



PRAMS and . . .

Postpartum Depression

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Depression among mothers in the months after delivery has surfaced as an important maternal and child health concern. Data from three states indicate that nearly 12% of women reported being moderately depressed after they delivered their baby, and 6% reported being very depressed after delivery.¹ In addition to directly influencing the emotional well-being of mothers, postpartum depression (PPD) has been shown to affect marital relationships, mother–infant bonding, and infant behavior.^{1–4}

PRAMS and Self-Reported Postpartum Depression

Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) can be used to estimate the prevalence of self-reported postpartum depression (SRPPD*) and identify trends in and risk factors for SRPPD. PRAMS data can also be used to monitor progress toward meeting the *Healthy People 2010* developmental objective to reduce PPD.⁵

In 2000, seven states (Alaska, Louisiana, Maine, New York, North Carolina, Utah, and Washington) collected information about SRPPD using PRAMS† (Figure 1). The following analysis is based on responses to the question, “In the months after your delivery, would you say that you were a) not depressed at all, b) a little depressed, c) moderately depressed, d) very depressed, or e) very depressed and had to get help?” The responses were collapsed into three depression categories: none (a), low to moderate (b or c), and severe (d or e).

Figure 1. PRAMS States in 2000

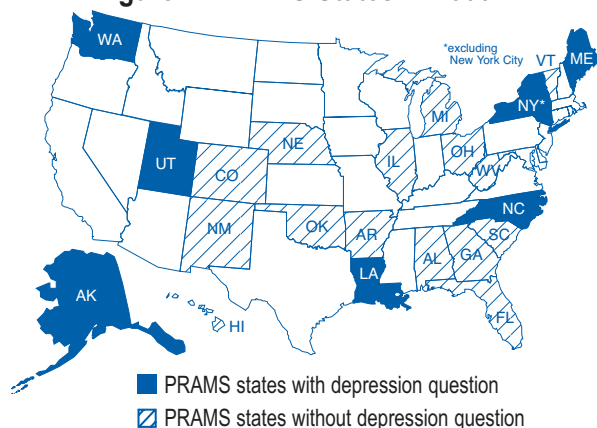


Figure 1 shows the 22 states that participated in PRAMS in 2000. In April 2001, 10 additional states or areas joined the PRAMS surveillance system: Maryland, Minnesota, Mississippi, Montana, New Jersey, North Dakota, Oregon, Rhode Island, Texas, and New York City.

PRAMS Data on Self-Reported Postpartum Depression

In 2000, the percentage of PRAMS respondents with severe SRPPD ranged from 5.1% in Washington to 8.9% in Louisiana; the percentage with low to moderate depression ranged from 48.9% in New York to 62.3% in Utah; and the percentage with no depression ranged from 31.0% in Utah to 44.6% in New York (Table 1).

Table 1. Prevalence of Three Levels of Self-Reported Postpartum Depression in Seven PRAMS States, 2000

	None % (CI)*	Low to Moderate % (CI)*	Severe % (CI)*
Alaska	39.8 (36.9–42.7)	54.9 (51.9–57.8)	5.4 (4.1–6.7)
Louisiana	40.8 (38.3–43.3)	50.3 (47.7–52.9)	8.9 (7.4–10.4)
Maine	41.4 (38.2–44.7)	50.8 (47.5–54.1)	7.7 (5.9–9.5)
New York†	44.6 (41.1–48.2)	48.9 (45.3–52.5)	6.5 (4.7–8.3)
North Carolina	42.2 (39.1–45.2)	49.4 (46.3–52.5)	8.5 (6.7–10.2)
Utah	31.0 (28.1–34.0)	62.3 (59.3–65.4)	6.7 (5.1–8.2)
Washington	41.0 (37.6–44.5)	53.8 (50.3–57.3)	5.1 (3.8–6.5)

* CI=95% confidence interval

† Data do not include New York City

These data represent the responses of 453,186 women who gave birth to a live infant in these seven states in 2000; overall, 7.1% (32,176) reported severe depression after delivery and more than half (233,844) reported low to moderate depression. Women with fewer than 12 years of education, those who were Medicaid recipients, and those who delivered low-birth-weight babies

*Because the question used in PRAMS does not correspond to a clinical definition or diagnosis of depression, we refer to this measure as SRPPD rather than PPD.

†The Pregnancy Risk Assessment Monitoring System (PRAMS) is part of CDC's program to reduce rates of infant mortality and low birth weight. PRAMS is an ongoing state-level, population-based surveillance system that identifies and monitors selected maternal experiences and behaviors before, during, and after pregnancy. Each state uses the same standardized protocol that involves a mail questionnaire with telephone follow-up to survey mothers who recently gave birth. Responses are then weighted to be representative of all women who gave birth in each state during that year.



Table 2. Prevalence of Three Levels of Self-Reported Postpartum Depression Among PRAMS Participants in Seven States,* by Selected Demographic Characteristics and Risk Factors, 2000			
	None % (CI) [†]	Low to Moderate % (CI) [†]	Severe % (CI) [†]
Overall	41.3 (39.8-42.8)	51.6 (50.1-53.1)	7.1 (6.4-7.9)
Age (years)			
<20	34.0 (29.6-38.3)	57.1 (52.5-61.7)	8.9 (6.4-11.4)
20-24	37.5 (34.6-40.4)	52.4 (49.4-55.4)	10.0 (8.2-11.9)
25-34	43.2 (41.1-45.2)	51.0 (49.0-53.1)	5.8 (4.9-6.7)
35+	47.0 (42.9-51.2)	47.6 (43.5-51.8)	5.3 (3.4-7.3)
Race			
White	41.1 (39.4-42.8)	52.3 (50.5-54.0)	6.6 (5.8-7.4)
Black	42.2 (38.6-45.7)	48.3 (44.7-52.0)	9.5 (7.4-11.6)
Other	39.2 (34.0-44.4)	52.1 (46.9-57.3)	8.7 (5.9-11.6)
Hispanic ethnicity			
Yes	44.9 (39.8-50.0)	46.7 (41.6-51.7)	8.4 (5.7-11.2)
No	40.3 (38.7-41.9)	52.6 (51.0-54.2)	7.1 (6.3-7.9)
Education			
<12 years	39.0 (35.3-42.7)	50.7 (46.9-54.4)	10.3 (8.1-12.5)
12 years	39.2 (36.6-41.8)	52.7 (50.1-55.4)	8.0 (6.6-9.4)
>12 years	43.3 (41.2-45.4)	51.3 (49.2-53.4)	5.4 (4.4-6.3)
Medicaid recipient			
No	43.4 (41.5-45.3)	51.6 (49.7-53.5)	5.0 (4.2-5.9)
Yes	37.8 (35.4-40.2)	51.7 (49.2-54.1)	10.5 (9.1-12.0)
Infant birth weight			
<2500g	34.9 (32.0-37.7)	53.7 (50.7-56.7)	11.4 (9.8-13.1)
≥2500g	41.7 (40.1-43.2)	51.5 (49.9-53.1)	6.8 (6.0-7.6)
Physical abuse during pregnancy			
Yes	16.2 (11.6-20.8)	61.9 (55.1-68.7)	21.9 (15.8-28.0)
No	42.6 (41.0-44.1)	51.0 (49.5-52.6)	6.4 (5.7-7.1)
Stress during pregnancy [‡]			
Emotional			
Yes	36.9 (34.4-39.4)	54.1 (51.5-56.6)	9.0 (7.6-10.5)
No	43.7 (41.9-45.6)	50.2 (48.3-52.0)	6.1 (5.2-7.0)
Partner-related			
Yes	28.8 (26.4-31.1)	57.6 (55.1-60.2)	13.6 (11.8-15.3)
No	47.9 (46.1-49.7)	48.4 (46.5-50.2)	3.8 (3.1-4.5)
Financial			
Yes	34.9 (33.0-36.9)	55.1 (53.1-57.2)	9.9 (8.7-11.2)
No	48.7 (46.5-50.9)	47.4 (45.2-49.6)	3.9 (3.1-4.7)
Traumatic			
Yes	30.7 (27.5-33.9)	54.3 (50.8-57.7)	15.0 (12.6-17.5)
No	44.0 (42.3-45.6)	50.8 (49.2-52.5)	5.2 (4.5-5.9)

* Alaska, Louisiana, Maine, New York, North Carolina, Utah, and Washington

† CI = 95% confidence interval

‡ The four types of stress were defined as follows:

emotional—a very sick family member had to go into the hospital or someone close to the respondent died;

partner-related—the respondent separated or divorced from her husband/partner, she argued more than usual with her husband/partner, or her husband/partner said he didn't want her to be pregnant;

financial—the respondent moved to a new address, her husband/partner lost his job, she lost her job, or she had a lot of bills she couldn't pay;

traumatic—the respondent was homeless, she was involved in a physical fight, she or her husband/partner went to jail, or someone close to her had a problem with drinking/drugs

were most likely to report severe depression. In addition, women who experienced physical abuse during pregnancy and women who reported emotional, partner-related, financial, or traumatic stress were more likely than other women to report being severely depressed (Table 2).

Because more than half of new mothers reported being depressed, health care providers should speak with their patients about PPD during prenatal care and well-baby visits.

Recommendations

In *Guidelines for Perinatal Care*,⁷ the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend that

- Pregnant women be educated about PPD during the third trimester.
- Obstetricians/gynecologists consult with their patients about their risk for psychiatric illness during the postpartum period.

Sources of Information

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Acknowledgments

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