Maternal Depression: A Review of Interventions for Mother and Infant Socio-Emotional Well-Being and Optimal Developmental Outcomes

Postpartum Depression, a psychiatric illness affecting nearly twenty percent of recently delivered mothers, has subsequent profound effects upon child development. Most prominent, the mother-infant bond is adversely compromised, resulting in an insecure attachment identity for the child. Furthermore, as the infant grows, he or she lacks the security, trust and self-efficacy skills needed to accomplish ample cognitive gain. Not surprisingly, children raised in an environment of maternal depression are associated with higher rates of anxiety, inability to regulate mood, lack of behavior inhibition and lack of school readiness. As (Puckering, McIntosh, Hickey, & Longford, 2010) indicate, numerous studies reveal, “where there is history of postnatal depression infants showed less affective sharing, a lower rate of interaction, less concentration and more negative responses and were less sociable with strangers” (p. 29). Hence, left unabated, all these factors indicate risk towards school failure; essentially non-responsive caregiving requires evidence based early intervention strategies to promote optimal child development.

While early intervention has long functioned as a means to enhance developmental trajectories for children born with biological disabilities, recent literature has indicated birth to three programs as an efficient mechanism to foster social-emotional maturity for the most vulnerable children. As with biological diagnosis, counteracting environmental disadvantage
occurs when children and their families receive nurture from the earliest stages of
development. As (Baggett, et al., 2010) explain,

“for the most vulnerable, at-risk infants and toddlers, the achievement gap often
emerges long before they reach the preschool door. The role of high-quality, responsive
caregiving in early infancy has been identified as a crucial precursor of school readiness in
recent research. Furthermore, it is a relatively recent phenomenon of infant/toddler special
education to recognize impairments in social-emotional development as one of the five
domains of developmental disability” (p. 227).

Thus, not only does maternal depression lead to emotional deregulation for both mother and
child, but also furthers the likelihood of special education placement.

For the purpose of this review, examined literature reflects current study into
postpartum depression as well as promising evidence based interventions to support
attachment, family outcome and a favorable child developmental trajectory. Like (Baggett, et
al., 2010) suggest, “high-quality interactions with caregivers beginning in infancy and continuing
throughout early childhood makes a profound difference in children’s developmental outcomes
as well as in long-term savings in human cost and social expenditures” (p. 226). Psychologists
and child developmental theorists concur that simply treating the depressive symptoms is not
sufficient; the best interventions involve guiding the mother to respond positively to her infant
and supporting her in creation of a nurturing environment.

Therefore, building mother-infant attachment is the initial focal point to reverse the
consequences of maternal neglect. In a 2007 study conducted by the School of Psychology at
the Catholic University of Chile, sought to determine the influence maternal representations
have upon mothers’ interactions with infants and the subsequent attachment patterns.
According to (Araneda, Santelices, & Farkas, 2010), maternal representations are both conscious and unconscious; they include the mother’s fantasies, her hopes and fears as well as her expectations and her perceptions of herself, her relationships and in particular, her baby. Additionally, they establish,

“it has been empirically demonstrated that maternal representations of the infant and self-as-a mother, together with certain prenatal contextual factors, are able to predict the postnatal infant-mother attachment. Furthermore, prenatal representations of attachment and of the child concord with the security of the attachment after the baby’s first year” (p. 31).

Thus, altering the maternal mental state during pregnancy (and the early months thereafter), will have significant impact on the behavioral and emotional outcomes of the child as well as encourage a secure attachment style.

Specifically in this study, the psychologists at the University of Chile sought to prove the correlation between maternal representations, self-efficacy and positive attachment patterns. Concurrently, the study served as a foundation in planning intervention and treatment of depression at (or even prior to) birth. Results proved, women with high self-esteem, self-efficacy and social support acquire positive representation of themselves as mothers. On the other hand, women plagued by poor mental health, social problems and lack of support systems represent themselves, as mothers, in a negative context. Essentially, after childbirth these negative representations correlate with depression, neglect and low attachment. Araneda explains,

“prenatal socio-emotional variables may also show great potential as protective factors in the future mother-infant attachment and child development, making prenatal socio-emotional well-being during pregnancy very relevant in terms of attachment difficulties. The results suggest that if there is a propitious prenatal socio-emotional situation, insecure
attachment may not necessarily lead to difficulties in mother’s attachment with the baby” (p. 41).

In other words, intervention against maternal depression can begin prior to childbirth. Implementing enhanced screening methods in relation to the mother’s psychiatric, social and emotional risk during gestation may yield her to view motherhood and her child in a more positive light. With the assistance of a network of support, (such as skilled social workers, nurses and pediatricians), women at risk can expand their knowledge of child development, constructive interaction, and how to bond with their infant. Araneda concludes, “Assessing and promoting prenatal well-being in preventative health settings is of great importance, especially, in groups of pregnant women that may be a psychosocial risk” (p. 41).

While, prenatal screening and intervention may be ideal, many mothers do not develop depressive symptoms until several weeks after birth. In these cases, intervention approach includes direct work with both mother and child. One such strategy, home visiting, has yielded long-term positive effects in numerous recent studies. A 2010 study conducted by Radboud University, The Netherlands, revealed early home visiting programs to be a protective buffer against poor developmental outcomes in at risk infants and toddlers. Through weekly ninety-minute visits over a ten week period, depressed mothers received modeling behavior, cognitive restructuring of negative thinking, practical pedagogical support, and a baby massage; Home-visits were conducted by trained prevention specialists and early childhood educators (Kersren-Alvarez, Hosman, Riksen-Wairaven, Van Doesum, & Hoefnagels, 2010). The study determined “positive post treatment effects on the mother-child interaction, especially maternal sensitivity, when children were 12 months old. These effects were maintained six months later, while the children in the intervention group also showed a more secure attachment to their mothers and
a greater socioemotional competence at 19 months” (p. 1161). A similar study, by the University of Washington, examined elements into promoting secure attachment. Researchers from the Center of Infant Mental Health ran a pilot intervention, engaging low-income depressed mothers in collaboration with health visitors and clinical infant psychologists. The professionals focused on skill building interactions to improve maternal sensitivity and attachment outcomes. Video feedback allowed clinicians to reflect, engage mothers in thinking about the impact of observed behavior, and to identify underlying thoughts and feelings. (Svanberg, Mennet, & Spieker, 2010) Upon completion of the program, Svanberg found,

“Improved child cooperativeness among intervention infants. In addition, child compulsivity remained low in the intervention group but significantly increased in the comparison group during the first year of life, suggesting the possibility of the intervention’s impact on maternal behavior (through improved sensitivity) had a protective function” (p. 372-373).

Likewise, The Mellow Babies, a group intervention in the United Kingdom for mothers experiencing depression, promotes maternal well-being and forming a strong bond with the infant. Mothers in this group were provided support services for depression, counseling, and interactive playgroups emphasizing mother-infant interaction (Puckering, McIntosh, Hickey, & Longford, 2010). Puckering relates, “Early maternal instructional style, secondary to exposure to depression/social adversity, is critical in contributing to adverse outcomes” (p .29). Similarly, in the United States, Early Head Start has tailored many home-visiting interventions to address the specific needs of minority and English Language Learner mothers. Astoundingly, as many as 64% of low-income Spanish-Speaking Latina mothers experience clinically significant depressive symptoms lasting a year or more (Beeber, et al.,
Hence, maternal depression combined with socio-economic risk, exposes “infants and toddlers to demonstrate profound language delays, cognitive and developmental deficits, and as school-aged children, experience behavior problems” (p. 62).

Hence, the Early Head Start Home visiting intervention provided highly trained nurses as well as Spanish translators in attempt to modify depressive symptoms. Beeber states, “The intervention was hypothesized to help increase their self-efficacy by developing strategies to reduce symptoms, manage interpersonal stressors, improve social support, and provide responsive parenting. Additionally, interventionists received training in cultural sensitivity to ensure a trusting and supportive relationship between professionals, mother and baby. Beeber adds, “Field training including learning to work with an interpreter, and sensitization to Latino cultural practices. The Interpreter repeated what was said in the source language as exactly as possible in the target language, and relayed as closely as possible the emotional tone and emphasis of the target statements” (p. 65). These strategies, emphasize connection with the mother’s cultural background, enabling her to feel comfort and ability in her capacities to mother. Not only did the majority of mother’s participating in the EHS program experience decline of depressive symptoms, but attachment and response between mother and child increased. Beeber reports, “Mothers looked at their infants and toddlers and had eye-eye contact more often, talked more frequently, and were more elaborative in their play” (p. 72).

In the technological environment of the twenty-first century, interventions promoting child development have begun practice as internet courses. Bagget et. al., states, “the rise of internet use has created potentially new avenues for intervention delivery, which, when paired with the many recent advances in computer networking and multimedia technology, is fueling
this demand” (p. 226). Although early intervention programs exist for infant and toddler socio-emotional support, many families do not have the capacity to reach such practices. These barriers include, efficiency, accessibility, affordability (Baggett, et al., 2010). In response, The Play and Learning Strategies program (PALS) executed an internet based version of evidence based early intervention practices; although online, mothers received behavior skill instruction, active parent engagement in personal behavior reflection, between skill assessments and practices, training videos and coaching guides. Skills taught included parent engagement with child and child developmental knowledge.

Like traditional early intervention and home-visiting practices, the PALS online course offered decrease in depressive symptoms while simultaneously amplifying mother-child nurturing and response. In fact, “with respect to parent engagement in intervention, the completion rate was much higher than typically found in home-visiting programs”. Even more, “infants whose mothers received the intervention showed significantly more social engagement with their mothers as well as engagement with the environment during interactions with the mothers” (p. 234). Consequently, the internet offers a new means of aide, which may determine the future of early intervention and special education practices. Technology possesses an advantageous to reach all families, is user friendly and completed on one’s own time schedule. As Baggett et.al., ends, “such technologies present advantages to reaching families, as well as professionals, who, respectively, may not otherwise be able to receive direct intervention services or individualized training and ongoing support for implementing them” (p. 235).
Finally, music therapy has shown promising effects in reducing stress and anxiety levels of postpartum mothers and infants. A 2003 study by Phumdoung and Good divulged, “music as a psychoprophylactic approach in childbirth is known to have an effect on perceived pain” (p. 1050). Henceforth, Tseng et. al., (2010) hypothesized music listening as a means to reduce maternal depression through lowering intensity of anxiety. Conducted in Taiwan, the study required postpartum women to listen to thirty minutes of music a day, for at least two weeks. Although no significant differences upon depression and attachment types appeared external factors such a choice of music and lack of implementation time may have contributed to the slight effect. Researchers concluded that music alone was not enough to counteract postpartum depression and anxiety, but future study should examine the arts combined with home visiting and counseling measuring. Tseng explains, “Studies that incorporate actively listening to music to facilitate mental imagery, progressive relaxation and the assistance of journaling also yielded significant physiological or perceptual indications when it comes to stress reduction and increased relaxation” (p. 1054).

**Summary and Conclusions**

Current research into infant and toddler development recognizes the significance socio-emotional deficits have upon overall growth. One such deficit stems from maternal
neglect, rooted in Postpartum Depression diagnosis. Inquiry into this form of depression reveals extreme impact on attachment patterns, cognitive development, language acquisition and behavioral regulation. Without intervention, these children are at risk for later school failure.

Alternatively, early intervention programs for both mother and child offer a secure environment to develop secondary attachment to caregivers as well as frequent exposure to language and social interaction. At the same time, parent instruction reshapes bonding patterns between mother and infant. Many studies into home-visiting and counseling have offered hope into reforming attachment patterns. With enhanced screening for psychiatric conditions, interventions for at risk mothers can even begin prior to birth. Finally, advances in technology provide a range of service to all reaches of families. Pilot internet courses have not only shown increased mother-child responsiveness, but yield higher program attrition rates.

In all, maternal depression requires collaboration between families, health care professionals and early childhood providers. When infant-mother attachment relationships are aided by a network of supports, the benefits for enhanced developmental trajectories increase. With extending resources, even the most vulnerable infants can succeed. As Brofennbrenner discovered, “social supports and resources have positive consequences on parent child interactions….help-giving and family systems practices influence the knowledge, skills, competence, and confidence of parents to interact with their children in ways that provide them learning opportunities that optimize child growth and development” (Trivette, Dunst, & Hamby, 2010).

Well done discussion and review of your research. You provide detailed reviews of each research study. Check APA format with direct quotes. See rubric.
Works Cited


ECED 503
Review of Research and Bibliography Rubric

Name ____ Grade ____

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Nine to ten page Review of Research and Bibliography submitted on a topic of inquiry related to the early care and education of infants and toddlers that demonstrates a knowledge and understanding of their characteristics, needs, development, or learning. 

The review demonstrates an in-depth integration and mastery of relevant theory. 

The research review presents knowledgeable, reflective, and critical perspectives of research and demonstrates a high level of skill in identifying and using professional resources and demonstrating inquiry skills and knowledge of research methods. 

5 Points Standards 1a, 1b, 5d Tools 4, 5, 6

Five to eight page Review of Research and Bibliography submitted on a topic of inquiry related to the early care and education of infants and toddlers that demonstrates some knowledge and understanding of their characteristics, needs, development, or learning. 

The review demonstrates an integration and some mastery of relevant theory. 

The research review presents some knowledgeable, reflective, and critical perspectives of research and demonstrates an acceptable level of skill in identifying and using professional resources and inquiry skills. A knowledge of research methods is also demonstrated in the review. 

4-5 Points Standards 1a, 1b, 5d Tools 4, 5, 6

Less than a five page Review of Research and Bibliography submitted on a topic of inquiry related to the early care and education of infants and toddlers. 

The review demonstrates limited integration of and lacks mastery of relevant theory. 

The research review lacks knowledgeable, reflective, and critical perspectives of research. It does not demonstrate an acceptable level of skill in identifying and using professional resources and inquiry skills. 

Knowledge of research methods is not demonstrated in the review. 

0-3.5 Points Standards 1a, 1b, 5d Tools 4, 5, 6

A minimum of 12 to 15 peer-reviewed primary research journal articles are clearly reviewed. 

A clear knowledge and understanding of the importance, central concepts, inquiry tools, and structures of the infant-toddler content area and academic discipline are well demonstrated in the review. 

5 Points Standards 4c/Tools 4, 5, 6

A minimum of 10 to 12 peer-reviewed primary research journal articles are reviewed. 

Some knowledge and understanding of the importance, central concepts, inquiry tools, and structures of the infant-toddler content area and academic discipline are demonstrated in the review. 

4 Points Standards 4c/Tools 4, 5, 6

Less than 10 peer-reviewed primary research journal articles are reviewed. 

Limited knowledge and understanding of the importance, central concepts, inquiry tools, and structures of the infant-toddler content area and academic discipline are demonstrated in the review. 

0-3.5 Points Standards 4c/Tools 4, 5, 6
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<td>Reviews contain detailed, concise, comprehensive, and in-depth information. The reviews all demonstrate the identification and integration of critical perspectives, essential concepts and resources. The reviews deepen understanding about the research with a mastery of relevant theory and research, use of inquiry skills, knowledge of research methods and skills in using professional resources.</td>
<td>Reviews contain detailed and concise information about the research. The reviews mostly demonstrate the identification and integration of critical perspectives, essential concepts and resources. The reviews deepen some understanding about the research. There is some mastery of relevant theory and research with use of inquiry skills, knowledge of research methods and skills in using professional resources.</td>
<td>Reviews lack detail and specific information about the research. The reviews demonstrate the identification and integration of limited critical perspectives, essential concepts and resources. The reviews demonstrate little understanding of the research. There is limited mastery of relevant theory and research with little use of inquiry skills, or knowledge of research methods and skills in using professional resources.</td>
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<td>A high level of skills in identifying and using professional resources is demonstrated through the selection of research that is relevant to knowing and understanding multiple influences on development and learning. It is current and aware of the field’s changing knowledge base and expertly compiled using multiple sources.</td>
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Summary - 9/10 Total grade - 36/40