

Parental Depression

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In this paper, I will be discussing the seriousness and importance depression has on raising children. In the first domain discussed, the articles by Deave, Heron, Evans, & Emond (2008) and Quevedo et al. (2011) will investigate the effects depression can have on children's cognitive and language development. Throughout both articles, they discuss how depression can still affect a child that has not been born yet and why mother attentiveness is important. In the social domain, the articles by Braarud et al. (2013) and Dietz, Donahue Jennings, & Abrew (2005) go over infant withdrawal and self-assertiveness in toddlers. Although this is part of the social domain, they also incorporate the importance of cognition and emotions among depressed mothers. Next, in the physical domain, research by Wojcicki et al. (2011) and Ndokera & MacArthur (2010) infant growth in relation to maternal depression. Both articles describe that although maternal depression affects physical development, there are multiple factors that influence growth. In the emotion domain, research by Prenoveau et al. (2017) and Reissland & Shepherd (2006) discuss how maternal depression can affect how children develop emotion regulation and displaying emotion. This paper will go over the effects of depression in the different domains and the long-lasting impact depression holds on development.

Cognitive

In the research article conducted by Deave, Heron, Evans, & Emond (2008), the authors discuss how postpartum depression in mothers is correlated with developmental problems in their children. The purpose of this study was to investigate the connections between depression in mothers during pregnancy and child development at 18 months. Using a cohort study of women giving birth to babies between April 1991 and December 1992, the researchers collected

data longitudinally at 18 and 32 weeks of gestation and at 8 weeks and 8 months postnatally. They collected their data using questionnaires that included self-report measure of depression; by the time the child was 18 months old, mothers would have completed five questionnaires about their child's health and development. The researchers determined if the mother was depressed by using the Edinburgh Postnatal Depression Scale (EPDS). In addition, this scale was validated for use during pregnancy as well as during the postpartum period. The EPDS uses a 10-item self-rating questionnaire that women rate their emotions over the previous week, giving a score that ranged from 0 to 30. The women were placed into three antenatal depression groups: women with a score below the EPDS cutoff indicated the absence of depression and women with EPDS scores at or higher than the cutoff show depression either at 18 or 32 weeks once, or at 18 to 32 weeks twice; the second indicates persistent depression. The Denver Developmental Screening Test (DDST) modification was implemented as the child outcome. This screening questionnaire showed cognitive and behavioral problems in preschool children. If a child failed to perform items passed by 90% of their peers, the more likely the child has developed a significant developmental delay. Applying the DDST at 18 months as a measure of development, a correlation was discovered between continuous depression throughout pregnancy and developmental delay with a 50% increase with the odds of delay associated with persistent depression during pregnancy. Furthermore, depression both during pregnancy and after in mothers is likely related to affect child development and cause delays.

Research conducted by Quevedo et al. (2011) discusses the effect of maternal depression on language development of children at one years old. They conducted their study using a longitudinal study; participants were mothers who had received prenatal care at the Brazilian National System of Public Health in Rio Grande do Sul, Brazil. The study used 296 mothers

whose children were born between September 2007 and September 2008. The first assessment given to the mothers was 30 to 60 days postpartum, and the second was 1 year after the birth; the baby was also assessed at 1 year. To determine maternal depression, they created categories: mothers who were not depressed in either evaluation, mothers who were only depressed during post-partum, mothers who were depressed at 12 months, and mothers who were depressed both post-partum and at 12 months. The children were assessed using a language scale called the Bayley Scales of Infant Development III. The Bayley-III has items related to receptive and expressive communication. The receptive communication subtest commences with items that assess auditory understanding, which is the ability to respond to a sound and discriminate between sounds in the environment and localized sound. The expressive communication subtest assesses the infant's ability to vocalize. In addition, the children's mothers completed a questionnaire about their socioeconomic status and the health of their baby. Depression in mothers during the post-partum period affects the quality of care the child is receiving and can cause poor cognition, social and physical interaction, and physical development in their first year. The findings reveal that mothers with post-partum depression were at a higher risk of low language acquisition at 1 years old. The study also found that mothers who went through persistent depression had lower language averages than children who were only exposed to maternal depression at one time or not at all. The research also indicated that children with two or more siblings were likely to have lower language acquisition skills because there was less time focused on the youngest child's needs. Furthermore, children who spent more time with their mother showed better performance on the Bayley-III test.

Both articles by Deave, Heron, Evans, & Emond (2008) and by Quevedo et al. (2011) discuss the effects of maternal depression on cognitive skills. Both research articles come to

similar conclusions that the longer the mother was depressed suggests the likelihood the child is not receiving adequate stimulus to develop in their cognitive domain. The article by (Quevedo et al., 2011) assists in explaining the article by (Deave, Heron, Evans, & Emond, 2008) because they discuss how severity of depression can influence the quality of stimulation, while the first article goes over the hard statistics without going super in-depth about why quality of time can determine the child's ability later on in life.

Social

Research conducted by Braarud et al. (2013) conducted a longitudinal study to investigate infant social withdrawal based on 302 infants and their mothers. The study used two cohorts; one full-term cohort and another of slightly premature infants. The purpose of the study was to investigate and compare the extent of social withdrawal in the full-term and premature infants at 3, 6, and 9 months of age; the levels of maternal depression postpartum in the two cohorts at 3, 6, and 9 months' after the child's birth, and if there are any correlations between the self-report from the mother of depression and infant withdrawal in social behavior. The measures (Braarud et al., 2013) used to evaluate infant social behavior was called the ADBB; this instrument observed 8 items: facial expression, eye contact, general level of activity, self-stimulating gestures, vocalizations, response to stimulation, relationship, and attraction. Every item was rated on a scale from 0 (no abnormal behavior) to 4 (severe abnormal behavior), and the observer only needed 10 to 15 minutes to score the ADBB. In addition, mothers filled out the EPDS that assessed postpartum depression during the last week to understand the relation between child's social withdrawal and mother's attentiveness. Moreover, there was a significantly higher degree of social withdrawal observed in premature infants in comparison to the full-term cohort. The differences were most profound at 6 months. Mothers of the premature

infants showed significantly higher depression at 3 months postpartum compared to mothers of full-term babies, but there was also a big decrease in depression over time when re-tested at 6 and 9 months postpartum. Furthermore, few mothers in the full-term cohort reported moderate to severe levels of depression at any point in the longitudinal study, whereas a significant number of the mothers with premature infants experienced depression at 3 months postpartum. Preterm birth for infants may have put more stress on parents during the first few months in the postpartum period. However, no infants suffered critical impairments or social problems; a possible reason why there was a positive change in mothers' depression is that the premature infants showed positive developmental path.

In the study by Dietz, Donahue Jennings, & Abrew (2005), the researchers were examining the effects of maternal depression on toddlers' self-assertive strategies in interactions with their mother and a female examiner. The participants for this study were 110 mothers and their 26-month-old toddlers. Out of the 110 mothers, 57 had clinical depression since their child was born, and 53 had no history of depressive symptoms. During the second year of life, toddlers start to complete tasks on their own and learn self-assertion. Self-assertion relates to social competence in toddlers because it is the desire to maintain mastery behavior. It is the first development of autonomy and will lead to more complex social skills like cooperation and negotiation. There are four types of self-assertive behaviors: the most unskilled kind of noncompliance was direct defiance, an aversive behavior marked with overt resistance and uncontrolled anger. Passive noncompliance is when toddlers ignore demands and continue their behavior. Simple assertion is a verbal expression of disagreement (saying no). Negotiation is when the child tries to persuade others to modify their requests. The change in the expression of assertion is caused by a toddler's increasing ability to regulate their emotions and behavior and

comply with demands. Toddlers with depressed mothers show more difficulties with emotional regulation, impulsiveness, and cooperation than children with non-depressed mothers. During the toddlers' 26 month, (Dietz, Donahue Jennings, & Abrew, 2005) observed the in a paradigm designed self-assertive responses rather than compliance. They gave toddlers an interesting and easy task and presented three increasingly meddlesome offers to help. The toddlers' were examined for their strategy of defiance in relation to maternal depression and then with the external examiner. The results suggest that toddlers with depressed mothers demonstrated fewer social skills in their self-assertion toward their mothers than toddlers who were not exposed to depression. Furthermore, toddlers exposed to maternal depression demonstrated more skilled self-assertion with their examiner than toward their mothers; although their mothers are the primary caretakers and whom the toddlers learn social interaction from, the toddlers appeared to not always demonstrate their best behavior in interactions with their mothers.

Both articles demonstrate thorough information about social development in young children. They both discuss how maternal depression can have negative effects on social interaction and potentially lead to long-term effects. However, the first article by (Braarud et al., 2013) discussed that premature mothers with depression may improve over time because they are not as worried about their children, while (Dietz, Donahue Jennings, & Abrew, 2005) state that mothers in their study only developed depression after their children were born. The toddlers demonstrating self-assertiveness were negatively affected by maternal depression when communicating with their parent, but with other adults the child elicited increased regulation of behavior and understood rules of social interaction. Both studies complement each other's data and suggest that social interaction can be affected short-term, but with enough social interaction outside of their depressed parent, there is a positive outlook.

Physical

Research conducted by Wojcicki et al. (2011) evaluates the relationship between prenatal and postpartum maternal depression experienced during pregnancy and infant growth from birth to 2 years of age in a cohort of Latino babies. The researchers used a longitudinal study to evaluate the relationship between weight increase patterns in the first two years of life in Latino infants and how maternal depression exposure affects that period of growth. Early growth trajectories of Latino children are important to study given the high prevalence of nutritional deficiencies in this population as well as a high risk for obesity. Upon signing up, mothers were given the EPDS and the Center for Epidemiologic Studies Depression Scale (CES-D) to reveal current depression state. In the postpartum period, mothers with high records of depression were provided information about where to receive treatment and follow-up evaluations. Once their children were born, anthropometric measurements were given to infant, including birth weight, length, gestational age, and Apgar score. After 1 month, participants were interviewed again for depression symptoms and clinical depression using the same tests given before their child's birth. In addition, mothers were instructed to keep a 24-hour dietary recall of their infant feedings. At 6, 12, and 24 months postpartum, the infants were weighed and measured again; waist circumference was measured at 24 months. Their results indicated that infants who experienced depression in utero or to chronic depression were more likely to not thrive in their first 2 years of life compared with children who were not exposed to depression. Neonates of depressed mothers have more significant right frontal EEG activation, lower vagal tone, behavioral issues, and higher cortisol and norepinephrine levels, inferring that infants of depressed mothers have dysregulation in neurobiology that could impact weight gain patterns as early as birth (Wojcicki et al., 2011).

In the study by Ndokera & MacArthur (2010), the researchers are investigating postpartum depression and how it affects new mothers. In developing nations, there is possibly an association between postpartum depression and adverse mortality-related infant health. The present study aims to discover the possibility of this research in rural Zambia, and find associations between maternal depression and infant health outcomes. This study is a cross-sectional design that was undertaken in the Chongwe district of Zambia over a three-week period. The participants were women with infants aged between 2- and 12-months attending child health clinics. The age group was chosen to avoid cases of postpartum blues which may be misdiagnosed as depression. The eligible women were required to fill out a self-reporting-questionnaire. However, due to high illiteracy rates, all information in the questionnaires were relayed through an interpreter and conducted in native language. The self-reporting questionnaire-20 (SRQ-20) asked about symptoms preceding 4 weeks to identify depression symptoms (Ndokera & MacArthur, 2010). Infants were studied by taking their weight and length in two ways: actual weight and length, and the fifth percentile as an indicator of malnutrition. Another factor that was considered when evaluating weight was serious illness; a diarrheal episode was considered and defined as three or more loose stools scattered by 3 days of normal motions. The overall prevalence of adverse infant health outcomes was significantly higher among the infants of depressed mothers, although none of these differences were statistically important. The regression analysis that adjusted for infant age and other possibilities, showed no significant association between maternal depression and serious health problems, diarrheal episodes, or weight or length. This study demonstrated that mothers with depression were relatively lighter and shorter than infants with non-depressed mothers. It demonstrated a

consistent increase in other adverse outcomes for infants like illness, incomplete vaccinations, and weight and height as markers of malnutrition.

Both of these studies did a good job of highlighting the importance of maternal awareness during a child's critical growth period. Wojcicki et al. (2011) discussed the effect of Latino mothers who were depressed and their child's likelihood to become obese, which indicated that infants who had a depressed mother in utero were more likely to not thrive in their first year of life. In the study by Ndokera & MacArthur (2010), the author discusses how the health of the children has more significance with the education of the mother. If the mother was attending a health clinic consistently, instead of just once in a while, the child had a higher chance of being healthy and not contracting serious illnesses like diarrhea. Overall, both made interesting claims about maternal depression and infant health; knowledge is truly power and can determine the developmental success of children.

Emotional

In the article by Prenoveau et al. (2017), postnatal maternal depression is investigated to see the association with poor child emotional and behavioral function. Parental depression has received significant attention because it affects up to 19% of mothers in developed countries. The aim of this study was to examine whether maternal depression and anxiety severity are correlated with children's negative emotions and behavior at 2 years of age. Maternal anxiety was focused on in addition to depression because very few research studies have been conducted about anxiety in this context despite many mothers experiencing anxiety during their postnatal period. Assessment began 3 months postpartum as many cases of depression begin within this period. A significant proportion cancel by 6 months postpartum, so this was the second period of assessment to distinguish those with brief episodes of depression compared with chronic

depression. Next, a 10-month assessment was selected based on the development occurring in children; language begins to develop and social interaction with parents. Outcomes were assessed again at 14 and 24 months because at this age children are more independent and able to self-regulate. Mothers were recruited by the Oxford Parent Project and were required to complete the EPDS and the Generalized Anxiety Disorder Questionnaire at around 9 weeks postpartum to identify those with depression, anxiety, or both. At 24 months postpartum, mothers completed the Child Behavior Checklist for ages 1.5-5 and Early Childhood Behavior Questionnaire (Prenoveau et al., 2017). In addition, mother-child participated in a play task for 10 minutes, and then the child completed an individual task for 5 minutes while the mother completed questionnaires nearby. Children also participated in a frustration inducing toy removal activity to elicit frustration. The mother sat next to the child but was asked not to interact or respond to the child. The child was given a toy for 15 seconds; the toy was placed behind a transparent screen at arm length from the child for 30 seconds. The child had to cope with the toy being taken away but still visible. This study found that maternal anxiety and depression were both predictors of poor emotional negativity and behavior, but anxiety alone did not predict any of these outcomes. Whereas, depression independently predicted total child problems and frustration.

In this last study by Reissland & Shepherd (2006), the purpose was to examine whether an infant's ability to respond appropriately to an emotional situation varies according to whether or not the mother has depression. In infancy, learning about emotions is a social situation and an emotion that is learned spontaneously is surprise. At around 5 months, infants learn to express this emotion in appropriate contexts. Since children learn the specific circumstances in which surprise is expressed, maternal responsiveness between facial and vocal emotions are expressed is an important factor in eliciting emotional reactions (Reissland & Shepherd, 2006). The present

study expects that infants of depressed mothers compared with infants of non-depressed mothers will show fewer facial components of surprise in surprise-eliciting situations. In addition, vocal aspects of the expression will be tested because depressed mothers will express their emotions in a flatter voice. The children chosen to participate were aged between 17 and 48 weeks and were contacted by mail. All mothers took the EPDS and were videotaped with their child at home. Mothers and their infants were observed in play interactions in their homes while playing Jack-in-the-box. The interaction lasted for 2 to 3 minutes, depending on how long the toy kept the infant's interest. The reaction to the first opening was the measured in regards of facial expression and vocalization (Reissland & Shepherd, 2006). Mothers with depression in the postnatal period exclaimed surprise with less frequency than non-depressed mothers. Infants of depressed mothers showed far fewer components of facial expressions of surprise than infants with non-depressed mothers. The differences between the depressed and non-depressed mothers was visible in pitch related to the child's responses. Overall, depression appears to correlate with the quality of the child's emotional expressions.

Conclusion

In this paper, I discussed parental depression and how it affects children in utero, infancy, toddlerhood, and potentially life. In the cognitive domain, the research by (Deave, Heron, Evans, & Emond, 2008) and (Quevedo et al., 2011) discuss the detriments of depression on language and neuro development. If a mother is depressed postpartum, then the child is significantly more likely to be delayed in cognitive development compared to their peers with non-depressed mothers. In the social domain, the first study discusses how having a depressed parent can lead to infant withdrawal based on if the infant was born full term or premature; the second study stated that toddlers with depressed parents had lower levels of self-assertiveness with depressed

parents, but surprisingly showed more self-assertion with non-caretakers. In the physical domain, both studies focus on infant health and how depression can affect the rate the child will grow in their first year. In the second article, the major cause of growth delay was not entirely depression but lack of education and motivation. The last domain, emotion, both articles investigate how depression affects children's abilities to show emotion and regulate their feelings. Both articles displayed that the effects of depression are not always long-term, children that have depressed parents have more trouble expressing themselves and do not cope as well as children with non-depressed parents. Depression is a serious matter and with interventions that discuss the repercussions depression can have on children, I believe public policy should hold programs for soon-to-be parents the importance of mental health and self-care. Traditionally, depression was not taken seriously and was thought of as just being sad, but with the research above it would be extremely advisable to have more information about how to take care of mental health. Overall, some areas that could be studied in the future are the effectiveness of classes that instruct people how to take care of themselves emotionally and mentally because children do not deserve to come into this world and receive subpar interactions.

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