

# Depression in Low-Income Mothers of Young Children: Are They Getting the Treatment They Need?



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# Depression in Low-Income Mothers of Young Children: Are They Getting the Treatment They Need?

**D**epression is a serious, prevalent, and treatable health condition affecting many parents in the United States (NRC and IOM 2009). More than one in six adults with at least one child has had depression in his or her lifetime (NRC and IOM 2009). National estimates from the Medical Expenditure Panel Survey showed nearly 40 percent of mothers with depression had not received treatment, and only 35 percent of those treated had received adequate treatment<sup>1</sup> (Witt et al. 2009). Low-income women, the uninsured, African American women, and Hispanic women are at even greater risk of receiving no or inadequate treatment (Kristofco, Stewart, and Vega 2007; Miranda et al. 2008; Santiago, Kaltman, and Miranda 2012; Witt et al. 2009).

Depression in parents—both fathers and mothers—can affect children, although research evidence on fathers is limited (NRC and IOM 2009). This brief explores rates of treatment for major depression among low-income mothers with young children. We focus on mothers because of the high depression rates in women and the strong research evidence linking untreated depression in mothers to developmental risks in children. We focus on mothers of young children (younger than age 6) due to growing evidence about developmental vulnerabilities in infancy and early childhood and long-term consequences that can extend to later childhood and adolescence (Essex et al. 2001; Naicker, Wickham, and Colman 2012).

The effects of a mother's untreated depression on her infant and young child can include preterm birth and low birth weight (Grote et al. 2010), poor physical health (Marcus et al. 2003), and physical endangerment including child abuse and neglect (Berger 2005; Buist 1998). Parental depression is also linked to children's developmental, emotional, and mental health problems such as increased risk of depression, separation anxiety, and oppositional defiant disorders (Beardslee, Gladstone, and O'Connor 2011; Council on the Developing Child 2009; Feder et al. 2009; Kiernan and Huerta 2008; NRC and IOM 2009). Fortunately, depression screening and early detection combined with treatment strategies that follow mothers to remission can help both

## Key Findings

- More low-income mothers with young children experience severe depression than higher-income mothers with young children.
- One in every 11 experienced a major depressive episode in the past year.
- Over one-third had not seen anyone or taken medication for her depression—even though the risks of untreated depression can be serious for mothers and children.
- The uninsured were much less likely to have seen anyone or taken medication than the insured.
- Mothers on Medicaid had similar treatment rates as mothers with private or other insurance.

mother and child (Gunlicks and Weissman 2008). In addition to the effective use of prescription medication, these strategies include place-based interventions designed to improve early parenting and educate mothers on the two-generational impacts of their depression (Knitzer, Theberge, and Johnson 2008; Weissman et al. 2006).

More and more research shows how depression in mothers affects children. We know very little, however, about how many mothers with young children are affected nationally and how many receive treatment. We know even less about how depression treatment rates vary by income and health insurance status, how Medicaid compares to private insurance, and whether mothers with young children feel their treatment is effective.

## About This Brief

This brief provides a national look at rates of major depression and treatment in low-income mothers of young children. We define this population as mothers with household incomes below 200 percent of the federal poverty level, where “mother” refers to any woman over 18 years of age with at least one biological child under age 6 living in her household.

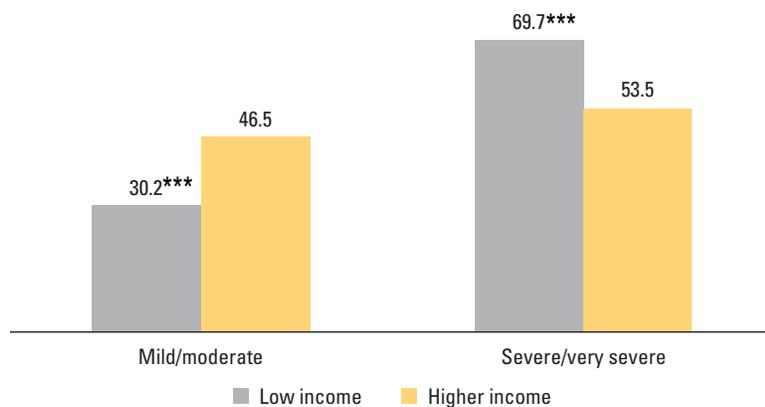


## What Is Major Depression?

A “major depressive episode” (major depression) is a concentrated collection of severe depression symptoms, defined by the American Psychiatric Association as including five of the nine criteria outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) in a two-week period. Depression itself is generally characterized by feelings of sadness and irritability, and a loss of self-worth, interest, and pleasure within one’s work, school, social, and home environments (APA 1994). The National Survey of Drug Use and Health (NSDUH) assesses both lifetime depression prevalence and whether respondents have had an episode in the past year. The questions for the NSDUH adult depression module were adapted from the National Comorbidity Survey-Replication (Harvard School of Medicine 2005) and modified from the Composite International Diagnostic Interview.

We combine three rounds of data from the National Survey of Drug Use and Health (NSDUH), 2008–2010, and examine both lifetime depression prevalence and major depression in the past year. We highlight the prevalence of major depression in mothers of young children, the extent to which the

FIGURE 1. Depression in Mothers of Young Children: Depression Severity, by Income (%)



Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.

Note: We define “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, “depression” as having a major depressive episode in the past year, and “low income” as household income below 200 percent of the federal poverty level.

mothers receive treatment, how health insurance relates to treatment access and type, and how mothers rate the effectiveness of their treatment. The data were produced with assistance from the Substance Abuse and Mental Health Services Administration (SAMHSA), which administers the NSDUH and provided aggregate numbers for the previously unanalyzed subset of mothers with young children.<sup>2</sup>

## Depression Is More Prevalent and More Severe among Low-Income Mothers

Roughly 2.6 million mothers with young children, or 14.5 percent of all mothers with young children, have had major depression at some time in their lives. This proportion does not vary by income. However, at 8.8 percent, a larger share of low-income mothers with young children has had major depression in the past year, compared to 7.5 percent of mothers with young children across all income groups.

Within this group that has experienced major depression, itself a serious illness, low-income mothers are also more likely to have had severe depressive symptoms that substantially interfered with daily life.<sup>3</sup> In our sample, 69.7 percent of depressed low-income mothers with young children have a condition classified as severe or very severe—to a degree that disrupts her home, social, or work life. A somewhat smaller proportion, but still a majority, of depressed higher-income mothers with young children have depression that is severe or very severe (54 percent) (figure 1).

Given that roughly 1 in 11 low-income mothers with young children has had major depression in the past year—and the vast majority at a level that severely impairs daily functioning—it is critical to understand how many have actually received treatment.

## Low-Income Mothers Are Less Likely to Receive Treatment

Common treatments for depression include antidepressant medication, interpersonal psychotherapy, cognitive-behavioral therapy, psychosocial interventions, and alternative medicines (Council on the Developing Child 2009; NRC and IOM 2009). The NSDUH provides a national look at the number of mothers who received two general categories of treatment for major depression: talk therapy and prescription medication. Depression remission is the ultimate goal of both types of treatment—a state characterized by a lack of depression symptoms



## The Treatment Measure

Talk therapy for a major depressive episode is captured in the NSDUH by asking respondents to identify which types of medical doctors or other professionals they have spoken to at least once in the past year regarding their major depression. These professionals include family doctor or general practitioner, psychiatrist, psychologist, counselor, religious advisor, social worker, healer, nurse or occupational therapist, other doctor, or other mental health professional. Additionally, respondents are asked a separate question about their use of prescription medication for a major depressive episode in the past year (SAMHSA 2012).

as well as the “presence of positive features of mental health such as optimism, vigor, and self-confidence” (Zimmerman et al. 2006). Research indicates that adequate treatment to remission leads to a mother’s own improvement and also better outcomes for her children, including decreased symptoms of psychiatric disorder and improved behavioral, social, and academic functioning (Gunlicks and Weissman 2008; Pilowsky et al. 2008; Weissman et al. 2006).

Depression treatment’s effectiveness often depends on many factors related to quality and intensity. For example, how individuals delivering the treatment are trained or how well patients

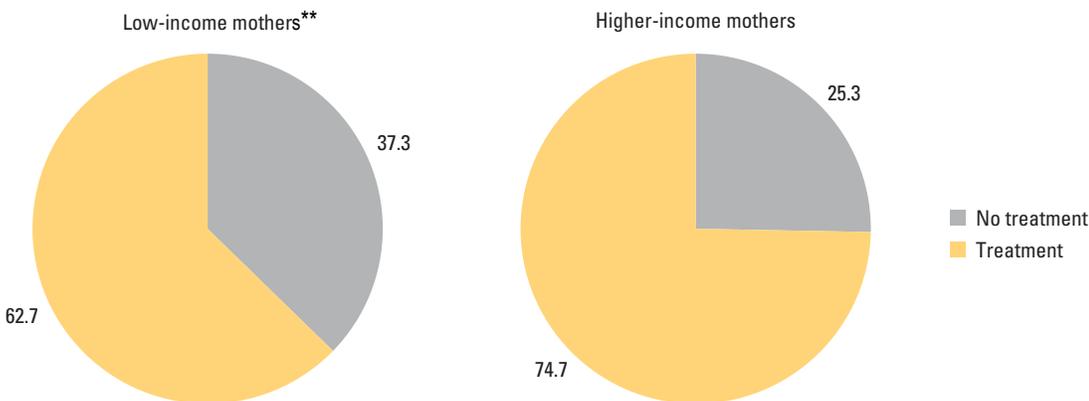
adhere to their prescribed medication regimen may affect treatment efficacy. Unfortunately, the NSDUH survey does not measure the intensity, duration, or other indicators of the adequacy of treatment received specifically for major depression, so we cannot determine whether treatment was sufficient to minimize the harm to mother and child. However, given major depression’s seriousness and its consequences, mothers who report receiving no treatment at all are likely at high risk.

The NSDUH defines depression treatment broadly, and includes several different types of health care and other professionals (see “The Treatment Measure”). Even when treatment is broadly defined, the data show that more than one-third of low-income mothers with major depression (37.3 percent) have neither used prescription medication nor received talk therapy for their depression in the past year (figure 2). That represents roughly 282,000 mothers. Among higher-income mothers with depression, one in four (25.3 percent) with young children has also neither received talk therapy nor prescription medication in the past year. In total, across all income groups nationally, roughly 437,000 depressed mothers of young children have not received any form of treatment.

### Health Insurance Makes a Difference

Part of the income disparity in treatment rates appears to be related to health insurance. One-quarter (25.4 percent) of low-income depressed mothers with young children are uninsured compared to

FIGURE 2. Depression in Mothers of Young Children: Mothers Who Have Not Received Treatment, by Income (%)

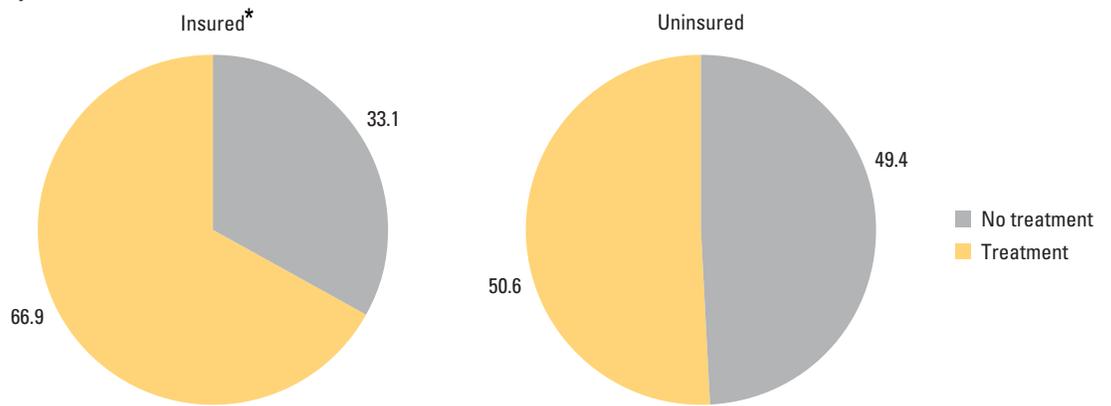


Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.

Note: We define “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, “depression” as having a major depressive episode in the past year, and “low income” as household income below 200 percent of the federal poverty level.



FIGURE 3. Depression in Mothers of Young Children: Low-Income Mothers Who Have Not Received Treatment, by Insurance Status (%)



Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.  
 Notes: We define “low income” as household income below 200 percent of the federal poverty level, “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, and “depression” as having a major depressive episode in the past year. Health insurance status was categorized as either insured or uninsured, where insured includes mothers receiving Medicaid/CHIP, private insurance, or any other health insurance.

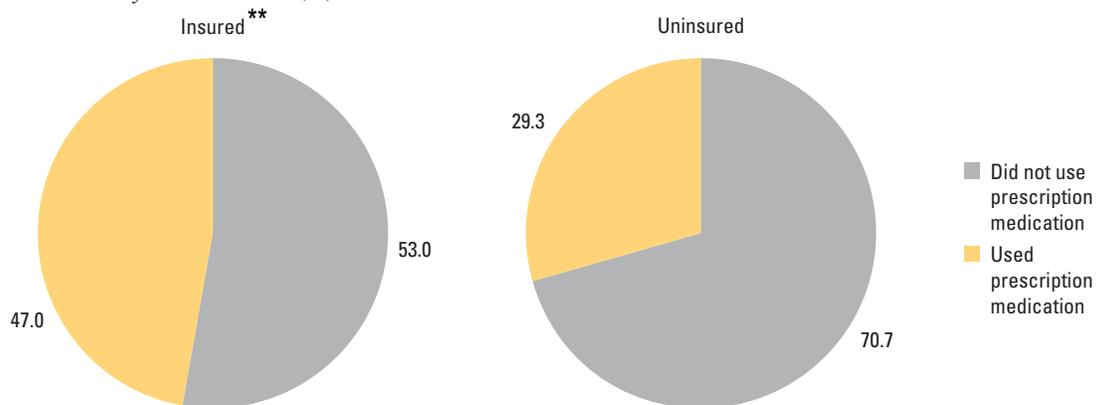
11.7 percent of higher-income depressed mothers with young children. When we look just among the group who are low income, nearly half (49.4 percent) of the mothers without insurance had not received any treatment for their major depression compared to one-third (33.1 percent) of the mothers with health insurance (figure 3). Mothers without health insurance were also much less likely to have used prescription medication (29.3 compared to 47.0 percent respectively, figure 4). The differences do not appear to be related to differences in depression severity; around 70 percent of mothers in both

groups had severe or very severe depression that interfered with daily activities.

*Medicaid-Covered and Privately Insured Mothers Have Comparable Treatment Rates*

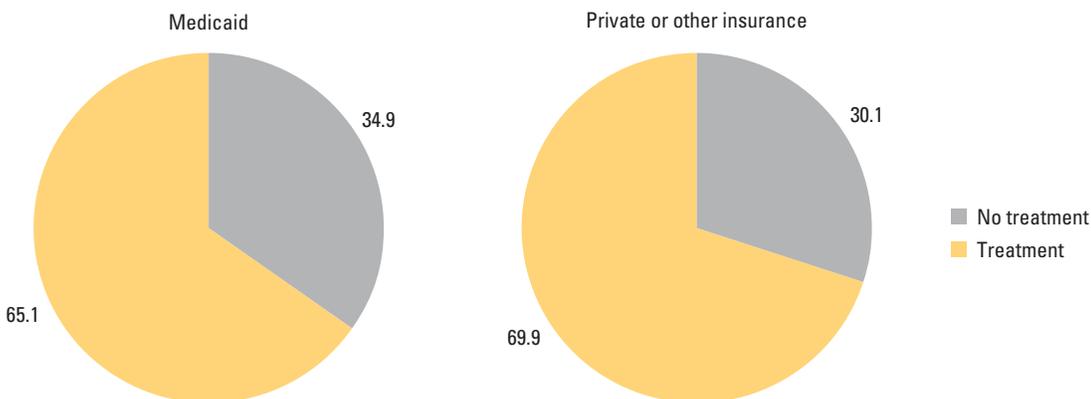
Within the insured group of low-income mothers with depression, mothers with Medicaid and mothers with private or other insurance have statistically comparable treatment rates<sup>4</sup> (65.1 percent for those with Medicaid and 69.9 percent for those with

FIGURE 4. Depression in Mothers of Young Children: Low-Income Mothers Who Have Not Received Prescription Medication, by Insurance Status (%)



Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.  
 Notes: We define “low income” as household income below 200 percent of the federal poverty level, “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, and “depression” as having a major depressive episode in the past year. Health insurance status was categorized as either insured or uninsured, where insured includes mothers receiving Medicaid/CHIP, private insurance, or any other health insurance.

FIGURE 5. Depression in Mothers of Young Children: Low-Income Mothers Who Have Not Received Treatment, by Insurance Type (%)



Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.  
 Note: We define “low income” as household income below 200 percent of the federal poverty level, “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, and “depression” as having a major depressive episode in the past year.

private or other insurance, figure 5). This suggests that Medicaid may fill a gap for mothers who might otherwise not have health insurance coverage. This finding is consistent with other research that shows little difference in the rates of access to mental health treatment among low-income mothers regardless of whether they are covered under public or private health insurance (Loprest, Zedlewski, and Schaner 2007). A more detailed look at this comparison is warranted but beyond the scope of this paper, as we also see characteristic differences between the two groups that suggest patterns influencing access may not be the same.

### Types of Treatment and Mother-Reported Effectiveness

We turn to look specifically at the type of treatment mothers of young children receive for major depression and examine differences by income (table 1). In a comparison of our higher- and lower-income groups, significant differences emerge in the source of treatment mothers use for their major depression. Only about 4 in 10 (42.2 percent) low-income mothers with depression reported using prescription medication, compared to 56.5 percent of higher-income mothers. This may be partially explained by the observation that low-income mothers were also less likely to report seeing a family doctor or a psychiatrist—two types of doctors trained and qualified to prescribe prescription medication.

In contrast, low-income mothers were significantly more likely to have received treatment from a

social worker or counselor. There were no significant differences by income in the proportion of mothers who saw a psychologist (15.5–17.6 percent). There were also no detectable significant differences by income in the proportion of mothers reporting having received less common forms of treatment from sources such as nurses or occupational therapists, religious advisors, or healers. When we define treatment using a narrower frame that considers only those who saw or spoke to a professional qualified to prescribe medication (family doctor, psychiatrist, or other doctor), we see that only 40.3 percent of low-income mothers have received treatment from these sources. This is significantly less than the 60.1 percent of higher-income mothers who have received treatment from this type of provider.

Our previous analysis showing an association between insurance status and treatment among low-income mothers is consistent with the hypothesis that insurance plays a role in what treatment sources are available to a mother. As we discuss in more detail below, other factors related to income may also manifest themselves as barriers in the quality and duration of treatment the mother receives.

### Most Mothers Who Received Treatment Felt It Helped

The NSDUH includes two questions related to depression treatment effectiveness for prescription medication and counseling, each asking the respondent to rank on the following scale how helpful their depression treatment in the past 12 months



TABLE 1. Depression in Mothers of Young Children: Treatment Utilization Rates, by Income (%)

Type of professional seen in the past year (at least one contact)	Low-income mothers	Higher-income mothers	Significance
Family doctor/general practitioner	31.9	42.4	*
Psychiatrist	10.3	16.9	*
Other type of doctor	7.4	13	
Family doctor, psychiatrist, or other doctor (combined)	40.3	60.1	***
Psychologist	17.6	15.5	
Counselor	20.6	9.5	***
Social worker	7	2.4	**
Other mental health professional	5.3	5.2	
Religious advisor	12.8	9.2	
Nurse or occupational therapist	5.1	6.9	
Healer	2.6	5.6	
Used prescription medication for major depression in the past year	42.2	56.5	***

Source: National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance Abuse and Mental Health Services Administration.  
 Note: We define “low income” as household income below 200 percent of the federal poverty level, “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, and “depression” as having a major depressive episode in the past year.  
 \*p<.05 \*\*; p<.01 \*\*\*; p<.001

has been: not at all, a little, some, a lot, or extremely (figure 6). Only half of low income mothers (49.7 percent) who had received prescription medication for depression felt it helped a lot or extremely compared to two-thirds of higher-income mothers (62.7 percent). Nearly 15 percent (14.9 percent) of low-income mothers felt that their prescription medication did not help at all, compared to only 4.2 percent of higher-income mothers. The self-reported effectiveness of counseling treatment did not differ significantly between the low- and higher-

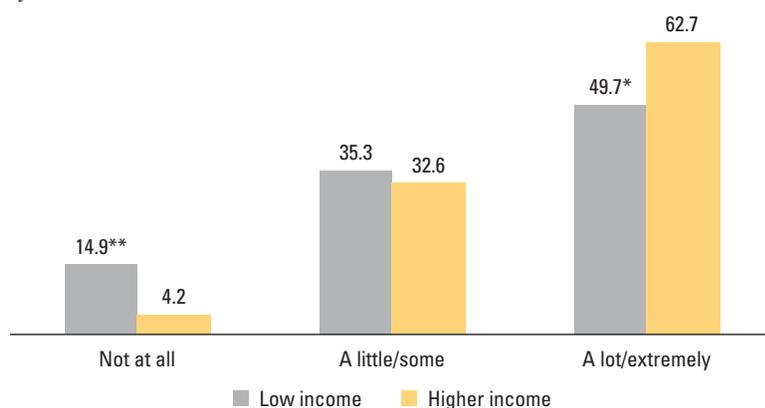
income mothers in any category: between 15 and 20 percent of both groups felt counseling did not help at all and between 34 and 40 percent felt it was extremely effective or helped a lot.

## Discussion and Implications

Several implications can be drawn from the findings in this brief. Most importantly, a sizeable share of low-income mothers with major depression has not received any form of treatment for this very serious health condition. This represents a vital public health concern and opportunity, especially given the two-generational impact of parental depression on children and the effectiveness of existing treatment. Second, among low-income mothers, Medicaid fills an important gap. Treatment rates are comparable for low-income mothers on Medicaid compared to low-income mothers with private or other health insurance—although conclusions about comparability warrant further study, given differences between the two populations of low-income mothers. For uninsured low-income mothers, however, treatment rates are quite low—only half receive any treatment, and most (70.7 percent) have not used prescription medication. Third, low-income mothers have higher rates of depression than higher income mothers and their symptoms are more severe.

Research identifies several barriers that tend to affect access to treatment for depression. Cost, as well as providers’ reluctance to offer care and patients’ reluctance to seek it, are three common challenges. Financial worries and whether costs will be covered

FIGURE 6. Depression in Mothers of Young Children: Prescription Drug Effectiveness, by Income (%)



Source: The National Survey of Drug Use and Health, 2008–2010. Data provided by the Substance and Mental Health Services Administration.

Note: We define “mother” as any woman over 18 years of age with at least one biological child younger than 6 living in her household, “low income” as household income below 200 percent of the federal poverty level, and “depression” as having a major depressive episode in the past year. Values do not sum to 100 percent due to missing data.

\*p<.10; \*\*p<.05; \*\*\*p<.01



by health insurance often top the list (Scholle et al. 2003; Uebelacker et al. 2012). Concerns about lost pay or taking time off from work are also cited (Alegria et al. 2008; Ojeda and McGuire 2006; Scholle et al. 2003). Other obstacles include transportation, lack of child care, or inconvenient location (Diamant et al. 2004; Ojeda and McGuire 2006; Scholle et al. 2003). These access barriers may not only prevent low-income mothers from initiating treatment but may also hinder their ability to receive the high-quality mental health services necessary for long-term improvement. A single visit to a mental health professional or dose of medication, while captured in this survey as a treatment, is not likely to effectively treat the mother to remission.

Also, if mothers are more likely to receive medical care from the physicians who feel least equipped to address depression, they may be less likely to receive effective treatment or any treatment at all.

Some physicians feel inadequately trained to address maternal depression or provide referrals. Others may spend too little time with mothers to make an assessment or feel limited to reliance on visual cues, since they do not have direct questions or an assessment. Some prefer leaving identification to other professionals (Heneghan, Morton, and DeLeone 2007).

Sometimes reluctance to seek treatment is another critical hurdle to getting help. A depressed mother may not recognize or accept symptoms, feel uncomfortable disclosing symptoms to a provider they do not know well, fear negative consequences for her children (e.g., getting reported to child protective services), believe that treatment is not effective, or distrust treatment options. Her reluctance may also reflect the weaknesses of the treatment options available to her, as when mothers report they would be far more willing to speak to a provider who had a longer-term relationship with them

## Study Data and Methods

The study involved descriptive analysis of the treatment low-income mothers in the United States currently receive for depression. We combined the 2008, 2009, and 2010 National Survey on Drug Use and Health (NSDUH). The NSDUH provides nationally representative estimates of drug use and mental health in the United States through an annual nationwide survey of approximately 70,000 individuals ages 12 and older. The survey measures the prevalence of major depressive episodes in the past year using criteria established by the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), and distinguishes between episodes with and without severe impairment.

Our 2008–2010 combined sample consisted of over 14,000 mothers older than 18 with at least one biological child younger than 6. For the analyses described in this paper, the sample was further broken down by poverty status (less than 100 percent of the federal poverty level, between 100 and 199 percent of the federal poverty level, or 200 percent of the federal poverty level or higher), depression status (major depressive episode in the past year, major depressive episode in one's lifetime), insurance status (insured, uninsured), insurance type (Medicaid/Child Health Insurance Plan, private or other health insurance, no insurance), and self-reported race/ethnicity (African American/black non-Hispanic, Hispanic, white non-Hispanic). The subsample of low-income mothers (those with incomes less than 200 percent of the federal poverty level) consisted of 7,400 mothers, 800 of whom reported experiencing a major depressive episode in their lifetime. The weights and survey design variables, including the analysis weight for the 2008 NSDUH split-sample design, have been taken into account in this analysis following the recommendations of SAMHSA's Office of Applied Studies NSDUH Codebook.

SAMHSA's Center for Behavioral Health Statistics and Quality provided aggregate tables for the selected subsamples of mothers of young children used in this brief. For each subsample (for example, insured and uninsured depressed, low-income mothers of young children), SAMHSA conducted comparison of means tests across all variables of interest (e.g., depression severity, demographic characteristics, treatment source). SAMHSA was unable to provide data on any subpopulations that included fewer than 100 mothers. Special care was taken to account for missing data and legitimate skips in the respondents' answers.



and knew them well (Abrams, Dornig, and Curran 2009; Anderson et al. 2006; Golden, Hawkins, and Beardslee 2011). Racial and ethnic differences in treatment seeking are also a consideration. For example, African American and Latina women may be less likely than white women to endorse medication and more likely to seek religion or faith (Nadeem, Lange, and Miranda 2008).

Our findings provide national estimates of treatment prevalence, but they include little indication of treatment quality other than the mother's self-reported effectiveness. Key issues affecting the ultimate outcomes of depression treatment are likely to be treatment duration, intensity, and quality. While the NSDUH does measure these aspects of treatment for general mental health services, it does not measure it specifically for the treatment of a major depressive episode. As treatment is only effective for parents and their children if depression is treated to remission, one next step in future research is to go beyond examining the "percentage treated" to better understand these factors and how they vary by income, treatment type, race and ethnicity,<sup>5</sup> and gender, and across geographic locations. A final implication of this work is the need for more research on major depression in mothers (and fathers) of young children. That includes sufficient data sources to identify parents and to track depression treatment type, quality, and outcomes for parents and children.

## Notes

1. Adequate treatment is defined in this study as receiving at least four prescriptions of antidepressants, any combination of eight office-based or outpatient psychotherapy or counseling visits, or both.
2. We collaborated with SAMHSA on this work, providing its analyst with detailed request for demographic and other estimates for several population subgroups for whom we could not access individual data (for estimating our own tables) due to data confidentiality restrictions.
3. The Sheehan disability scale, one tool commonly used to diagnose and classify depression severity, uses a 10-point scale to measure the extent to which symptoms interfere with a variety of daily activities: not at all (0), mildly (1–3), moderately (4–6), markedly (7–9) or extremely (10). The NSDUH survey asked one question each on home and work life, and two questions on social life. The highest rating given to any of these four questions is reported as the respondent's overall depression severity (SAMHSA 2012).
4. Differences are not statistically significant at a  $p < .05$  level.
5. Sample size limitations prevented sufficient comparisons by race and ethnicity among low-income mothers of young children. Cross-tabulations comparing African American, Hispanic, and white low-income mothers of children under 18 were also limited by sample size but show not only differences in treatment access (with African Americans less likely to have used prescription medication or seen or talked to someone about their major depression), but also differences in insurance access, family structure, income, and education, making interpretation difficult and warranting further study with additional rounds of NSDUH data to increase sample sizes.

## References

Abrams, Laura S., Katrina Dornig, and Laura Curran. 2009. "Barriers to Service Use for Postpartum Depression Symptoms among Low-Income Ethnic Minority Mothers in the United States." *Qualitative Health Research* 19(4): 535–51.

Alegría, Margarita, Pinka Chatterji, Kenneth Wells, Zhun Cao, Chih-nan Chen, et al. 2008. "Disparity in Depression Treatment among Racial and Ethnic Minority Populations in the United States." *Psychiatric Services* 59(11): 1264–72.

American Psychiatric Association (APA). 1994. *Diagnostic and Statistical Manual of Mental Disorders*. (DSM-IV), 4th ed. Washington, DC: Author.

Anderson, Carol M., Cynthia S. Robins, Catherine G. Greeno, Helen Cahalane, Valire Carr Copeland, and R. Marc Andrews. 2006. "Why Lower Income Mothers Do Not Engage with the Formal Mental Health Care System: Perceived Barriers to Care." *Qualitative Health Research* 16(7): 926–43.

Beardslee, William R., Tracy R. G. Gladstone, and Erin E. O'Connor. 2011. "Transmission and Prevention of Mood Disorders among Children of Affectively Ill Parents: A Review." *JAACAP* 50(11): 1098–109.

Berger, L. M. 2005. "Income, Family Characteristics, and Physical Violence toward Children." *Child Abuse & Neglect* 29(2): 107–33.

Buist, A. 1998. "Childhood Abuse, Parenting and Postpartum Depression." *Australian and New Zealand Journal of Psychiatry* 32:479–87.

Council on the Developing Child at Harvard University. 2009. "Maternal Depression Can Undermine the Development of Young Children." Working Paper 8. Cambridge, MA: Center on the Developing Child at Harvard University.

Diamant, Allison L., Ron D. Hays, Leo S. Morales, Wesley Ford, Daphne Calmes, et al. 2004. "Delays and Unmet Needs for Health Care among Adult Primary Care Patients in a Restructured Urban Public Health System." *Research and Practice* 94(5): 783–89.

- Essex, Marilyn J., Marjorie H. Klein, Richard Miech, and Nancy A. Smider. 2001. "Timing of Initial Exposure to Maternal Major Depression and Children's Mental Health Symptoms in Kindergarten." *British Journal of Psychiatry* 179:151–56.
- Feder, Adriana, Angeliqne Alonso, Min Tang, Wanda Liriano, Virginia Warner, Daniel Pilowsky, Eva Barranco, Yanping Wang, Helena Verdelli, Priya Wickramaratne, and Myrna Weissman. 2009. "Children of Low-Income Depressed Mothers: Psychiatric Disorders and Social Adjustment" *Depression and Anxiety* 26(6): 513–20.
- Golden, Olivia, Amelia Hawkins, and William Beardslee. 2011. "Home Visiting and Maternal Depression: Seizing the Opportunities to Help Mothers and Young Children." Washington, DC: The Urban Institute. <http://www.urban.org/publications/412316.html>.
- Grote, Nancy K., Jeffery A. Bridge, Amelia R. Gavin, Jennifer L. Melville, Satish Iyengar, and Wayne J. Katon. 2010. "A Meta-analysis of Depression During Pregnancy and the Risk of Preterm Birth, Low Birth Weight, and Intrauterine Growth Restriction." *Archives of General Psychiatry* 67(1): 1012–24.
- Gunlicks, Merideth L., and Myrna M. Weissman. 2008. "Change in Child Psychopathology with Improvement in Parental Depression: A Systematic Review." *JAACAP* 47(4): 379–89.
- Harvard School of Medicine. 2005. "Home Page: National Comorbidity Survey (NCS)." <http://www.hcp.med.harvard.edu/ncs/>. (Accessed October 2008.)
- Heneghan, A. M., S. Morton, and N. L. DeLeone. 2007. "Paediatricians' Attitudes about Discussing Maternal Depression during a Paediatric Primary Care Visit." *Child: Care, Health & Development* 33(3): 333–39.
- Kiernan, Kathleen E., and M. Carmen Huerta. 2008. "Economic Deprivation, Maternal Depression, Parenting and Children's Cognitive and Emotional Development in Early Childhood." *British Journal of Sociology* 59(4): 783–806.
- Knitzer, J., S. Theberge, and K. Johnson. 2008. "Reducing Maternal Depression and Its Impact on Young Children: Toward a Responsive Early Childhood Policy Framework." Project Thrive Issue Brief 2. New York: National Center for Children in Poverty.
- Kristofco, Robert E., Altha J. Stewart, and William Vega. 2007. "Perspectives on Disparities in Depression Care." *Journal of Continuing Education in the Health Professions* 27(S1): S18–25.
- Loprest, Pamela, Sheila Zedlewski, and Simone Schaner. 2007. "Mental Health, Work, and Mental Health Service Use among Low-Income Mothers." LIWF Discussion Paper 1. Washington, DC: The Urban Institute. <http://www.urban.org/publications/411522.html>.
- Marcus, Sheila M., Heather A. Flynn, Frederic C. Blow, and Kristen L. Barry. 2003. "Depressive Symptoms among Pregnant Women Screened in Obstetrics Settings." *Journal of Women's Health* 12(4): 373–80.
- Miranda, Jeanne, Thomas G. McGuire, David R. Williams, and Philip Wang. 2008. "Mental Health in the Context of Health Disparities." *American Journal of Psychiatry* 165(9): 1102–08.
- Nadeem, Erum, Jane M. Lange, and Jeanne Miranda. 2008. "Mental Health Care Preferences among Low-Income and Minority Women." *Archives of Women's Mental Health* 11(2): 93–102.
- Naicker, Kiyuri, Maeve Wickham, and Ian Colman. 2012. "Timing of First Exposure to Maternal Depression and Adolescent Emotional Disorder in a National Canadian Cohort." *PLoS ONE* 7(3): e33422. doi:10.1371/journal.pone.0033422.
- National Research Council and Institute of Medicine (NRC and IOM), Committee on Depression, Parenting Practices, and the Healthy Development of Children. 2009. *Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment, and Prevention*. Washington, DC: National Academies Press.
- Ojeda, Victoria D., and Thomas G. McGuire. 2006. "Gender and Racial/Ethnic Differences in Use of Outpatient Mental Health and Substance Use Services by Depressed Adults." *Psychiatric Quarterly* 77:211–22.
- Pilowski, Daniel J., Priya Wickramaratne, Ardesheer Talati, Min Tang, Carroll W. Hughes, et al. 2008. "Children of Depressed Mothers 1 Year after Initiation of Maternal Treatment: Findings from the STAR\*D-Child Study." *American Journal of Psychiatry* 165:1136–47.
- Santiago, Catherine DeCarlo, Stacey Kaltman, and Jeanne Miranda. 2012. "Poverty and Mental Health: How Do Low-Income Adults and Children Fare in Psychotherapy?" *Journal of Clinical Psychology* 69(2): 115–26.
- Scholle, Sarah Hudson, Roger F. Haskett, Barbara H. Hanusa, Harold Allen Pincus, and David J. Kupfer. 2003. "Addressing Depression in Obstetrics/Gynecology Practice." *General Hospital Psychiatry* 20:83–90.
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2012. "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: SAMHSA.



Uebelacker, Lisa A., Beth A. Marootian, Paul A. Pirraglia, Jennifer Primack, Patrick M. Tigue, et al. 2012. "Barriers and Facilitators of Treatment for Depression in a Latino Community: A Focus Group Study." *Community Mental Health Journal* 48:114–26.

Weissman, Myrna M., Daniel J. Pilowsky, Priya J. Wickramaratne, Ardesheer Talati, et al. 2006. "Remissions in Maternal Depression and Child Psychopathology: A STAR\*D-Child Report." *JAMA* 295(12): 1389–98.

Witt, Whitney P., Abiola Keller, Carissa Gottlieb, Kristin Litzelman, John Hampton, Jonathan Maguire, and Erika W. Hagen. 2009. "Access to Adequate Outpatient Depression Care for Mothers in the USA: A Nationally Representative Population-Based Study." *Journal of Behavioral Health Services & Research* 38(2): 191–204.

Zimmerman, Mark, Joseph B. McGlinchey, Michael A. Posternak, Michael Friedman, Naureen Attiullah, and Daniela Boerescu. 2006. "How Should Remission from Depression Be Defined? The Depressed Patient's Perspective." *American Journal of Psychiatry* 163:148–50.

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This brief is part of the Urban Institute's "Linking Depressed Mothers to Effective Services" project, which aims to develop well-grounded, practical options for policy and system reform that will link more low-income mothers with depression to effective treatment. Other products from the Urban Institute on this topic include a data brief about infants with depressed mothers, a report on the opportunities and challenges home visiting programs experience in serving depressed mothers, a look at Medicaid financing and barriers to two-generational services, and a report on opportunities to address maternal depression treatment through Medicaid and the Affordable Care Act. This project is funded primarily by a research grant from the Doris Duke Charitable Foundation.

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