



# Antenatal Mental Health and Support

**Angela Bowen, RN PhD**

Assistant Professor, College of Nursing  
University of Saskatchewan,  
Saskatoon, SK

[angela.bowen@usask.ca](mailto:angela.bowen@usask.ca)



**Funding:**



# Depression

## World Health Organization

- **2020**
  - depression will be 2nd greatest cause of premature death and disability worldwide in both sexes
- **Already**
  - #1 cause of disease burden in women (WHO, 2003)

## Canada

- Prevalence 7%, lifetime prevalence 12.3%
  - Twice that of men (Stewart, 2003)

# Depression is Depression...



***5 of these symptoms for more than  
2 weeks might mean a woman has major  
depression...***

- **Depressed mood most of the day**
- **Anhedonia (severely diminished interest or pleasure in activities)**
- Weight changes-secondary to appetite changes
- Insomnia or hypersomnia; psychomotor changes
- Restless, agitated, or slowed
- Diminished energy level
- Feelings of worthlessness or excessive guilt
- Decreased concentration and increased indecisiveness
- Recurrent thoughts of death or suicide

# Risk factors

- Female
- Single or living with parents
- Partner discord
- Lack of social support
- Stress
  - Often precedes first episode
- Low income
  - Food security
- Low education
- Family violence
  - Often starts in pregnancy
- Ethnic minority
  - Aboriginal
  - Immigrant
- Substance abuse
- Teen
- Parity---
- Previous History of Depression –PPD (~60%)
- Discontinuation of Anti-Depressants



***But any woman is susceptible...***

# Anxiety

- 4-15% of women
  - inability to relax
  - persistent arousal
  - fearfulness, phobic
  - preoccupied / over-concern with baby
  - high parenting expectations
  - constantly need reassurance
- Panic attacks
  - tension, hot sweats, palpitation
- May not identify symptoms
  - Think going crazy

# Anxiety and Depression

- Comorbid and temporal relationship
- Younger women
- Anxiety in pregnancy precedes postpartum depression
- May be equally detrimental to fetus and maternal functioning

- **Obsessive-Compulsive Disorder (OCD)**
  - Thoughts of suffocating, accidents, harming baby, sexual thoughts, knives
  - One study -- 39% of the participants reported their OCD began during a pregnancy, 25% increase in symptoms  
(Neziroglu, 1992)

- **PTSD**
  - 90% of women have experienced some trauma in life
    - Up to 5% PTSD in childbirth
  - Higher in younger women
  - Greatly increases depression, anxiety and obstetrical complications, substance use/abuse (Beck, 2006)

**Why do we care?**



# Effects on pregnancy and fetus

## Dysregulation of hypothalamic-pituitary-adrenal (HPA) axis

- Neuroendocrine system that responds to stress and regulates secretion of cortisol
- Animal studies
  - Stress in mothers affects fetal development
  - Neuronal death and abnormal development of brain structures
  - Ongoing pattern of stress reaction in the babe (Glover et al, 2002)

## Cortisol “the stress hormone”

- **also increased in anxiety and depression**
  - irritability of the uterus
  - ↑ resistance in blood vessels to the uterus &  
↓ blood flow to the baby
  - ↑ risk of pre-term delivery

(Teixeira, 1999)



# Effects on mother and pregnancy

- Increases and worsens with parity
- **Physical effects**
  - Irritable bowel
  - Hippocampus, Brain ventricles
  - Cardiac
- **Psychological**
  - Sleep → postpartum psychosis
    - Poor decisions, self-care
  - Relationship
    - Spouse-partners 50% more depression
  - Social
    - Isolation-substance use



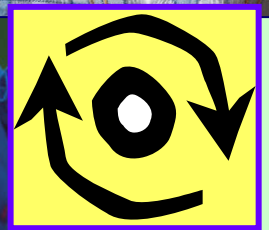
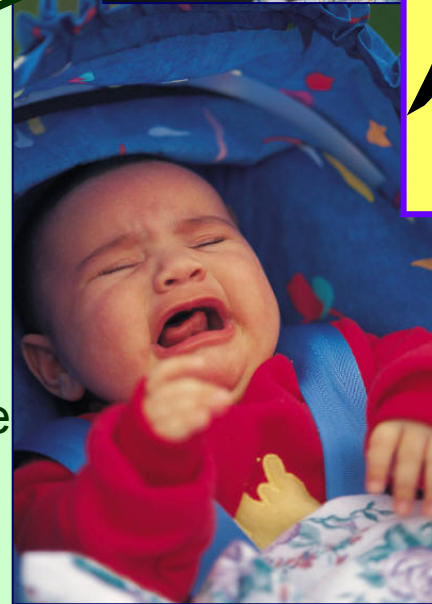
## ↑ **Complications in the pregnancy**

- ↓ prenatal care, ↓ vitamins, folic acid
- ↑ Preterm delivery
- ↑ Hypertension, C-section (Mixed findings)

# Effects on fetus and baby...

- ↑ Fetal abuse
- ↑ preterm
- ↓ Birth weight and weight gain
  - failure to thrive
- ↓ Apgar
- ↓ and shorter duration of breastfeeding
- Behavior
  - More withdrawn, irritable, inconsolable, depressed
- Pattern of stress responses
- ↑ SIDS
- Effects of lifestyle
  - alcohol ?FASD, smoking, poor prenatal care etc.

(Murray, 1997,2003; Zuckerman, 1989)



# ...Effects in Children

- Behavior problems in children
  - anxiety in pregnancy = ↑risk ADHD in boys
  - ↑ Depression in girls
- Social and school difficulties
- Autism
- Criminality
- Mothers less attentive to safety and stimulation of child

# Edinburgh Postnatal Depression Scale - EPDS

- Most common perinatal depression screening tool -1987
- Takes out many physical and emotional symptoms common in the perinatal period
  - Confound symptoms of depression
    - Irritability, sleep disturbance, tiredness, bowel, appetite, weight changes (Cox, 1987)

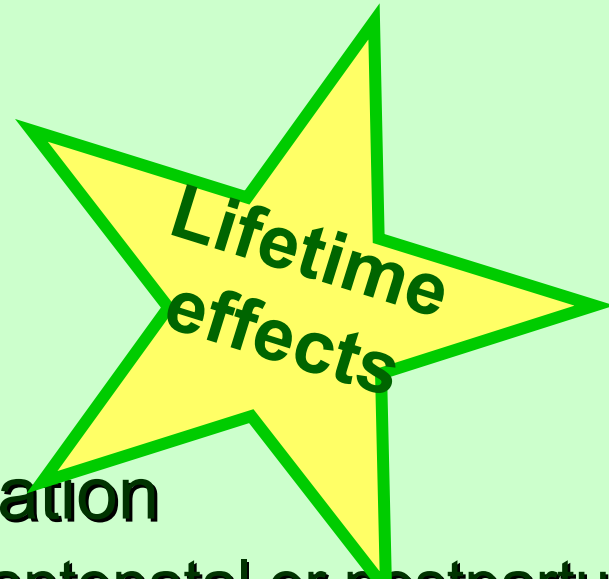
**Excessive physical complaints can alert care givers to potential depression in pregnancy**

# Interventions

- Need to screen in order to capture
  - Prenatal visits, immunization visits
- Need to address anxiety as well as depression symptoms
- Consider lifestyle
  - Working, tired, other children

# 1. Individual therapy

- Cognitive Behavioral Therapy
  - CBT, brief interpersonal therapy, mindfulness
    - “relaxation group”
  - Significantly more than education (Astin, 2008, Spinelli, 2003)



# 2. Groups

- Support, psycho education
  - Not proven to prevent antenatal or postpartum depression (Hayes, 2001)

### **3. Supportive, “listening visits”**

- Prevent PPD -- Unknown in antenatal
  - Depends on caregiver relationship

#### **➤ Educate woman about symptoms**

- Not going crazy
- **Family about symptoms**
  - Report worsening symptoms to caregiver
  - Suspiciousness, social isolation, no improvement despite intervention, sudden lightening of symptoms or elation

# 5. Medication

## ■ Antidepressants

- Fluoxetine 1st Line (CanMat) most studied (CEPHR, 2004)
- Mixed research findings
- PTSD

## ■ Anxiolytics

- Benzodiazepines

## ■ Antipsychotics

## ■ Mood stabilizers

- Treatment associated with ↑ risk for NTD
  - Valproic Acid and other anticonvulsants
  - Take preconceptual additional folic acid

**If medication will need information  
and support**

***'more dangerous for expectant or  
new mother to be seriously  
depressed'***

## **6. Electroconvulsive Therapy – ECT**

- Severe cases

## **7. Light therapy**

- Pilot studies positive (Epperson et al., 2004)

## **8. Self-care**

- Exercise
  - Walking, swimming
- Sleep
- Nutrition
- Simplify life
- Yoga or other relaxation

## 9. “Alternate” treatments

- Food & supplements - folic acid, omega 3
- Support quitting smoking – current and recently quit smokers, more depression and anxiety
- St. John’s Wort – contraindicated in pregnancy
- Acupuncture, massage (Clement, 1995; Simon et al., 2002; Spinelli, 2001)

*Combination of  
approaches...*



*Thank you*  
*Women and Staff*  
*Healthy Mother*  
*Healthy Baby Program,*  
*Westside Clinic,*  
*Saskatoon, Canada*