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## Screening of Preterm and Term Infants for Motor Behavior Developmental Disability

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**Introduction:** Every new born baby has to go through a complex process of growthand development at various levels. Improved new born care is leading to retrieve many critically ill new-born's, but many of them survive with brain damage, leading to ultimate developmental disability. Motor behavior is the product of continuous interaction of multiple networks in which neural pathways may mediate a motor response. This motor response helps infants to develop the basis to attain their developmental milestones. Motor examinations have been used to increase our understanding of an infant's motor behavior, including their strengths and vulnerabilities. Early motor assessment can be useful during neonatal period to recognize the causative factor and to provide adequate preventive measures. In turn it also helps to identify early markers of developmental delay and to develop early interventional measures in preventing childhood disability.

**Objective:** To observe the motor behavior in both preterm and term infants.

**Design/Method:** An observational study was conducted in the duration of October 2019 - December 2019; from a single primary health care hospital. Out of 49 new born screened, 30 infants were recruited. Infants born <37 weeks and <2500gram (preterm) and ≥37 weeks (term) infants were included in the study. Four items of the NICU Network Neurobehavioral Scale (NNNS) namely, Lower extremity reflex, upright response, infant prone, and pick up infant, was administered. The data was analyzed using descriptive statistics.

**Results:** Thirty infants were included in the study out of which they were 25 term infants and 5 preterm infants. The mean (SD) gestational age of infants was 40.17(3.39) and for birthweight was 2.84(768.56). The mean (SD) of 4 items of NNNS were: lower extremity reflex 16.46(2.43), upright response 8.33(2.13), infant prone 5.06(1.11), and pick up infant 8.30(2.40).

**Conclusion:** The above 4 components of NNNS have showed to have motor behavioral variations in preterm and term infants. Therefore, this scale can be used in clinical set-up as a screening, identifying and predicting the developmental delay not only in preterm infants but also in the term infants.