

## Maternal Depression and Its Impact on Families at Risk

Maternal depression and other serious mental illnesses are extremely important factors in relation to parenting and overall child health. The healthy development of young children can be affected significantly by the presence of maternal depression, and these effects may be more profound and/or pervasive among families already at risk due to outside factors.

There is considerable evidence of a relationship between maternal depression and poor child outcomes. Infants and young children of depressed mothers can experience a range of problems including lower activity levels, fussiness, problems with social interactions, and difficulty achieving age appropriate developmental and cognitive milestones.<sup>1</sup> Additionally, research suggests that children of depressed mothers may experience poor bonding/attachment with their mothers, lower reading and language scores, and a higher incidence of later mental health issues and depression themselves.<sup>2</sup>

Despite our knowledge of the negative impact of maternal depression on children, it remains one of the most common yet unrecognized, undiagnosed, and untreated complications of pregnancy. Studies have shown that 10% to 20% of women experience depression either during pregnancy or in the first 12 months after delivery. Low-income and minority women are disproportionately likely to be affected by maternal depression, with rates reaching as high as 40%.

Most of our knowledge about maternal depression derives from samples of women who do not necessarily face additional risks and challenges. For example, most research has been done on women with low-risk pregnancies. Very little, in fact, is known about depression and depressive symptoms in women with perinatal complications. This is an important gap in our knowledge because perinatal complications can be associated with the development of depression.

Another important population is families with children in the child welfare system. Previous research has established a clear relationship between maternal mental health and involvement in the child protection system. For example, studies have shown that mothers who maltreat their children have greater lifetime histories of mental illness.<sup>3</sup> Additionally, we know that parenting behaviors and substance abuse among women with serious mental illness are the most common reasons for legal termination of parental custody.<sup>4</sup> However, there is a paucity of empirical and clinical literature examining the maternal and child factors that may affect this relationship.

Two members of the Case Western Reserve University faculty in the School of Nursing are working to address these gaps in knowledge.

# Focus on Research at Case Western Reserve University

Dr. Lewin's research has focused on the relationship between maternal depression, and more broadly, mothers with serious mental illness and children in the child welfare system. Specifically, her research has sought to answer the following questions:



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- What factors in mothers with serious mental illness affect child safety?
- What factors in children of mothers with serious mental illness affect their safety?
- What factors in the social context of the mother affect child safety?

## Study Design

To address these questions, Dr. Lewin conducted a retrospective chart review.<sup>5</sup> The sample included families living in Cuyahoga County who had an open case at the County Department of Children and Family Services and who received services for treatment of a serious mental illness from the County Mental Health Board. The final sample included 122 families with a total of 457 children.

## Findings

The sample mothers had poor utilization of mental health care, both acute care and out-patient. Fifty percent of the mothers had not been hospitalized in the past 18 months, and 40% of the mothers did not have any outpatient visits during the same time period.

The study found that most of the mental illness diagnoses included substance abuse. In fact, poly-substance dependence (20%) and dual diagnoses (bi-polar or manic with alcohol abuse) (39%) were the most frequent mental health problems.

Although child protection investigation does not require information regarding a child's exposure to domestic violence unless specific evidence is revealed, 63% of mothers in this sample spontaneously disclosed domestic violence. The study also found statistically significant co-occurrence of major depression and domestic violence but not with polysubstance dependence, dual diagnoses or schizophrenia.

Neglect was the most prevalent form of child maltreatment (59% of cases). Physical abuse occurred in 8% of cases. Almost 11% were classified as a

## CHARACTERISTICS OF THE MOTHER

- Average age at first birth 19.6 years
- 60% African American, 36% Caucasian, 3% Hispanic.
- 45% single, 21% lived with a paramour, 20% married
- 57% had some HS education, 26% had graduated from HS
- 63% had marginal or inadequate income, 25% were unable to meet basic needs
- Average number of children: 3.8

## CHARACTERISTICS OF THE CHILD

- Mean age: 11.5 years
- 50% male, 50% female
- 46% of children had regular and supportive contact with their maternal grandmothers

combination of neglect with physical abuse and just under 6% as neglect with sexual abuse. Thirty seven percent of the children were in foster care, 22% remained with the mother or maternal grandmother, and 8% were placed with their biological father.

These findings underscore the need to more closely link the child protection, mental health and substance abuse services systems. Specifically, a focus on parenting skills within mental health and substance abuse treatment programs is needed. Additionally, an understanding of the role parental mental health has on children, specifically on mother-child attachment and maternal parenting decisions, is needed.

## Focus on Research at Case Western Reserve University



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Dr. Maloni's research interests include pregnancy, high risk pregnancy and bed rest, and perinatal depression. Much of her work has focused on the connection between these conditions. A recent study<sup>6</sup> examined depressive symptoms during high risk pregnancy and the side effects, including depression, of bed rest among women with multiple gestation. This study was driven by the fact that the birth rate for higher order multiples has dramatically increased in recent decades. Multiple gestation pregnancies are considered to be at high obstetric risk, and antepartum bed rest is often prescribed to offset complications despite the lack of evidence for its effectiveness in preventing complications.

### Study Design

To better understand the side effects of antepartum bed rest treatment for women with twin or triplet gestation, Dr. Maloni and colleagues conducted a longitudinal repeated-measures study. The sample included a subset of women (N=31) who participated in a larger study (including those with singleton gestation) of the effects of antepartum bed rest. Data were collected during antepartum hospitalization through 6 weeks postpartum.

Maternal weight gain and infant birth weight were recorded. Antepartum stressors were measured by the Antepartum Stressors Hospital Inventory, and depressive symptoms were measured by the Center for Epidemiologic Studies Depression Scale (CES-D). Antepartum and post-partum side effects of bed rest were also assessed by the Antepartum and Postpartum Symptom Checklists.

### Findings

The weekly rate of maternal weight gain during antepartum hospitalization and treatment with bed rest was significantly less than recent recommendations for multiple gestation weight gain. In fact, by the end of hospitalization, 43% of women with twins and 57% of those with triplets either lost weight or did not gain during hospitalization. However, infant birth weights were appropriate for gestational age, and there were fewer than expected small-for-gestational-age infants.

Concerns regarding family status and separation from family were the major antepartum stressors. CES-D scores for depressive symptoms were very high on antepartum hospital admission, with scores at or above the cutoff for risk of depression for more than 50% of the sample. The CES-D scores were similar to but slightly higher than Dr. Maloni's previous studies whose samples consisted primarily of women with singleton gestation treated with antepartum hospitalization and bed rest. Postpartum symptoms were initially high but declined significantly by 6 weeks. However, scores for 28% of the sample remained above the CES-D cutoff, indicating risk of depression.

These findings suggest that antepartum maternal weight loss, stress, physiologic and psychosocial symptoms, and depressive symptoms are important factors to consider among women with multiple gestation who are either hospitalized and treated with bed rest or are recovering during the postpartum period. Monitoring of depressive symptoms and appropriate interventions are needed to help women of multiple gestation cope with the difficult process of childbearing and child rearing and to prevent clinical depression.

## IMPLICATIONS FOR POLICY AND PRACTICE

Early screening and treatment for maternal depression is critically important in all families, especially those who may be at high risk. Special attention should be paid to families with children in the child welfare system and women with high risk pregnancies who may have a higher likelihood of suffering from depression and face particular challenges as a result of it. There are a number of efforts locally and beyond working to do just that.

For high risk families, parent visitation programs that acknowledge maternal depression are critical. Public health or social services involvement in screening for high-risk parenting is now a standard intervention in many areas. For example, Ohio's *Help Me Grow* program offers parent visitation to families with a combination of risk factors that could impact a child's development. In Cuyahoga County, prenatal home visits through the city of Cleveland's *MomsFirst Project*, the *Ohio Infant Mortality Reduction Initiative* and *Help Me Grow* provide parental support and early identification of maternal depression and concerns. The *Help Me Grow* newborn home visit to all first time parents and parents under age 25 provides a visit by a registered nurse within 10 days of the birth. Families demonstrating high risk, including maternal depression, are offered continued *Help Me Grow* home visits. (For more information see: <http://www.helpmegrow.org>).

Additionally, in Ohio, the *Ohio Department of Mental Health Maternal Depression Pilot Project* provides maternal depression awareness training for health professionals serving mothers and children and is evaluating the feasibility of a large scale maternal depression screening, using the Edinburgh Postnatal Depression Scale. To date, over 250 professionals have been trained through this initiative. In Cuyahoga County, the *Regional Perinatal Network* has worked collaboratively to provide maternal depression trainings to *Help Me Grow* service coordinators and other professionals serving mothers and children. (For more information see: <http://www.ohiocando4kids.org/node/150> and <http://www.crpn.net/>).

In Cuyahoga County, interagency agreements and collaborations between *Help Me Grow* and family serving entities such as the *Department of Family and Children Services*, *Alcohol and Drug*

*Addiction Services Board*, *Community Mental Health Board*, and *Office of Homeless Services* ensures a multi-disciplinary, family systems approach to serving young children and families. Continued work on these collaborations to provide opportunities for cross-training, protocols for referrals, information sharing of best practices and monitoring outcomes will enhance services to families.

At a national level, there is a need to expand health coverage for parents. Mothers, especially low-income mothers, are much less likely to receive treatment for their depression if they do not have health care coverage. For low-income mothers, that coverage is most likely *Medicaid*. Without *Medicaid*, depression among mothers living in poverty often goes untreated, putting their children at greater risk. To help meet this need, Ohio recently expanded *Medicaid* coverage for pregnant women. The expansion was authorized in the Ohio State budget that was approved in June 2007. For pregnant women, the expansion will increase income eligibility from 150% to 200% of the poverty limit. Unfortunately, coverage for parents is currently at 90% of poverty.

In order to better identify and treat all parents experiencing depression, including those described in this brief who may be at particular risk, more policies and practices like the ones described here need to be implemented.

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- <sup>1</sup> K.M. Weinberg, E.Z. Tronick, "Emotional Characteristics of Infants Associated with Maternal Depression and Anxiety," *Pediatrics*; 102(5): 1298-1304; 1998.
  - <sup>2</sup> Onunaku, N. (2005). Improving maternal and infant mental health: Focus on maternal depression. Los Angeles, CA: *National Center for Infant and Early Childhood Health Policy*, University of California at Los Angeles.
  - <sup>3</sup> Debellis, M., Broussard, E., Herring, D., Wexler, S., Mortiz, G., & Benitez, J. (2001). Psychiatric co-morbidity in caregivers and children involved in maltreatment: A pilot research study with policy implications. *Child Abuse & Neglect*, 25, 923-944.
  - <sup>4</sup> Mowbray, C., Oyserman, D., Bybee, D., & MacFarlane, P. (2002). Parenting of mothers with a serious mental illness: Differential effects of diagnosis, clinical history, and other mental health variables. *Social Work Research*, 26, 229-240.
  - <sup>5</sup> Lewin, L. & Abdrbo, A. (in review). Mothers with serious mental illness and child protection.
  - <sup>6</sup> Maloni, J., Margevicius, S., & Damato, E. (2006). Multiple gestation: Side effects of antepartum bed rest. *Biological Research for Nursing*, 8, 115-128.



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