Breast Feeding Education for Nurses : The Front Line Resource for the Breast Feeding Mom in The JHH Children's Center

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1 Background

The Department of Health and Mental Hygiene recognizes The Johns Hopkins Hospital (JHH) as a "Maryland Best Practices Hospital" following its certification through the Baby-Friendly Hospital Initiative (BFHI) (DHMH, 2012). JHH was designated as a Baby-Friendly designated facility on December 29, 2015 by the BFHI, a global program launched by the World Health Organization and the United Nations Children's Fund to recognize hospitals that offer optimal mother-baby bonding and infant feeding though the promotion of initiation and continuation of breastfeeding or feeding formula safely.

The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for 6 months, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and baby to achieve optimal growth (2012, AAP). Support for this recommendation is found in the positive health outcomes achieved by infants who had a significant decrease in respiratory tract illnesses, otitis media, asthma, diabetes, leukemia, SIDS, NEC in preterm infants, obesity, inflammatory bowel disease and diarrheal diseases as well as an improvement in maternal outcomes of delayed menses, postpartum weight loss, decreased risk for ovarian and breast cancer, an association between increased cumulative duration of breastfeeding and decreased risk of rheumatoid arthritis and cardiovascular disease (AAP, 2012). Moreover, infants fed human milk have better neurodevelopmental and cognitive outcomes (Spatz et al., 2015).

However, for mothers of hospitalized infants, direct breastfeeding may not always be an option. Therefore, mothers must begin their lactation experience by mechanically expressing milk using a combination of a hospital-grade electric breast pump and 'hands-on pumping' in order to promote, establish and sustain a sufficient milk supply (Morton et al., 2009). Women who pump within 1 hour of birth (compared to those who start at 6 hours) produce significantly more milk at 3 weeks postpartum (Spatz et al., 2015). Although mothers may initiate pumping for their infants, few infants receive human milk through discharge because mothers are unable to maintain an adequate supply or experience difficulties in initiating a milk supply (Spatz et al., 2015).

2 Objective

Develop evidenced-based breastfeeding education tools for staff and patients in the Johns Hopkins Children's Center and Outpatient Pediatric Clinics regarding breastfeeding/pumping initiation, skin to skin (kangaroo care) and the benefits of human milk so mothers can make an informed decision about breastfeeding to help them reach their personal breastfeeding/pumping goals and optimize health outcomes for their infants.

3 Method

The Plan-Do-Study-Act (PDSA) process was used for this quality improvement project.

Plan

- Goal: Develop evidence-based breastfeeding education tools for mothers and staff by identifying current breastfeeding resources and practices that promote breastfeeding and improve health outcomes for infants and their mothers in the Children's Center.

Do

- Identify 5 types of mothers that would benefit from additional breastfeeding education:
  - The mother who is both pumping and breastfeeding
  - The mother whose baby is hospitalized and wants to maintain her milk supply
  - The mother who wants to increase her milk supply
  - The mother who wants to decrease her milk supply
  - The mother initiating a supply primarily with a breast pump

Study

- Review and analyze current patient education resources purchased by Johns Hopkins Hospital:
  - Kids Health Library
  - Krames
- Conduct a literature review of current breastfeeding policies, protocols and evidence-based resources:
  - American Academy of Pediatrics
  - The Academy of Breastfeeding Medicine

Act

- Nurses can utilize the breastfeeding/pumping log and the patient information sheet when educating patients in order to maximize the mother's milk production and reach their breastfeeding goals.

The Johns Hopkins Hospital Patient Information
Pumping/Breastfeeding Log

NICU Original 08/15/2016

This log will help you manage your milk supply schedule for your baby. If you are a mom who is breastfeeding and pumping, record **B** for breastfeeding in the time column and record the amount of milk pumped from your breasts. Add the total amount pumped per day and compare your numbers with the **Daily Milk Goals** chart on the next page.

√ anytime you spend in Kangaroo Care with your baby.

Note: Day 1 is *ideally* the day you deliver your baby, but can also be the **1st day** you begin to pump/breastfeed.

Enter Date →	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Comments (R/L)
	11/14	11/15	11/16					
Midnight								
1:00am	B	B	B					Pain on L breast, tender
2:00am								
3:00am		B, 20cc	B					
4:00am	B							
5:00am		B	40 cc					R > L
6:00am								
7:00am	B, 10 cc	B, 15cc	B					
8:00am								
9:00am	B	B	B					
10:00am								
11:00am			20 cc					
Noon	B, 10 cc	15 cc						
1:00pm			B, 25 cc					
2:00pm								
3:00pm	B, 5 cc	B	B					
4:00pm								
5:00pm		B						
6:00pm	B		35cc					
7:00pm		25cc						
8:00pm	B		B					
9:00pm		B						
10:00pm								
11:00pm	B							
Total milk volume	25 cc	75 cc	120 cc					
Total Kangaroo Count	✓	✗	✗					

4 Results

- Following a thorough analysis of Krames & Kids Health Library patient education resources, we identified recommended edits utilizing our primary resources
- Development of a more detailed breastfeeding pumping log

5 Conclusions

Educating and engaging mothers in breastfeeding practices will ensure that any infant hospitalized will receive breast milk without barriers created by hospitalization, hospital practices, lack of maternal education etc. Providing and utilizing consistent evidenced-based patient education tools within the JHHS will ensure collaborative efforts are maintained and delivered effectively to patients.

6 Future Directions

- Encourage ongoing lactation collaboration within the JHHS
- Community outreach among institutions within the JHHS in the Baltimore area.

7 References

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