

# Development of Nursing Practice Guidelines for Care of Patients with Cleft Lip-Palate at Srinagarind Hospital: Counselling

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**Background:** Nursing practice guidelines are important for the interdisciplinary team to give counselling and ensure effective service of comprehensive care for patients with cleft lip and cleft palate (CLP) under long term treatment.

**Objective:** To develop nursing practice guidelines of counselling for patients with CLP.

**Materials and Methods:** This descriptive research was conducted in order to obtain recommended guidelines for the treatment of patients with CLP at Srinagarind Hospital by the Center for Advanced Nursing Practice Model. Research instruments included: 1) Tools for empirical data collection developed from PICO and derived from CD-ROM and online databases (PubMed, ProQuest, Science Direct, CINHAL), 2) Selection and evaluation of the reliability of research samples, 3) Evaluation, 4) Analysis, 5) Creation of empirical guidelines for nursing, and 6) A validity test conducted by experts. The process spanned six months from June to November, 2018.

**Results:** A total of 7,400 documents were accessible in the databases, from which 10 journals, 8 studies, and 2 academic journals were selected for this research. The synthesizing of these documents yielded three key practical guidelines for the treatment of CLP patients, namely: 1) Evaluating pregnancies for babies with complete CLP, 2) Providing suggestions to mothers reportedly carrying babies with CLP, and 3) Evaluating the guidance given to mothers and families of CLP toddlers.

**Conclusion:** This study developed three practical nursing guidelines for CLP patients namely: 1) Evaluating pregnancies for babies with CLP, 2) Providing suggestions to families and the mothers reportedly carrying babies with CLP, 3) Evaluating the guidance given to mothers of CLP toddlers and families. These guidelines help the nursing team to correctly provide suggestions and treatment to the patients with CLP.

**Keywords:** Nursing Practice Guidelines, Cleft lip-Palate, Counseling

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Cleft lip and cleft palate (CLP) is a birth defect for which symptoms are observable worldwide. Incidence of CLP is one in every 500 to 550 people. Ratios can differ depending on race and economic and social background<sup>(1)</sup>. Thailand's CLP rate of 1.51: 1,000<sup>(2)</sup> is a result of heredity and viral factors, as well as certain medicines and various toxins<sup>(3)</sup>. CLP emerges during the first three months of pregnancy and defects the fetal's facial, oral cavity, teeth, and respiratory system development, among other effects. The patients undergo difficulties in hearing, speaking, and eating due to the distorted alignment of the teeth<sup>(4)</sup>. CLP patients are at risk since birth of other detrimental symptoms, including blockage of their respiratory path, suffocation, and

sucking difficulties<sup>(5)</sup>. CLP children's families also endure mental stress and depression. Some even blame themselves, believing that their previous sins caused the children's handicap<sup>(4)</sup>. If families are well-informed regarding CLP, they are able to confront the situation wisely and their children have a higher chance of treatment appropriate to their clinical needs<sup>(6)</sup>. CLP children are required to receive immediate treatment from an interdisciplinary team consisting of: surgeons, pediatricians, obstetricians, otolaryngologists, dentists, oro-maxillofacial, psychiatrists, nurses, and social workers. Treatment takes a significant amount of time according to the patients' physical needs and the severity of the case. From inspection during the mother's pregnancy, treatment can last until the patient reaches 19 years old<sup>(7)</sup>. The ultimate goal is safety and empowering the patients to realize their own value in order to facilitate their integration as equals in the community.

Nursing division, Srinagarind Hospital has collaborated with Tawanchai Center to develop a care map protocol, where guidelines are provided prior to and after the

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patient has received treatment from the interdisciplinary team. In addition, the integrative nursing care system is based on correspondence among 9 nursing units, including: the antenatal clinic, the labor unit, the post labor unit, family planning, the surgical ward, the surgical examination room, the surgery room, the anesthesiology room, and Tawanchai Center. Collaboration from these nursing units helps the interdisciplinary team maintain an appropriate workflow for nursing care of the patient during and after service hours. Different handouts have also been developed, such as: a manual for pre- and post-operation care, standard for breastfeeding, a multidisciplinary care manual, and standard of care patients undergoing alveolar bone grafting. The information system has consistently been updated to assure up-to-date and standardized performance among the 9 nursing units<sup>(8)</sup>. Despite the attempts to standardize performance, there is relatively little empirical evidence related to nursing performance.

There are several models that suggest practical nursing guidelines, including: the Stetler Model<sup>(9)</sup>, the Iowa Model<sup>(10)</sup>, and the Center for Advanced Nursing Practice Model<sup>(11,12)</sup>. Among them, Souk up's model has been most widely used. Souk up's model has four phases of empirical development. In Phase 1, Evidence Triggering, it is clarified that the patient and family are undergoing trauma due to social perceptions, self-devaluation, and lack of CLP treatment<sup>(13)</sup>. In Phase 2, Evidence-Supported Clinical Support, the problems observed in Phase 1 are analyzed and used as consulting guidelines for patients with CLP and their family. This should result in a more effective clinical performance, as presented in Figure 1.

## Objective

To develop nursing practice guidelines of counselling for patients with CLP.

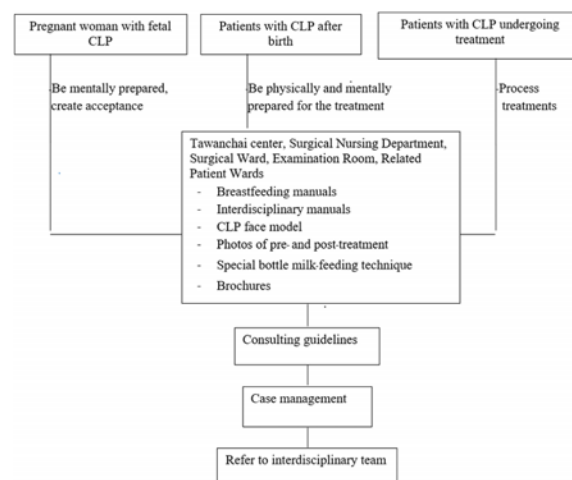
## Materials and Methods

This descriptive research was conducted in order to obtain recommended guidelines for the treatment care patients with CLP at Srinagarind Hospital by the Center for Advanced Nursing Practice Model<sup>(12)</sup>. The project includes four working phases, where Phase 1 has already been completed. Therefore, this research focuses on Phase 2, involving the development of consulting guidelines to be used for patients with CLP and their families. Research instruments

include: 1) Retrieval of empirical evidence based on CIPO's<sup>(14)</sup> framework, used "cleft and counseling" to assess databases available from CD-ROM and online databases (PubMed, ProQuest, Science Direct, CINAHL); 2) Selection of evidence and research for evaluation of reliability<sup>(15)</sup>; 3) Evaluation; 4) Analysis and synthesis of the research and related evidence; 5) Creation of practical consulting guidelines for nursing based on the collected data; and 6) Evaluation of the recommended guidelines by 5 experts. The aforementioned process took 6 months, starting from June to November, 2018. This research is exempt from review under Human Ethic Research Evaluation (HE611366).

## Results

There were a total of 7,400 documents available on the databases, from which 10 journals, 8 studies, and 2 academic reports were selected for this research. The synthesizing of these documents yielded three main practical guidelines the treatment for patients with CLP, namely: 1) Evaluating pregnancy women with fetal CLP, 2) Providing counseling pregnancy women with fetal CLP, husband and cousin, and 3) Evaluating and counseling patients with CLP and caregiver Figure 1 and Tables 1 to 3.



**Figure 1.** Service flow for patients with CLP and families

**Table 1.** Nursing practical guideline 1: Evaluation of pregnancy women with fetal CLP

Date	Guidelines
First visit	1) Evaluation of pregnancy women with fetal CLP <sup>(16)</sup> 1.1) Mental Evaluation: Use two questions (2Q) to test the pregnancy women's mental state for depressive disorder. 1.2) Test the mothers' recognition and acceptance fetal with CLP <sup>(17)</sup> 1.3) Conduct ultrasound and test for other possible disorders <sup>(18)</sup> 1.4) Evaluate the husband's and family's acceptance fetal with CLP.

**Table 2.** Nursing practical guideline 2: Consulting guidelines for pregnancy women with fetal CLP husband and families

Date	Guidelines
First visit	<ol style="list-style-type: none"> <li>1) Consulting guidelines that should be followed <ol style="list-style-type: none"> <li>1.1) Let the patients ask questions, clarify, and talk to release their stress</li> <li>1.2) Answer the questions and explain following these steps: <ol style="list-style-type: none"> <li>1) Explain CLP causes as resulting from hereditary and environmental factors, as well as chemical use and the intake of some drugs, such as certain pimple treatment drugs, anti-stroking drugs, and vitamin A. Other risk factors for CLP include smoking, akohol consumption, and infection during the first three months of pregnancy.</li> <li>2) Obtain medical care and advice from the obstetrical team during pregnancy period</li> <li>3) Post-birth care involves breastfeeding suggestions, evaluating for other possible diseases or syndrome, and aligning the palate ridge before operation (this is applied for wide unilateral or bilateral CLP)</li> <li>4) Empowerment by conduct group activities to raise patients' and families' spirits. Activities should involve sharing experiences of those who have previously undergone treatment</li> <li>5) Distribute the CLP patient care manual, breastfeeding manual for CLP patients to the interdisciplinary team in order to help them to correctly provide nursing service to the patients with CLP after birth.</li> </ol> </li> </ol> </li> </ol>

**Table 3.** Nursing practical guideline 3: Evaluating and providing consultation patients with CLP and their mothers<sup>(5,18)</sup>

Date	Guidelines
First admission discharge	<ol style="list-style-type: none"> <li>1) Process for CLP patient evaluation<sup>(19)</sup> <ol style="list-style-type: none"> <li>1.1) Identify severity level and cleft type</li> <li>1.2) Identify possible side effects and other syndrome</li> <li>1.3) Extend the case to the interdisciplinary team, be it the surgical team or pediatricians</li> </ol> </li> <li>2) Process for evaluating the mother's post labor <ol style="list-style-type: none"> <li>2.1) Evaluation of mental health and screening for depressive disorder using two questions (2Q)</li> <li>2.2) Explain the causes, type, and treatment of care patients with CLP as it will be conducted by the interdisciplinary team</li> <li>2.3) Answer questions and offer explanations, starting with the following: <ol style="list-style-type: none"> <li>1) Explain CLP causes as resulting from hereditary and environmental factors, as well as chemical use and the intake of some drugs, such as certain pimple treatment drugs, anti-stroking drugs, and vitamin A. Other risk factors for CLP include smoking, akohol consumption, and infection during the first three months of pregnancy.</li> <li>2) Explain breastfeeding procedures, procedures relating to the alignment of the palate ridge prior to operation (applicable to wide-open cleft occurring on either one side or both sides of the palate), and the need for the mother to be admitted for training on how to breastfeed CLP babies.</li> <li>4) The treatment of Tawanchai Center and the interdisciplinary team involves exploitation of the following methods and materials: facial modeling, photography, the interdisciplinary manual for CLP care<sup>(20)</sup>, breastfeeding methods for babies with CLP<sup>(21)</sup>, a poster presentation of Tawanchai Center's protocol, and the pre-surgical orthodontic.</li> <li>5) Use group activities to empower the new CLP mothers. Invite previously successful CLP treatment cases to share their experiences with new CLP mothers. Meanwhile, explanations from participating nurses help the mothers to gain more confidence in taking care of their CLP children<sup>(22)</sup>.</li> <li>6) Distribute to the mothers the CLP patient interdisciplinary care manual, the breastfeeding manual, and other tools necessary for raising CLP children.</li> </ol> </li> </ol> </li> </ol>

## Discussion

The three interdisciplinary nursing guidelines were observed to have helped nurses in providing appropriate suggestions and support to CLP mothers and families. As a result, the relatives of the patients with CLP were able to accept the children's condition and provide correct care for their children. The idea was also articulated in a study by

Kutten berger et al<sup>(17)</sup> who investigated pregnant women's recognition and perceptions of fetal CLP during pregnancy. Participants in the study were informed of the chances of carrying a CLP baby and an ultrasound check was introduced during the antenatal period. Nurses were trained on the CLP advising process to help them perform the sensitive task more effectively.

A newborn baby evaluation must be performed together with an assessment for other diseases related to CLP, and the type and level of CLP severity must be classified. Evaluation in these areas helps the interdisciplinary team to work effectively on the reported case. The mother's mental health state and presence of depressive disorder must be traced after she has given birth by addressing her using two questions (2Q)<sup>(17)</sup>. Understanding the mother's mental state leads to better long term treatment. It is indispensable to empower the husband and families of CLP patients, as their acceptance of the problem is a significant source of support for the mother and for the treatment of the CLP child.

## Conclusion

This study developed three practical nursing guidelines for CLP patients namely: 1) Evaluating pregnancies for babies with CLP, 2) Providing suggestions to families and the mothers reportedly carrying babies with CLP, 3) Evaluating the guidance given to mothers of CLP toddlers and families. These guidelines help the nursing team to correctly provide suggestions and treatment to the patients with CLP.

## What is already known on this topic?

The pregnancy woman and mothers of fetal or children with CLP often suffer from this unusual pregnancy, and raising children with CLP can be a long term challenge for them.

## What this study adds?

Therefore, the nursing practice guideline will benefit the nurses as evaluation guidance and counseling for pregnancy women with fetal with CLP, families, and the caregivers.

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## Potential conflicts of interest

The authors declare no conflicts of interest.

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