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Infant Mental Health and Family Mental Health Issues

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ABSTRACT

This article examines common parental responses to the experience of having a medically fragile infant in the intensive care unit, which are compounded by parental mental health issues, and may result in a disrupted parent-preterm infant attachment. The importance of an interdisciplinary team with a strong infant mental health approach is described.

The preterm birth rate in the USA is 9.6%.[1] Prematurity is associated with approximately one-third of all infant deaths in the United States. Infants born at or before 25 weeks gestation have the highest mortality rate (about 50 percent) and if they survive, are at the greatest risk for severe impairment. In addition to admissions to the neonatal intensive care unit, infants are commonly admitted to cardiac and pediatric intensive care units after birth.[2] The experience of having an infant in an intensive care unit impacts not only the vulnerable infant and the parents' physical and emotional health, but also affects the tenuous developing bond between the newborn and his or her parents.[3,4]

Attachment theory's key concept is the necessity of the formation of an emotional bond between an infant and primary caregiver and how the bond affects the child's behavioral and emotional development into adulthood.[5,6] The importance of experiencing early relationships as warm, caring, and stable is clear, as it results in the infant's ability to develop appropriate social–emotional development and long-term mental health.[7] Infant mental health (IMH) is the developing capacity of the child from birth to age 3 to experience, regulate (manage), and express emotions; form close and secure interpersonal relationships and explore and master the environment and learn; all in the context of family, community, and cultural expectations for young children.[8] IMH also refers to how well an infant develops socially and emotionally into preschool age.

The period between 20 and 40 weeks' gestational age is one characterized by rapid and vulnerable neurodevelopment, which continues through the first two years after birth.[9] Infants hospitalized in intensive care and having experiences that set the stage for poor state and affect regulation may display increased irritability, difficulties with settling into a routine, and decreased ability to play when compared to infants not hospitalized and/or who were born at term. These behavioral characteristics have the potential to impact the parent–child relationship. In addition, parental distress, anxiety, depression and symptoms of post-traumatic stress disorder may further influence the parent–child relationship. Importantly, parental mental health problems have been shown to be associated with children's later social–emotional difficulties, as well as mental health problems.[10]

Mental Health Issues for Parents of Infants in Intensive Care

The birth of a premature or medically fragile infant is often an unexpected and traumatic event for families.[11] Ensuing parental anxiety, depression and post-traumatic stress disorder contributes to the challenges related to caring for and bonding with a medically fragile newborn. Parents must adjust dramatically to being in the intensive care unit while bonding with an infant who may die or face significant impairment in functioning. Forming a relationship with a newborn in an unfamiliar environment in which physical and emotional separation and distance from the infant may be the reality is difficult enough, and may be compounded by the loss of a normal, protective parenting role.[12]

Since preterm birth and intensive care unit admission for early birth complications are an inherently stressful experience, and because symptoms may persist long after the infant is discharged, an infant's primary support system that is typically provided by his or her parents may be strained. Parents experience significant distress including financial difficulties, housing and transportation, balancing the needs of other children, and interpersonal stress coupled with worrying about their infant's life. Multiple emotional, psychosocial, and financial stressors

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significantly increase the risk for developing depression, anxiety and post-traumatic stress disorder (PTSD). [13,14] Prevalence of postpartum post-traumatic stress disorder in mothers and fathers of premature infants admitted to intensive care units is 15% and 8%, respectively.[15,16] Trauma plays a pivotal role in predicting the development of peripartum post-traumatic stress disorder. Mothers with a past history of trauma (sexual assault, underage sexual contact, death or serious injury of family member or friend, birth interventions and caesarean birth or assisted birth) have statistically higher complications during pregnancy and childbirth.[17] There is strong evidence to suggest that a trauma history should be considered a risk factor for high-risk pregnancy and a potential for postpartum traumatic stress symptoms.[18]

Unfortunately, chronic PTSD is associated with co-morbid psychiatric disorders including depression, panic disorder, agoraphobia, generalized anxiety disorder as well as illicit drug and alcohol abuse. There is limited research examining long-term effects and outcomes of PTSD for the mother, her infant and/or family.[19] However, many studies of postpartum depression identify a continuum of symptoms affecting the child from infancy through adolescence.[20,21]

Medically fragile infants whose parents are depressed have worse developmental, cognitive and emotional outcomes compared to other infants. The overall risk of postpartum depression (PPD) in new mothers is 13–19%.[21] The prevalence rate of PPD in mothers with infants in intensive care units is much higher, ranging from 39 to 63%.[22] Mothers with infants born at lower gestational age and birth weight, with more medical complications and prolonged intensive care stays are at highest risk for developing PPD.[23] Additionally, infants born to parents with untreated depression have worse developmental, cognitive and emotional outcomes than other infants.[24]

In a large postpartum screening study,[25] reported that 66% of women with postpartum depression had co-morbid anxiety disorders. A major risk factor for developing an anxiety disorder during pregnancy is a history of anxiety disorder. Parenting styles of anxious mothers have been shown to be more intrusive, less sensitive and less able to form secure attachments with their infants. Alterations in reactivity and responses to stress may be persistent and epigenetic changes in the infant may be passed on to future generations.[26]

Essential Mental Health Resources for Parents of Infants in Intensive Care

Parents who are identified with a mental health issues such as PTSD, depression, or anxiety will typically require additional psychological support in order to be both physically and emotionally present for their medically compromised infant. Since the parents' and infants' daily interactions are with intensive care staff, it would seem that professionals play a vital role in providing support to the parents, which ultimately results in better outcomes for the parent–infant relationship and improved cognitive and social–emotional development of the infant. A recent survey,[11] conducted with neonatal intensive care unit (NICU) staff, revealed their perceptions of the emotional experiences of parents and the developing parent–infant relationship in an intensive care environment. Despite staff comments that all parents should be made aware of mental health supports, referrals to a psychiatrist received the lowest ranking, regarding those responsible for talking to parents about their emotional experiences. In addition, NICU physicians received significantly less training on parent–infant attachment than nurses or allied health professionals.

There are a number of assessment instruments that can be used to screen parents for mental health issues. One of the most common instruments in use is the Edinburgh Postnatal Depression Scale.[27,28] The EPDS screens for depression and can also be used for identifying symptoms of anxiety. The Beck depression inventory can also be used in pregnancy and postpartum. A positive score (indicating a potential mental health concern), on a self-report questionnaire should always be followed up with an interview by a mental health provider to explore symptoms of depression, anxiety and any coexisting psychiatric illnesses.[29] A high risk birthing experience can be traumatic and may result in an adjustment disorder, an acute stress disorder, or post-traumatic stress disorder. The PTSD Checklist-Civilian version (PCL-C) may be a helpful screening tool in identifying persistent symptoms in a parent who may be irritable, not sleeping and appear withdrawn or depressed. Other valid instruments to assist in screening for post partum depression and post traumatic stress are also available.

The infant mental health (IMH) specialist is uniquely equipped to factor in all that is happening in the intensive care unit, acknowledge the medical and social emotional factors that may impact the wellbeing of the infant, while at the same time focusing on the parent–infant relationship. If the parent is unable to fully engage with, and read the infant's behavioral communication, the IMH specialist will, in turn, read the parental behavior and verbalizations signaling distress, and be responsive in supporting the parent in seeking the appropriate care for themselves.

There are a number of evidence-based interventions that may benefit a family in the intensive care. Ultimately, the focus is on improving the quality of the mother–infant relationship.[30] An impoverished parent–infant relationship may result in the infant displaying future behavioral, and social–emotional disturbances. Evans et al.[30] found that interventions that alerted the parent to the infant's behavioral communication and resulted in more sensitive, and responsive parenting, resulted in a better relationship, and strengthened attachment. A more engaged and sensitive parent sets the stage for improved cognitive and language skill as the child gets older.

One evidenced-based early intervention used in the ICU, is kangaroo care (KC), which is a relatively simple, yet specific parenting intervention widely utilized in ICUs to promote skin-to-skin co-regulation between the mother and infant. A randomized controlled trial of KC with 146 mother–infant dyads showed that KC had statistically significant long-term benefits for both motor and perceptual-cognitive process of preterm infants as well as the parenting relationships. This parenting intervention revealed positive effects on maternal depression, improved maternal sensitivity, altered perception of the infant as being abnormal and improved ratings of the quality of the home environmental after discharge.[31]

Another early relationship based intervention in the NICU is the Neonatal Individualized Developmental Care and Assessment Program (NIDCAP) created by Als and colleagues. The NIDCAP approach incorporates an individualized developmentally focused intervention that aims to improve the emotional and physical environment by observation and monitoring of the infant's stress responses and through modifications to the infant's environment and caregiving.[32] Developmental care plans are created to address appropriate modifications to the caregiving environment. The aim of these care plans includes methods to assist parents to become more sensitively involved in the care of their infant.

An innovative, mother–infant intervention, the Family Nurture Intervention (FNI) developed by Welch et al.,[28] introduces consistently calming activities that are implemented while the baby is in the intensive care unit. By allowing the mother to feel reassured and competent, she can then be present for her infant, thereby facilitating co-regulation. The calming activities include scent cloth exchange, calming touch, as well as skin-to-skin, or wrapped holding sessions. Self-report scales were completed by mothers at enrollment near term age, and at the infants' 4-month corrected age follow-up visit. A randomized controlled trial of FNI versus standard care (SC), showed that mother's depression and anxiety symptoms were significantly lower in FNI mothers as compared to SC mothers.[33]

The three established, evidence based interventions: KC, NIDCAP and FNI give parents the sense of being able to participate in the care of their infant, and make a difference. However, often, in addition to interventions that support the parent infant relationship in intensive care, other therapeutic strategies are needed to treat mental health issues such as PTSD, postpartum depression and anxiety. In order to provide