

Nursing Care System Development for Patients with Cleft Lip-Palate and Craniofacial Deformities in Srinagarind Hospital: Pre-Post Operation

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Background: Cleft lip and palate are the most common craniofacial anomalies. Srinagarind Hospital has 150-200 cases each year. The operating process of care requires continuity of care involving a multidisciplinary team. When the patients go to hospital to have operation, pain, limited activity and food are very different from normal life. During pre and post operative care nurses who work continuously and closely with the patients should have knowledge, experience and ability to take excellent care of their patients and families. This can prevent complications and help their decision process, decrease parents stress and encourage better co-operation.

Objective: To develop a nursing care system for patients with cleft lip-palate undergoing operation.

Material and Method: This is an action research divided into 3 phases. Phase1, situation review: review of nursing care process by interview, focus group, observation and nursing documents. Phase2, nursing system management: developing guidelines, composing nursing manual, handbook for parents, VCD for patients and family and story telling. Following that announcement and implementation. Phase 3: evaluation.

Result: The authors found that guidelines, nursing manual, handbook for parents, VCD for patients and family and story telling are appropriate and have good utilization, but the pictures in handbook for parents and storytelling were not clear, too small and not attractive.

Conclusion: Nursing manual for giving information about pre-post operative care, handbook for parents, story telling and VCD about pre-post operative care provide optimal care for patients and family with cleft lip and palate, but need to evaluate further the nursing outcome after this nursing system development.

Keywords: Nursing care system, Cleft lip and palate, Pre-post operation.

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Cleft lip and cleft palate are the most common craniofacial anomalies, affecting approximately 2.49 of every 1,000 children born in North East of Thailand⁽¹⁾. Srinagarind Hospital has 100-150 cases of cleft lip and palate each year⁽²⁾. Unexpected birth of infants with cleft lip and cleft palate has psychological effects for parents and some parents feel nervous with their child and also can have marriage problems⁽³⁾. The process for cleft lip and palate care requires continuity of care involving a multidisciplinary team⁽⁴⁾.

Patients with cleft lip and palate have problems with feeding, swallowing difficulties and delayed development. When they go to hospital to receive surgery, the pain, limited activity and food are very different from normal life. When going to school, children will separate from other friends. They have speech articulation problems, suffer from shyness, social isolation and loneliness⁽⁵⁾. When becoming teenagers they have low self esteem and self image⁽⁶⁾. Complete rehabilitation by holistic and interdisciplinary care is very important to patients and family. During pre and post operative care nurses who work continuously and closely with the patients require knowledge, experience and ability to take excellent care of their patients and families to prevent illness, duplicate rehabilitation and promote quality of life and respond

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well to patients needs⁽⁷⁾. It can prevent complications and help their decision process, decrease parents stress and encourage better co-operation. Nursing care system should be supported to provide the optimal care of the patients.

Objective

To develop a nursing care system for patients with cleft lip-palate who are undergoing an operation.

Nursing care system

Nursing care system is the system where nurses use their nursing ability to adjust the balance between self care ability and self care demand. Starting by searching the problem or needs then developing patient or clients ability for self care. Nursing care system is a dynamic system depending on patients or clients needs⁽⁷⁾. To develop nursing system needs integrated quality management and risk management together. Nursing care comprises⁽⁸⁾:

1. Outcome-based nursing service. This is specific nursing care to each health problem.
2. Holistic care: integrated physical, mental, emotional, social and spiritual care together. All of nursing activity focused on the science of caring.
3. Family-based nursing practice: its focus on family centre to solve health problem.
4. Management view: This is the management system for nursing quality. Use nursing process, nursing conference, nursing rounds, nursing modalities, and nursing documentation.

Nursing care systems have to integrate 4 dimensions of service thus treatment, health promotion, prevention of illness and rehabilitation as well as concern about holistic care⁽⁷⁾. Nurses provide nursing care to all people to solve health problems, so need to have knowledge, ability to prevent illness, duplicate rehabilitation and promote quality of life. Nurses use Care MAPs and nursing care plan to guide nursing implementation in response to patients need⁽⁹⁾.

Material and Method

This is an action research. It was approved by The Ethics Committee for Human Research, Khon Kaen University. The authors divided into 3 phases:

Phase 1 Situation review

In this phase the authors review the nursing care process by interview, focus group, nursing care observation and review nursing documents. 12 nurses were interviewed by semi-structured questionnaire

about what nurses are doing for patients with cleft lip and palate now, if they have any problem about nursing care, and how they think can solve any problems. After that the authors have 2 focus groups, 6 nurses in each group. The main topic of this part is to discuss about what nurses can do to develop nursing care for patients with cleft lip and palate. Nursing care observation: the authors observe nurses who take care of patients with cleft lip and palate from the day patients were admitted until discharge by researcher and review all documents we have such as nursing assessment, nursing care plan, nurses notes and other record. This phase took about 2 months.

Phase 2 Nursing system management

After situation review the authors agreed to the developed guidelines, composing of nursing manual and handbook for the parents, VCD for patients and family and story telling. After that, announcement and implement all of the documents (concept PDCA). This phase took about 4 months.

Phase 3 Evaluation

After implementation the authors evaluate all of documents by 5 level rating scale questionnaire and semi-structure questionnaire. Guidelines and nursing manual were evaluated by 12 nurses, handbook for parents, VCD for patients and family and story telling were evaluated by 20 parents of patients with cleft lip and palate. The data collection was obtained from January-March 2011. The authors divided the result of evaluation into 5 levels.

Mean 1.0-1.49	Very poor
Mean 1.50-2.49	Poor
Mean 2.50-3.49	Fair
Mean 3.50-4.49	Good
Mean 4.50-5.00	Very good

Results

Demographic data

Register nurse, experience 2-10 years, average 7.18 years, age 24-43 years, average 29.18 years old. All of them are graduate bachelor of nursing. Parents of patients with cleft lip and palate: age 17-34 years old, average 21.60 years old. The parents' education is primary school 92%.

Nursing care system which comprise of nursing care process

As a result of evaluation of all the documents the authors found the following:

Table 1. Guidelines, Guidelines are easy to follow, appropriate for nurses, and utilization but not flexible and adaptable enough

Topic	Mean	SD	Interpretation
Easy to follow	4.41	0.51	Good
Appropriate	4.25	0.45	Good
Flexible and adaptable	3.41	0.51	Fair
Utilization	5	0.0	Very good

Table 3. Hand book for parents Hand book for parents is easy to read and understand, appropriate, and useful content but illustration not clear enough

Topic	Mean	SD	Interpretation
Easy to read	4.20	0.41	Good
Easy to understand	4.35	0.48	Good
Appropriate to the reader	4.75	0.44	Very good
Clear illustration	3.45	0.82	Fair
Useful content	4.50	0.60	Very good

Table 5. Story Telling Story telling is easy to read and understand, appropriate to the reader, useful content, but picture is not so attractive

Topic	Mean	SD	Interpretation
Easy to read	3.85	0.67	Good
Easy to understand	4.20	0.61	Good
Appropriate to the reader	4.35	0.67	Good
Picture is attractive	3.47	0.68	Fair
Useful content	4.30	0.73	Good

From the evaluation interview the authors found that the handbook and story telling the text size and pictures should be bigger, and cartoon characters are small and not attractive enough for children. From this opinion the authors need to update in this section and after that implement and measure nursing outcome.

Conclusion

Nursing manual for giving information about pre-post operative care, handbook for parents, story telling and CD about pre-post operative care provide optimal care for patients and family with cleft lip and palate, but need to evaluate nursing outcome after development of nursing system.

Table 2. Nursing manual Nursing manual is easy to read and understand, appropriate and useful content

Topic	Mean	SD	Interpretation
Easy to read	4.41	0.51	Good
Easy to understand	4.33	0.49	Good
Appropriate to the reader	4.66	0.49	Very good
Useful content	4.83	0.38	Very good

Table 4. VCD for patients and family, VCD for patients and family is useful content, easy to understand, appropriate to the audiences, image interpretation and clear illustration

Topic	Mean	SD	Interpretation
Easy to understand	4.20	0.52	Good
Appropriate to the audiences	4.20	0.61	Good
Image interpretation	4.5	0.60	Very good
Clear illustration	3.90	0.78	Good
Useful content	4.70	0.47	Very good

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Potential conflicts of interest

None.

References

1. Chowchuen B. Interdisciplinary care of cleft lip cleft palate and craniofacial anomalies. Khon Kaen, Thailand: Siriphan Offset Publisher; 2004.
2. Medical record. Khon Kaen, Thailand: Srinagarind Hospital Khon Kaen University; 2005.
3. Johansson B, Ringsberg KC. Parents' experiences of having a child with cleft lip and palate. *J Adv Nurs* 2004; 47: 165-73.
4. Hunt O, Burden D, Hepper P, Stevenson M, Johnston C. Self-reports of psychosocial functioning among children and young adults with cleft lip and palate. *Cleft Palate Craniofac J* 2006; 43: 598-605.
5. Snyder H, Pope AW. Psychosocial adjustment in children and adolescents with a craniofacial

- anomaly: diagnosis-specific patterns. *Cleft Palate Craniofac J* 2010; 47: 264-72.
6. Ramstad T, Ottem E, Shaw WC. Psychosocial adjustment in Norwegian adults who had undergone standardised treatment of complete cleft lip and palate. II. Self-reported problems and concerns with appearance. *Scand J Plast Reconstr Surg Hand Surg* 1995; 29: 329-36.
 7. Hanuchareonkul S. *Nursing: science of caring*. Bangkok: V.J. Printing; 2001.
 8. Althammer T. *Designing process-driven information systems in nursing care*. Norderstedt, Germany: GRIN Verlag; 2007.
 9. Pichitpornchai W, Asdornwised U. *Nursing case management: strategies and application*. Khon Kaen, Thailand: Niyomwittaya Printing; 2001.

การพัฒนาระบบการพยาบาลผู้ป่วยที่มีภาวะปากแหว่งเพดานโหว่และความพิการแต่กำเนิดของ ศีรษะและใบหน้า โรงพยาบาลศรีนครินทร์ ก่อนและหลังผ่าตัด

ดารารวรรณ อักษรวรรณ, พันธมนัส ปัตตังทานัง, กฤษณา พิขุนทด

ภูมิหลัง: ปากแหว่งเพดานโหว่เป็นความผิดปกติที่พบบ่อยในกลุ่มที่มีความผิดปกติของศีรษะและใบหน้าแต่กำเนิด โรงพยาบาลศรีนครินทร์มีผู้ป่วยปากแหว่งเพดานโหว่เข้ารับการรักษารายต่อปี การรักษาผู้ป่วยต้องการการรักษาที่ดูแลอย่างต่อเนื่องร่วมกับสหสาขาวิชาชีพ เมื่อผู้ป่วยเข้ารับการผ่าตัดในโรงพยาบาล ผู้ป่วยต้องเผชิญกับความปวด การจำกัดกิจกรรม และอาหารที่แตกต่างจากปกติ การดูแลผู้ป่วยก่อนและหลังผ่าตัด พยาบาลซึ่งเป็นบุคคลที่ใกล้ชิดกับผู้ป่วยและดูแลผู้ป่วยอย่างต่อเนื่อง ต้องมีความรู้ ประสบการณ์ และความสามารถในการดูแลผู้ป่วย และครอบครัวเป็นอย่างดี ซึ่งจะช่วยป้องกันภาวะแทรกซ้อน และช่วยให้ผู้ป่วยและครอบครัวตัดสินใจ ลดความเครียดของผู้ปกครองและทำให้มีความร่วมมือดีขึ้น

วัตถุประสงค์: เพื่อพัฒนาระบบการบริการพยาบาลผู้ป่วยปากแหว่งเพดานโหว่ที่เข้ารับการผ่าตัด

วัสดุและวิธีการ: การศึกษาครั้งนี้เป็นการศึกษาแบบ *action research* แบ่งออกเป็น 3 ระยะ ระยะที่ 1 ศึกษาสถานการณ์ในปัจจุบัน โดยการศึกษากระบวนการพยาบาล โดยการสัมภาษณ์ การสนทนากลุ่ม การสังเกต และการศึกษาจากเอกสารทางการแพทย์ ระยะที่ 2 การจัดการระบบการพยาบาล โดยการปรับแนวปฏิบัติ การสร้างคู่มือการพยาบาล คู่มือสำหรับผู้ปกครอง การสร้างวิดิทัศน์ในการให้ข้อมูล และการดูต้นในการเล่าเรื่อง หลังจากนั้นประกาศและให้นำไปใช้ ระยะที่ 3 ประเมินผล

ผลการศึกษา: พบว่าแนวปฏิบัติ คู่มือการพยาบาล คู่มือสำหรับผู้ปกครอง วิดิทัศน์ในการให้ข้อมูล และการดูต้นในการเล่าเรื่อง มีความเหมาะสมและมีประโยชน์ต่อรูปภาพในคู่มือสำหรับผู้ปกครองและการดูต้นในเรื่องเล่า ไม่ชัดเจน เล็กเกินไป และไม่ดึงดูดใจ

สรุป: คู่มือการพยาบาล คู่มือสำหรับผู้ปกครอง วิดิทัศน์ในการให้ข้อมูล และการดูต้นในการเล่าเรื่อง เพื่อให้ข้อมูลผู้ป่วยและครอบครัวเกี่ยวกับการดูแลก่อนและหลังผ่าตัด ให้ประโยชน์ในการดูแลผู้ป่วยปากแหว่งเพดานโหว่ ก่อนและหลังผ่าตัด แต่ต้องมีการติดตามผลลัพธ์ทางการแพทย์หลังจากเสร็จสิ้นการพัฒนาระบบ
