

Poster Number: **Th 20**

Abstract Title: **Increasing the Feasibility and Sustainability of Kangaroo Care for Premature Infants in the NICU**

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Background and Significance: Protection of neuro and sensory development are extremely important for premature infants in the neonatal intensive care unit (NICU). Unfortunately, negative stimuli from the environment can disturb neurobiological and sensory pathways, impacting neonatal growth. Kangaroo care (KC) is an intervention that reduces neonatal stress and improves neuro and sensory development.

Purpose: At the project site, the percentage of NICU patients receiving KC is staggeringly low, at 4-12%, not meeting the site goal of 20%.

Problem Statement: Neonates admitted to the NICU have exposure to negative stimulus up to 14 times per day. KC can negate the effects of these stimuli but is underutilized at the project site. Increasing awareness and use of KC can improve infant development and reduce stress.

Methods: A quality improvement (QI) project was conducted in an 85-bed, level IV NICU at a large academic pediatric hospital from June 1st, 2023 to October 1st, 2023. Nurses and parents of infants who were born ≤ 37 weeks gestational age (GA) and corrected to ≤ 40 weeks GA, and/or a birth weight ≤ 2500 g participated in interventions designed to increase awareness, frequency, and duration of KC. Two interventions – a KC flowchart and KC color-coded bedside cards – were rolled out in Plan- Do- Study- Act ramp cycles. Feedback, run charts, monitoring frequency and duration of KC, and assessment of knowledge gained was gathered through pre/post surveys. IRB deemed the project non-human subject's research. No funding was used for this project.

Results: Interventions which introduced the use of visual cues for KC increased the percentage of patients receiving KC in the NICU to an average of roughly 18%, with the highest percentage being 50%, the highest the NICU had seen in years.

Discussion/Conclusion: Simple visual cues can serve as education and reminders for KC impacting the use of the therapy in the NICU. Sustaining the use of KC as a therapy to improve growth and development can be accomplished by identifying barriers to implementation and continued education.

Keywords: premature infants, neuroprotection, skin-to-skin care, kangaroo care, sustainability