

# Treatment of 4-5 Year Old Patients with Cleft Lip and Cleft Palate in Tawanchai Center

Suteera Pradubwong MSN\*,  
Kanitha Volrathongchai PhD\*\*, Bowornsilp Chowchuen MD, MBA\*\*\*

\* Division of Nursing, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

\*\* Faculty of Nursing, Khon Kaen University, Khon Kaen, Thailand

\*\*\* Department of Surgery, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

**Background:** The occurrence of Cleft Lip/Palate condition in Thailand reaches a rate of 2.49% of child births, with estimates of 800 new cases per year in the Northeastern region. The healthcare process emphasizes interdisciplinary teamwork at each stage of the planning of treatment and services with the primary goal of achieving patient satisfaction and ability to live normally in society. The first 5 years are particularly important, with a focus on quality of care and ability to adapt to the environment before entering school.

**Objective:** To study the treatment of patients with cleft lip and palate in Tawanchai center, in the 4-5 year age range.

**Material and Method:** A retrospective study of the clinical records was led, concerning the 123 cleft lip and cleft palate patients aged 4-5 years under treatment in Tawanchai center, Srinagarind Hospital. Data was collected during three months from October to December 2011, using the admission records of the interdisciplinary team. Percentages and mean values were calculated from these data.

**Results:** 120 of the 123 patients were operated, giving a ratio of 97.56%. 108 cases were under government universal health coverage regime, corresponding to 87.80% of cases. 74 cases (60.16%) presented both cleft lip and palate condition, and an average of 5-night stay in hospital per person. Medical services by the interdisciplinary team were provided as follows: (1) of 30 patients with cleft lip aged 3-4 months, 30 (100%) received pre and post-surgery care counseling, 29 (96.67%) received surgery; (2) of 19 patients with cleft palate aged 10-18 months, 17 (89.47%) received treatment information, pre and post-surgery counseling and were operated according to the protocols; (3) of 74 patients with cleft lip and palate, 53 (71.62%) received counseling for pre and post-surgery care for lip repair at the age of 3-4 months, 52 (70.27%) were operated following the protocols, while at the age of 10-18 months 63 patients (85.14%) received treatment information, pre and post-surgery care counseling, and surgical intervention for palate repair.

**Conclusion:** Results of cleft lip and palate continuous treatment by interdisciplinary team in Tawanchai center for patients aged 4-5 years are reported. The highest percentage of patients to follow the treatment protocol, with pre and post-surgery care counseling and surgical intervention was achieved for cleft lip only cases, followed by cleft palate cases. Patients with both cleft lip and palate condition achieved the lowest percentage. In all cases, patients accepted within the center were treated at an 85.39% rate.

**Keywords:** Treatment of 4-5 years-old, Cleft lip and cleft palate, Tawanchai center

**J Med Assoc Thai 2013; 96 (Suppl. 4): S1-S8**

**Full text. e-Journal:** <http://jmat.mat.or.th>

Cleft Lip/Palate condition in the northeast of Thailand had a reported occurrence rate of 1.1/1,000 births<sup>(1)</sup>. Some recent studies show figures up to 2.49 cases per 1,000 births<sup>(2)</sup> in specific areas, which constitute one of the highest reported rates of the country and the world. From these figures, the authors can estimate that about 800 children per year are born

with cleft lip and/or palate condition in the Northeastern region of Thailand<sup>(3)</sup>.

The impact of Cleft Lip and/or Palate (CL/P) concern both physical and psychological conditions of the patient and caretakers, along with livelihood and societal issues due to disability. Stigma and prejudice are associated to physical appearance, such as cranio-facial or dental abnormalities, as well as hearing or speaking difficulties, and potential behavioral development issues<sup>(4-8)</sup>.

The standards of care for patients with cleft lip and cleft palate in Tawanchai Center have been established since the year 1999<sup>(3)</sup>, with a coordinated

**Correspondence to:**

Chowchuen B, Division of Plastic Surgery, Department of Surgery, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand.

Phone: 043-366-123

E-mail: [bchowchuen@gmail.com](mailto:bchowchuen@gmail.com)

multidisciplinary teamwork approach for holistic care. The system of care is being implemented as follows in Table 1.

As of today, no study has been made to review and evaluate to what extent the patients have been following the established care protocol and what were problems or obstacles faced. Whether this information was recorded or not in patient history, the current review is interested in the empirical data in order to develop and improve the care system.

The step-by-step care protocol of the interdisciplinary team is important in planning treatment and services to patients, with a primary focus on patient/family satisfaction and ability to live normally in society. A retrospective study of patients aged 4-5 years, which are in a pre-school period, where adaptation to others as well as development of cognitive skills are critical to be able to live in society<sup>(9)</sup>, is crucial to evaluate the quality and appropriateness of the treatment of CL/P patients of this age group at Tawanchai center. The results will be important for planning the management of health care of CL/P patients in the future, along with assessing the resources needed, imagining a standardized clinical record system, and improving the quality of academic research within the center.

### The aim of the research

This research is aimed at studying the treatment of patients with cleft lip and palate at the age of 4-5 years in Tawanchai center.

### Material and Method

This research is a retrospective study of the clinical records of cleft lip and cleft palate patients aged 4-5 years admitted to the date of September 30, 2011 in Tawanchai center, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University. Data concerning the 123 ongoing cases were collected during 3 months from October to December 2011, using the admission records of the interdisciplinary team. Data analysis was performed using percentage and averaging tools. The entire study process necessitated 1 year. The present study was approved by the ethics committee of Khon Kaen University.

### Study

The retrospective study of the 123 CL/P patients aged 4-5 years admitted in Tawanchai center, Srinagarind Hospital, shows that 120 cases were operated, which corresponds to 97.56% of patients. The first province of origin was Khon Kaen province, with 20 patients (16.26% of cases), 10 male and 10 female.

**Table 1.** Guidelines for the care of patients with cleft lip and cleft palate, according to patient age, from pregnancy to 5 years old by the Tawanchai center multidisciplinary team<sup>(5)</sup>

Age period	Care services
First 3 months of pregnancy	Counseling about risk factors and care during pregnancy.
4-5 months of pregnancy	Diagnosis and evaluation of the fetus by ultrasound.
Newborn-3 months	Evaluate cleft condition and educate on treatment and care process. Assist and instruct on: - breastfeeding and nutrition issues - assistive devices use, such as lip/nostril retainer (as necessary) - how to prepare for surgery
3-4 months	Primary surgical lip-nose repair Provide pre and post-surgery care counseling Provide ear and hearing check up within 6 months
10-18 months	Speech assessment before palate surgery Palate surgical repair, including hard and soft palate cleft cases+ Myringotomy (as necessary) Provide pre and post-surgery care counseling
1-3 years	General health monitoring, speech therapy, ear and hearing check ups Monitor the development of teeth and general dental healthcare Development of learning and social skills
4-5 years	Secondary lip and nose repair (as necessary) Assessment of speech and language impairments General health monitoring, ear and hearing check ups, dental condition surveillance

The second province of origin was the province of Roi Et, with 18 patients (14.63% of cases), 9 male and 9 female.

For access to treatment, the majority of patients used the governmental universal health coverage insurance, with 108 patients (87.80% of cases). The 15 remaining patients (12.20% of cases) resorted to additional coverage from secondary governmental agencies.

Analysis by type of cleft showed that the majority of cases presented both cleft lip and cleft palate condition was 74 cases (60.16% of all patients), among which 44 males and 30 females. 30 cleft lip only patients were numbered (24.39% of all patients), with 20 male and 10 female patients. Cleft palate cases only were 19, with 6 male and 13 female, constituting 15.45% of all cases. These results are summarized below in Table 2.

Concerning the length of stay at the hospital, 39 patients (31.71% of all cases) stayed 1 night, 28 patients (22.77% of all cases) stayed 2 nights. The longest stay was 9 nights, for 1 patient (0.81% of all cases), and the average stay is 5 nights/case.

The team clinical records of the 30 patients with cleft lip show that all the patients were provided pre and post-surgery care counseling at the 3-4-month age. Between birth and 3 month age, 29 cases (96.67% of cleft lip cases) were provided pre-surgical preparation information and care for lip/nose repair, and received surgery following the established protocol at the 3-4-month age.

For the 19 cleft palate patients, the team clinical records show that 17 patients (89.47% of cleft palate cases) were provided pre-surgical preparation information and care for soft/hard-palate repair, with myringotomy as necessary, along with post-surgical care counseling and surgical intervention, at 10-18 months age period. During the 1-3 years old period, 15 patients (78.95% of cleft palate cases) received general

health care, as well as specialized care such as speech language therapy or ENT follow-up. These results are summarized in the following Table 3.

For the 74 cleft lip and palate patients treated by the Tawanchai center team, it was found that, (1) during the 3-4 months 53 patients (71.62% of cleft lip and palate cases) were given pre and post-surgery care counseling, and 52 patients (70.27% of cleft lip and palate cases) received surgery for lip - nose repair according to care protocols. (2) During the 10-18 months 63 patients (85.14% of cleft lip and palate cases) received pre-surgical preparation information and care for soft/hard-palate repair, with myringotomy as necessary, as well as surgery and post-surgical care counseling. (3) During the 1-3 years old 59 patients (79.73% of cleft lip and palate cases) were provided general medical follow-up, speech therapy services, audiometry and hearing checkups. Finally, (4) at 4-5 years old speech assessment was done to 53 patients (71.62% of cleft lip and palate cases), and additional lip repair surgery was performed for 40 patients (54.05% of cleft lip and palate cases). These results are summarized in Table 4, as follows.

## Discussion

Treatment protocols of cleft lip and/or palate condition can differ greatly depending on cleft type and severity, with a variety of approaches in different countries. For instance in European countries<sup>(10)</sup>, comparative reviews have been conducted between several care centers, differentiating cleft lip repairs, soft and hard palate repairs, but no statistic study has been done for each specific center concerning the protocol implementation for all patients. In part of the U.S.<sup>(11)</sup>, 6 care centers implement interdisciplinary teamwork with standardized and compatible protocols. Some centers perform lip repair surgery as early as 6 weeks, up to 4 months age, and perform palate repair surgery within

**Table 2.** Patient distribution by sex, cleft type and province of origin (n = 123)

Data	Right	Male	Female	Total	Percentage
Preferential treatment	Government agency	10	5	15	12.20
	Global health insurance coverage	60	48	108	87.80
Total		70	53	123	100.00
Diagnosis	Cleft type				
	Cleft palate	6	13	19	15.45
	Cleft lip	20	10	30	24.39
	Cleft palate with cleft lip	44	30	74	60.16
Total		70	53	123	100.00

**Table 3.** Treatment of patients by interdisciplinary team approach in Tawanchai center, for 30 cleft lip patients and 19 cleft palate patients, by age periods from pregnancy to 5 years old

Age period	Care services	Cleft lip, 30 cases			Cleft palate, 19 cases		
		Received	Not received	Percentage of treated cases	Received	Not received	Percentage of treated cases
First 3 months of pregnancy	Counseling about risk factors and care during pregnancy.	0	30	0.00%	0	19	0.00%
4-5 months of pregnancy	Diagnosis and evaluation of the fetus by ultrasound.	0	30	0.00%	0	19	0.00%
Newborn-3 months	Evaluate cleft condition and educate on treatment and care process.	25	5	83.33%	6	13	31.58%
	Assist and instruct on						
	- breastfeeding and nutrition issues.	15	15	50.00%	4	15	21.05%
	- how to put obturator.	0	30	0.00%	0	19	0.00%
	- how to apply pre-surgical orthodontic treatment.	1	29	3.33%	0	19	0.00%
3-4 months	How to prepare for surgery	29	1	96.67%	5	14	26.32%
	- Primary surgical/cleft lip-nose repair	29	1	96.67%	0	19	0.00%
	- Provide pre and post-surgery care counseling	30	0	100.00%	0	19	0.00%
	- Provide ear and hearing checkup, and refer to speech therapy within 6 months	1	29	3.33%	5	14	26.32%
10-18 months	- Speech assessment before palate surgery	0	30	0.00%	9	10	47.37%
	- Palate surgical repair, including hard and soft palate cleft cases+ Myringotomy (as necessary)	0	30	0.00%	17	2	89.47%
	- Provide pre and post-surgery care counseling	0	30	0.00%	17	2	89.47%
1-3 years	- General health monitoring, speech therapy, ear and hearing check ups	2	28	6.67%	15	4	78.95%
	- Monitor the development of teeth and general dental healthcare	8	22	26.67%	5	14	26.32%
4-5 years	- Development of learning and social skills	10	20	33.33%	10	9	52.63%
	- Secondary lip and nose repair (as necessary)	13	17	43.33%	6	13	31.58%
	- Assessment of speech and language impairments	1	29	3.33%	9	10	47.37%
	- General health monitoring, ear and hearing check ups,	3	27	10.00%	9	10	47.37%
	- General dental condition surveillance	5	25	16.67%	3	16	15.79%

**Table 4.** Treatment and care services delivered to cleft lip and/or palate patients by Tawanchai center's interdisciplinary team, according to age periods, from pregnancy to 5 years old (n = 74)

Age period	Care services	Received	Not received	Not Record	Percentage of treated cases
First 3 months of pregnancy	Counseling about risk factors and care during pregnancy.	0	35	39	0.00%
4-5 months of pregnancy Newborn-3 months	Diagnosis and evaluation of the fetus by ultrasound.	0	35	39	0.00%
	Evaluate cleft condition and educate on treatment and care process. Assist and instruct on:	48	8	18	64.86%
	- breastfeeding and nutrition issues.	39	17	18	52.70%
	- how to put obturator.	19	35	20	25.68%
3-4 months	- how to apply pre-surgical orthodontic treatment	12	45	17	16.22%
	How to prepare for surgery.	49	10	15	66.22%
	Primary surgical cleft lip-nose repair.	52	9	13	70.27%
	Provide pre and post-surgery care counseling.	53	8	13	71.62%
	Provide ear and hearing check up, and refer to speech therapy within 6 months.	49	13	12	66.22%
	Speech assessment before palate surgery.	48	21	5	64.86%
10 to 18 months	Palate surgical repair, including hard and soft palate cleft cases+ Myringotomy (as necessary).	63	7	4	85.14%
	Provide pre and post-surgery care counseling.	63	4	7	85.14%
1-3 years	General health monitoring, speech therapy, ear and hearing check ups.	59	10	5	79.73%
	Monitor the development of teeth and general dental healthcare.	34	33	7	45.95%
	Development of learning and social skills.	44	22	8	59.46%
4-5 years	Secondary lip and nose repair (as necessary).	40	22	12	54.05%
	Assessment of speech and language impairments.	53	10	11	71.62%
	General health monitoring, ear and hearing check ups.	52	12	10	70.27%
	General dental condition surveillance.	26	35	13	35.14%

the 9-18 month age period. But no statistic study of step-by-step protocol implementation to patients has been led either.

In Thailand, the Tawanchai Centre for cleft lip/palate and cranio-facial anomalies, Khon Kaen University, applies interdisciplinary teamwork approach since 1999. The center resulted from a collaboration of the Faculty of Medicine and the Faculty of Dentistry, who jointly developed protocols and finalized guidelines in 2004 to be used by a common multidisciplinary team. The nursing team has developed manuals to provide information and instructions for caretakers to prepare and follow the treatment. Additional teaching materials are distributed, such as file picture and face model<sup>(12)</sup>, so that parents and patients understand the treatment process and learn how to undertake care steps safely on their own.

This retrospective study on clinical records was conducted to assess the implementation effectiveness of the treatment and care protocol of the multidisciplinary team, including surgery, pre and post-surgery care counseling, hearing care and speech therapy. The results show that the center is able to deliver surgery and counseling services in very good accordance with the established guidelines. Moreover, these results can be compared to previous surveys led in Srinagarind Hospital<sup>(13)</sup>, from 1984 to 2007, which show that for the 1984-1992 period, only 14.3% of cleft lip patients received lip repair surgery at 3-4 months age, and only 28.6% of cleft palate patients received palate repair surgery at 9-12 months age. For the 1993-2007 periods, these rates evolve to 39.7% and 58.2% respectively, which remain well below the 85.39% mean rate calculated in the present study relative to surgery interventions performed for all cleft cases. This progress reflects the dedication and efficiency of the interdisciplinary team in Tawanchai center, confirming the choice of integrating specialized hospital services within one excellence center, thus resulting in improved quality of care for patients and families.

### Conclusion

The authors have presented the results of a retrospective study concerning cleft lip and palate treatment by the medical interdisciplinary team of Tawanchai center, for patients aged 4-5 years. The cleft lip only patient group achieved the highest percentage of patients to follow the treatment protocol, with pre and post-surgery care counseling and surgical intervention, followed by cleft palate only patient group, while patients with both cleft lip and palate had

the lowest treatment percentage. All cleft conditions considered, patients accepted into the center were treated at 85.39% mean rate.

### Acknowledgement

The authors wish to thank (a) The Center for CLP and craniofacial deformities, Khon Kaen University in association with Tawanchai Project for financial support, (b) the staff, head of Department of Medical Record and Statistics, and directors of Srinagarind Hospital for allowing collection of data and (c) Dr. Paul Cavalier for the assistance with the English and presentation of the manuscript.

### Potential conflicts of interest

None.

### References

1. Ratanasiri T, Junthathamrongwat N, Apiwantanakul S, Wongkam C, Chowchuen B. The birth incidence of cleft lip and palate at Srinagarind Hospital, 1990-1999. *Srinagarind Med J* 2001; 16: 3-7.
2. Ruangsitt C, Phraserthsang P, Banpho Y, Lamduan W, Glathamnuay S, Nuwantha A. Incidence of cleft and cleft palate in three hospitals in Khon Kaen. Khon Kaen: Department of Orthodontics, Faculty of Dentistry, Khon Kaen University; 1993.
3. Chowchuen B. Interdisciplinary care of cleft lip-palate and craniofacial abnormalities. Khon Kaen: Siriphan offset; 2004.
4. Patjanasoontorn N, Pradubwong S, Mongkoltawornchai S, Phetcharat T, Chowchuen B. Development and reliability of the THAICLEFT Quality of Life Questionnaire for children with cleft lip/palate and families. *J Med Assoc Thai* 2010; 93 (Suppl 4):S16-8.
5. Pradubwong S. Interdisciplinary care on timing of cleft lip-palate. *Srinagarind Med J* 2007; 22: 291-6.
6. Chowchuen B, Keinprasit C, Pradubwong S. Primary unilateral cleft lip-nose repair: the Tawanchai cleft center's integrated and functional reconstruction. *J Med Assoc Thai* 2010; 93 (Suppl 4):S34-45.
7. Chowchuen B, Viwattanatipa N, Wangsrimgkol T, Pradubwong S. Primary bilateral cleft lip-nose repair: the Tawanchai Cleft Center's integrated and functional reconstruction. *J Med Assoc Thai* 2010; 93 (Suppl 4): S46-57.
8. Prathanee B, Pumnum T, Jaiyong P, Seepuham C, Xayasin V. Speech and language therapy model

- for children with cleft lip/palate in Lao People's Democratic Republic. *J Med Assoc Thai* 2011; 94 (Suppl 6): S27-32.
9. Child Development 4-5 Years [Internet]. 2013 [cited 2013 Mar 5]. Available from: [http://www.health.wa.gov.au/docreg/Education/Population/Child\\_Health/Growth\\_and\\_Development/HP3425\\_child\\_dev4-5years.pdf](http://www.health.wa.gov.au/docreg/Education/Population/Child_Health/Growth_and_Development/HP3425_child_dev4-5years.pdf)
  10. Shaw WC, Semb G, Nelson P, Brattstrom V, Molsted K, Pahl-Andersen B, et al. The Eurocleft project 1996-2000: overview. *J Craniomaxillofac Surg* 2001; 29: 131-40.
  11. The Americleft Project: Experience and recommendations for establishing successful inter-center collaborative outcome studies [Internet]. 2012 [cited 2012 Oct 21]. Available from: <http://www.acpa-cpf.org/uploads/site/americleft-study-guide.pdf>
  12. Pradubwong S, Govist W, Patjanasontorn N, Chowchuen B. Development of improved cleft lip/palate face models for teaching parents of children with cleft lip/palate. *J Med Assoc Thai* 2010; 93 (Suppl 4): S19-23.
  13. Lekbunyasit O, Pradubwong S, Chantachum V, Udomtanasup S, Chowchuen B. Statistics of patients with cleft lip and cleft palate in Srinagarind Hospital, 1984-2007. *Srinagarind Med J* 2009; 24: 240-6.

---

## การรักษาผู้ป่วยปากแหว่งเพดานโหว่ในช่วงอายุ 4-5 ปี ของศูนย์ตะวันฉาย

สุธีรา ประดับวงษ์, ขนิษฐา วรธงชัย, บวรศิลป์ เชาวนชื่น

**ภูมิหลัง:** อุบัติการณ์ภาวะปากแหว่งเพดานโหว่ของประเทศไทยสูงที่สุดถึง 2.49 ราย ต่อเด็กแรกเกิด 1,000 ราย ซึ่งประมาณการณเด็กแรกเกิดที่มีภาวะปากแหว่งเพดานโหว่ในภาคตะวันออกเฉียงเหนือสูงถึง 800 ราย ต่อปี กระบวนการดูแลแต่ละขั้นตอนของทีมสหวิทยาการมีความสำคัญ ในการวางแผนการรักษาและการให้บริการ โดยมีเป้าหมายหลักคือผู้ป่วยมีความพึงพอใจและสามารถดำรงชีวิตอยู่ในสังคมได้เทียบเท่ากับบุคคลปกติโดยเฉพาะในช่วงอายุ 5 ปีแรก เพื่อให้ได้รับการดูแลรักษาที่มีคุณภาพ สามารถปรับตัวเข้าสู่สังคมในก้าวแรกก่อนเข้าสู่วัยเรียนได้

**วัตถุประสงค์:** เพื่อศึกษาการเข้ารับการรักษาก่อนการผ่าตัดของปากแหว่งเพดานโหว่กับศูนย์ตะวันฉายในช่วงอายุ 4-5 ปี

**วัสดุและวิธีการ:** การศึกษาเชิงพรรณนาแบบย้อนหลังจากประวัติการรักษาของผู้ป่วยปากแหว่งเพดานโหว่ ในช่วงอายุ 4-5 ปี ที่เข้ารับการรักษากับศูนย์ตะวันฉาย โรงพยาบาลศรีนครินทร์อย่างต่อเนื่อง จำนวน 123 ราย เก็บรวบรวมข้อมูล 3 เดือน คือ เดือนตุลาคม ถึง เดือนธันวาคม พ.ศ. 2554 โดยใช้แบบบันทึกข้อมูลทั่วไปและข้อมูลด้านการเข้ารับการรักษากับทีมสหวิทยาการวิเคราะห์ข้อมูลโดยใช้สถิติร้อยละและค่าเฉลี่ย

**ผลการศึกษา:** ผู้ป่วยปากแหว่งเพดานโหว่ช่วงอายุ 4-5 ปี ที่เข้ารับการรักษากับศูนย์ตะวันฉาย โรงพยาบาลศรีนครินทร์ จำนวน 123 ราย ได้รับการผ่าตัด 120 ราย คิดเป็นร้อยละ 97.56 ใช้ลิทธิบัตรประกันสุขภาพถ้วนหน้ามากที่สุด 108 ราย คิดเป็นร้อยละ 87.80 มีภาวะปากแหว่งเพดานโหว่มากที่สุด 74 ราย คิดเป็นร้อยละ 60.16 และนอนโรงพยาบาล เฉลี่ย 5 ครั้งต่อรายการเข้ารับการตรวจรักษากับทีมสหวิทยาการของ (1) ผู้ป่วยปากแหว่ง 30 ราย ช่วงอายุ 3-4 เดือน ได้รับคำแนะนำการดูแลก่อนและหลังผ่าตัดทั้งหมด 30 ราย คิดเป็นร้อยละ 100 ได้รับการผ่าตัดตามเกณฑ์ 29 ราย คิดเป็นร้อยละ 96.67 (2) ผู้ป่วยเพดานโหว่ 19 ราย ช่วงอายุ 10-18 เดือน ได้รับข้อมูลการผ่าตัดซ่อมแซมเพดานโหว่และได้รับคำแนะนำการดูแลก่อนและหลังผ่าตัด พร้อมทั้งได้รับการผ่าตัดตามเกณฑ์ 17 ราย เท่ากัน คิดเป็นร้อยละ 89.47 และ (3) ผู้ป่วยปากแหว่งเพดานโหว่ จำนวน 74 ราย ช่วงอายุ 3-4 เดือน ได้รับคำแนะนำในการดูแลก่อนและหลังผ่าตัดปากแหว่ง 53 ราย คิดเป็นร้อยละ 71.62 ได้รับการผ่าตัดตามเกณฑ์จำนวน 52 ราย คิดเป็นร้อยละ 70.27 ส่วนช่วงอายุ 10-18 เดือน ได้รับข้อมูลการผ่าตัดซ่อมแซมเพดานโหว่และได้รับคำแนะนำการดูแลก่อนและหลังผ่าตัด รวมทั้งได้รับการผ่าตัดตามเกณฑ์จำนวน 63 ราย เท่ากันคิดเป็นร้อยละ 85.14

**สรุป:** ผู้นิพนธ์รายงานให้เห็นถึงผลการเข้ารับการรักษาย้อนหลังในกลุ่มผู้ป่วยปากแหว่งเพดานโหว่ช่วงอายุ 4-5 ปี กับศูนย์ตะวันฉายอย่างต่อเนื่องตามแนวทางการรักษาของทีมสหวิทยาการ ซึ่งทราบว่าผู้ที่มีภาวะปากแหว่งอย่างเดียวได้รับคำแนะนำการดูแลก่อนและหลังผ่าตัด และได้รับการผ่าตัดตามเกณฑ์มากที่สุด ภาวะเพดานโหว่อย่างเดียวได้รับคำแนะนำและผ่าตัดตามเกณฑ์รองลงมา ส่วนผู้ที่มทั้งภาวะปากแหว่งเพดานโหว่ได้รับคำแนะนำและได้รับการผ่าตัดตามเกณฑ์น้อยที่สุด อย่างไรก็ตามในภาพรวมผู้ป่วยได้รับการผ่าตัดตามเกณฑ์อายุเฉลี่ยร้อยละ 85.39