

Improving Skin To Skin Contact Immediately After Birth and Breastfeeding by Implementing the Ten Steps to Successful Breastfeeding at a Tertiary Community Hospital

Abstract

Background: United Nations International Children's Emergency Fund (UNICEF), the World Health Organization (WHO) and many national government health agencies recommend that babies are breastfed exclusively for their first six months of life [1]. Breastfed babies are less likely to suffer from serious illnesses, including gastroenteritis, asthma, eczema, respiratory infections, pneumonia, ear infections, otitis media, and sudden infant death syndrome [1-3].

Objective: We hypothesized that by not separating infants and increasing Skin to skin (STS) contact our exclusive breastfeeding rates would increase. We conduct a quality improvement project, utilizing Multidisciplinary team with the aim of increasing breastfeeding rate and making our hospital baby-friendly.

Significance and Conclusion: Multidisciplinary staff training, no separation of dyad unless medically indicated, STS contact, peer support, have been shown to be effective [4] in promoting breastfeeding in new mothers. The Lincoln BFHI is an ongoing evolving project. We aim to improve our strengths, resolve the areas of weakness in the program and move forward for better results every day. As of February 27, 2015, Lincoln Medical and Mental Health Center, became the First Hospital in the Bronx, New York to attain Baby-Friendly designation and recognized by WHO, UNICEF and Baby-Friendly USA for promoting breastfeeding to improve infant and maternal health [5].

Keywords: Baby-Friendly Hospital Initiative (BFHI); Baby Friendly 10 Steps; Breastfeeding; Kangaroo skin-to-skin contact; Skin to skin (STS) Contact; Ten Steps to Successful Breastfeeding

Research Article

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Background

United Nations International Children's Emergency Fund (UNICEF), the World Health Organization (WHO) and many national government health agencies recommend that babies are breastfed exclusively for their first six months of life [1]. Breastfed babies are less likely to suffer from serious illnesses, including gastroenteritis, asthma, eczema, respiratory infections, pneumonia, ear infections, otitis media, and sudden infant death syndrome [1-3,6]. Adults who were breastfed as babies may be less likely to develop risk factors for heart disease such as diabetes, obesity and high blood pressure [1-3,6,7].

There are benefits for mothers too: women who don't breastfeed have increased risk of developing heart disease, hypertension, diabetes, high cholesterol, breast cancer, ovarian cancer and hip fractures in later life [1].

The Baby-Friendly Hospital Initiative (BFHI) is a global program to encourage and recognize hospitals and birthing centers that offer an optimal level of care for infant feeding and mother/baby bonding [8-10]. The BFHI assists hospitals in giving

all mothers the information, confidence, and skills necessary to successfully initiate and continue breastfeeding their babies or feeding formula safely [8].

The BFHI aims to increase the numbers of babies who are exclusively breastfed worldwide, a goal which the WHO estimates could contribute to avoiding over a million child deaths each year, and potentially many premature maternal deaths as well [1].

The Ten Steps [3,7,10-13] for Successful Breastfeeding (Figure 1) for maternity settings are an evidence-based set of hospital practices, proven to increase breastfeeding rates in healthcare settings and beyond [14]. Skin to skin (STS) has been identified as important for the initiation of breastfeeding. STS involves placing naked infant prone one mother's bare chest, with infant back and head covered with warm blanket [15].

Highlights of the importance are:

Improved:

- Infant temperature, flexed movements, blood glucose and physiological parameters

- b. Cardio-respiratory stability in late preterm infants
 - c. Pre-feeding behavior: Mothers learn baby's hunger cues [10,12].
 - d. Maternal attachment behavior in the postpartum period and at 1 year
 - e. Infant self-regulation as measured at 1 year
- Increased:
- a) Confidence in parenting
 - b) Breastfeeding duration
 - c) Success at first breastfeeding
 - d) Breast comfort

Objective

We hypothesized that by not separating infants and increasing STS contact our exclusive breastfeeding rates would increase from 16% in 2013 to 30% by 2014.

Methods

In 2012 Lincoln Medical and Mental Health Center applied and was accepted into the New York City Breastfeeding Hospital Collaborative (NYC BHC). This collaborative was initially comprised of 9 community and public hospitals and later grew to 18. Quarterly meetings involving upper management and leadership, monthly phone webinars and ad lib access to technical support to leadership that steered the cohort, gave Lincoln the tools and mechanisms by which to make systematic and sustainable changes to remove barriers to breastfeeding.

During the second half of 2014 intensive multidisciplinary training began in preparation for our pending assessment from Baby-Friendly USA INC. The following interventions were made to improve exclusive breastfeeding at Lincoln:

- 1) Formation of breastfeeding classes for women during the prenatal visits as well as postpartum period.
- 2) First hour after birth (the golden hour): (STS) contact and early initiation of breastfeeding encouraged to eligible mothers [16].
- 3) All eligible mothers, regardless of delivery type, are encouraged to do skin-to-skin throughout their hospital stay [17].
- 4) Newborn admission workflow was changed to eliminate the separation of all newborns and their mothers. Newborn exams and admission procedures were done at the mother's bedside.
- 5) Maternal/infant separation was reduced to not more than 1 hour/24 hours except for medical indication
- 6) Rooming-in was practiced 24hours/day and breastfeeding was encouraged achieving >8 feedings/24 hours at discharge. Parents were that frequent breastfeeding improves milk production, and that babies breastfeed for comfort as well as nourishment [2].

- 7) No formula supplementation of breastfed infants was done unless medically indicated. If supplementation was needed or was requested by the mother she was informed of the risks and options by the nursing, pediatric and breastfeeding staff. Use of alternative feeding methods were also discussed and used [17].
- 8) Formula was maintained in locked cabinet in nursery and usage was documented in log book. A Doctor's order was needed prior to distributing formula. Formula was not given on discharge unless the mother requested it and the limit was 2 bottles.
- 9) A certified Breastfeeding Team of nurses was developed to work with breastfeeding mothers and educated staff as well as be a resource for them. The team consisted of 2 RN, IBCLC and 5 LPN, CLC all FTE.
- 10) Staff education on breastfeeding techniques, baby holding/STS throughout the hospital stay, and educating mothers was continued and intensified by reviewing staff competencies and having several grand rounds.
- 11) Sensitivity training for all clinical/non-clinical maternal child health staff and hospital staff and new employees
- 12) Bi-weekly Breastfeeding Committee Meetings regarding breastfeeding issues and management were held.
- 13) Baby-Friendly Audit Tools were used to assess progress and effectiveness of care.
- 14) Mothers were referred to breastfeeding support groups upon discharge from the hospital [12].

Results

The (BFHI) aims at improving the care of pregnant women, mothers and newborns at health facilities that provide maternity services for protecting, promoting and supporting breastfeeding, in accordance with the International Code of Marketing of Breast milk Substitutes [1]; the following results were noted on the breastfeeding initiative program at Lincoln:

Data was collected by a trained dedicated clerk who reviewed documentation in the EMR. Infant I&O, Medical staff, nursing, and breastfeeding team notes throughout hospital stay were reviewed. Findings showed that:

- i. STS rates for NSVDs increased to 100% (Figure 2).
- ii. STS rates for C/section increased to 70% (Figure 3).
- iii. Any breastfeeding rates increased to 98% at the fourth quarter of 2014 (This rate exceeds the Healthy People 2020, 82% goals set by the U.S. Department of Health and Human Services) (Figure 4a & 4b).
- iv. Exclusive rates increased to 20% in the fourth quarter (Figure 5a & 5b).

Ten Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast-milk, unless medically indicated.
7. Practice rooming in - allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center

Figure 1: Ten Steps to Successful breastfeeding [3,7,10,12].

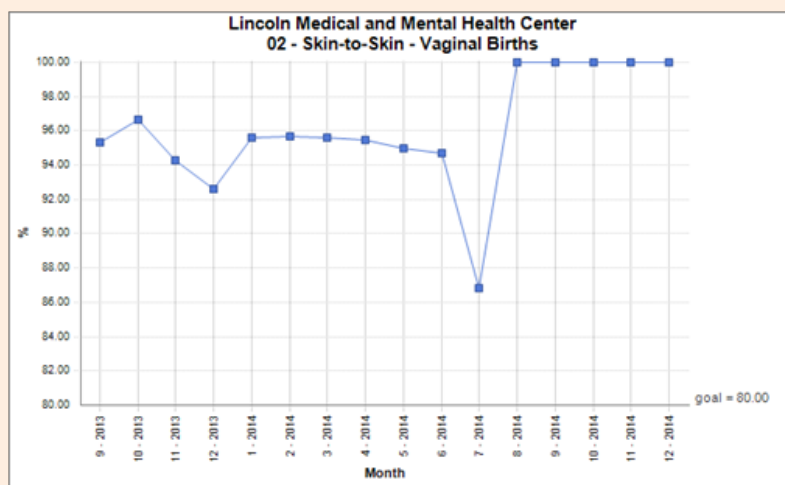


Figure 2: Rate of Skin to Skin Contact Immediately after Birth for NSVD within 5 minutes of birth for at least 1 hour or after completion of first feeding.

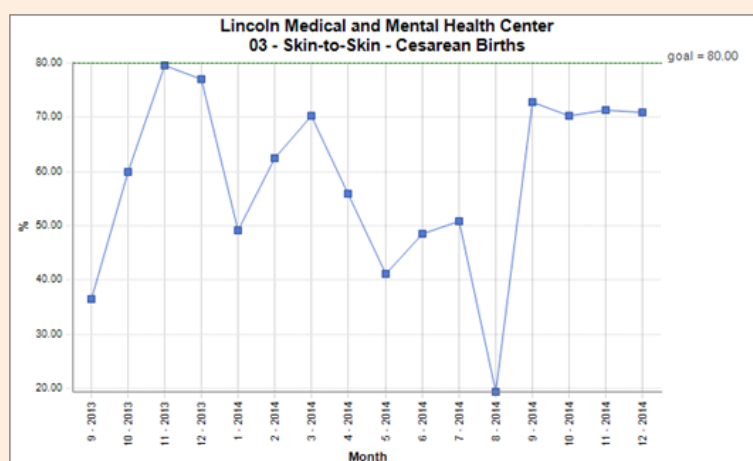


Figure 3: Rate of Skin to Skin Contact Immediately after Birth for NSVD within 5 minutes of birth for at least 1 hour or after completion of first feeding.

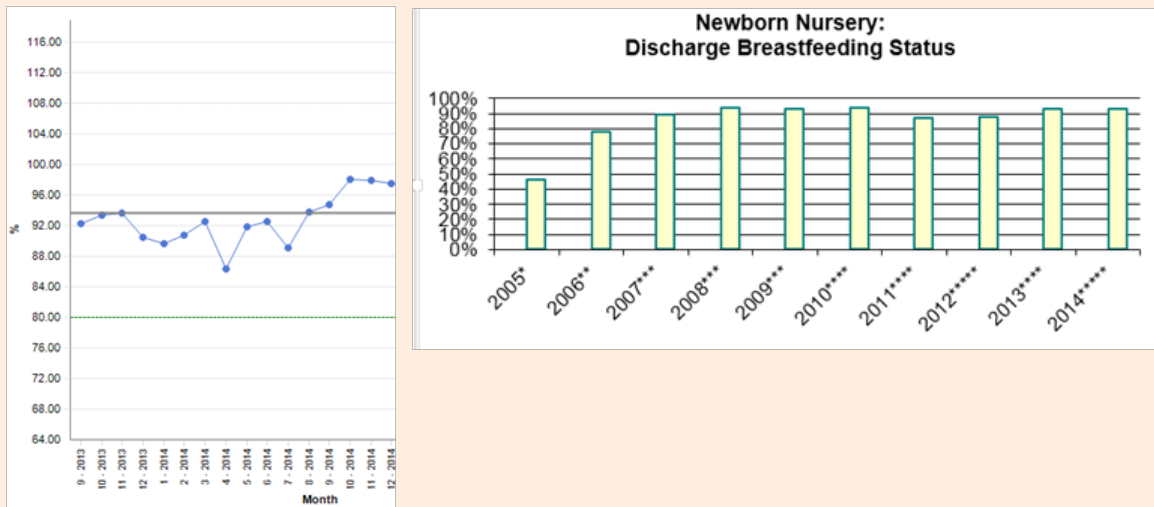


Figure 4a & 4b: Any Breastfeeding at Discharge from the Newborn Nursery in 2014 and since 2005.

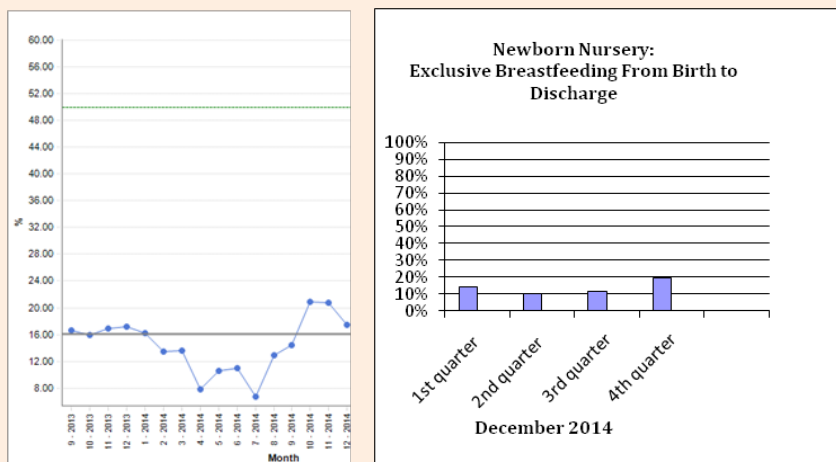


Figure 5a & b: a) Rate of Patients Exclusively Breastfeeding from birth to discharge in newborn nursery: Exclusive rates as defined by the Joint Commission (TJC JCAHO) have fluctuated trending upward. b) 1st-4th quarter exclusive rate.

Significance and Conclusion

Multidisciplinary staff training, no separation of dyad unless medically indicated, STS contact, peer support, have been shown to be effective [4] in promoting breastfeeding in new mothers. The Lincoln BFHI is an ongoing evolving project. We aim to improve our strengths, resolve the areas of weakness in the program and move forward for better results every day. While we have not achieved the goal of 30%, we have made sustainable changes and should gradually reach that outcome.

As of February 27, 2015, Lincoln Medical and Mental Health Center, became the First Hospital in the Bronx, New York to attain Baby-Friendly designation and recognized by WHO, UNICEF and Baby-Friendly USA for promoting breastfeeding to improve infant and maternal health [5].

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