

Breastfeeding Promotion Program: A Quality Improvement Initiative in a Community Based Setting

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In partial fulfillment of the requirements for the Doctor of Nursing Practice

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Overview

- The Question: Does education of staff nurses enhance breastfeeding?
- Goal: Aims to educate, assess, and assist postpartum mothers in order to improve outcomes
- Use of the Lactation Assessment & Comprehensive Intervention Tool
- Improved breastfeeding outcomes
- Practice pearls:
 - establish bonding with skin to skin,
 - Support and education for positioning and latching
 - Father and other supportive individuals encouragement

(Gianni et al., 2019)



DNP Problem

- Lack of provider assistance
- Lack of competent providers
- Poor breastfeeding outcomes
- High cessation rates post discharge
- Barriers to success

(Schanler & Potak, 2020)

DNP Project Problem and Purpose Statement

- Lack of breastfeeding education and help for mothers
 - Jeopardy of premature termination of breastfeeding
 - No initiation of breastfeeding
 - Lack of specific problem-solving guidance
- Public health attempt to increase staff behaviors
- Increase breastfeeding outcomes three weeks postpartum

DNP Project Objectives

1. Train nursing staff to use the LAT.
2. Conduct weekly case reviews of breastfeeding families visited by the community nursing team.
3. Improve rates of breastfeeding versus formula feeding by 15% within a 5-week implementation frame.

Review of Literature

- Detrimental factors to breastfeeding
 - Return to work
 - Milk supply issues
 - Lack of public awareness
 - Mechanical issues of breastfeeding
 - Incorrect latch techniques

Review of Literature (cont'd)

- Breastfeeding promotion measures
 - Support from fathers
 - Breastfeeding counseling
 - Breastfeeding support
 - Provider and Lay support
 - Home visiting support
 - Early weaning protection

Review of Literature (cont'd)

- Alternative methods of assistance
- Breastfeeding initiation and continuation
- Breastfeeding Education
- Twins and higher order multiple births
- Peer support

Theoretical Model

- Lewin's Change Theory
 - Unfreezing-nursing staff unlearning breastfeeding myths as truths
 - Common myths: getting rest, drinking more fluids and taking supplements
 - Change-teaching support measures with corrective interventions
 - Refreeze-increasing breastfeeding versus formula feeding

Project/Study Design


- Experimental
 - LAT education with staff nurses
 - LAT used to assist breastfeeding mothers
 - Corrective interventions for latch
 - Increased breastfeeding outcome results

Project/Study Design cont'd

ASSESSMENT PARAMETERS	CORRECTIVE INTERVENTION
Latch process (root, gape, seal, suck)	Baby roots, then gapes, seals, and sucks
Angle of mouth opening at breast□	160 degrees minimum mouth angle
Lip flange□	Top and bottom lip not turned in
Baby's head position	Nose and chin close to breast
□Baby's cheek line□	□Smooth cheek line□
Baby's height at breast□	Nose opposite nipple to start□
Baby's body rotation□	Baby's chest to mother's breast□
Baby's body relationship □	Baby horizontal across mother's chest
Nursing dynamic	Bursts of suck (swallow 2:1 or 1:1)

Healthy Children Project's **LAT: Lactation Assessment & Comprehensive Intervention Tool**

Mother: _____
 Baby: _____
 Date: _____ Time: _____

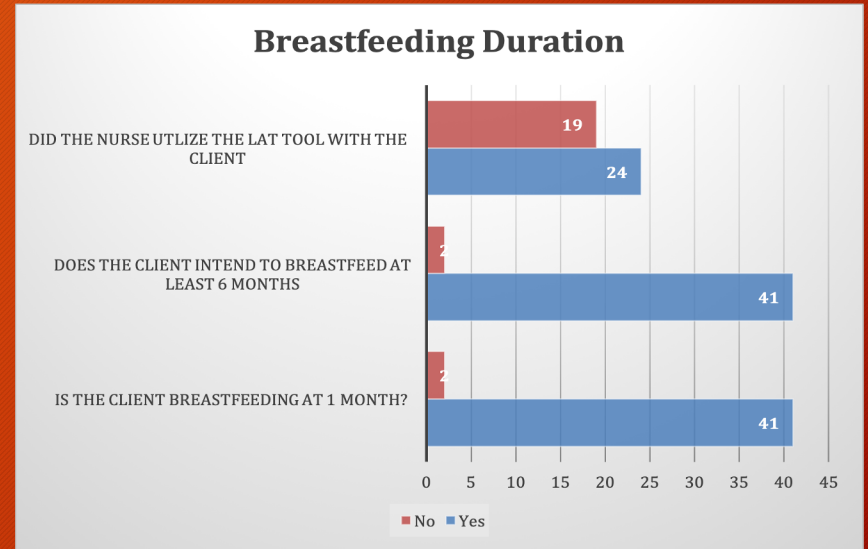
Pre-feeding		ideal	observed	Mouth seal		Mother's comfort level			
<i>Skin-to-skin</i>		<input checked="" type="checkbox"/> nose opposite nipple to start	<input type="checkbox"/> nose opposite nipple to start <input type="checkbox"/> mouth opposite nipple to start	<input checked="" type="checkbox"/> top and bottom lip sealed	<input type="checkbox"/> both lips sealed <input type="checkbox"/> top lip turned in <input type="checkbox"/> bottom lip turned in <input type="checkbox"/> both lips not sealed	<input checked="" type="checkbox"/> tugging feeling	<input type="checkbox"/> tugging <input type="checkbox"/> little discomfort <input type="checkbox"/> moderate discomfort <input type="checkbox"/> great discomfort <input type="checkbox"/> severe discomfort		
<input type="checkbox"/> immediately prior to feeding <input type="checkbox"/> for _____ minutes prior <input type="checkbox"/> no skin-to-skin prior									
<i>State of baby</i>									
<input type="checkbox"/> deep sleep <input type="checkbox"/> light sleep <input type="checkbox"/> quiet alert <input type="checkbox"/> active alert <input type="checkbox"/> crying		<input checked="" type="checkbox"/> aspect of gape response	<input type="checkbox"/> gape response <input type="checkbox"/> no gape response	<input checked="" type="checkbox"/> rounded cheek line	<input type="checkbox"/> rounded cheek line <input type="checkbox"/> not rounded cheek line	Post-feeding			
<i>Feeding cues exhibited</i>		<input checked="" type="checkbox"/> head tilts back	<input type="checkbox"/> head tilts back <input type="checkbox"/> no head tilt <input type="checkbox"/> forehead tilt	<input checked="" type="checkbox"/> not dimpled cheek line	<input type="checkbox"/> not dimpled cheek line <input type="checkbox"/> dimpled or indented cheek	<i>Ending feeding</i>			
<input type="checkbox"/> rooting <input type="checkbox"/> hand to mouth actions <input type="checkbox"/> mouthing/suckling motions <input type="checkbox"/> rapid eye movement (REM) <input type="checkbox"/> body movements		<input checked="" type="checkbox"/> bottom lip and tongue reach breast first	<input type="checkbox"/> bottom lip and tongue reach breast first <input type="checkbox"/> top lip reaches breast first <input type="checkbox"/> top lip and bottom lip reach together	<i>Rhythm</i>		<input checked="" type="checkbox"/> baby releases nipple	<input type="checkbox"/> baby release <input type="checkbox"/> mother breaks suction <input type="checkbox"/> baby unable to sustain feed		
During Feeding		<input checked="" type="checkbox"/> nose and chin close to breast	<input type="checkbox"/> nose and chin close to breast <input type="checkbox"/> nose too close to breast <input type="checkbox"/> chin away from breast <input type="checkbox"/> nose away from breast <input type="checkbox"/> nose and chin away from breast	<i>Bursts</i>		<i>Baby's tone</i>			
<i>Baby's body position</i>				<input checked="" type="checkbox"/> bursts of 2:1 or 1:1		<input type="checkbox"/> bursts of 2:1 or 1:1 <input type="checkbox"/> 4 or more sucks with ? number of swallows <input type="checkbox"/> no suck <input type="checkbox"/> suck but no swallow		<input checked="" type="checkbox"/> soft tone <input checked="" type="checkbox"/> relaxed hands	<input type="checkbox"/> soft body tone <input type="checkbox"/> relaxed hands <input type="checkbox"/> awake/seeking behavior
<input checked="" type="checkbox"/> turned toward mother	<input type="checkbox"/> turned toward mother <input type="checkbox"/> head only turned to mom			<i>Latch type</i>		<i>Mother's nipple</i>			
<input checked="" type="checkbox"/> shoulders and hips aligned	<input type="checkbox"/> shoulders/hips align <input type="checkbox"/> shoulders/hips do not align	<input checked="" type="checkbox"/> asymmetric		<input type="checkbox"/> asymmetric <input type="checkbox"/> symmetric		<input checked="" type="checkbox"/> similar to pre-feed	<input type="checkbox"/> similar to prefeed <input type="checkbox"/> shaped by latch <input type="checkbox"/> discolored <input type="checkbox"/> inverts after feed		
<input checked="" type="checkbox"/> arms/hands around breast	<input type="checkbox"/> arms/hands around breast <input type="checkbox"/> arms/hands swaddled	<i>Angle of mouth opening</i>		<i>Jaw motion</i>		draw shape: <div style="border: 1px solid black; width: 80px; height: 60px; margin: 5px;"></div>			
<i>Notes:</i> _____		<input checked="" type="checkbox"/> 140 °+	<input type="checkbox"/> 140 °+ <input type="checkbox"/> 91 ° - 140 ° <input type="checkbox"/> < 90 °	<input checked="" type="checkbox"/> rocker					
				<input type="checkbox"/> rocker <input type="checkbox"/> piston					
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Implementation

- LAT education with staff nurses
- Latch 1, 2, 3 video
- Documentation in Salesforce database
- Go Live for nurses using the LAT with clients
- Continued support for nurses
- Alternative data collection methods created for back up

Evaluation

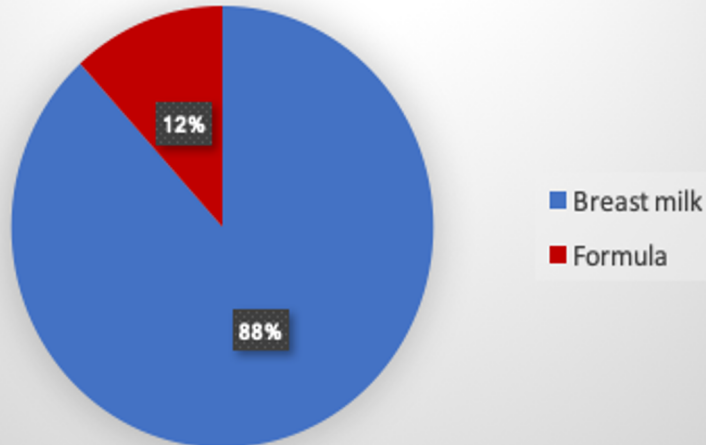
- 43 clients enrolled in the study
- Nurse compliance with LAT use (56%)
- 95% breastfeeding at 1 month
- 95% plan to continue to 6 months



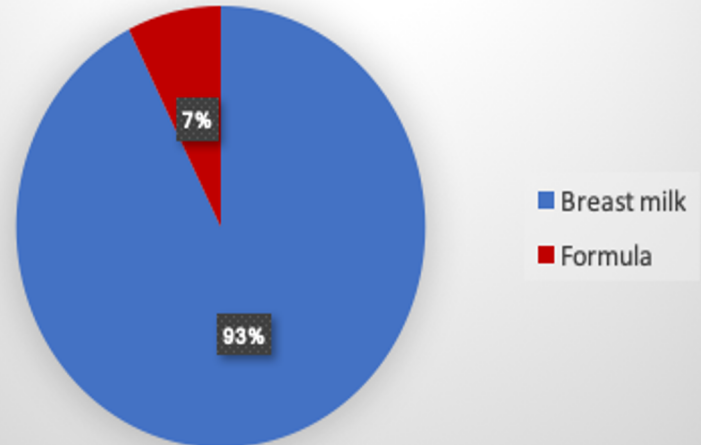
Evaluation (cont'd)

- Increase from 88% to 93% in breastfeeding after the intervention
- 5% increase

Pre Study Breastfeeding Rates



Post Study Breastfeeding Rates



Conclusion

- Evaluation of breastfeeding outcomes in relation to nurse education
- LAT assistance by nursing staff
- Support and reassurance for new mothers
- Positive effect on breastfeeding duration
- SUPPORT, SUPPORT, SUPPORT!!!

Discussion

- Significance of the DNP project to host site
- Impact of future practice
- Improve health and safety of infants
- Healthy People 2030 breastfeeding goal

Future Dissemination

- DNP repository upon approval
- Family Connects International
- Nurse Family Partnership Inc.
- Early Childhood Services of Tarrant County
- The 27th Annual Breastfeeding and Human Lactation Conference

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References

- Gianni, M. L., Bettinelli, M. E., Manfra, P., Sorrentino, G., Bezze, E., Plevani, L., Cavallaro, G., Raffaelli, G., Crippa, B. L., Colombo, L., Morniroli, D., Liotto, N., Roggero, P., Villamor, E., Marchisio, P., & Mosca, F. (2019). Breastfeeding Difficulties and Risk for Early Breastfeeding Cessation. *Nutrients*, 11(10), 2266. <https://doi.org/10.3390/nu11102266>
- Huang, P., Yao, J., Liu, X., & Luo, B. (2019). Individualized intervention to improve rates of exclusive breastfeeding: A randomised controlled trial. *Medicine*, 98(47), e17822. <https://doi.org/10.1097/MD.00000000000017822>
- Kalarikkal, S. M., & Pfliegerhaa, J. L. (2020). Breastfeeding. In StatPearls. StatPearls Publishing.
- Mahesh, P. K. B., Gunathunga, M. W., Arnold, S. M., Jayasinghe, C., Pathirana, S., Makarim, M. F., Manawadu, P. M., & Senanayake, S. J. (2018). Effectiveness of targeting fathers for breastfeeding promotion: systematic review and meta-analysis. *BMC Public Health*, 18(1), 1140. <https://doi.org/10.1186/s12889-018-6037-x>
- McFadden, A., Siebelt, L., Marshall, J. L., Gavine, A., Girard, L., Symon, A., & MacGillivray, S. (2019). Counselling interventions to enable women to initiate and continue breastfeeding: a systematic review and meta-analysis. *International Breastfeeding Journal*, 14, 42. <https://doi.org/10.1186/s13006-019-0235-8>

References (cont'd)

- Petiprin, A. (2019). Lewin's change theory. Nursing Theory. [https://nursing-theory.org/theories- and-models/lewin-change-theory.php](https://nursing-theory.org/theories-and-models/lewin-change-theory.php)
- Ridgway, L., Cramer, R., McLachlan, H. L., Forster, D. A., Cullinane, M., Shafiei, T., & Amir, L. H. (2016). Breastfeeding Support in the Early Postpartum: Content of Home Visits in the SILC Trial. *Birth (Berkeley, Calif.)*, 43(4), 303-312. <https://doi.org/10.1111/birt.12241>
- Schanler, R., & Potak, D. (2020). Breastfeeding: Parental education and support. UpToDate. <https://doi.org/https://www.uptodate.com/contents/breastfeeding-parental-education-and-support>
- Wagner, C. (2019). Counseling the Breastfeeding Mother: Overview, Mechanics of Breastfeeding, Correct Breastfeeding Techniques. <https://emedicine.medscape.com/article/979458-overview#a1>