PROMOTION OF MATERNAL MENTAL HEALTH TO IMPROVE CHILD OUTCOMES IN COMMUNITIES

BRIE OLIVER, RN, IBCLC
EXECUTIVE DIRECTOR OF HEALTHY MOTHERS, HEALTHY BABIES
WELCOME!

*A Brief Description of Brain Development

*Deep Dive on PMADs

*Why we should care

*Consequences of untreated PMADS

*What can we do about it
“THE GREATEST GIFT A PARENT CAN GIVE TO A
CHILD IS HIS OR HER OWN HAPPINESS”

NHAT HANH, BUDDHIST TEACHER
MY STORY
3 CORE CONCEPTS IN EARLY BRAIN DEVELOPMENT

HARVARD CENTER FOR THE DEVELOPING CHILD
1.) “SERVE AND RETURN” INTERACTION SHAPES BRAIN CIRCUITRY

NURTURING, RESPONSIVE, AND INDIVIDUALIZED INTERACTIONS FROM BIRTH BUILD HEALTHY BRAIN STRUCTURE
HOW TO BUILD BRAINS

• TALK
• SING
• PLAY
• READ
• SMILE
• DANCE
• TOUCH
• FEED WITH LOVE
• ENCOURAGE EXPLORATION
2.) EXPERIENCES
BUILD BRAIN ARCHITECTURE
3.) TOXIC STRESS DERAILED HEALTHY DEVELOPMENT
ADVERSE CHILDHOOD EXPERIENCES CAN
IMPACT LIFE LONG HEALTH AND
WELLBEING
POSITIVE
Brief increases in heart rate, mild elevations in stress hormone levels.

TOLERABLE
Serious, temporary stress responses, buffered by supportive relationships.

TOXIC
Prolonged activation of stress response systems in the absence of protective relationships.
Adverse Childhood Experiences

Traumatic events that can have negative, lasting effects on health and wellbeing

- Abuse
  - Emotional abuse
  - Physical abuse
  - Sexual abuse

- Neglect
  - Emotional neglect
  - Physical neglect

Household Challenges
- Domestic violence
- Substance abuse
- Mental illness
- Parental separation / divorce
- Incarcerated parent

4 or more ACEs
- 3x the levels of lung disease and adult smoking
- 14x the number of suicide attempts
- 4.5x more likely to develop depression
- 11x the level of intravenous drug abuse
- 4x as likely to have begun intercourse by age 15
- 2x the level of liver disease

Adverse childhood experiences are the single greatest unaddressed public health threat facing our nation today

Dr. Robert Block, the former President of the American Academy of Pediatrics

67% of the population have at least 1 ACE

People with 6+ ACEs can die 20 yrs earlier than those who have none

1/8 of the population have more than 4 ACEs

www.70-30.org.uk
at NEST/Carers骏
Sources of Toxic Stress in Young Children

U.S. Children Ages 2-5 (per 1,000)

- Maltreatment: 75
- Parental Substance Abuse: 98
- Postpartum Depression: 130

Sources:
- Maltreatment: Finkelhor et al. (2005)
- Parental Substance Abuse: SAMHSA (2002)
- Postpartum Depression: O-Hara & Swain (1996)
Taking a two generational approach to health and well-being.

Consequences of unaddressed maternal mental health concerns on child outcomes
DEFINITIONS

Perinatal period: The perinatal period occurs between pregnancy through age one of the child.

PMADs: **Perinatal Mood and Anxiety Disorders**
<table>
<thead>
<tr>
<th>A VARIETY OF PMADS</th>
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<tbody>
<tr>
<td>Depression</td>
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<tr>
<td>Anxiety and Panic Disorder</td>
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<tr>
<td>Obsessive-Compulsive Disorder</td>
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<tr>
<td>Post-Traumatic Stress Disorder</td>
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<tr>
<td>Bipolar</td>
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<td>Psychosis</td>
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PERINATAL DEPRESSION

Feelings of anger or irritability
Lack of interest in the baby
Appetite and sleep disturbance
Crying and sadness

Feelings of guilt, shame or hopelessness
Loss of interest, joy or pleasure in things you used to enjoy
Possible thoughts of harming the baby or yourself

Pregnancy: An estimated 15-20% experience moderate to severe symptoms of depression of anxiety.

Postpartum: Major or minor depression affects more than 20% of women.

(Wisner, Sit, McShea, et al., JAMA Psychiatry 2013)
PERINATAL ANXIETY

- During pregnancy and early postpartum, anxiety prevalence (15.8-17.1%) exceeds depression rates. (Fairbrother et al., 2016)
- Prenatal:
  - Strong predictor of PPD (Fairbrother, et al. 2015)
- Postnatal: Up to 11% of new moms experience Perinatal Panic Disorder (Wenzel, 2011)

- Constant Worry
- Feeling that something bad is going to happen
- Racing Thoughts
- Disturbances of sleep and appetite
- Inability to sit still
- Physical symptoms like dizziness, hot flashes, and nausea

(Fairbrother et al., 2016)
PERINATAL OBSESSIVE COMPULSIVE DISORDER

• While 1-2% of general population is affected by OCD, it is more prevalent in the postnatal period.
• Prevalence estimates range from 4-9% (Challacombe, 2013) up to 11% (Miller, 2013).

  • Symptoms commonly oriented around baby
  • Pregnancy onset: more focused on accidentally harming or contaminating baby (excessive handwashing, avoiding others because of germs, minimal child handling affecting attachment)
  • Postnatal onset: more likely fears of deliberately harming baby (avoidance of task with baby care and mental rituals to cancel thoughts)
• Most misdiagnosed PMAD
• Misdiagnosis can lead to separation of mother/infant and possibly reinforce fears that they may harm baby.
POST-PARTUM PTSD

- An estimated 9% of women experience PTSD following childbirth (Beck, et al., 2011)
- Trauma screening in perinatal period is recommended (Choi and Sikkema, 2016)
  - Reminder of past maltreatment, experiences as a child
  - Possibly intrusive medical interventions

- Intrusive re-experiencing of a past traumatic event (which in this case may have been the childbirth itself)
- Flashbacks or nightmares
- Avoidance of stimuli associated with the event, including thoughts, feelings, people, places and details of the event
- Persistent increased arousal (irritability, difficulty sleeping, hypervigilance, exaggerated startle response)
- Anxiety and panic attacks
- Feeling a sense of unreality and detachment
PERINATAL PSYCHOSIS

- Occurs in approximately 1-2 of every 1,000 deliveries
- Onset is generally very sudden
- A 5% suicide rate and a 4% infanticide rate are associated with postpartum psychosis
- Delusions or strange beliefs
- Hallucinations (seeing or hearing things that aren’t there)
- Feeling very irritated
- Hyperactivity
- Decreased need for or inability to sleep
- Paranoia and suspiciousness
- Rapid mood swings
- Difficulty communicating at times

(Sit, et al., 2006)
HIGH RISK GROUPS

- Risk of PMAD increases for those experiencing a these social, economic and health concerns
- Access to care is also impacted by many of these risk factors and should be part of any discussion of PMAD care.

- Social isolation
- High risk pregnancies
- Teen mothers
- Low income
- Veteran/service member in family
- History or current substance use
- Trauma
- Adoption
- NICU
- Intimate partner/domestic violence
- Pregnancy loss/infertility

Risk of PMAD increases for those experiencing these social, economic and health concerns. Access to care is also impacted by many of these risk factors and should be part of any discussion of PMAD care.
WHY WE SHOULD CARE

Most common medical complication related to childbearing

Illness is detectable and treatable

Opportunity to help women with prior undiagnosed mental illness or those at risk for continued mental illness.
### Pregnancy-Related Deaths in the US

#### Leading underlying causes of pregnancy-related deaths

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Hemorrhage</td>
<td>14.0</td>
</tr>
<tr>
<td>Cardiovascular and coronary conditions</td>
<td>14.0</td>
</tr>
<tr>
<td>Infection</td>
<td>10.7</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>10.7</td>
</tr>
<tr>
<td>Embolism</td>
<td>8.4</td>
</tr>
<tr>
<td>Preeclampsia and eclampsia</td>
<td>7.4</td>
</tr>
<tr>
<td>Mental health conditions</td>
<td>7.0</td>
</tr>
</tbody>
</table>

#### Preventability among pregnancy-related deaths

- **70.0%** of pregnancy-related deaths from hemorrhage are preventable.
- **68.2%** of pregnancy-related deaths from cardiovascular and coronary conditions are preventable.

UNTREATED PMADS

When a mother has a PMAD, 10% or more of fathers will experience a PMAD as well. (Paulson & Bazemore, 2010)

If left untreated, depressive symptoms persist.
-16.1% depressed at 2-4 months
-15.5% depressed at 30-33 months
(Phelan et al. Inj Prev 2007)

If not treated, does not typically resolve itself (Woolhouse H. et al. BJOG 2014)
CONSEQUENCE OF UNDIAGNOSED, UNTREATED PMADS
UNTREATED PMADS NEGATIVELY IMPACT MATERNAL, BIRTH, AND INFANT OUTCOMES

Suicide is a leading cause of pregnancy-related mortality and is strongly associated with depressive symptoms
  - Increased risk of self-harm ideation
  - Women hospitalized with postpartum psychiatric disorder have a suicide rate of 6.8%

Additionally, women with PPD have:
  - Higher risk for alcohol or illicit substance abuse
  - Higher prevalence of smoking during postpartum period
  - Higher risk of low birth weight
  - Increased risk of preterm delivery
PARENTING STYLES OF DEPRESSED MOTHERS MIGHT BE INCREASINGLY WITHDRAWN OR INTRUSIVE

• WITHDRAWN:
  - DISENGAGED
  - DISTANT
  - UNRESPONSIVE/FLAT AFFECT
  - DO LITTLE TO ENCOURAGE OR SUPPORT THEIR CHILD’S ACTIVITIES

• INTRUSIVE:
  - USED HARSH DISCIPLINE
  - ROUGH HANDLING
  - ANGRY/HOSTILE
  - ACTIVELY INTERFERE WITH THEIR INFANTS’ ACTIVITIES
INCREASED RISK FOR INJURY

- LESS SAFETY PRECAUTIONS TAKEN
  - IMPROPER CAR SEAT USE
  - LESS SAFE SLEEP PRACTICES
  - LESS USE OF SAFETY LATCHES OR TAKING EXTRA STEPS TO PREVENT FALLS, POISONING, OR BURNING
<table>
<thead>
<tr>
<th>Consequences of Undiagnosed or Untreated PMADS in Prenatal Period</th>
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<tbody>
<tr>
<td>Increased preterm births</td>
</tr>
<tr>
<td>Impaired fetal growth resulting in low birth weights</td>
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<tr>
<td>Pre-eclampsia</td>
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<tr>
<td>Placental abruption</td>
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<tr>
<td>Gestational Diabetes</td>
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<tr>
<td>Maternal bereavement increased stillbirth risk by 18%</td>
</tr>
<tr>
<td>Consequences of Undiagnosed or Untreated PMADS in Postpartum Period</td>
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<tr>
<td>---------------------------------------------------------------</td>
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<tr>
<td>Risk of impaired bonding and attachment</td>
</tr>
<tr>
<td>Lower levels of dopamine and serotonin in newborn</td>
</tr>
<tr>
<td>Increased infant crying</td>
</tr>
<tr>
<td>Delayed fetal heart rate responsivity</td>
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<tr>
<td>50% increased risk for developmental delay at 18 months of age</td>
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CONSEQUENCES OF UNDIAGNOSED OR UNTREATED PMADS IN MOTHERS FOR TODDLERS

- Insecure attachment with mother, inhibition and fear, clinginess
- Less social interaction with peers
- Lower self esteem
- More behavior problems, aggression
- Motor delays with chronic maternal depression
CONSEQUENCES OF UNDIAGNOSED OR UNTREATED PMADS IN MOTHERS FOR OLDER CHILDREN

- Increased peer conflicts
- Decreased cognitive development
- Worse school achievement
- Increased risky behavior
- Increased risk of mental health challenges
IT TAKES A VILLAGE

COMMUNITIES CAN INCREASE MATERNAL AND CHILD HEALTH OUTCOMES BY PROMOTING:

- OPTIMAL NEURODEVELOPMENT (WORKING TO ENSURE SAFE, STABLE, NURTURING ENVIRONMENT AND RELATIONSHIPS)
- PROMOTING POSITIVE PARENTING BEHAVIORS
- REDUCING ENVIRONMENTAL STRESSORS (EPIGENETICS)
Offer education about PMADs in women’s health care settings

Screening for PMADs in pre and post natal settings, including pediatric offices

Referrals for treatment

Referrals to other supports
MIND-BODY/SELF CARE PROMOTION

• EDUCATE ON RISKS OF STRESS TO MOM AND BABY
• ENCOURAGE SELF CARE:
  • EXERCISE
  • SPIRITUAL PRACTICE/MINDFULNESS
  • REST
  • SOCIALIZATION

NORMALIZE ASKING FOR HELP
INCREASE ACCESS TO PARENTING SUPPORTS

EARLY CHILDHOOD COALITIONS

THE LOCAL COALITIONS ARE WORKING TO INCREASE COORDINATION ACROSS CHILD SERVING SYSTEMS AT THE GRASS ROOTS LEVEL IN TOWNS, COUNTIES, AND REGIONS.
INCREASE ACCESS TO PARENTING SUPPORTS

- Period of PURPLE crying program
- Safe Sleep for Baby (cribs)
- Safe Seats for Baby (car seats)
- Resource guide development for PMADs
- Education on current MCH issues
- Screening Guide for PMADs in Primary Care
- Community Connection Building
INCREASE ACCESS TO PARENTING SUPPORTS

HEALTHY MONTANA FAMILIES HOME VISITING

HOME VISITING IS A PARTNERSHIP BETWEEN PROFESSIONALLY TRAINED PARENT EDUCATORS AND FAMILIES TO HELP PARENTS BE THE BEST PARENTS THEY CAN BE. HOME VISITS ARE PROVIDED REGULARLY TO EXPECTANT PARENTS, PARENTS WITH NEW INFANTS, AND YOUNG CHILDREN UNTIL THEY ENTER KINDERGARTEN. THE GOAL OF HOME VISITING SERVICES IS TO BUILD ON PARENT AND FAMILY STRENGTHS.
PARENTING CLASSES

CIRCLE OF SECURITY

- TEACHES LANGUAGE OF ATTACHMENT
- PROMOTES HEALTHY RELATIONSHIPS
CULTURE IS MEDICINE, WE ARE THE MEDICINE

SOCIALIZATION/CULTURAL CONNECTION  
EQUITY  
PLAY/QUALITY TIME
RESOURCES

- HTTP://DPHHS.MT.GOV/HCSD/CHILDCARE/BESTBEGINNINGSADVISORYCOUNCIL
- HTTP://DPHHS.MT.GOV/PUBLICHEALTH/HOMEVISITING
- HTTPS://WWW.CIRCLEOFSECURITYINTERNATIONAL.COM/
- HTTP://WWW.MTCHILDCARE.ORG/
FOR MORE INFORMATION

Stephanie Morton, MSW
Program Manager
Stephanie@Hmhb-mt.org
(406)449-8611 o
(406)370-2504 c

Brie Oliver, RN, IBCLC
Executive Director
Brie@Hmhb-mt.org
(406)449-8611

Healthy Mothers, Healthy Babies
318-20 N. Last Chance Gulch, Ste 2C
Helena, MT 59601

www.hmhb-mt.org