Mental Health among Women of Reproductive Age

The Centers for Disease Control and Prevention (CDC), Division of Reproductive Health works to improve the mental health of women of reproductive age (aged 15-44) through surveillance and research.

Why is CDC's Division of Reproductive Health studying this issue?

- Mental health conditions, including depression and anxiety, are common among pregnant, postpartum, and nonpregnant women of reproductive age.[1,2,3]
- Poor mental health may adversely affect women's family relations, social life and their ability to function at school or work.[4]
- Poor mental health is associated with substance use and may put women at risk for future chronic disease, such as diabetes and heart disease.[5,6]
- Poor mental health may adversely impact pregnancy, maternal infant bonding, maternal functioning, and infant and child health and development.[1,7]

What is CDC's Division of Reproductive Health doing to address the issue?

- **Conducting routine national and state-based surveillance** on depression and other mental health conditions; their diagnosis and treatment among pregnant, postpartum and nonpregnant women of reproductive age by analyzing data from the CDC Pregnancy Risk Assessment Monitoring System (PRAMS), the Behavioral Risk Factor Surveillance System (BRFSS), SAMHSA's National Survey on Drug Use and Health (NSDUH), and other sources.
- **Creating optimal screening questions for postpartum depression and anxiety** for the PRAMS (www.cdc.gov/PRAMS).
- **Identifying risk factors and health conditions** associated with depression, anxiety, and poor mental health among women of reproductive age through epidemiologic studies.
- **Monitoring reproductive health and infant outcomes** among women with depression and anxiety through surveillance and epidemiologic studies.
- **Assisting states** with state-based surveillance on depression among women of reproductive age.
- **Synthesizing and disseminating information** on mental health among women of reproductive age to the scientific community, states, partner organizations, and the public through published reports, systematic reviews, presentations, and a Web site (http://www.cdc.gov/reproductivehealth/Depression/).

These activities will further efforts to develop appropriate public health strategies for addressing mental health among women of reproductive age, increase information between providers and their patients, and advance CDC's goal to improve the mental health of women of reproductive age.

What has CDC found?

Depression is common among women of reproductive age.

- From the 2005-2009 NSDUH, about 1 out of 10 women (8% of pregnant women and 11% of nonpregnant women of reproductive age) had at least one major depressive episode in the past year. [2]

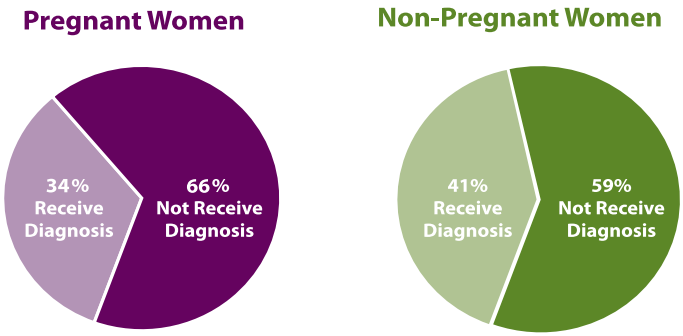
Additionally

- From the 2006 and 2007 BRFSS, more than 14% of nonpregnant U.S. women 18-44 years of age had current major or minor depression and 3% had current serious psychological distress.[3]
- Among a group of pregnant women in Washington and Oregon, mental health was one of the top three types of maternal complications during pregnancy, with about 1 out of 10 (9%) women having a diagnosed mental health condition.[8]
- From the 2004 and 2005 PRAMS, the percentage of women in 17 states with self-reported postpartum depressive symptoms ranged from 12% in Maine to 20% in New Mexico.[9]
- About half (54%) of women with postpartum depression had depression diagnosed before or during pregnancy.[10]

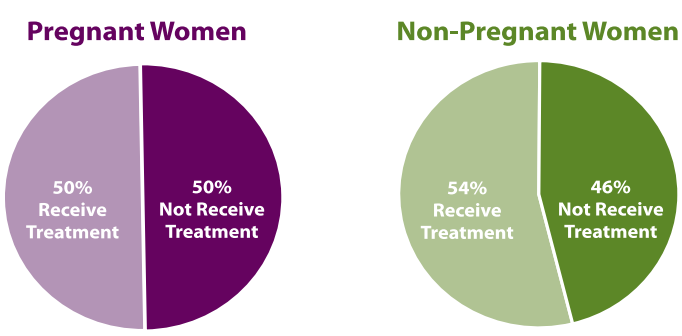
Depression in women often goes undiagnosed and untreated.

- In a U.S. sample of women, two-thirds (66%) of past-year depression in pregnant women and 59% of past-year depression in nonpregnant women went undiagnosed.[2]
- Only half of depressed pregnant (50%) and nonpregnant (54%) women receive treatment, with prescription medication the most common form for both pregnant (40%) and nonpregnant (47%) women, followed by counseling (36% for both pregnant and nonpregnant women).[2]

Diagnosis among Pregnant and Non-Pregnant Women with Depression



Treatment among Pregnant and Non-Pregnant Women with Depression



- Common barriers to treatment among pregnant and nonpregnant U.S. women are cost (55%), opposition to treatment (42%), and stigma (26%).[2]

Certain groups of women are at higher risk of poor mental health.

- Risk factors for major depression in nonpregnant women 18-44 years of age include older age, less education, being unmarried, inability to work or being unemployed, and lower income.[3]
- Postpartum depressive symptoms are associated with young maternal age, partner-related stress or physical abuse, traumatic or financial stress, tobacco use during pregnancy, and delivery of a low birth weight infant.[9]
- Younger women (65%), African American (73%), Hispanic (68%), other nonwhite racial and ethnic groups (68%), and uninsured women (66%) are least likely to receive a diagnosis.[2]

Depressed women have unique reproductive and infant health outcomes.

- Among low income women, those with frequent mental distress are more likely to use less effective forms of contraception.[11]
- Women with frequent mental distress are more likely to smoke, be overweight or obese, and have less social support before becoming pregnant.[12]
- In an insured population, infants of mothers with postpartum depression or anxiety had more sick/emergency visits and an increased risk of hospitalization than infants of mothers with no depression or anxiety.[13]

Depressed women are at increased risk of chronic disease and substance use.

- Among U.S. women with major depression, most (89%) have one or more chronic physical conditions or risk factors, such as diabetes, smoking, binge or heavy drinking, obesity, and physical inactivity.[6]
- Women who quit smoking during pregnancy are almost twice as likely (1.8 times) to start smoking again during the postpartum period if they experienced postpartum depressive symptoms.[14]
- A higher percentage of women with current major (18%) or minor (18%) depression, or a past diagnosis of depression (20%) reported binge or heavy drinking compared to women with no history of depression (15%).[6]

What don't we know?

- More research is needed on ways to alleviate barriers to diagnosis and treatment among depressed women.
- More work is needed to find effective ways to integrate mental health services into routine healthcare for women of reproductive age.
- Interventions are needed that simultaneously address both lifestyle behaviors, such as smoking, and depression among reproductive age women in order to improve their mental and physical health.

For further information on the internet, please visit:
http://www.cdc.gov/reproductivehealth/Depression/ or http://www.mentalhealth.gov/, or directly contact **Dr. Sherry Farr** (email: sfarr@cdc.gov).

Definitions

Depression:

- Minor Depression: 2-4 symptoms out of the 9 below, with at least one being #1 or #2
- Major Depression: ≥5 symptoms out of the 9 below, with at least one being #1 or #2

1. Depressed mood
2. Markedly diminished interest or pleasure in all, or almost all, activities
3. Significant weight loss when not dieting or weight gain
4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feelings of worthlessness or excessive or inappropriate guilt
8. Diminished ability to think or concentrate, or indecisiveness
9. Recurrent thoughts of death, suicidal ideation, or a suicide attempt

Frequent Mental Distress:

- Reporting mental health, including stress, depression, and problems with emotions, was not good for ≥14 days out of the previous month.

Serious Psychological Distress:

- Based on a score of ≥13 on the K-6 screening instrument which assesses frequency of the following feelings in the past 30 days: nervous, hopeless, restless or fidgety, so depressed that nothing could cheer you up, everything was an effort, and worthless. A score of ≥13 is correlated with severe mental illness.

References

1. O'Hara MW. Postpartum depression: what we know. *Journal of clinical psychology*. Dec 2009;65(12):1258-1269.
2. Ko JY, Farr SL, Dietz PM, Robbins CL. Depression and treatment among U.S. pregnant and nonpregnant women of reproductive age, 2005-2009. *Journal of women's health*. Aug 2012;21(8):830-836.
3. Farr SL, Bitsko RH, Hayes DK, Dietz PM. Mental health and access to services among U.S. women of reproductive age. *American journal of obstetrics and gynecology*. Dec 2010;203(6):542 e541-549.
4. Substance Abuse and Mental Health Services Administration, *Results from the 2011 National Survey on Drug Use and Health*: Mental Health Findings, NSDUH Series H-45, HHS Publication No. (SMA) 12-4725. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.
5. Le Strat Y, Dubertret C, Le Foll B. Prevalence and correlates of major depressive episode in pregnant and postpartum women in the United States. *Journal of affective disorders*. Dec 2011;135(1-3):128-38.
6. Farr SL, Hayes DK, Bitsko RH, Bansil P, Dietz PM. Depression, diabetes, and chronic disease risk factors among US women of reproductive age. *Preventing chronic disease*. Nov 2011;8(6):A119.
7. Yonkers KA, Wisner KL, Stewart DE, et al. The management of depression during pregnancy: a report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. *General hospital psychiatry*. Sep-Oct 2009;31(5):403-413.
8. Bruce FC, Berg CJ, Hornbrook MC, et al. Maternal morbidity rates in a managed care population. *Obstetrics and gynecology*. May 2008;111(5):1089-1095.
9. Centers for Disease Control and Prevention. Prevalence of self-reported postpartum depressive symptoms--17 states, 2004-2005. *MMWR. Morbidity and mortality weekly report*. Apr 11 2008;57(14):361-366.
10. Dietz PM, Williams SB, Callaghan WM, Bachman DJ, Whitlock EP, Hornbrook MC. Clinically identified maternal depression before, during, and after pregnancies ending in live births. *American journal of psychiatry*. Oct 2007;164(10):1515-1520.
11. Farr SL, Curtis KM, Robbins CL, Zapata LB, Dietz PM. Use of contraception among U.S. women with frequent mental distress. *Contraception*. Feb 2011;83(2):127-133.
12. Farr SL, Bish CL. Preconception health among women with frequent mental distress: a population-based study. *Journal of women's health*. Feb 2013;22(2):153-158.
13. Farr SL, Dietz PM, Rizzo JH, et al. Health care utilisation in the first year of life among infants of mothers with perinatal depression or anxiety. *Paediatric and perinatal epidemiology*. Jan 2013;27(1):81-88.
14. Allen AM, Prince CB, Dietz PM. Postpartum depressive symptoms and smoking relapse. *American journal of preventive medicine.* Jan 2009;36(1):9-12.