ICPSR

Find data, studies, variables, and related publications

Maternal Depression and Child Health

Research Spotlight No. 1-2022



Editor's Note: This Research Spotlight reflects a selection of ICPSR studies and the literature analyzing the data in those studies, as of December 2022.

Introduction

Major depressive disorder, or depression, is a common and serious medical condition that negatively affects one's mood or ability to function for more than two weeks. It's been estimated that one in six people will experience depression symptoms during their lifetime, and according to the American Psychiatric Association (2020), one-third of women will experience a major depressive disorder. Mental Health America (n.d.) indicates that almost 12 million women experience clinical depression each year, mostly between the ages of 24 and 44. While there are some biological explanations for it, such as childbirth, premenstrual syndrome, infertility, menopause, or hormonal disorders, clinical depression among women can be reinforced by social factors such as

stress, family responsibilities and expectations, sexual abuse, or poverty (Mental Health America, n.d.).

Maternal depression includes having depressive symptoms before, during, and after pregnancy (postpartum). Maternal postpartum depression has a correlation with chemical and hormonal changes in the mother's body following childbirth. The Centers for Disease Control and Prevention (CDC) reported that one in every eight new mothers could expect to develop clinical levels of postpartum depression (Bauman et al., 2020). According to the National Institute of Health (2020), postpartum depressive symptoms could last for three years after a woman gives birth. This *Spotlight* will reference several studies about early childhood, which evaluated maternal depression at some level.

Using early childhood data to evaluate maternal depression

Maternal depression has been evaluated through the use of multiple large, national representative surveys in the United States. One of the oldest datasets distributed by ICPSR about mothers and infants is the National Maternal and Infant Health Survey, 1988, which provides information on the health and development of low-birthweight babies, child care and safety, maternal health, maternal depression, and plans for adoption and foster care. Using these data, Deal and Holt (1998) found substantially high rates of depressive symptoms among adolescent first-time mothers more than a year after giving birth, with 37 to 48 percent among Black teen mothers and 28 to 33 percent among white teen mothers.

The Early Head Start Research and Evaluation (EHSRE) Study also contains data about women and children, which are often used to examine maternal depression. The EHSRE was a large-scale, random assignment evaluation of Early Head Start families from 1996 to 2010. Principal investigators of the study found a high rate of depression among the families enrolled in the Early Head Start programs, which are designed for low-income pregnant women and families with infants and toddlers up to three years old. According to a report published by the US Department of Health and Human Services Administration for Children and Families (2006), one-third of mothers of one-year-olds and one-third of mothers of three-year-olds indicated symptoms of clinical depression. Significantly, 12 percent of these mothers were diagnosed with chronic

depression, meaning they were depressed when their children were both one and three years old.

A more recent study found that the rate of depressive symptoms among low-income mothers who are not enrolled in programs such as Head Start is even higher. Using the Head Start Impact Study (HSIS), Lee and Hunter (2022) found that mothers who struggle with more depressive symptoms are involved in less nurturing parenting practices, including corporal punishment and an authoritative parenting style. The authors investigated four care types: Head Start, informal care, other center-based care, and exclusive parental care. Their study showed that mothers whose children enrolled in Head Start programs tend to have fewer depressive symptoms compared to other types of care. The availability of formal subsidized child care such as Head Start reduces mothers' stress and allows them to begin or maintain their career path. In addition, it gives the mothers more free time for self-care or to get help from mental health services.

Maternal depression and child behavior problems

Using the National Maternal and Infant Health Survey, 1988 and its 1991 longitudinal follow-up, Civic and Holt (2000) found a significant positive correlation between maternal depressive symptoms and the mother's report of child behavior problems. According to this study, depressed mothers in both surveys reported child behavior problems three times more than non-depressed mothers.

When it comes to maternal depression and children's behaviors, much research focuses on children's internalizing and externalizing behaviors. Internalizing has been defined as a variety of internally-focused symptoms such as anxiety, fear, and social withdrawal. Externalizing, on the other hand, includes externally-focused behavioral symptoms such as aggression, conduct problems, hyperactivity, attention problems, and more (Willner et al., 2017).

Maternal depressive symptoms are a risk factor for children's behavioral problems. Using EHSRE data, Conners-Burrow et al. (2016) revealed that maternal depression during a child's first year of life could predict internalizing problems, low self-esteem, and hopelessness in children as they grow. They found that mothers with depression are less emotionally available, reciprocal, or involved, and their children are three times more likely to develop depression than parents without depression. Using the

same dataset, Mesman et al. (2017) examined the relationship between maternal depression and alcohol use problems and children's internalizing and externalizing behaviors. The study demonstrated that children whose mothers showed severe depressive symptoms have significantly higher internalizing and externalizing behavior problem scores (almost double) than children whose mothers had shown minimal symptoms.

Wang and Yan (2019) used Phases I and II of the NICHD Study of Early Child Care and Youth Development (NICHD SECCYD) to examine gender differences in the development of internalizing and externalizing problems among preschool-aged children who have depressed mothers. Their findings supported the idea that when mothers have high depressive symptoms, preschool-aged boys exhibit more externalizing problems than internalizing ones. High depressive symptoms in mothers increase externalizing problems in boys that lead to peer rejection. The authors speculate that continuous peer problems may contribute to the stability of internalizing problems in boys. In general, boys are more vulnerable than girls in disadvantaged environments. However, the findings should not be generalized to other age groups, the authors said.

Surprisingly, a decreasing trajectory of internalizing and externalizing problems was found in preschool-age girls who had a depressed mother which may be justified by age. Prior literature found increasing trajectories in girls during their middle childhood and adolescence. Therefore, the authors suggested that the increase of internalizing problems in girls may happen after early childhood along with their growing cognitive capacities to better remember, reflect, and anticipate negative events. Overall, co-occurring internalizing and externalizing problems were found in both boys and girls. Over time, children who exhibited internalizing problems and were viewed as anxious or sad tended to be viewed as aggressive and defiant by their teachers.

Maternal depression can prevent children from learning how to regulate their emotions. In a more recent study, Wu (2021) used data from the Family Life Project to shed light on the association between maternal intrusive parenting and infant fear in 6- to 24- month-old children and mothers with postpartum depressive symptoms. The result revealed that depressed mothers discontinue interactions with their infants when infants show high fear. On the other hand, when mothers show early postpartum depressive symptoms, infants reduce their fear expression,

which over time results in reduced mother-infant communication. Infants seem to restrain their fear to prevent their mothers from turning away. Consequently, the children do not learn to regulate their emotions and use them to communicate with their mothers.

While the literature has been mostly focused on the impacts of maternal depression on children, Baker et al. (2020) explored the reciprocal relationship between maternal depression and child behavior problems. Using nationally representative data from the 2009 Head Start Family and Child Experiences Survey (FACES), Baker and colleagues studied a sample of low-income and primarily ethnic minority families enrolled in Head Start. Their findings demonstrated a significant and consistent reciprocal pattern, showing that although children are strongly affected by their parents, they could also impact their parent's functioning and increase maternal depression. The authors speculate that it is possible that depressive symptoms increase due to challenges and struggles with misbehaving children. In addition, mothers might experience reinforced feelings of sadness and despair because they blame themselves for their children's behavior problems. On the other hand, children who observe their mothers' reactions, e.g., crying alone or yelling due to frustration, will be more likely to imitate such behaviors than children who never observe their mothers' emotional dispositions. An additional finding in this study was that African American mothers showed more vulnerability to depression than those in other racial or ethnic groups during their children's first year in Head Start. Baker et al. speculate that African American mothers frequently experience more emotional tension due to multigenerational exposure to stressors like discrimination, poverty, and limited access to health care. When a strained relationship with a child is added to the list, it may increase vulnerability for depression among this group of mothers.

Maternal depression and child physical problems

Poor mental health in mothers can lead to physical injury in children. Leiferman (2002) indicated that maternal depression is associated with negative maternal behaviors that predict children's physical health. Specifically, the author studied three behaviors, including engagement in smoking, car seat usage, and not administering vitamins to a child. Using data from the Maternal and Infant Health Survey, 1988 and its follow-up, Leiferman demonstrated that depressed mothers tend toward unhealthy behaviors, such as smoking, as a form of emotion-focused coping to reduce negative mood. Also, these mothers experience lethargy and

hopelessness, which probably makes it challenging to care for their children or to make parental decisions such as placing children in a car seat or administering vitamins to them.

Schwebel and Brezausek (2008) used Phase I of the NICHD SECCYD study to examine the relationship between maternal depression and toddlers' injury risk. The study indicated that chronic and severe maternal depression is related to a high risk of injury among infants and toddlers, even after controlling for variables such as socio-economic status, child sex, and parenting strategies. Mothers who are struggling with severe depression can fail to safeguard their children's physical environments, e.g., stair gates or outlet covers. Also, poor concentration, distractibility, and irritability due to depression might impact effective parental supervision and lead to injuries in children engaging in risky activities.

In addition to the risk of physical injuries, research has supported the association between children's general health and well-being and maternal depression. For example, using EHSRE data, Henninger and Luze (2010) revealed that caregivers of underweight children were more likely to report depressive symptoms than caregivers of normal-weight children. Although the scores did not signify that mothers were clinically depressed, they reported more symptoms. Similarly, Duarte et al. (2012) studied the association between maternal depression and child weight status using data from the Early Childhood Longitudinal Study, kindergarten cohort class of 1998-99 (ECLS-K). Their data analysis from kindergarteners and first, third, and fifth graders showed that maternal depression impacts child BMI over time. Although this pattern is complex and varies by gender and age of the children, the authors stated that depressed mothers are likely disengaged from parenting. Without maternal supervision, younger children may not be fed adequately. In contrast, lack of supervision of older children may result in weight gain.

Hsu et al. (2020) used longitudinal data from the NICHD SECCYD, Phases I-IV, to investigate the relationship between children's long exposure to maternal depression and adolescent body mass index. Their findings indicated that children exposed to maternal depressive symptoms over time could experience depressive symptoms in their adolescence. Also, the study showed an increased BMI score in these adolescents, which could be a direct or indirect effect of their depressive symptoms.

Conclusion

This Research Spotlight does not reflect all of the existing research regarding maternal depression and child health. To see how each of the ICPSR studies mentioned in this Spotlight has been examined in other scholarly literature, to gain ideas for extending prior research, or to conduct a larger literature review, you can search the ICPSR Bibliography of Data-related Literature. Using search terms like "maternal depression" will lead you to search results containing publications linked to the study data analyzed in them. Discovering data via the literature in this way can begin your investigation of the existing and potential uses of the data distributed by ICPSR.

When authoring publications that include your secondary analysis of study data downloaded from ICPSR, be sure to cite the study in the publication's references section, using the provided data citation and unique identifier (in the form of a URL containing a DOI). Once your paper is published, submit its citation to the ICPSR Bibliography via this form, so it can be added to ICPSR's collection of linked data-related literature, enabling others to find, learn from, and cite your work.

References

American Psychiatric Association. (2020). *What is depression?*

Baker, C. E., Brooks-Gunn, J., & Gouskova, N. (2020). Reciprocal relations between maternal depression and child behavior problems in families served by Head Start. *Child Development*, 91, 1563-1576.

Bauman, B. L., Ko, J. Y., Cox, S., D'Angelo, D., Warner, L., Folger, S., Tevendale, H. D., Coy, K. C., Harrison, L., & Barfield, W. D. (2022). Vital signs: Postpartum depressive symptoms and provider discussions about perinatal depression - United States. *Morbidity and Mortality Weekly Report (MMWR)*, 69(19), 575-581.

Civic, D., & Holt, V. L. (2000). Maternal depressive symptoms and child behavior problems in a nationally representative normal birthweight sample. *Maternal and Child Health Journal*, 4(4), 215-221.

Conners-Burrow, N. A., McKelvey, L., Perry, D., Whiteside-Mansell, L., Kraleti, S., Mesman, G., Homes, K., & Kyzer, A. (2016). Low-level symptoms of depression in mothers of young children are associated with behavior problems in middle childhood. *Maternal and Child Health Journal*, 20, 516-524.

Deal, L. W., & V. L. Holt. (1998). Young maternal age and depressive symptoms: Results from the 1988 National Maternal and Infant Health Survey. *American Journal of Public Health*, 88(2), 266-270.

Duarte, C. S., Shen, S., Wu, P., & Must, A. (2012). Maternal depression and child BMI. *Pediatric Obesity*, 7, 124-133.

Henninger, W. R., Luze, G. J. (2010). Differences in parental perceptions of the socio-emotional development of underweight, overweight, and typically weighted children in a low-income sample. *Journal of Child Health Care*, 14(3), 250-260.

Hsu, A. R. C., Niu, Z., Lei, X., Kiresich, E., Li, Y., Hwang, W.-C., & Xie, B. (2020). Adolescents' depressive symptom experience mediates the impact of long-term exposure to maternal depression symptoms on adolescents' body mass index. *Annals of Behavioral Medicine*, 54(7), 510-517.

Leiferman J. (2002). The effect of maternal depressive symptomatology on maternal behaviors associated with child health. *Health Education and Behavior*, 29(5), 596-607.

Lee, K. & Taylor, H. (2022). The associations between maternal depressive symptoms and parenting practices among low income Head Start eligible families. *Social Work in Mental Health*, 20(2), 203-225.

Mental Health America. (n.d.) *Depression in women*.

Mesman, G. R., Edge, N. A., McKelvey, L. M., Pemberton, Joy L., Holmes, K. J. (2017). Effects of maternal depression symptoms and alcohol use problems on child internalizing and externalizing behavior problems. *Journal of Child and Family Studies*, 26, 2485-2494.

National Institute of Health. (2020). *Postpartum depression may last for years*.

Schwebel, D. C., & Brezausek, C. M. (2008). Chronic maternal depression and children's injury risk. *Journal of Pediatric Psychology*, 33(10), 1108–1116.

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. (2006). *Depression in the lives of Early Head Start families*.

Willner, C., Gatzke-Kopp, L., & Bray, B. (2016). The dynamics of internalizing and externalizing comorbidity across the early school years. *Development and Psychopathology*, 28(4 pt1), 1033-1052.

Wang, Y., & Yan, N. (2019). Trajectories of Internalizing and externalizing problems in preschoolers of depressed mothers: Examining gender differences. *Journal of Affective Disorders, 257, 551-561.*

Wu, Q. (2021). Trajectory of maternal postpartum depressive symptoms moderates the bidirectional associations between maternal intrusive parenting and infant fear. *Journal of Affective Disorders*, 292, 359-368.

Suggested Citation

Banaeefar, H. (2022). *ICPSR Bibliography of Data-related Literature Research Spotlight: Maternal depression and child health* (No. 1-2022). Inter-university Consortium for Political and Social Research.

Tags

Women, Mental health

Go to Research Spotlights

Accessibility | Privacy Policy | Contact Us | Help |
ICPSR-help@umich.edu | 734-647-2200

Sign up for our newsletter

© 2025 The Regents of the University of Michigan. ICPSR is part of the Institute for Social Research at the University of Michigan.