-Center for Women's Health, Mass General
- www.iberastfeeding.com www.neonatal.ttuhsc.edu/lact Thomas Hale
- www.motherrisk.org
- www.infantrisk.com
- <u>www.mothertobaby.org</u>-OTIS: Organization of Teratology Information Specialists
- www.lactmed.nlm.nih.gov
- <u>www.Breastfeedingmadesimple.com</u>- Kathleen Kendall Tackett



Treatment Barriers

- Concerns about perceptions of others-Stigma
- Cost or lack of insurance
- Need for childcare during mental health visits
- Lack of access to a trained provider
- Lack of knowledge about PMD
- Unrealistic beliefs about coping with being a mother
- Feelings of failure
- Fears about using mental health services
- Low energy and motivation

³⁸Bilszta, Ericksen, Buist, Milgrom. Aust J Adv Nurs 2010



Cultural Perspectives

One Universal denominator:

Social Support is THE most significant factor across all cultures

Use of alternative words in lieu of "Depression and Anxiety"

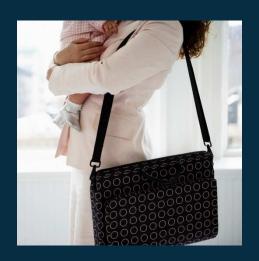
May use "stress" and "sadness" instead

All cultures: African American, Hispanic, Asian, and Caucasians, etc. have customs and traditions for families and women who give birth.

Barriers, such as distant family units, can lend to isolation difficulties for new mothers.



PMD Resources





Recommended Websites

www.postpartum.net - PSI

www.mededppd.org National Institute of Mental Health

http://www.postpartumprogress.com/ PMD Blog

http://postpartumstress.com/ -Philadelphia -Karen Klieman

http://postpartum.org/ Canada

http://nj.gov/health/fhs/maternalchild/mentalhealth/professionals/ - New Jersey

Recommended Books

Good Moms Have Scary Thoughts— Kleiman 2019
This Isn't What I Expected — Kleiman, Raskin 1994
Postpartum Depression for Dummies-Bennett 2006
Postpartum Survival Guide — Dunnewold 1994



Beyond the Blues – A Guide to Understanding and Treating Prenatal and Postpartum Depression – Bennett, Indman 2015 Also Spanish

Postpartum Husband: Practical Solutions for Living with Postpartum Depression - Kleiman 2003

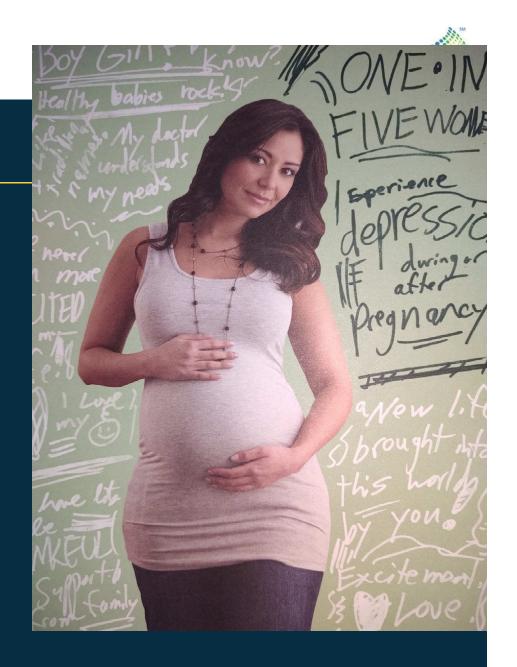
What am I thinking? Having a Baby After Postpartum Depression – Kleiman 2005

Therapy and the Postpartum Woman-Kleiman 2009

Moods in Motion-Kleiman 2016

Brochures

Published by MSU College of Human Medicine





Multi Language Resources

Spanish

www.postpartum.net PSI video "Healthy Mom, Happy Family" and pamphlets

Medline Plus PPD Resources

http://www.nlm.nih.gov/medlineplus/languages/postpartumdepression.html 15 languages

British Columbia Partners for Mental Health and Addictions http://www.heretohelp.bc.ca/other-languages







PSI Blog

Donate Online To PSI En Español Contact Us Certification Feasibility Study

Chat With An Expert

1.800.944.4773

GET HELP

JOIN US

LEARN MORE FAMILY

PROFESSIONALS RESOURCES

ABOUT PSI





PSI Video: Healthy Mom Happy Family

https://www.youtube.com/watch?v=qKOHiPsu6To 2:17 min







Postpartum Support International's (PSI)

Memory Quilts







Michigan PSI Coordinators

West Michigan: Nancy Roberts - Spectrum Health

616-391-1771 or 616-391-5000

nancy.roberts@spectrum-health.org

Greater Detroit: Kelly Ryan - Beaumont Hospital 248-898-3234

kelly.ryan@beaumont.org

North Detroit and Thumb: Danielle Gordon 248-955-3021

dsgordon0528@gmail.com

South Central Michigan: Amy Lawson- 734-358-3376 amypsi01@gmail.com

Northern Michigan: Kim Foster - Munson Healthcare Cadillac

231-876-7820 <u>kfoster@mhc.net</u>

Greater Flint: Catherine Mansueti 810-354-5828 rmansueti@gmail.com



Michigan PMD Support Groups

Battle Creek (269) 964-5868 Phone support

Bay City Medical Center- (989) 894-6980 Phone support

Cadillac Munson Healthcare (231) 876-7277 Facebook Baby Steps

Detroit Area 6 Locations -Sterling Heights/Clinton Twp/Rochester/Troy/St Clair Shores /Ferndale/Walled Lake Beaumont Health Parenting Program (248) 898-3230

Tree of Hope Foundation (586) 372-6120

Natures Playhouse (248) 955 3219

Flint (810) 964-4224 Phone support

Fremont/Newaygo (231) 924-7155

Grand Rapids Spectrum Health Hospital (616) 391-1771, (616) 391-5000

Grand Rapids Women's Health / Renew Mama (616) 717-0134, (616) 588-1200

Grandville (616) 299-3345

Grand Haven North Ottawa (616) 847-5145

Holland supportmom.org

Kalamazoo Bronson (269) 341-7175

Lansing (517) 333-3741

Marquette (906) 286-3254

Muskegon Hackley (231) 773-6624

Zeeland Spectrum Health (616) 748-8722





Michigan Statewide PMD Coalition

Founded 2013

www.mipmdcoalition.org

PMD Providers listing

Recruiting members- Currently 475 members

Quarterly call meetings

Funding PMD projects

Goals: Advocacy, Education, Awareness, and Support for Families

To join https://mipmdcoalition.org/professionals/join/

Soon to become a PSI State Chapter in 2020





MICHIGAN STATEWIDE PERINATAL MOOD DISORDER COALITION

SUPPORTING FAMILIES, CREATING HOPE

HOME RESOURCES ABOUT GETHELP DONATE EVENTS FAMILIES PROFESSIONALS

WELCOME

February 26, 2015

Pregnancy and postpartum Mood Disorders (PPMD) affect 10 to 20% of all mothers and about 10% of fathers. You are not alone. Help is available. You can get well.

MI Statewide PMD Coalition aspires to bring together families, communities, and professionals working to support families during pregnancy, pregnancy loss, and the postpartum period.

You may be worried that you or someone you care about is suffering from a perinatal mood or anxiety disorder such as postpartum depression. It can be very confusing, challenging and even painful to watch your spouse, family member or friend react to becoming a parent in ways that you didn't expect. Please know that you have come to the right place for help.

- UPCOMING EVENTS -

September 27th: Board Meeting 3-4pm

October 13th: Fall Conference Call 12-1

October 20-21st 2016: PSI 2-day PMD Conference, Grand Rapids

May 7th-9th 2017
Michigan Association for Infant Mental
Health Biennial Conference



Annual Michigan Capitol Steps Event-May 20, 2020 3pm









Michigan Regional PMD Coalitions

Healthy Kent PMD Coalition – Kent Co.

Barbara Hawkins Palmer barb.hawkins-palmer@kentcountymi.gov

Nancy Roberts nancy.roberts@spectrumhealth.org

Lakeshore PMD Coalition – Ottawa / Muskegon Co.

Laura Bronold lbronold@noch.org 616.847.5512

Kalamazoo Co. PMD Coalition

Kristina Ledlow ledlokr@bronsonhg.org 269-341-7175

Detroit Area PMD Coalition

Aimee Cisler detroitpwc@gmail.com 248.219.7713

www.detroitpwc.wix.com/detroitpwc

https://www.facebook.com/groups/849576845176046/

Lansing Capitol Area PMD Coalition

Kersten Kimmerly kerstenkimmerly1@gmail.com 517. 333.3741



Pine Rest Mother and Baby Day Program

Partial Hospitalization Program- 9 am to 3 pm M-F Opened 2012

Serves families throughout Michigan

Pine Rest Main Campus Grand Rapids

Pregnant and Postpartum up to 3 years

Voluntary Admission, Self Referral, Provider Referral, Agency Referral

Private Insurance and Medicaid accepted with CMH approval

Nursery and Nursery Attendant on site

Group and Individual PMD Therapy and Education Classes

Psychiatrist Evaluation on Day 1

Usual program length averages 7 days

https://www.pinerest.org/services/mother-baby-program-postpartum-depression-treatment/



TED Talk on Matresence

https://www.ted.com/talks/alexandra_sacks_a_new_way_to_think_about_the_transition_to_motherhood





Contact Information

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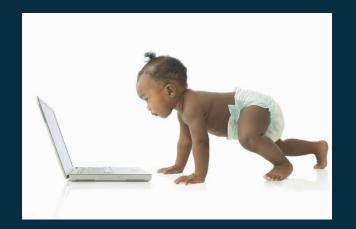
Spectrum Health Healthier Communities

665 Seward Ave NW

Grand Rapids, MI 49504

Fax (616) 391-2109

Inpatient Message Phone (616) 391-1771



^{*}References for this presentation are available upon request



YOU can make a difference! Accept the Challenge!

