Postpartum Depression Among Michigan Women

Postpartum depression (PPD) occurs anytime during the first year after delivery with an estimated prevalence of almost 12% (1). Baby blues is a mild form of depression that resolves itself 10 days after delivery and affects 50-75% of mothers. The onset of PPD usually takes place after baby blues and ranges from mild to severe depression. Postpartum psychosis is the extremely severe form in which the mother loses touch with reality and has thoughts of suicide/homicide. It affects about 1 in 1000 women (2).

PPD affects a woman’s ability to function as a new mother and can impair the cognitive and language development of the newborn. It also has a long-term effect on the woman’s confidence as a mother (3). Numerous studies have identified several risk factors for PPD including lower education level, substance abuse (such as alcohol or cigarette), an increased number of stressful life events, and maternal age (4-8).

This issue of MI PRAMS Delivery focuses on PPD that occurred in women with no prior history of mental illness.

Maternal Demographics

In the PRAMS survey, the following is asked about depression: “In the months after your delivery, would you say that for 2 weeks or more you were: (a) not depressed at all, (b) a little depressed, (c) moderately depressed, or d) very depressed.” Among women surveyed, 49.5% reported not feeling depressed, 29.6% a little depressed, 15.4% moderately depressed, and 5.5% severely depressed. Based on the responses, women were grouped into either not depressed (a) or depressed (b, c, d). Overall, half of the women (50.5%) report feeling depressed.

Maternal race/ethnicity does not appear to be correlated to the PPD, with about 50% of the women suffering from PPD in each of the racial/ethnic categories surveyed (White, non-Hispanic, Black, non-Hispanic, and Hispanic). When comparing maternal age groups, women 18-21 were the most likely to report PPD (65.1%) while women older than 35 (40.5%) were the least likely to report it (figure 1).

Maternal education

Young, single, and uneducated women are particularly vulnerable to PPD and are the least likely to receive treatment.

More than 80% of women with PPD did not receive help.

The more stressful life events that occur in a mother’s life, the more likely she will suffer from PPD.

Points of Interest:

- Young, single, and uneducated women are particularly vulnerable to PPD and are the least likely to receive treatment.
- More than 80% of women with PPD did not receive help.
- The more stressful life events that occur in a mother’s life, the more likely she will suffer from PPD.

Figure 1: Percentage of Women with Postpartum Depression; July-Dec MI PRAMS 2001 Survey

PPD by Maternal Age

<table>
<thead>
<tr>
<th>Maternal age (in years)</th>
<th>Percent women depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>47.9%</td>
</tr>
<tr>
<td>18-21</td>
<td>65.1%</td>
</tr>
<tr>
<td>23-34</td>
<td>49.6%</td>
</tr>
<tr>
<td>35+</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

Figure 1: Percentage of Women with Postpartum Depression; July-Dec MI PRAMS 2001 Survey
Symptoms of PPD

Detecting risk factors and symptoms of PPD is important in preventing the health condition, especially if caught early. Symptoms of postpartum depression include (9):

- Emotional Symptoms
  - Increased crying and irritability
  - Feelings of hopelessness/sadness
  - Mood swings
  - Fear of hurting baby/partner/self
  - Unable to cope or feel overwhelmed
  - Less energy and/or motivation

- Behavioral Symptoms
  - Little or no interest in baby or excessively concerned with baby
  - Loss of interest in activities
  - Reduced energy/motivation
  - Poor self-care
  - Unable to make decisions/think clearly

- Physical Symptoms
  - Tiredness/fatigue
  - Troubled sleep
  - Appetite disturbances

also appears to be correlated to PPD with women without a high school degree reporting PPD the most (58.7%) and women with a college degree reporting it the least (43.8%). In addition, fewer married women (44.9%) report PPD compared to unmarried women (63.1%).

The prevalence of PPD varied also by insurance status. Women who had Medicaid coverage prior to pregnancy or during prenatal care or delivery are more likely to report PPD (57.0%) than are women with other insurance status (46.7%).

Seeking/Receiving Treatment for PPD

Seeking treatment for PPD helps women cope with their symptoms. In the PRAMS Questionnaire, women who reported depression were asked the following: “Since you delivered your new baby, have any of the following things happened? (a) I wanted to see a professional about my depression (b) I tried but was unable to see a professional about my depression, and (c) I received professional help for my depression.” About 15.9% wanted to see a professional and of those, only 32.9% received help. We are unable to determine from the responses why many who wanted help did not receive it. Approximately 9.6% of the total women with PPD received help. About 4.4% of women tried but were unable to see a professional for undetermined reasons.

Although the numbers are similar among the racial/ethnic groups, Blacks who wanted treatment received professional care the least (92.9%) when compared to Whites (89.1%) and Hispanics (90.6%).

Only 10.9% of women aged 18-21 received care in contrast to 14.6% of women older than 35 (figure 2). Women with a college degree received professional treatment more often (12.8%) than women with only a high school degree/GED (8.7%). Married women received treatment approximately 1.5 times more often (11.6%) than unmarried women (7.1%).

Although insurance status does not appear to be related to seeking care, women who had Medicaid coverage before pregnancy, as well as during prenatal care or delivery received care slightly less (9.4%) than women without (10.2%).

Unfortunately, the majority of women did not receive professional care regardless of whether they wanted treatment or not.

![Graph: Receive Care for PPD by Maternal Age]

Figure 2: Percentage of women with PPD who sought stratified by maternal age; July-Dec MI PRAMS 2001 Survey

*DSU-Data statistically unsignificant
Factors Which Increase Risk for PPD

Pregnancy outcomes such as preterm delivery or having a low birth weight infant may increase a woman’s chances of experiencing PPD. Approximately, 58.2% of women who delivered preterm babies (<37 weeks gestational age) experienced PPD as opposed to only 49.6% who gave birth to babies at full term. In addition, 63.8% of women who delivered low birth weight babies (<2500 grams) experienced PPD in comparison to 49.5% of woman who gave birth to normal birth weight babies.

Studies have also identified cigarette use as an indicator for poor pregnancy outcome that, therefore, may lead to PPD. Among women who smoked before pregnancy, during pregnancy, or at the time surveyed, about 62% experienced PPD as compared to women who had not smoked (46%).

It is also known that stressful life events can affect the likelihood of PPD. In the PRAMS survey, women were asked about stressful life events that occurred 12 months before the birth of the infant. Examples include death/sickness of a family member and/or close friend, inability to pay the bills, divorce, loss of job, and moving. The more stressful life events a woman encounters, the more likely she will experience PPD (figure 3). About 35% of the women who had no stressful life events suffered from PPD when compared to 50.2% of the women who had one to two stressful events, and 62.5% of women who had 3 or more stressful events.

Physical abuse is one of the stressful life events that most often triggers PPD. About 67% of the women who reported being physically abused before or during pregnancy experienced PPD in contrast to 49% who reported no experiences of abuse.

Potential Strategies to Reduce PPD
- Standardized screening for PPD during prenatal and post delivery to identify mothers at risk.
- Improve mother’s education about the signs and symptoms of PPD during the third trimester as well as offer information of various hotlines and help groups.

Figure 3: Postpartum depression by the number of stressful life events; July-Dec MI PRAMS 2001

Resources for women with PPD

National Mental Health Association
800.433.5959
http://www.nmha.org

Depression After Delivery
800.944.4773
http://www.depressionafterdelivery.com

Postpartum Education for Parents
http://www.sbpep.org

Postpartum Support International
805.967.7636
http://www.chss.iup.edu/postpartum
About Michigan’s PRAMS

The Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based survey, is a CDC initiative to reduce infant mortality and low birth weight. It is a combination mail/telephone survey designed to monitor selected self-reported maternal behaviors and experiences that occur before and during pregnancy, and early-postpartum periods of women who delivered a live infant in Michigan. Information regarding the health of the infant is also collected for analysis. Annually, over 2,000 mothers are selected at random to participate from a frame of eligible birth certificates. Women who delivered a low-birth weight infant were oversampled in order to ensure adequate representation. The results are weighted to represent the entire cohort of women who delivered during that time frame.

INTRODUCING: RUPALI

Rupali V. Patel recently received her Masters in Public Health in Hospital and Molecular Epidemiology at the University of Michigan School of Public Health. She also participated in the Genetics interdepartmental concentration. She joined the PRAMS staff in July and is currently the Maternal Child Health (MCH) epidemiologist for PRAMS and Birth Defects.

Suggested Citation