

Info on NICU Care

Below you will find some additional information on NICU care and the history of NICU care.

History of NICU Care:

- Jefferies AL, Canadian Paediatric Society, Fetus and Newborn Committee. Kangaroo care for preterm infant and family. *Paediatric Child Health*. 2012; 17(3): 141-143.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287094/>
- A Brief History of Advances in Neonatal Care <https://www.nicuawareness.org/blog/a-brief-history-of-advances-in-neonatal-care>

Abstracts from Referenced Articles:

- White-Traut RC, Rankin KM, Yoder JC, Liu L, Vasa R, Geraldo V, & Norr KF. Influence of H-HOPE Intervention for premature infants on growth, feeding progression, and length of stay during initial hospitalization. *Journal of Perinatology*. 2015; 35(1), 636-641.
 - To examine whether premature infants receiving the maternally administered H-HOPE (Hospital to Home Transition-Optimizing Premature Infant's Environment) intervention had more rapid weight gain and growth, improved feeding progression and reduced length of hospital stay, compared with controls. Study Design: Premature infants born at 29-34 weeks gestational age and their mothers with at least two social-environmental risk factors were randomly assigned to H-HOPE intervention (n=88) or an attention control (n=94) groups. H-HOPE consists of a 15-min multisensory intervention (Auditory, Tactile, Visual and Vestibular stimuli) performed twice daily prior to feeding plus maternal participatory guidance on preterm infant behavioral cues. Result: H-HOPE group infants gained weight more rapidly over time than infants in the control group and grew in length more rapidly than control infants, especially during the latter part of the hospital stay. Conclusion: For healthy preterm infants, the H-HOPE intervention appears to improve weight gain and length over time from birth to hospital discharge.
- White-Traut RC, Nelson MN, Burns K, & Cunningham N. Environmental influences on the developing premature infant: Theoretical issues and applications to practice. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*. 1994; 23: 393-401.
 - The neonatal intensive-care unit (NICU) environment may interfere with the maturation and organization of premature infants' central nervous systems and may fail to meet these infants' developmental needs. In particular, immature distance receptors (i.e., hearing and vision) may receive overwhelming stimulation, whereas more mature tactile and vestibular pathways receive little stimulation. Furthermore, research on fetal learning suggests that the NICU environment should sensitively address requirements for learning by providing contingent experience. Nurses are ideally suited to reorganize the NICU and intervene to optimize infants' growth and development.

