Low-Level Depressive Symptoms Reduce Maternal Support for Child Cognitive Development

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Objective: The objective of this study was to examine the relationship between low-level depressive symptoms in mothers and their support for child cognitive development.
Methods: Participants included 913 low-income mothers of preschool-age children who were screened for maternal depression and interviewed about support for learning in the child's home environment.
Results: Of the 770 mothers in the analysis, 21.5% reported low-level depressive symptoms (*below* the cutoff on the screening tool indicating clinically elevated symptoms). Logistic regression analyses revealed that children of mothers with low-level depressive symptoms were significantly less likely to experience six of seven types of support for learning compared with children of mothers with no depressive symptoms.
Conclusions: Results suggest that children whose mothers experience even low-level depressive symptoms are less likely to receive important supports for cognitive development and school readiness, pointing to the need for screening and interventions to address maternal depression at all levels of severity. J Pediatr Health Care. (2014) *28*, 404-412.

KEY WORDS
Depression, cognitive development, school readiness

It has been well documented that maternal depression has a negative impact on children's health and

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development (Cummings, Keller, & Davies, 2005; Downey & Coyne, 1990; Goodman & Gotlib, 1999), especially during early childhood, when rapid brain growth and maximum dependence on caregivers coincide. In the United States, it is estimated that 1 in 10 children experience maternal depression in any given year (Ertel, Rich-Edwards, & Koenen, 2011), and in fact maternal depression is considered a worldwide public health problem (World Health Organization–U.N. Fund for Population Activities [WHO-UNFPA], 2007). Despite the recognized prevalence of maternal depression, the connection is often not made between a mother's positive screening for depression and the risk to a child's well-being. Conversely, a link often is not made between developmental delays in children and possible depression or another mental health disorder of the parent.

Although the existing research is clear that depression negatively affects parenting and child outcomes, the severity of depressive symptoms needed to create these negative impacts remains unclear. Specifically, we are unaware of any research that has examined whether low-level maternal depressive symptoms negatively affect parenting practices or child outcomes. The purpose of this article is to examine whether mothers with low-level depressive symptoms (i.e., symptoms *below* the cutoff point on a standard screening tool) are less likely to engage in activities that support their child's healthy cognitive development and school readiness, compared with mothers who have no depressive symptoms.

IMPACT OF DEPRESSION ON CHILDREN

Children of depressed parents have been found to have more behavior problems, fewer positive social behaviors, and lower scores on early academic performance measures (Galler, Harrison, Ramsey, Forde, & Butler, 2000; Salt, Galler, & Ramsey, 1988) than do children of parents who are not depressed. More specifically, children of depressed mothers display more negative affect, more behavior problems, and poorer self-regulation, social skills, and cognitive and language functioning (Carter, Garrity-Rokous, Chazan-Cohen, Little, & Briggs-Gowan, 2001; Zahn-Waxler, Duggal, & Gruber, 2002). Authors of a longitudinal prospective study (NICHD Early Child Care Research Network, 1999) found that children of mothers who reported more chronic depressive symptoms had poorer scores on tests of school readiness and expressive language and higher ratings of externalizing behaviors compared with children of mothers who were not depressed mothers or mothers who had intermittent symptoms.

IMPACT ON PARENTING PRACTICES

Children of depressed mothers have poorer outcomes in part because of the negative impact of depression on maternal sensitivity, responsiveness, and other aspects of parenting (Hwa-Froelich, Cook, & Flick, 2008; Jacob & Johnson, 1997; Paulson, Dauber & Leiferman, 2006). Optimal caregiving behaviors include sensitive responsive caregiving, provision of resources such as books and toys that support learning, and parent-child verbal and stimulating interactions such as shared reading, telling stories, singing songs, playing counting or alphabet games, visiting new places, and doing daily activities together (Rodriguez & Tamis-LeMonda, 2011; Tamis-LeMonda, Bornstein, & Baumwell, 2001; Tomopoulos et al., 2006). Research suggests that depressed mothers are less likely to engage in these activities with their children that support their healthy cognitive development and contribute to school readiness.

The pathway from depression to less sensitive maternal behavior and lower levels of maternal sensitivity was found to partly explain children's poorer school readiness, verbal comprehension, and expressive language and higher rates of problem behavior (NICHD Early Child Care Research Network, 1999; Paulson, Keefe, & Leiferman, 2009). The research of Hart & Risley (1995) and Hoff (2003) provides compelling documentation of the value of providing children with more labels for objects, responding contingently to children's speech, making efforts to elicit conversation from children, sustaining conversations with children, and just talking to them more often. Depressed mothers have been found to use longer utterances (i.e., they do not shorten utterances for children of younger ages), less repetition, more negative affect, fewer explanations, suggestions, and questions, and fewer references to their infants' behavior (Herrera, Reissland, & Shepherd, 2004; Kaplan, Bachorowski, & Zarlengo-Strouse, 1999). Maternal depression is also associated with fewer reading activities (Kiernan & Huerta, 2008; Paulson et al., 2009).

INTERVENTION

The harm to children as a result of maternal depression is a compelling reason for programs that serve young children and their families to screen for the presence of maternal depressive symptoms. The need for increased, sustained efforts to not only treat adults but to prevent problems in children has been identified by international and national

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