Early Post-Partum Depression Screening for Mothers with Infants in the NICU
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Background:
Post-partum depression (PPD) affects approximately 10-20% of women and can lead to impaired maternal-infant bonding which can have long term effects on an infant’s cognitive and emotional development¹. Outpatient screening of mothers for PPD is routinely done at the six week post-partum visit by the obstetrician; however, screening for post-partum depression in the neonatal intensive care unit is not routinely done. Currently there are few studies describing the relationship of PPD in mothers with critically ill preterm infants in a level III NICU.

Aim:
To perform an early post-partum depression screen for mothers with infants less than 32 weeks in the NICU on day three to five post-partum and compare that to a screen given at six weeks post-partum.

Setting:
Three level III NICUs

Mechanisms/Methods:
We plan to enroll 120 mothers on day 3-5 post-partum of whom have infants less than 32 weeks in the NICU. Once enrolled, a data sheet is completed to gather basic identifying information, medical history and social history for the mother and infant. At the time of enrollment the mother is given a study ID number which links her information to an electronic RedCap survey. She is asked to complete two post-partum depression surveys, one at 3-5 days post-partum and again at six weeks post-partum. We are using the well-established and validated Edinburgh Postnatal Depressive Scale (EPDS)²,³, which is a 10-question depression scale that has been shown to be an effective tool in screening mothers for perinatal depression. The mother can complete the screens online with a personal device or with a device designated by the investigative team that will ensure the mother’s privacy while completing the depression screen. Mothers can choose to complete paper forms if desired. Of note, social work services and mental health resources are in place at the institutions involved for situations where a mother may indicate suicidal ideation on the EPDS screen. If a mother has suicidal ideation on the initial screen then she will be removed from the study and assisted in seeking appropriate medical care.

Measures:
In addition to describing the incidence of post-partum depression in our population we plan to look at predictive factors for the presence of post-partum depression at six weeks. The predictive factors will include maternal demographics, medical and social history, infant gestational age, infant death, infant discharge prior to six weeks of age and EPDS score at day 3-5. Predictive factors will be examined singly and in a multivariate model-building analysis.

Data/Results:
We plan to enroll 120 mothers in this multi-centered study. Currently we have twenty mothers enrolled at our primary site. Currently, no mothers have had positive scores for suicidal ideation.

Discussion:
Screening of mothers for PPD in the NICU is feasible and may be facilitated by the use of online surveys. Currently there are few studies describing the relationship of PPD in mothers with preterm infants in a level III NICU. We feel this is an important topic for further investigation in how best to both recognize and screen for post-partum depression for mothers with infants in the neonatal intensive care unit, but to also further define the role of the neonatal team in assisting mothers who need post-partum depression support.