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# Making Breastfeeding Easier with Clinician Support

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Making Breastfeeding Easier with Clinician Support

A Paper Submitted in Partial Fulfillment of the Requirements

For NURS 5382: Capstone

In the School of Nursing

The University of Texas at Tyler

by

Katherine Laney RN, BSN

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#### **Executive Summary**

During the perinatal period, women make plans to bring a new life into the world. One of the first decisions they must make is how they are going to feed their newborn. Women can struggle with decisions on how to feed their babies. The formula versus breast milk debate has been an ongoing argument for many years. There are many studies on the subject and many more opinions are provided to new mothers. Mothers can become overwhelmed with the information and feel pressured to feed their infants in a certain way. Women who choose to breastfeed their infants sometimes discover insufficient support from their clinicians while they are learning to breastfeed. This lack of assistance leads to more women deciding to stop breastfeeding sooner than they would have if they had adequate support and education.

Current practices are to leave breastfeeding education for lactation specialists while the mother is in the hospital after having her baby and sometimes one lactation outpatient appointment about 5 days or so after birth. Lactation nurses are already in short supply with many hospitals only employing one or two and they only work during regular business hours. This leaves women with about 30 minutes to an hour with a specialist to learn to breastfeed before they are sent home with a newborn that they must keep fed and growing. There are breastfeeding resources available to the public, but many women are unaware of them prior to having a baby and find that they are too little too late in helping them feed their baby. Increasing clinician support starting before the mother delivers and continuing that support through the first few months after delivery can improve breastfeeding rates and health outcomes.

#### **Rationale for the Project**

According to the CDC (2022), Texas reports an average of 42.4% of infants exclusively breastfeeding at 3 months, and only 24% are exclusively breastfeeding at 6 months. There are

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many benefits to breastfeeding. Meek and Noble (2022) report that breastfeeding benefits include decreased otitis media, asthma, lower respiratory tract infections, necrotizing enterocolitis in preterm infants, sudden infant death syndrome (SIDS), severe diarrhea, Type 1 and Type 2 diabetes, and obesity. These are life-altering health consequences that can be avoided when a mother chooses to breastfeed her baby.

There are financial incentives for breastfeeding as well. Choosing not to breastfeed leads to higher infant feeding costs, but also higher healthcare costs later in life. According to the CDC (2021), low rates of breastfeeding lead to more than \$3 billion in healthcare costs for mothers and babies in the United States alone. The WHO (2022) states that the reduction of these costs can lead to economic gains for the family.

This project's purpose is to increase the amount of education and support from clinicians starting in the obstetric office antepartum and continuing through the first few months postpartum in the pediatric office. This will lead to increased breastfeeding rates and self-efficacy. Increasing the involvement of clinicians leads to an increased number of infants that are breastfed exclusively thus decreasing patient healthcare costs, decreasing financial strain on low-income families, and improving the health of hundreds of people a year. These clinicians are the medical assistants, registered nurses, lactation specialists, nurse practitioners, midwives, and physicians that care for the women and their children. This multidisciplinary approach to care will lead to improved health outcomes in the community.

#### **Literature Synthesis**

Multiple studies have shown that individual support and intervention leads to increased exclusive breastfeeding rates and breastfeeding self-efficacy (Brockway et al., 2017; Kassianos

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et al., 2019; Shortis, 2019). Breastfeeding self-efficacy is the belief in a mother's own ability to be able to breastfeed. Shafaei et al. (2020) found that increasing the breastfeeding self-efficacy of mothers led to a decrease in breastfeeding problems. Improving breastfeeding self-efficacy is one of the most crucial factors that generate increased breastfeeding rates (Brockway et al., 2017).

The review of several randomized control trials determined that the combined use of education and clinician support is the most effective combination of interventions that can be utilized to improve breastfeeding rates and breastfeeding self-efficacy in new mothers (Akyıldız & Bay, 2023; Huang et al., 2019; Nilsson et al., 2017; Prasitwattanaseree et al., 2019; Puharić et al., 2020; Santamaría-Martín et al., 2022). Puharić et al. (2020) demonstrated the implementation of educational materials and direct support from clinicians provided the highest rates of breastfeeding at 3 and 6 months. Prasitwattanaseree et al. (2019) found that providing new mothers with breastfeeding support before they give birth as well as after led to higher breastfeeding rates at 6 months postpartum. Nilsson et al. (2017) found that increased clinician support while in the hospital that included the mother's own support system increased the rates of breastfeeding at 1 month and 6 months postpartum. Santamaría-Martín et al. (2022) found that using the PROLACT intervention in the primary care setting was effective at improving exclusive breastfeeding rates up to 6 months of age. Huang et al. (2019) determined that combining individualized antenatal and postpartum education increased breastfeeding rates among new mothers during the first 4 months after delivery. These different interventions all create a strong knowledge base and positive opinions of breastfeeding in the new mother. They also foster a support system that helps her continue through challenges that may occur in the first months of breastfeeding (Ingram et al., 2020).

# **Project Stakeholders**

It is imperative to involve as many parts of the healthcare system as possible to make this project work. The primary stakeholders in this project are the clinicians and the mothers and their infants. In the chosen organization stakeholders can also include CEOs, CNOs, office and clinical directors, unit and office managers, clinical educators, and support staff. Other stakeholders include the families of the new mothers and the community where they live. All stakeholders will be affected by the proposed change in care. Although not evident at first glance, improving the health outcomes of mothers and their newborns directly impacts the community.

#### **Implementation Plan**

This change project would be carried out at the Obstetrics/Gynecology and Pediatric clinics, and at the hospital. These clinics and hospitals can either be within the same corporation or privately owned. The mothers and infants would be seen at both clinics and the hospital during their perinatal care. Initial data needs to be collected on the rates of breastfeeding initiation and continuance at all three locations. It should be noted that full implementation of this project is not required to produce an increase in breastfeeding rates, however, more success will be achieved by implementing it completely.

Lactation education must be provided to the clinicians prior to implementing the project. This education is best done based on the amount of background knowledge that each clinician has. Some clinicians have ample breastfeeding experience and can simply be given handouts as resource guides. Other clinicians will need to have in-person training on breastfeeding techniques and tips. These training sessions should be done by the lactation specialist. In-person training should be provided for all newly hired employees at regular intervals and as refresher courses. Implementation of the project can begin as soon as clinicians are ready to assist new mothers.

This project will require the combined efforts of physicians, advanced practice nurses, midwives, registered nurses, lactation specialists, and clinical educators to work together to implement the education with their patients. These patient contacts will occur in the office antepartum, in the hospital perinatally, and either with the baby or the mother at the follow-up visits. Permission will be obtained from the clinical director at the hospital and the clinical managers at the outpatient clinics. They are the gatekeepers for the project. The project will also need to be evaluated by the clinical education director for approval. The allies and assistants in this project are the lactation specialists in the hospital. They are the main source of breastfeeding knowledge and can help drive change in this area to increase breastfeeding success.

#### **Timetable/Flowchart**

The plan for the project starts by providing base education to the mothers beginning around the 36-week visit in their antenatal care by the physicians and midwives. This will occur for approximately 4 weeks, depending on when the mother gives birth. The staff will be trained to answer questions and be able to provide resources for mothers to be able to attend classes on breastfeeding. Education materials to give to the mothers can be obtained through the Department of State Health and Human Services (DSHS) website and the Texas WIC website for free.

The education will continue to be expanded upon during the next step when the mother delivers at the hospital by lactation consultants and the nursing staff. This part of the timeline is completely subject to when the mothers deliver. It will likely be within a 4 week window of originally receiving the first education. Education materials are already available at the hospital and bedside nurses will be trained to help with breastfeeding more by the lactation nurses that are employed at the hospital through classes or orientation time.

The remaining steps include patient education and clinician support that will continue postnatally at the pediatric and postpartum office visits and lactation appointments. These routine appointments typically occur at 1 week, 2 weeks, 4 weeks, 6 weeks, 8 weeks, and 12 weeks postnatally. Clinicians at all facilities will be trained before the initiation of this project to answer frequently asked questions and refer to lactation consultants and specialists when feeding problems arise after delivery rather than immediately suggesting formula unless medically necessary. Education materials for the mothers can be obtained from the Texas DSHS and WIC websites as well.

A total of 12 weeks postpartum, plus a few antepartum weeks, will be required for this project depending on maternal delivery timeframes. The data can then be collected at the 3 month well-child visit to the pediatrician using a question-and-answer format form for the mother to fill out to determine the effectiveness of the intervention. See Appendix B for flow chart and timeline for the project.

#### **Data Collection Methods**

To evaluate the results of the project, data must be collected at every mother and baby visit after delivery. These data collections are typically at 1 week, 2 weeks, 4 weeks, 6 weeks, 8 weeks and 12 weeks postpartum. The data collection would be in a questionnaire format (see Figure C.1). This format has some open-ended questions and some yes/no questions. This provides both quantitative and qualitative data for collection. This data will be collected, and feedback will be given to providers on how well they are supporting women that are trying to

breastfeed their newborns. It will also give a percentage of women that continue to breastfeed during the first few weeks postpartum.

The descriptive statistics in this project are collected in the responses and how they fit together. They would be represented as qualitative data and as whole numbers. The main statistic to be evaluated would be the total number of women that reported breastfeeding at 1 week postpartum, and how it compares to the total number of women breastfeeding at further visits. The amount of support they are receiving from their providers is important also. The statistician can also compare the number of women supplementing with formula between the various visits. These values could be represented as either whole numbers or percentages of participants (see Table C). They can analyze the number of women receiving support from their families as well. They would then place all these values in charts and diagrams that show the values at different visits.

Data should also be collected from the clinicians that are part of the project to determine their satisfaction with the intervention. This would be collected in a survey form that could be made available in either print of online formats (see Figure C.2). This will help the leaders of the project determine what changes need to be made for the training and education provided to the clinicians and whether the clinicians are satisfied with it.

### **Cost/Benefit Discussion**

The costs of this project are mostly related to the training of the clinicians. The cost of paying the instructors and paying for education time for the students while attending the class. Printed resources are available for free on the Texas DSHS and Texas WIC websites.

The benefits of the project are almost immeasurable. The cost of formula alone can vary based on the brand and amount consumed by the child. Research shows that breastfed infants and their mothers have fewer chronic health conditions that can be expensive to manage. Saving this money can ease the financial burden of raising children for parents. During 2022 many parents were left trying to figure out how to feed their babies due to a severe formula shortage and many parents continue to be afraid that it could happen again. Breastfeeding eases this concern because it is always readily available for the child.

## **Discussion of Results**

There is not a full evaluation of this project available at this time. Positive feedback was received from the clinical director of a postpartum unit and a lactation specialist at the local hospital stating that the project was a good suggestion and that with refinement it would be well-suited for use in their setting.

If the change is successful, then it should show that the more women had support from providers, the longer they continued to breastfeed. This would be evident by an increased number of mothers that continued to breastfeed compared to previous data. By using the numbers and data collected in the project population you can infer that if the project was utilized by other providers that the results would translate equally across the general population of new mothers.

#### **Conclusions/Recommendations**

Research shows that multiple interventions can bring about increased breastfeeding rates and breastfeeding self-efficacy (Brockway et al., 2017). Support from clinicians improves breastfeeding rates and self-efficacy among new mothers. The standard practice of only supporting breastfeeding while in the hospital setting or through the lactation specialist alone is less effective at increasing breastfeeding rates than a multidisciplinary support approach. Individualizing the type of education implemented in this project will allow for flexibility among

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different organizations and it can be tailored to fit any organization structure. This allows clinicians and managers to work together to create a plan that works for their organization rather than a one-size-fits-all method. As the project continues it can be changed overtime to create the best results for new mothers and their infants. It is recommended that this project be implemented throughout an organization from the obstetrics clinics to the pediatric clinics, however, benefits can be attained from partial implementation during any portion of the perinatal period.

#### References

- Akyıldız, D., & Bay, B. (2023). The effect of breastfeeding support provided by video call on postpartum anxiety, breastfeeding self-efficacy, and newborn outcomes: A randomized controlled study. *Japan Journal of Nursing Science*, 20(1), 1–13. <u>https://doiorg.ezproxy.uttyler.edu/10.1111/jjns.12509</u>
- Brockway, M., Benzies, K., & Hayden, K. A. (2017). Interventions to improve breastfeeding self-efficacy and resultant breastfeeding rates: A systematic review and meta-analysis.
  *Journal of Human Lactation*, 33(3), 486-499. doi:10.1177/0890334417707957
- Centers for Disease Control and Prevention. (2021). *Breastfeeding*. Centers for Disease Control and Prevention. Retrieved October 20, 2022,

from https://www.cdc.gov/breastfeeding/index.htmLinks to an external site.

- Centers for Disease Control and Prevention. (2022). *Breastfeeding report card*. Centers for Disease Control and Prevention. Retrieved October 20, 2022, from <a href="https://www.cdc.gov/breastfeeding/data/reportcard.htm">https://www.cdc.gov/breastfeeding/data/reportcard.htm</a>
- 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. <u>https://doi-org.ezproxy.uttyler.edu/10.1097/MD.000000000017822</u>
- Ingram, J., Thomson, G., Johnson, D., Clarke, J. L., Trickey, H., Hoddinott, P., Dombrowski, S. U., Jolly, K. (2020). Women's and peer supporters' experiences of an assets-based peer support intervention for increasing breastfeeding initiation and continuation: A qualitative study. *Health Expectations*, 23(3), 622-631. doi:10.1111/hex.13042
- Kassianos, A. P., Ward, E., Rojas-Garcia, A., Kurti, A., Mitchell, F. C., Nostikasari, D., Payton, J., Pascal-Saadi, J., Spears, C. A., & Notley, C. (2019). A systematic review and meta-

analysis of interventions incorporating behaviour change techniques to promote breastfeeding among postpartum women. *Health Psychology Review*, *13*(3), 344–372. https://doi-org.ezproxy.uttyler.edu/10.1080/17437199.2019.1618724

- Meek, J. Y., & Noble, L. (2022). Policy statement: Breastfeeding and the use of human milk. *Pediatrics*, 150(1). https://doi.org/10.1542/peds.2022-057988
- Natalia, R., Rustina, Y., & Efendi, D. (2022). Combining breastfeeding education and support to improve breastmilk production, frequency of breastmilk expression, and partial breastfeeding in low-birth-weight infants. *Journal of Neonatal Nursing*, 28(5), 356–360. https://doi-org.ezproxy.uttyler.edu/10.1016/j.jnn.2021.08.015
- Nilsson, I. M., Strandberg-Larsen, K., Knight, C. H., Hansen, A. V., & Kronborg, H. (2017). Focused breastfeeding counselling improves short- and long-term success in an earlydischarge setting: A cluster-randomized study. *Maternal & Child Nutrition*, 13(4). doi:10.1111/mcn.12432
- Prasitwattanaseree, P., Sinsucksai, N., Prasopkittikun, T., & Viwatwongkasem, C. (2019). Effectiveness of breastfeeding skills training and support program among first time mothers: A randomized control trial. *Pacific Rim International Journal of Nursing Research*, 23(3), 258–270.
- Puharić, D., Malički, M., Borovac, J. A., Šparac, V., Poljak, B., Aračić, N., Marinović, N., Luetić, N., & Zakarija-Grković, I. (2020). The effect of a combined intervention on exclusive breastfeeding in primiparas: A randomised controlled trial. *Maternal & Child Nutrition, 16*(3). doi:10.1111/mcn.12948
- Santamaría-Martín, M. J., Martín-Iglesias, S., Schwarz, C., Rico-Blázquez, M., Portocarrero-Nuñez, J. A., Diez-Izquierdo, L., Llamosas-Falcón, L., Rodríguez-Barrientos, R., Del-

Cura-González, I., & Grupo PROLACT (2022). Effectiveness of a group educational intervention - prolact - in primary care to promote exclusive breastfeeding: a cluster randomized clinical trial. *BMC pregnancy and childbirth*, *22*(1), 132. <u>https://doi-org.ezproxy.uttyler.edu/10.1186/s12884-022-04394-8</u>

- Shafaei, F. S., Mirghafourvand, M., & Havizari, S. (2020). The effect of prenatal counseling on breastfeeding self-efficacy and frequency of breastfeeding problems in mothers with previous unsuccessful breastfeeding: a randomized controlled clinical trial. *BMC women's health*, 20(1), 94. <u>https://doi-org.ezproxy.uttyler.edu/10.1186/s12905-020-00947-1</u>
- Shortis, E. (2019). Have interventions been effective at increasing the rates of breastfeeding in the UK? *British Journal of Midwifery*, 27(5), 312–319. <u>https://doi-org.ezproxy.uttyler.edu/10.12968/bjom.2019.27.5.312</u>
- World Health Organization. (2022). *Breastfeeding*. World Health Organization. Retrieved October 20, 2022, from <u>https://www.who.int/health-topics/breastfeeding#tab=tab\_1</u>