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Maternal Depression: Prevalence, Implications, Diagnosis, and Current Treatment Options

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Infant Mortality Rates: Prevalence

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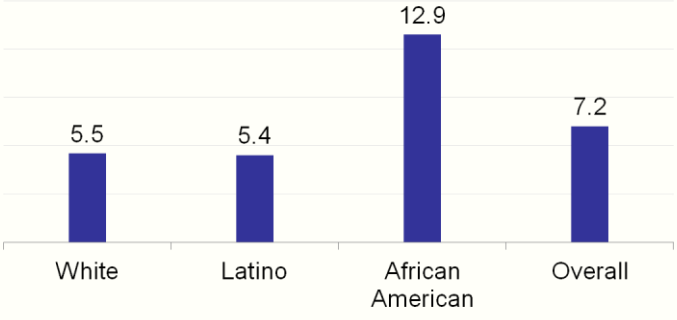
Deaths per 1,000 Live Births by Ethnicity in 2011[1]:



- 73% of child fatality in NC occurs in the first year of life
- NC infant mortality rate of 7.2 exceeds the national average of 6.02

1. NC Department of Health & Human Services State Center for Health Statistics
2. National Center for Health Statistics (CDC) Data Brief

Infant Mortality Rates: Prevalence

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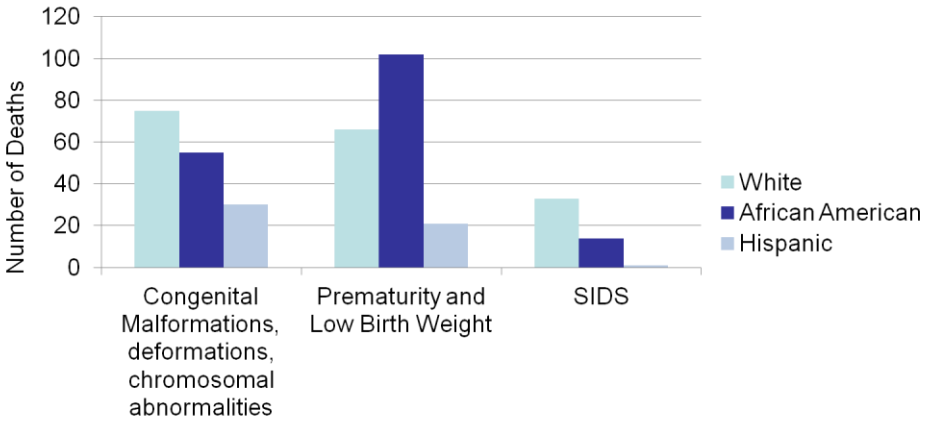
Leading Causes for 2011 NC Infant Deaths



1. NC Department of Health & Human Services State Center for Health Statistics

Maternal Depression: Implications on Child Mortality

Maternal depressive symptoms during pregnancy are associated with an increased risk of:

- preterm births,
- low birth weight, and
- Intrauterine growth restriction

Preterm birth, low birth weight, and intrauterine growth restriction are the leading causes of neonatal, infant, childhood morbidity, mortality, and developmental impairments worldwide

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Grote NK, Bridge JA, Gavin AR, Melville JL, Iyengar S, Katon WJ. A Meta-analysis of Depression During Pregnancy and the Risk of Preterm Birth, Low Birth Weight, and Intrauterine Growth Restriction. *Arch Gen Psychiatry.* 2010;67(10):1012-1024. doi:10.1001/archgenpsychiatry.2010.111.

Maternal Perinatal Depression: Prevalence

- 9-10% of women with middle incomes
- 20-26% of low-income African American and White women
  - Rates *may* be lower in Latina women
  - Not the case in NC (estimates of up to 64%)
- Estimates of perinatal depression are higher in adolescents
  - 16-44% compared to 10-23% in adult women
  - Highest estimates in both groups are low-income and minority adolescents
- Maternal perinatal depression has harmful, lasting deleterious effects on the child, mother, and family

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Maternal Depression and Child Mortality

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Depression during pregnancy significantly increases the risk of:

- preterm birth by 39%,
- low birth rate by 49%, and
- intrauterine grown restriction by 45%

In context, smoking more than 10 cigarettes a day increases the likelihood of preterm birth during weeks 33-40 of pregnancy by 40%, and 60% for week 32 or less

Depression during pregnancy poses the same risk for low birth weight and preterm birth as smoking 10 or more cigarettes a day during pregnancy

Grote NK, Bridge JA, Gavin AR, Melville JL, Iyengar S, Katon WJ. A Meta-analysis of Depression During Pregnancy and the Risk of Preterm Birth, Low Birth Weight, and Intrauterine Growth Restriction. *Arch Gen Psychiatry.* 2010;67(10):1012-1024. doi:10.1001/archgenpsychiatry.2010.111.

Maternal Depression: DSM-5 Diagnosis

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Must include (1) depressed mood or (2) lost of pleasure or interest

1. Depressed mood

2. Diminished interest or pleasure in all, or almost all, activities

3. Changes in weight or appetite

4. Changes in sleeping (insomnia or hypersomia)

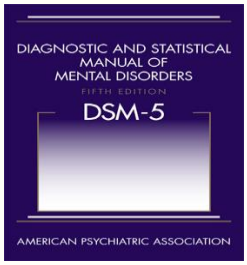
5. Feeling slowed down or agitated

6. Fatigue or loss of energy

7.Feelings of worthlessness or excessive or inappropriate guilt

8. Difficulty with thinking, concentrate, memory or decision making

9. Recurrent thoughts of death , suicidal thoughts, or a suicide attempt



Symptoms must significantly interfere with functioning and not be due to another medical illness.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders : DSM-5.* (5th ed., text revision.). Washington, DC: American Psychiatric Association.

Screening for Maternal Depression

There are a number of effective screening tools for maternal depression:

- Edinburgh Postnatal Depression Scale (EPDS)
- Center for Epidemiological – Depression (CESD)
- Hamilton Rating Scale for Depression (HRSD)
- Beck Depression Inventory (BDI)

The problem is that mothers are rarely screened for maternal depression consistently across the perinatal period and are even less likely to be screened for depression later in motherhood.

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Maternal Depression: Barriers to Care

- It is **difficult** to diagnose maternal depression
  - Postpartum depression is especially difficult to diagnose within the first 2 weeks after birth
- Uninsured pregnant women are offered "Pink Medicaid" (temporary & time limited)
- Pink Medicaid only covers 60 days of postpartum care, and up to 8 weeks of treatment for depression

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North Carolina Division of Medical Assistance

Risk Factors for Maternal Depression

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- Previous depressive symptoms, diagnosed depressive disorder, or other mood disorder
- Mood and anxiety symptoms during pregnancy
- Family history of depression
- Childhood trauma
- Recent "exit" events
- "Shame" or "Entrapment" events
- Poverty
- Current stressors (acute or mild but chronic)
- Interpersonal tensions
- Poor social support, especially confidant support (real or perceived)
- Lack of support from or conflict with the baby's father
- Low levels of optimism
- Low levels of perceived control
- Ambivalence or hostility toward pregnancy

Maternal Depression: Barriers To Treatment

Findings

- 13% to 16% of US mothers are diagnosed with postpartum depression
- However, postpartum depression is frequently undiagnosed and undetected

Challenges

- Depression during pregnancy is the strongest predictor depression postpartum
  - It is less likely to be detected or diagnosed than postpartum depression
- Screening for postpartum depression is oftentimes not accurate during the first 2 weeks after giving birth
- Our current system is unable to provide long-term treatment follow up care for mothers at greatest risk for developing postpartum depression
- Left undiagnosed, low-income mothers with postpartum depression have increased risk of negative infant outcomes for future pregnancies

1. Abrams, L. S., Dornig, K., & Curran, L. (2009). Barriers to service use for postpartum depression symptoms among low-income ethnic minority mothers in the United States. Qualitative Health Research, 19, 535-551. doi:10.1177/ 1049732309332794
2. Murray, L., Woolgar, M., Murray, J., & Cooper, P. (2003). Self exclusion from health care in women at high risk for postpartum depression. Journal of Public Health Medicine, 25(2), 131-137.
3. O'Hara, M. W. (2009), Postpartum depression: what we know. Journal of. Clinical Psychology, 65: 1258–1269. doi: 10.1002/jclp.20644
Robertson, E., Grace, S., Wallington, T., & Stewart, D. E. (2004). Antenatal risk factors for postpartum depression: A synthesis of recent literature. General Hospital Psychiatry, 26(4), 289-295.

Maternal Depression: Current Treatment Options

- Medication alone (e.g., SSRI)
- Medication with Cognitive Behavioral Therapy
- Group Therapy with CBT
- Interpersonal Psychotherapy

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Bledsoe, S.E., & Grote, N.K. (2006). Treating depression during pregnancy and the postpartum: A preliminary meta-analysis. Research in Social Work Practice, 16, 109–120.

Maternal Depression: Safety of Medication

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- Risk of birth defects from antidepressants is present, but low
- Type of risk varies
  - Limb malformation with tricyclic antidepressants
  - Lung problems in newborns with SSRIs (most commonly used medications)
- Evidence of risks for women who breastfeed is mixed
  - Breastfed infants exposed to Paroxetine and Sertraline are unlikely to develop detectable serum levels
  - Infants exposed to Fluoxetine were likely to have detectable drug levels
- The decision to use antidepressants during pregnancy and lactation is based on the balance between risks and benefits to both mother and child

Psychotherapy interventions for maternal depression pose no known risks to mother or child.

Lanza Di Scalea T, Wisner KL. Antidepressant medication use during breastfeeding. Clin Obstet Gynecol. 2009;52:483–97.

Maternal Depression: Beyond Child Fatality

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Additional long-term and costly risks to children associated with maternal depression include:

- Maternal morbidity and mortality
- Risk of negative attachment
- Delayed language & developmental milestones
- More negative affect
- Severe tantrums
- Less social interest and exploration
- Decreased school readiness
- Increased risk of childhood mental health problems
- For infants of adolescent mothers with depression, increased risk of repeating the cycles of being a depressed, adolescent mother

Questions?

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