Development Clinical Practice for Nurses in Breastfeeding Promotion for Infants with Cleft Lip and Palate Srinagarind Hospital Northeastern Thailand

Namchaitaharn S, BSc1, Pradubwong S, MSN1, Surit P, DNSc, PhD2, Chowchuen B, MD, MBA3

- ¹ Division of Nursing, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand
- $^2 Department \ of \ Adult \ Nursing, Faculty \ of \ Nursing \ Khon \ Kaen \ University, \ Khon \ Kaen, \ Thailand$
- 3 Department of Surgery, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Background: The promotion of breastfeeding is beneficial to infants with cleft lip and palate (CLP). Nursing practice guidelines are important for the Nurses team to give practice for mothers with infants CLP.

Objective: To develop a nursing practice to promote breastfeeding for infants with CLP in Srinagarind Hospital.

Materials and Methods: This descriptive research was conducted to obtain recommended guideline to promote breastfeeding for infants with CLP, was carried out for four months. The literature was collected from nursing and medical databases, CINAHL, PubMed, the Cochrane Library, THAIJO, and Google Scholar by using PICO from. In order to evaluate the level of reliability of the evidence or literature as well as the introduction of the practice, the choices were based on the selection of standard criteria and validity test conducted by 4 experts.

Results: A total of 140 documents were accessible in the databases, but eight documents were synthesized into three key practical guidelines for breastfeeding infants with CLP, namely: (1) the types and degrees of severity of the cleft palates conditions, as well as disability and the evaluation of the mother after parturition, including her mental state and need for assistance; (2) the assistance from the nurses, who give the information regarding how to correctly hold the infant when breastfeeding and how to the evaluate the infant's weight; and (3) the plans to be made before discharge and the instructions to be given in the correct techniques to get and store milk from the mother's breasts to be used later.

Conclusion: The three practices of breastfeeding for infants with CLP: (1) the evaluation of the infants and the mothers, (2) the assistance received from the nurse, and (3) the proper preparation before discharge, help the nurse team as guideline to practice and take care the Infants with CLP.

Keywords: Infants Cleft lip and Palate, Breast feeding, Nursing practice

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The promotion of breastfeeding is beneficial to the health and the brain development of infants with CLP, as well as the bonding between the mother and their children⁽¹⁾ the breastfed infants are less likely to suffer from serious infection including recurrent bronchitis, pneumonia and otitis media⁽²⁾. Due to the fact that some mothers lack proper knowledge about breastfeeding and the necessary skills, they are unable to breastfeed their babies by themselves, which results in the baby not getting enough breast milk during the newborn phase and causes slower development. Breastfeeding for infants with cleft lip and palates is still problematic. For

$\label{lem:correspondence} \textbf{Correspondence to:}$

Surit P.

Department of Adult Nursing, Faculty of Nursing, Khon Kaen University, Khon Kaen 40002, Thailand.

Phone: +66+43-363123, **Fax:** +66-43-202558

E-mail: z3101_ps@hotmail.com

this reason, the Clinical Nursing Practice Guidelines or (CNPG) were introduced to promote breastfeeding for infants with cleft lip and palates. These are to be used as practice guidelines for the nurses, who treat infants with cleft lip and palates in order to more clearly delineate the procedures, which can better lead to successful breastfeeding. Hence, the researcher was interested in studying and developing a nursing practice, which could promote breastfeeding for infants with cleft lip and palates. The goal was to apply a framework for systematic practice development, which was in accordance with the empirical evidence, so that the practice guidelines for breastfeeding infants with cleft lip and palates could be formulated.

Objective

To develop a nursing practice to promote breastfeeding for infants with cleft lip and palates in a patient unit after parturition and for newborns in Srinagarind Hospital.

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Materials and Methods

This descriptive research was conducted in order to obtain recommended guideline to promote breastfeeding for infants with cleft lip and palates at Srinagarind Hospital, was carried out for four months from December 2017 to March 2018. The literature was collected from related nursing and medical databases both nationally and internationally using population intervention comparison outcome from the following data bases: Cumulative Index to Nursing and Allied Health Literature, PubMed, The Cochrane Library, Thai journals online, and Google Scholar. In order to evaluate the level of reliability of the evidence or literature as well as the introduction of the practice, the choices were based on the selection of standard criteria. The nursing practice examined by four professionals was amended for appropriateness, and consisted of eight pieces of evidence research.

Ethical

The study was reviewed and approved by the Human Research Ethics Committee, Khon Kaen University.

Results

From the analysis and synthesis of the research, the documented nursing practice includes three main issues were indicated in the practice as follows.

Discussion

According to a review of the collected literature, there is not yet a nursing practice that has been able to emphasize direct breastfeeding in order to promote breastfeeding for infants with cleft palates. Therefore, the researcher has developed a practice that can be successful if the breastfeeding is initiated early (immediately after the baby's birth). As a result, the baby will learn to suckle, swallow, and breathe simultaneously. In addition, the practice,

which is useful for both the mother and the baby, can better prepare the mother, who can be encouraged by the relatives and who can be capably educated by the assistant nurse.

Conclusion

There are three practices in the promotion of breastfeeding for infants with cleft palates as follows: (1) the evaluation of the mother and the baby, (2) the assistance given by the nurses, and (3) the preparation of the mother and infant before being discharged. These guidelines help the nurse team for practice and take care to the Infants with cleft lip and palate.

What is already known on this topic?

In the first stages, if the mother intentionally learns from the assistant nurse and follows the instructions given, then the infants with cleft palate will able to suckle from its own mother's breasts.

What this study adds?

It adds new, clear, concrete, and referable nursing practices, which can be utilized to promote breastfeeding for infants with cleft palates.

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Potential conflicts of interest

The authors declare no conflicts of interest.

References

1. Klaus MH, Kennel JH, Klaus PH. Bonding. New York: Adison-Wesley; 1995.

Table 1. The Evaluation of Infants with the Condition of Cleft lip and Palates and their Mothers

Day	Practice
From birth to 14 day of age	 Proper evaluation of infants in term of type and severity of cleft lip or palate⁽³⁾ 1.1) Determine the severity and types of cleft palates conditions 1.2) Check for any complications and joint diseases 1.3) Check for the ability of the infants to suckle by massaging their tongues and oral cavities 1.4) Evaluate the efficiency of the mothers' breastfeeding and the infants' suckling using the Latch Assessment Tool⁽⁴⁾ Evaluate the mothers as follows: Evaluate their mental states using two questions from the Depression Inventory (2Q)⁽⁵⁾ Evaluate the mothers' nipples and the amount of breast milk supply, as well as their knowledge, attitudes, and skills at breastfeeding Encourage the mothers to feel their babies as soon as they can. For example, the mothers should hold the babies right after parturition so that the bond and the relationship between the mother and the baby can be built⁽⁶⁾ Arrange for a separate room so that the parents and the babies can be together for 24 hours in order to build a relationship between the parents and the baby⁽⁷⁾ The postpartum/assistant nurses should explain the treatment plan according to age range by the interdisciplinary team

Table 2. Breastfeeding for Infants with Cleft lip and Palates

Day	Practice
From birth to 14 day of age	1) If the parturition takes place at the hospital, the nurses should immediately assist the infants to suckle within 30 minutes after birth in order to share techniques to better help the mother breastfeed. If the mother is transferred from another hospital, the nurses should assist the infant to suckle right after the child is born after the readiness of the mother has been evaluated and the infant has received a physical examination. 2) The professional nurses or those with more than one year of experience should assist, teach, and suggest to the mother about the usefulness and importance of mother's breast milk for infants with cleft lip cleft palates ⁽⁸⁾ , including how the infant should be held when breastfeeding and how to stimulate the flow of breast milk.
Day	Practice
From birth to 14 day of age	3.1) The mother should hold the infant in the position in which the head and body of the baby are between 45 to 60 degrees so that the milk can pass through to the stomach more easily in order to prevent the milk from flowing up into the middle ears(9) 3.2) The mother should hold the infant in a "football" position by sitting up or by sitting halfway up clinging to the side. Her arms should be on the sides of the body, while her hands hold the infant's head with the infant's feet behind The infant is to suckle the mother's nipple to the areola. While breastfeeding, the mother should squeeze the breast periodically in accordance with the baby is suckling, swallowing, and breathing. This will assist the infant to suckle more milk and will compensate the energy of the baby when suckling 3.3) For an infant with a complete cleft palate, the mother should hold the infant in a leaning position so that the nipple is not pushed into the soft palate(9) 3.4) The mother should hold the infant in the opposite direction in a sitting or in a half-sitting position using the palm opposite to the mother's breast(10). Mother should use her arms to enfold the baby's back, body, and head, and should then use her palm to hold the baby's head, while the other hand holds the breast 3.5) The mother should hold the baby in a position similar to the "football" position, but the baby should rest on one of the mother's thighs with the infant's back kept quite straight. Then the mother should use the palm on the same side as the breast that the baby is suckling in order to hold the baby's head and should use the other hand to hold the breast. This position is appropriate when an infant has a cleft palate, has a problem with its tongue, or when an infant has Pierre-Robin syndrome 3.6) While breastfeeding, the mother should squeeze the breast to help the baby. In order to better support the baby so that the child doesn't have to use too much energy to suckle and can also receive more milk, the mother should follow the baby's suckling, swallow

 $\textbf{Table 3.} \ \ \textbf{The Discharge Plan from the Hospital}$

Day	Practice
From birth to 14 day of age	1) Techniques should be taught to stimulate the breasts to produce milk starting from parturition or after the separation of the mother and the baby. For example, the breasts should be stimulated every three hours for 15 minutes each(11) 2) In case the baby's weight doesn't increase according to the standards or under circumstances when the mother cannot breastfeed, the mother should be taught to store breast milk by pumping breast milk after every breastfeeding session 3) After the mother and infant have been discharged, Nurses should provide follow-up about the breastfeeding practices at the Breastfeeding Clinic every 1 to 2 weeks and should make a phone call to evaluate and consult every 2 months

- Jocelyn LJ, Penko MA, Rode HL. Cognition, communication, and hearing in young children with cleft lip and palate and in control children: a longitudinal study. Pediatrics 1996;97:529-34.
- Reid J, Kilpatrick N, Reilly S. A prospective, longitudinal study of feeding skills in a cohort of babies with cleft conditions. Cleft Palate Craniofac J 2006;43:702-9.
- 4. Jensen D, Wallace S, Kelsay P. LATCH: a breastfeeding charting system and documentation tool. J Obstet Gynecol Neonatal Nurs 1994;23:27-32.
- Ministry of Public Health Department of Health. Selfesteem and suicide evaluation [Internet]. 2016 [cited 2018 Nov 15]. Available from: https://www.dmh.go.th/ test/download/files/2Q%209Q%208Q%20(1).pdf.
- Fugate K, Hernandez I, Ashmeade T, Miladinovic B, Spatz DL. Improving Human Milk and Breastfeeding Practices in the NICU. J Obstet Gynecol Neonatal Nurs 2015;44:426-38; quiz E14-5.
- World Health Organization and UNICEF. Global nutrition targets 2025: Breastfeeding policy brief [Internet]. 2014 [cited 2018 Nov 15]. Available from:

- https://apps.who.int/iris/bitstream/handle/10665/149022/WHO NMH NHD 14.7 eng.pdf?ua=1.
- Meier PP, Patel AL, Bigger HR, Rossman B, Engstrom JL. Supporting breastfeeding in the neonatal intensive care unit: Rush Mother's Milk Club as a case study of evidence-based care. Pediatr Clin North Am 2013;60:209-26.
- 9. Reilly S, Reid J, Skeat J, Cahir P, Mei C, Bunik M. ABM clinical protocol #18: guidelines for breastfeeding infants with cleft lip, cleft palate, or cleft lip and palate, revised 2013. Breastfeed Med 2013;8:349-53.
- Thulier D. Weighing the Facts: A Systematic Review of Expected Patterns of Weight Loss in Full-Term, Breastfed Infants. J Hum Lact 2016;32:28-34.
- 11. Pathumwiwatana P, Tongsukho S, Naratippakorn T, Pradubwong S, Chusilp K. The promotion of exclusive breastfeeding in infants with complete cleft lip and palate during the first 6 months after childbirth at Srinagarind Hospital, Khon Kaen Province, Thailand. J Med Assoc Thai 2010;93 Suppl 4:S71-7.