

Title of Abstract:

Targeted Interventions Increase Breastmilk at Discharge for ELBW (Extremely Low Birth Weight) Infants

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Abstract Description:

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INTRODUCTION

Breastmilk is the preferred nutrition for infants with particular benefit in the preterm population. Mothers of preterm infants have lower breastfeeding initiation rates and are least likely to maintain lactation due to many barriers. They are dependent on the ability to initiate and maintain a milk supply via pumping, making it more difficult to sustain adequate volumes. Proven tactics to increase lactation include the use of hand expression and hands-on pumping, early skin-to-skin (STS) contact, and increased maternal support directed at behavioral factors. Because mothers of preterm infants have reported being unable to recall verbal or written pumping instructions, it is speculated that audiovisual instruction may be effective in providing lactation education.

The CHOC Children's Hospital small baby unit (SBU) is designated for extremely-low-birth-weight (ELBW) infants. Breastmilk availability at hospital discharge for this unit averaged 42-48% between 2009 and 2011 compared to 66-80% in the 1000-1500 g population during the same time period.

CAN: Cool Topics in Neonatology

March 3-5, 2017

The goal of this project was to increase breastmilk at discharge for the CHOC SBU ELBW infants utilizing targeted interventions.

METHODS

Phase I: Inpatient lactation consultant (LC) hours were reallocated, assigning 75% of one LC's time to the SBU, providing all with increased LC support. Bedside nurses promoted a STS campaign and focused on encouraging pumping efforts.

Phase II: SBU babies born at our delivery hospital received a hands-free pumping bra and audiovisual instruction on hand expression and hands-on pumping. Data for these patients was collected to evaluate the effectiveness of the interventions. Those receiving any breastmilk were compared to those receiving no breastmilk at hospital discharge.

RESULTS

- Breastmilk availability at hospital discharge in the ELBW patients went from 42% to 67% (a 60% increase).
- The groups did not vary for average gestational age at birth, time of non-nutritive breastfeeding, or discharge.
- Time to first pumping was 15% sooner in the group that discontinued lactation.
- Day of first skin-to-skin was 32% sooner for the group with breastmilk at discharge compared to those discontinuing lactation.

CONCLUSIONS

Targeted initiatives to support lactation and hand expression techniques were effective in increasing breastmilk availability at discharge in the ELBW population. We speculate that the increased focus helped facilitate a culture change in the unit resulting in an overall positive impact on lactation.

Funding Acknowledgement (if applicable):

None