Timing of Newborn First Bath to Improve Outcomes and Reduce Preventable Transfers to the NICU

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Introduction and Background

- Transition to life:
  * Stressful life event
  * Dramatic pathophysiologic process
- Baths:
  * Stressful event
  * Interferes with the transition process
- Unsuccessful transition:
  * Hypothermia
  * Hypoglycemia
  * Respiratory Distress

Local Problem

- Baths within first 2 hours of life
- 2.7% of infants on Post-Partum transferred to the NICU

Methods and Implementation Plan

Methods

- Retrospective chart reviews on all well born infants from January 1st through May 8th of 2018. Comparative patient data via EMR reports from change implementation on May 9th through September of 2018

Interventions

- Shared research with division staff
- Recruited Task Force volunteers
  - Needs assessment & gap analysis completed
  - Developed new workflow process: bath between 12 to 18 hours of life
  - Educated all division staff, validated bath competency
- Created parent education brochure, education committee for accurate literacy, language services translated into Swahili, French, and Spanish

Aim Statement/Intended Outcomes

Delay the first bath by a minimum of 12 hours to achieve 100% normothermia rates, 15% improvement in breastfeeding rates, and achieve a 25% reduction in transfers to NICU

Results

- 89% of baths received after 12 hours of life
- Hypothermia rate reduction from 16.35% to 9.98% (p=0.000)
- Hypoglycemia rate reduction from 14.69% to 2.33% (p=0.000)
- Tachypnea rate reduction from 4.8% to 0.57% (p=0.000)
- Exclusive breastfeeding rate increased from 40.0% to 45.6% (p=0.391)
- Transfers to NICU increased from 2.7% to 4.3% - unexpected

Conclusions & Recommendations

- Increase in NICU transfers due to patient condition – transfers occurred prior to bath being given
- Delay of first bath reduced negative sequela
- Later bath should be continued
- Educating parents during the labor process is not the best time
  - Bath experience gravitated from the mother’s room to the infant care room where parents were unable to participate
- Solutions to engage parents in the bathing experience should be explored

Graphs and Tables

- Negative Sequela in Relation to Timing of First Bath
- Hypoglycemia in Relation to Infant’s First Bath
- Exclusive Breastfeeding Rates