Depression during pregnancy increases risk for preterm birth and low birth weight

October 4 2010

Clinical depression puts pregnant women at increased risk of delivering prematurely and of giving birth to below-normal weight infants, according to a report published Oct. 4 in the *Archives of General Psychiatry*.

Being born too soon and weighing too little at birth can jeopardize the immediate survival and long-term health of babies. Preterm birth and low birth weight are leading causes worldwide of infant and early childhood mortality, respiratory distress, neurological and developmental impairment, cerebral palsy, blindness, hearing loss and other disabilities.

Depression is common during pregnancy as well as at other times in a woman's life. Between 9 to 23 percent of women experience clinical depression while pregnant.

"In the United States, the likelihood of experiencing premature birth is even greater for depressed pregnant women living in poverty than for depressed pregnant women from middle- to high-socioeconomic backgrounds," said the lead author of the report, Dr. Nancy Grote, University of Washington (UW)research associate professor of social work. Compounding the situation, she added, "Poor women in America are twice as likely to experience depression, compared to other women in this country."

Depressed, pregnant women living in European social democracies fared better than poor pregnant, depressed women in developing nations or in

the United States, the Oct. 4 paper reported. European women had lower rates of premature births and low-birth weight infants. Social democracies offer universal health care and tend to have fewer socio-economic disparities in birth outcomes. Living in a developing nation or in poverty in the United States, where adequate prenatal, medical and mental health services may be lacking, could add to the harmful effects of depression during pregnancy on birth outcomes, the Oct. 4 paper suggested.

A multidisciplinary group of researchers at the UW, The Ohio State University, and the University of Pittsburgh – representing social work, psychiatry, statistics, obstetrics, and pediatrics – conducted the study.

Previous reports over the past decade on the association between depression during pregnancy and preterm birth and low-birth weight infants have provided an inconsistent and inconclusive picture, the researchers noted. The researchers for this project performed a meta-analysis of all available United States and non-United States studies and used rigorous state-of-the-art guidelines to examine the data.

Dr. Jeffrey Bridge of The Research Institute at Nationwide Children's Hospital and Department of Pediatrics of The Ohio State University conducted the statistical analyses for the study. The results affirmed the strength of the link between depression during pregnancy and negative birth outcomes.

Based on these findings and other research evidence on the lasting effects of maternal depression on mothers and their children, the authors suggest some possible public health, as well as personal and family health, actions. Universal screening for depression and ready access to mental health care during pregnancy are critical initiatives.

"Ideally, pregnant women across the socioeconomic spectrum should be

checked for clinical depression, and treated appropriately," Grote said. In addition to this study showing depression during pregnancy might lead to serious newborn health issues, Grote explained that work by other researchers has shown that about 60 percent of postpartum depressions begin during pregnancy. Maternal postpartum depression, in turn, has been found to interfere with mother-infant bonding and attachment. Insecure attachment to the mother is associated with a host of emotional, behavioral, and cognitive problems for the child. It can foster difficulties in the baby's emotional and social development, school and learning problems as the child grows, and adolescent mental health concerns.

"Maternal depression affects the fetus, the newborn, the child and the adolescent," Grote said. "There are pernicious effects both before and after birth."

These findings overall point to the need for health-care reform measures to protect the well-being of mothers and children before they are born.

Grote believes that the investment incurred by such interventions as depression screening and treatment for pregnant women and young mothers, especially those who are economically disadvantaged, would by far offset the tremendous costs of neonatal intensive care and the ongoing costs for medical treatment and special education for preterm or low birth weight babies as they grow up. During economic downturns, supportive social services to facilitate access to mental health care for mothers and expectant mothers are often the first on state governments' chopping blocks.

The results of Grote's study also address the debate over whether women should be prescribed anti-depressant medication during pregnancy. Depression in pregnant women often goes untreated – or treatment is stopped -- because of safety concerns about medications.

"Many news reports exaggerate the perils of taking anti-depressant medication during pregnancy," she said. "They seldom mention that untreated depression during pregnancy has negative birth outcomes comparable to anti-depressant medication use, such as those reported in the Oct 4 paper."

"Depressed pregnant women and their health-care providers," she suggested, "should weigh the risks and benefits of antidepressant use in their particular situations. They should also discuss together whether other evidence-based, effective ways to treat depression, like interpersonal psychotherapy or cognitive-behavioral therapy, might be preferable or available."

Grote noted that professional guidelines on the safety of antidepressant use during pregnancy are available from the American Congress of Obstetricians and Gynecologists (ACOG) for obstetricians, nurse midwives, pharmacists, family physicians, psychiatrists, internal medicine physicians and others whose patients are depressed and might be pregnant or considering pregnancy.

Women who are trying to have a baby, who are already pregnant or who recently gave birth and who find themselves feeling the blues, would be wise to let their health-care providers or a social service worker know. Some features of depression are a low mood, lasting sadness, sleeping or eating too much or too little, mental anguish, difficulty concentrating, worrying, withdrawing from others, or losing interest in life.

"We advise pregnant women to 'speak up when you're down,'" Grote said. "Being depressed is a treatable, medical condition. It's not your fault. Depression can affect your health and your baby's health. If one person can't help you, he or she might know someone else who can." The public health system of Seattle-King County, for example, has a federally funded program called "MomCare." The program screens

pregnant women for depression and provides them access to psychotherapy and/or anti-depressant medication in consultation with a team of health and mental health care professionals.

"Pregnancy is a tremendous life change and opportunity -- a new son or daughter is on the way. Many women are highly motivated to seek help during pregnancy. They want to try to take good care of themselves because they want the best for their babies", Grote observed.

Provided by University of Washington