Anxiety and Sleep Disorders During and After Pregnancy

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Objectives

• Discuss the prevalence of anxiety disorders during pregnancy and postpartum
• Identify symptoms of anxiety during and after pregnancy
• Determine what is “normal” anxiety vs. clinically significant anxiety
• Identify screening tools to identify patients with anxiety
• Discuss treatments available for anxiety
• Identify changes in sleep cycle during and after pregnancy
• Discuss treatments available for sleep disturbances during and after pregnancy
How common is anxiety during and after pregnancy?

- Anxiety is diagnosed in: (6)
  - 4-39% of pregnant women
  - 16% of postpartum women
- Antenatal anxiety is more prevalent than antenatal depression(1)
- Anxiety symptoms during first trimester predicted anxiety in the third trimester, may put patients at higher risk for postpartum mental illness(1)
- Anxiety is highest during hospital stay but then sharply declines 2 weeks after delivery
  - If significant anxiety is still present at 2 weeks, levels remain fairly consistent at 2 months and 6 months(9)
- Generalized anxiety disorder is the most common anxiety disorder in postpartum(7)

Risk Factors

- History of smoking
- Single mothers
- Young age
- Lower level of completed education
- Unplanned pregnancy
- Low self esteem
- Low marital satisfaction
- Low social support(1)
- Presence of other mental health diagnoses, including depression(6)
Common Symptoms of Anxiety in the Perinatal/Postpartum Period

- Low self-esteem, low self-efficacy \(^{(8)}\)
- Obsessions concerning contamination \(^{(11)}\)
- Fear of harm to the fetus \(^{(11)}\)
- Examples:
  - Contracting a serious illness
  - Doubts about the baby’s safety because of contamination
    - Sterilizing products aren’t working
  - Preparing the house, losing sleep over need to have house “perfect”
  - Seeking reassurance from friends, family members, and healthcare providers

Common Symptoms of Anxiety in the Perinatal/Postpartum Period

- Risk for lower bonding with baby \(^{(12)}\)
- Difficulty with breastfeeding – can exacerbate anxiety \(^{(9)}\)
  - Perinatal anxiety can also lead to breastfeeding difficulty due to increased demands and difficulty adapting to challenges
- Underinvolvement – avoidance in order to keep from acting on fears \(^{(11)}\)
- Overinvolvement – being overprotective in order to avoid fears \(^{(11)}\)
Isn’t some worry during and after pregnancy “normal”?

- YES!!!
- Major role transition
- “Although intrusive thoughts commonly occur in new parents, psychological factors such as inflated responsibility beliefs, overestimation of threat, and faulty appraisals of intrusive thoughts can increase vulnerability for the development or exacerbation of OCD.” (11)
- Intrusive thoughts are common in pregnancy and postpartum
  - Increased risk if a mother believes these thoughts increase the likelihood of the behavior occurring and exaggerate the consequences (11)

When Anxiety Goes Beyond “Normal”

- Difficult to determine when to treat due to this being a time of a lot of worry
- Recommend treatment when a female is very distressed and/or taking significant measures to alleviate the anxiety
  - Compulsions such as not leaving the house, avoiding the baby, cleaning, etc.
  - Increased anxiety over beliefs that automatic thoughts are indicating real desires (i.e. harm to the baby)
Screening Tools to Help Identify Patients with Anxiety

- HADS-A\(^{(1)}\): Hospital Anxiety and Depression Scale – Anxiety Subset
- State-Trait Anxiety Inventory (STAI) used at 1 week postpartum can identify mothers at risk for anxiety disorders at the 8 week period \(^{(2)}\)
- Postpartum Worry Scale – Revised\(^{(7)}\)
  - Currently undergoing validity research
- GAD-7: Generalized Anxiety Disorder 7-item Scale

**GAD-7**

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![Generalized Anxiety Disorder 7-item (GAD-7) scale](image)
Need to Keep Other Diagnoses in Mind

- Depression and anxiety screening scores are moderately correlated
  - Despite this, very few women have positive screens for both\(^{(9)}\)
  - Clinically, we often see overlap between these two diagnoses which is contrary to this study
    - Depression = emotional upset about the past
    - Anxiety = emotional upset about the future

Nonpharmacologic Treatments for Anxiety

- Cognitive behavioral therapy (CBT)\(^{(6)}\)
  - OCD\(^{(4)}\)
  - Panic disorder
  - Specific phobia (group CBT)
Pharmacologic Treatment for Anxiety

- Selective serotonin reuptake inhibitors (SSRI)
  - Most recent research does not indicate a need to choose one SSRI over another, but sertraline (Zoloft) is often chosen due to having the most information available on this medication
  - Risk of malformation, including cardiac malformation, did not increase with use of SSRIs\(^6\)
  - Neonatal withdrawal is possible and usually lasts less than 2 weeks (Moses-Kolko et al, JAMA 293: 2372-2382, 2005)
  - In breastfeeding, may choose SSRI with shorter half-life due to concerns about plasma levels in the infant\(^6\)
    - Longer half-life: citalopram, fluoxetine
- Quetiapine augmentation \(^6\)

Pharmacologic Treatment for Anxiety, cont.

- Benzodiazepines
  - Oral clefting originally a concern has not been supported by more recent study, not thought to increase risk for congenital abnormalities \(^{13}\)
  - Can cause some neonatal withdrawal including breathing difficulty, weakness, irritability, crying, sleep disturbance, tremors, jitteriness \(^{13}\)
Pharmacologic Treatment of Anxiety, cont.

- Benzodiazepine study
  - Study by J. Kelly (2012) looked at exposure in 124 infants
    - 2 infants (1.6%) showed signs of CNS depression
      - Excessive sleepiness, not waking to breastfeed, or latch, limpness, lack of response to stimuli
      - In these two cases, mother took average of 3.5 CNS meds vs 1.7 in the other cases
    - No association with infant age, total daily infant sleep time, maternal benzodiazepine dose, or chronic vs intermittent use
    - No association with maternal sedation response to medication – 26% of mothers reported adverse effect

Case Study #1

- 32-year-old female from China
- Married with a 5-year-old son, full-time student in doctoral program
- Family history of OCD, depression
- No mental health history
- Referred from obstetrician for increased anxiety related to heartburn at 20 weeks pregnant
  - Made appointment for abortion
- Fixed beliefs vs. Obsessions
- Hospitalized for 10 days
- Started sertraline, quetiapine, and lorazepam
Case Study #2

- 41-year-old Caucasian female
- First pregnancy, unplanned
- Married, recently quit job to stay at home with child
- Presented at 2 months postpartum, breastfeeding
- Constant worry about daughter’s safety and how she may cause daughter harm
  - Unintentional harm vs. intentional harm
  - Recognizing automatic thoughts
  - Efforts to avoid harm including all organic diet, not leaving home due to fear of illness in public, avoidance of baby when home alone with her
- Started sertraline 50 mg daily x 1 week then increase to 100 mg daily

Sleep Problems

- International Classification of Sleep Disorders, 2\textsuperscript{nd} edition
  - Insomnia: presence of a sleep problem despite adequate opportunities for sleep
- Risk factors in this population:
  - Those with previous sleep problems
  - Being a first-time mother\textsuperscript{(3)}
- Depression can worsen sleep, but sleep can worsen depression... make sure to screen
Changes in Sleep Patterns During Pregnancy

- Only 1.9% of women do NOT experience sleep disruption in the third trimester \(^{(10)}\)
- Naps are common and often necessary \(^{(10)}\)

Changes in Sleep During the Postpartum Phase

- At 2 weeks postpartum, less than 6 hours of sleep total in 24 hours is common, including naps \(^{(10)}\)
- Almost 60% of postpartum women experienced poor sleep quality at 2 months \(^{(3)}\)
  - 16.5% of the women in this study also had depressive symptoms
- Sleep efficiency was not shown to return to baseline by 3 months postpartum \(^{(5)}\)
Other Things to Consider

- Sleep-disordered breathing (SDB), including obstructive sleep apnea (OSA)\textsuperscript{(10)}
  - Effects of rapid weight gain on progression of SDB is currently unknown
  - Those with daytime somnolence, loud snoring, or witnessed apneas should be evaluated
- Restless leg syndrome (RLS) is thought to increase during pregnancy and commonly resolves quickly in postpartum\textsuperscript{(10)}
  - Check for iron deficiency and supplement with folate
  - Walking, stretching, massage, heat, and relaxation techniques may be helpful
  - There are no controlled clinical trials to support or oppose medication treatment for RLS during pregnancy or breastfeeding

Nonpharmacologic Treatments of Sleep Disorders

- Adjust fluid intake to reduce nocturia\textsuperscript{(10)}
- Use pillow support during sleep or local heat application before sleep to alleviate discomfort\textsuperscript{(10)}
  - Do not use heat during sleep due to risk for burns
- Maternal sleep shown to improve if infant sleeps in another room\textsuperscript{(3)}
Pharmacologic Treatments of Sleep Disorders

- Start with Doxylamine
  - When combined with pyridoxine = Diclegis
    - Potentially can help nausea as well
- Zolpidem (Ambien): short acting, no anticholinergic effects
- Zaleplon (Sonata): not found to be a teratogen in animals, but no human data available
- Trazodone: No evidence of increased risk for malformation

Breastfeeding

- “The advice not to breastfeed or to uniformly avoid medications while nursing because of possible adverse effects in the infant is often not evidence-based and is not necessary in many cases” - 2013 American Academy of Pediatrics
- “The benefits of breastfeeding outweigh the risk of exposure to most therapeutic agents via human milk.” - Mass General Center for Women’s Mental Health

- LACTMED
  - Drug-use during lactation
  - Reports of adverse effects in breastfed infants
  - Effects on lactation
  - Drug alternatives to consider if indicated
Resources

- FDA Drug Information: https://www.accessdata.fda.gov/scripts/cder/drugsatfda/
  - New guidelines regarding use in pregnancy and breastfeeding no longer use the letter categories
  - Now will have descriptive summaries, including use during pregnancy and lactation subsections

- MGH Center for Women’s Mental Health: https://womensmentalhealth.org/

- MotherToBaby: http://mothertobaby.org/
  - Includes patient handouts

- Biennial Perinatal Mental Health Conference: www.perinatalmentalhealth.com

Questions?


