

Infant Driven Feeding in the NICU

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INTRODUCTION

For NICU premature infants less than 37 weeks gestational age, does the use of infant driven feeding protocols reduce the risk of negative feeding outcomes compared to traditional volume driven feeding?

Research shows that cue based feeding is beneficial in a variety of ways to the infant. Changing from our current practice of *volume driven* feedings to *infant driven* feedings will impact the infants development significantly in order to meet criteria for discharge. It will also allow for bedside care to be focused on more current evidence based practice vs. traditional policies.

Nursing care can impact infant development significantly, making it imperative that our unit provide education and policies for current evidence based practice.

Traditional volume based feedings can induce stress on the infant by:

- *Feeding past the infant's interest, capability and stress cues like coughing, pulling away, turning head, arching back, grimacing, drooling, tongue thrusting and desaturations.
- *Feeding after disorganized suck/swallow
- *Prodding or twisting nipples to stimulate suck/swallow
- *Using faster flowing nipples than infant is physiologically ready for
- *Causing silent aspiration
- *Lead to negative feeding experiences leading to long-term feeding aversions.
- *Cheek/chin support leading to bolus swallowing blocking airway causing apnea, bradycardia or desaturations.
- *Interrupting sleep state to meet time based feeding schedules.

OBJECTIVES

- Assess NICU staff's practice when feeding preterm infants.
- Improving feeding outcomes
- Promoting positive oral feeding experience
- Increasing feeding safety
- Individualized and cue focused feedings
- Identify problems with volume driven model of managing infant feedings.
- Increase weight gain
- Decreased hospital stays

MATERIALS & METHODS

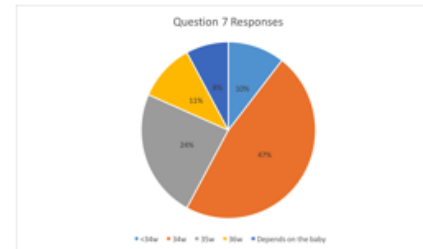
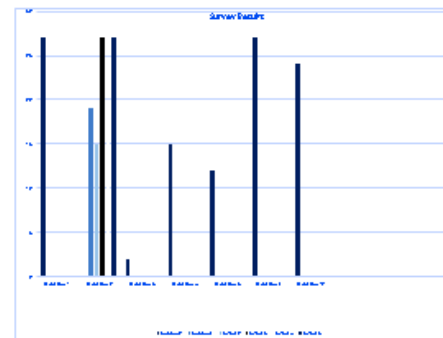
Our narrative for this project was developed by a unit survey, research, and evidence-based opinion. Research for this project was based on other hospital policies, online publications, and printed text. For our online publications, we gathered literature from relevant journals, electronic databases and websites. All of our research gathered and used was published within the last five years.



RESULTS OF RESEARCH AND UNIT SURVEY

Cue based feedings combine the use of non-nutritive sucking to promote awake behavior for feeding, use of behavioral assessment to identify readiness for feeding, and systematic observation of and response to infant behavior cues to regulate frequency duration, and volume of oral feedings. Evidence based research indicates that by providing individualized care to every preterm baby would elicit the following outcomes:

- the transition to oral feedings
- have a shorter length of stay
- experience fewer adverse events
- elicit enhanced behavioral maturity
- improved physiological outcomes
- increased nutrient intake
- no additional workload.



CONCLUSIONS

After gathering research on infant driven feeding and analyzing the collected data from our survey, we found that the level of evidenced based nursing interventions for feedings were inconsistent. Therefore we concluded that the nursing staff, does not have consistent knowledge regarding infant readiness to feed.

Recommendations:

1. Develop NICU Unit education and protocols would be beneficial in ensuring consistent care in the NICU. An infant driven feeding protocol would help ensure proper evaluation of readiness to feed, how to feed, and why its important to follow cue based feeding for the premature infant.
2. Monitor staff consistency to infant feed protocols and monitor for a decrease in negative outcomes.
3. Resurvey the staff after 3 months and share results with the NICU staff

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