PERINATAL DEPRESSION

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Faculty/Presenter Disclosure

- **Faculty: Jane Moody, MD, FRCPC**
- **Relationships with commercial interests:**
  - **None**
- **Potential for conflict(s) of interest:**
  - **None**

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Objectives

The participant will be able to:

- Become familiar with risk factors for perinatal depression
- Be aware of criteria for diagnosis of perinatal depression
- Understand immediate management strategies for perinatal psychiatric disorders

Perinatal Depression

- Lifetime rates of Depressive disorders in women: 10-20%
- Occur more frequently during childbearing years
- Prevalence rates of moderate and severe depressive sx in pregnancy: 7 to 20%
- Prevalence in 1st year postpartum: 10-30%

DSM-V Criteria for Major Depressive Episode

- Depressed mood or a loss of interest or pleasure in daily activities for more than two weeks
- Mood represents a change from the person's baseline
- Impaired function: social, occupational, educational
- Specific symptoms, at least 5 of 9, present nearly every day:

DSM-V Criteria for Major Depressive Disorder

1. Depressed or irritable mood most of the day
2. Decreased interest or pleasure in most activities, most of each day
3. Significant weight change or change in appetite
4. Change in sleep: Insomnia or hypersomnia
5. Change in activity: Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feelings of worthlessness or excessive or inappropriate guilt
8. Concentration: diminished ability to think or concentrate, or difficulty making decisions
9. Suicidality: Thoughts of death or suicide, or has suicide plan

RISK FACTORS

Risk Factors for Perinatal Depression: (major)

- Prior history of mental illness
  - Depression: strongest risk factor (up to 50% will develop PPD)
  - Postpartum Depression (40% will have a recurrent episode)
- Stopping treatment in pregnancy
  - 3-5 X risk of relapse compared with continued treatment
- Domestic Violence
- Family history of Depression

Risk Factors for perinatal depression: associated factors

- Anxiety in pregnancy
- Adverse life events, acute and chronic stressors
- Teenager, unplanned pregnancy, ambivalence
- Poor supports, no partner, low SES
- Relationship/family conflict
- Pregnancy complications
    - Preterm birth, multiple births, infant with health problems or perceived difficult temperament
- Substance misuse
- Chronic medical illness

Prevention of Perinatal Depression

- No evidence for specific interventions for prevention of antenatal depression

- Postpartum Depression:
  - Cochrane reviews:
    - Women who received a psychosocial intervention less likely to develop PPD than those with standard care (2013)
    - Antidepressants to prevent PPD: mixed evidence but inconclusive (2018)

SCREENING AND ASSESSMENT

Screening

- Conflicting evidence regarding universal vs. targeted screening
- Perinatal women may be less likely to report depressive symptoms than non-perinatal women
- Canadian guidelines support universal screening
- EPDS: valid anytime during pregnancy, and postpartum
- Positive screen is not diagnostic; warrants further assessment

Edinburgh Postnatal Depression Scale[1] (EPDS)

Name: _____ Address: _____

Your Date of Birth: _____ _____

Baby's Date of Birth: _____ Phone: _____

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- ☐ Yes, all the time
- ☒ Yes, most of the time
- ☐ No, not very often
- ☐ No, not at all

This would mean: "I have felt happy most of the time" during the past week. Please complete the other questions in the same way.

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - ☐ As much as I always could
   - ☐ Not quite so much now
   - ☐ Definitely not so much now
   - ☐ Not at all

2. I have looked forward with enjoyment to things
   - ☐ As much as I ever did
   - ☐ Rather less than I used to
   - ☐ Definitely less than I used to
   - ☐ Hardly at all

*3. I have blamed myself unnecessarily when things went wrong
   - ☐ Yes, most of the time
   - ☐ Yes, some of the time
   - ☐ Not very often
   - ☐ No, never

4. I have been anxious or worried for no good reason
   - ☐ No, not at all
   - ☐ Hardly ever
   - ☐ Yes, sometimes
   - ☐ Yes, very often

*5 I have felt scared or panicky for no very good reason
   - ☐ Yes, quite a lot
   - ☐ Yes, sometimes
   - ☐ No, not much
   - ☐ No, not at all

*6. 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 copied quite well
   - ☐ No, I have been coping as well as ever

*7 I have been so unhappy that I have had difficulty sleeping
   - ☐ Yes, most of the time
   - ☐ Yes, sometimes
   - ☐ Not very often
   - ☐ No, not at all

*8 I have felt sad or miserable
   - ☐ Yes, most of the time
   - ☐ Yes, quite often
   - ☐ Not very often
   - ☐ No, not at all

*9 I have been so unhappy that I have been crying
   - ☐ Yes, most of the time
   - ☐ Yes, quite often
   - ☐ Only occasionally
   - ☐ No, never

*10 The thought of harming myself has occurred to me
   - ☐ Yes, quite often
   - ☐ Sometimes
   - ☐ Hardly ever
   - ☐ Never

Administered/Reviewed by _____ Date _____

[1]Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786.

[2]Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

Diagnosis of MDE in Perinatal Period

- **“Symptom” overlap**
  - **Fatigue, poor sleep, appetite changes, poor concentration**

- **Symptoms not normally seen in pregnancy/postpartum:**
  - **Guilt, anhedonia, suicidal thinking, obsessive thoughts, severe anxiety about mothering, difficulty sleeping when baby is sleeping, lack of enjoyment in baby**

Postpartum Mood Changes: a Spectrum

Blues

- Transient, non-pathologic
- Up to 75%

PPD

- Often severe, disabling, affects function
- 10-20%

PPP

- Psychiatric emergency
- 0.1%

Baby Blues vs. PPD?

- Up to 75% of women
- Onset 3-5 days after delivery
- Course days to weeks
- Characterized by rapid mood swings, crying for no reason, anxiety
- Normal response to birth
- Resolves quickly and without treatment

Baby Blues vs. **PPD**?

- Occurs anytime in first year postpartum
- May start/overlap with same symptoms as Baby Blues
- Symptoms more severe, persistent

Baby Blues vs. **PPD**?

- Wanting to pass off the baby
- Difficulty sleeping when baby is sleeping
- Withdrawal/Isolation
- Feelings of worthlessness and guilt, sense of inadequacy as a parent
  - Hopelessness
  - “Bad” or “terrible” mother
- Obsessive thoughts of harming the baby
  - Ego-dystonic
  - Lack delusional conviction
- Suicidality

Other Considerations

- Collateral information
- Comorbidities
  - Anxiety disorders, substance abuse, others
- Differential diagnosis
  - r/o endocrine cause

Suicide assessment

- Very difficult to predict
- Maternal suicide rate similar to gen pop
  - 3-5/100,000
- Increased severity of illness increases risk
- Early onset of depression following childbirth
- Previous episode of hospitalized mental illness
- Prior suicide attempt
- Family history of suicide

TREATMENT

Perinatal Depression - Treatment

- Self-care, psychoeducation
- Referral to Mental Health Services
- Hospitalization if necessary
- Psychotherapy – CBT, IPT, others
- Medications for moderate to severe symptoms
- ECT for severe Depression, esp psychosis
- Close follow-up, ongoing assessment for SI and HI

Risks of Untreated Perinatal Depression: Mother

- Poor self care, inadequate nutrition, less weight gain
- Poor adherence to prenatal care
- Poor sleep, chronic depression, substance abuse, family strife
- Postpartum mood disorders, suicide, infanticide
- Negative views of self and infant
- Poorer response to baby's cues, shorter time breastfeeding

Risks of Untreated Perinatal Depression: Child

- Associated with preterm birth, lower birth weight, decreased head circumference
- Attachment problems in baby
- Emotional/social difficulties
- Behavioral difficulties
- Cognitive development? (Persistence of Depression)

Treatment of Depression in Pregnancy

- **Mild to moderate** depression
  - Psychotherapy
    - IPT, CBT
  - Others
    - Self-care, Psychoeducation, Light therapy, Mindfulness, Exercise, Massage, Acupuncture
- **Moderate to severe**
  - Grey area
  - Pharmacotherapy
- **Severe** depression
  - ECT

Psychotherapy

- Cognitive Behavioral Therapy
  - Link between thoughts, behaviors and physiological and emotional responses
- Interpersonal Therapy
  - Focus on role transitions and interpersonal interactions
- Group Therapy
- Couples/Family Therapy

Pharmacotherapy

- Pharmacotherapy preferred treatment for severe depression
- No controlled studies to date on effects of psychotropic medication for antepartum mental disorders
- NB discussion of risks and benefits of treatment vs. no treatment

Antidepressants: risks

- First trimester exposure:
  - Malformations
  - Other
- Third trimester exposure:
  - PPHN
  - Poor neonatal adaptation
- Behavioral teratogenesis

SSRIs

- First trimester exposure:
  - Malformations
    - No consistent pattern of defects
    - Some studies: very slight increased risk of septal heart defects
      - 0.9% (baseline 0.5%) (Pederson, 2009, BMJ)
      - 2.1% with >1 SSRI
    - Other newer studies have **not** found an association (better control of confounding risk factors: Huybrechts, 2014, NEJM)
      - RR for any cardiac defect exposed to AD: 1.25
      - RR fully adjusted for Depression and other confounders: 1.06
  - Other
    - Small increased risk spontaneous abortion (confounding factors?), possibly preterm birth, LBW
    - All risks with untreated depression

SSRIs

- Third trimester exposure:

- PPHN
  - Slight increased risk PPHN (3/1000 from 1-2/1000)
- Poor neonatal adaptation
  - Transient withdrawal symptoms (days to 2-3 weeks)
  - jitteriness, respiratory distress, feeding problems, ↑crying, ↑muscle tone, temperature instability, sleep disruption
  - Rare seizures in severe cases
  - 25-30% exposed newborns

SSRIs

- Behavioral Teratogenesis
  - Few studies, most important area
  - Fluoxetine, TCAs best studied
  - Reassuring but limited data
  - Long-term follow-up study of exposure to Fluoxetine: no difference in development (tested IQ, language, behaviour at 16 months-7 yrs) (1997, 2002)
  - 2012: Children of healthy controls scored better on IQ/behaviour ratings than those exposed to maternal depression or maternal depression +SSRI or Venlafaxine
  - Autism Spectrum Disorders: inconsistent evidence

Treatment Guidelines

- General Hospital Psychiatry, 2009

  "The management of depression during pregnancy: a report from the APA and the ACOG".

- BC Reproductive Mental Health Program

  "*Best Practice Guidelines for Mental Health Disorders in the Perinatal Period"* (March 2014)

- Molenaar et al 2018 (ANZJP)

  "*Guidelines on treatment of perinatal depression with antidepressants: An international review"*

  - 16 CPGs
  - 2 Canadian: BC Reproductive MHP, CANMAT

Table 1. Summary of guideline recommendations pre-, during and post-pregnancy and perinatal medication recommendations.

				Pre-pregnancy					Pregnancy				Postpartum					Medication recommendations	
	Country of origin	Year of publi-cation	Perinatal specific	Pregnancy planning	Continue AD	Switch AD	Psycho-therapy for new depression	Medi-cation for new depres-sion	Continue AD	Switch AD	Psycho-therapy for new depres-sion	Medi-cation for new depres-sion	Continue AD	Switch AD	Breast-feeding	Psycho-therapy for new depres-sion	Medi-cation for new depres-sion	Preferred medication	Non-preferred medication
ACOG	USA	2008	√								0	+							Paroxetine
APA	USA	2010		+			+	0	0		+	+			+	0	0		Paroxetine
BC	Canada	2014	√	+		–			0	–	+	+	+		+				Paroxetine
BMU	China	2015									+	+							
CANMAT	Canada	2016		+							+	+			+	+	+	Sertraline, (es) citalopram	Paroxetine, fluoxetine
COPE	Australia	2017	√				+	+			+	+			+	+	+		
Danish	Denmark	2014	√						+	+	+				0			Sertraline, citalopram	Paroxetine, fluoxetine
DGPPN	Germany	2017							+		0	0							Paroxetine, fluoxetine
NFOG	Norway	2015	√			–			+	–	+			+	+				Paroxetine
NHS	Spain	2014																Fluoxetine	Paroxetine
NICE	UK	2014	√	+			+	+	0	0	+	+	0	0	+	+	+		
NVOG	Netherlands	2012	√		+	–			0				+		+				Paroxetine
MOH	Singapore	2012							0		+	+				+	+		
RANZCP	Australia and New Zealand	2015		+							+					+	+		Paroxetine, fluoxetine, venlafaxine
SIGN	UK	2012	√						+	–	+	+			+	+	+		Paroxetine
VA/DoD	USA	2016									+					+		Sertraline	Paroxetine, fluoxetine

√: yes; +: advised by guideline; –: discouraged by guideline; 0: mentioned but no steering recommendation; ACOG: American College of Obstetricians and Gynaecologists; APA: American Psychiatric Association; VA/DoD: Department of Veterans Affairs/Department of Defense; BC: British Columbia Reproductive Mental Health Program & Perinatal Services British Columbia; BMU: Beijing Medical University; CANMAT: Canadian Network for Mood and Anxiety Treatments; COPE: Centre of Perinatal Excellence; RANZCP: Royal Australian and New Zealand College of Psychiatrists; NICE: National Institute for Health and Care Excellence; SIGN: Scottish Intercollegiate Guidelines Network; Danish: Danish Psychiatric Society, Danish Society for Obstetrics and Gynaecology, Danish Paediatric Society and Danish Company for Clinical Pharmacology; DGPPN: German Society for Psychiatry and Psychotherapy, Psychosomatics and Neurology; NVOG: Dutch Society of Obstetrics and Gynaecology; NFOG: Nordic Federation of Societies of Obstetrics and Gynaecology; NHS: Spanish ministry of health, social services and equality; MOH: Ministry of Health, Singapore.

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Antidepressants in Pregnancy

- Bottom line
  - No decision is risk free
  - Psychoeducation NB
  - Risks of non-treatment
  - Discontinuing antidepressant for pregnancy/planning: 68% likelihood of relapse during the pregnancy vs 40% risk if stay on medication.
  - Chance of malformations may be increased, but still very low for individual women
  - All SSRIs now implicated equally
    - We still avoid Paroxetine
    - Single AD is best
    - **If stable, don't switch!**

ADs in Breastfeeding

- Not contra-indicated
- Relative infant vs. maternal dose <10% is deemed negligible
- Fluoxetine & Citalopram highest infant serum levels
- Paroxetine & Sertraline usually undetectable infant plasma levels
- Other newer ADs (Bupropion, Venlafaxine, etc.): limited data but no evidence so far of risk

ADs in Breastfeeding

- Exposure in pregnancy is higher than in breastfeeding
- “Pump and Dump” costs outweigh theoretical benefits: not advised
- Side effects in breastfeeding infants rare: encourage monitoring by mother

Perinatal Depression – Take Home Points

- Rates of Depression in perinatal women same as non-perinatal women
- Diagnostic criteria the same, some symptoms overlap with pregnancy/postpartum
- Distinguish between “baby blues” and PPD
- Major risk factors: hx depression (esp perinatal), family hx depression, domestic violence
- Canadian guidelines support universal screening
- Psychosocial interventions may prevent occurrence of PPD
- NB to exclude other causes/contributing factors

Perinatal Depression – Take Home Points

- Mild to moderate depression: non-pharmacological approaches
  - Self-care, psychoeducation, psychotherapy
- Moderate to severe depression may require pharmacological approaches
- Risk of medications on fetus must be weighed against the risk of untreated depression
- Sertraline recommended first choice in most guidelines, but switching ADs usually not recommended
- Antidepressants not contraindicated in breastfeeding

Resources

- Local Public Health Nurse
- WRHA resources
  - “Families First” home visitors
  - Breastfeeding support
- Women’s Health Clinic
  - “Blues and Beyond” support group
  - “Peer Mentoring Program”
- Mood Disorders Association MB Support Groups
  - Crisis hotline, Peer support “Postpartum Warmline”
- Anxiety Disorders Association of Manitoba
- Other community counseling resources (Klinic, AFM)

Resources

- Consultation:
  - Centralized Intake for Psychiatric Consultation
    - (Non-urgent but perinatal referrals are prioritized)
  - WRHA Clinical Health Psychology services
  - RACE 204-940-2573
  - eConsult Manitoba (contact mbeconsult@umanitoba.ca)
- Mobile Crisis Service 204-940-1781
- Crisis Response Center
- Emergency Room

Other Resources - Links

- WRHA perinatal quick reference guide for health care providers:
  - Contact: mentalhealthpromotion@wrha.mb.ca
- Mental Health Resource Guide for Winnipeg
  - www.cmhawpg.mb.ca/resources.htm
- Fact sheets:
  - www.heretohelp.bc.ca/publications/factsheets/postpartum
  - www.psychguides.com/guides/depression-in-women
- Medication safety: www.motherisk.org (1-877-439-2744)
- www.ppdmanitoba.ca
- BC reproductive mental health program
  - www.reproductivementalhealth.ca

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SSRIs

- Paroxetine: **contraindicated** (despite newer evidence)
  - 4% risk of major malformation (gen pop 3%)
  - 2% cardiovascular risk, most VSDs (gen pop 1%)
  - Dose-related?
  - **Newer studies found lower risks, no significant association
  - Consider fetal echo if exposed
- Fluoxetine:
  - ? Small ↑risk of cardiac defects (up to 3%, baseline 1%) (not according to newer studies)
  - ↑risk of minor malformations of no functional or cosmetic importance

SSRIs

- Sertraline:
  - Possible small risk cardiac defects (2%, baseline 1%)
  - More recent large cohort study: **no association**
  - Study of 147 women exposed: no malformations
  - *Sertraline is recommended 1st choice for pharmacological treatment (very low levels in breastmilk)
- Citalopram:
  - General SSRI risk
- Escitalopram, Fluvoxamine: insufficient data

Other Newer ADs (Few Studies)

- Venlafaxine:
  - Little data; no increased risk of major malformations. Possible ↑ spontaneous abortions
- Duloxetine:
  - No increased risk malformations (little data)
- Desvenlafaxine: insufficient data
- Mirtazapine:
  - Small↑ risk of spontaneous abortions
  - No increased risk major malformations
- Bupropion
  - Small↑ risk of spontaneous abortions
  - Possible ↑ risk Cardiac defect (LVOTO) above other ADs (0.3% vs. 0.07%)

- Thank you for your attention!
- Questions?