Analysis Of The Management Of Cleft Lip Surgery With The Characteristics Of Patients With Cleft Lips Or Without Cleft Palatum In Nort Sumatra

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Abstract.
Clefts are the most common type of congenital abnormality on the face. This condition can cause medical, psychological, and social problems in individuals and families. Several previous studies have yielded results in the form of a large number of cleft sufferers who come for treatment at a late age. This can affect the outcomeof the management given. The characteristics of cleft patients in Indonesia, especially in Medan City, are still very limited. Therefore, researchers have the desire to be able to do research in this field. patients with or without cleft palate who were managed by Smile Train Indonesia together with the Horas Sehat Foundation at hospitals in North Sumatra based on:(1) type of cleft, (2) location of the cleft defect, (3) Gender, (4) Treatment time, and (5) Type of operation. design. The sample for this study was secondary data on 193 cleft patients who were managed by Smile Train Indonesia together with the Horas Sehat Foundation at hospitals in North Sumatra in the 2017 – 2022 period. palate based on the type of cleft was labiognatopalatoschizis with a total of 115 patients (59.6%), based on the location of the defect was a unilateral defect (left side) of 98 patients (50.8%), based on gender was male with a total of 130 patients (67.4%), based on the time of treatment category was the late labioplasty category with a total of 54 patients (28%), and based on the type of surgery the most was the type of primary cleft palate repair surgery with a total of 56 people (29%). from previous studies.

Keywords: *Cleft, Labioschizis, Labiopalatoschizis, Cleft Lip/Palate and Epidemiology of Labiopalatoschizis.*

I. INTRODUCTION

Cleft is an abnormal condition in the form of a gap in the tissue structure caused by the failure of tissue formation during the process of embryological development. During the 3-6 week gestation period, the lip and nose development process occurs from the embryonic structure. Interference with each of these developmental processes creates a gap whose location depends on what embryonic process is disturbed [1].Populations in Asia and America have the highest prevalence of cleft lip and/or palate. While the population that has the lowest prevalence of cleft lip and/or palate is in African countries. Male sex has a 2 times higher incidence of experiencing a cleft lip accompanied by cleft palate compared to women. Meanwhile, women have a higher incidence of cleft lip without palatal clefts compared to men [2].In 2003 the World Health Organization (WHO) through the Human Genetics Program established the International Perinatal Database of Typical Orofacial Clefts. From this database a study report on CL/P incidents is shown. From the results of records based on the geographical location of CL/P incidents that occurred in Japan, Mexico, Western Europe, the United Arab Emirates, southern Europe, and South Africa, it was found that the highest incidence of CL/P was in Japan and the lowest incidence was in Africa. South. The generally accepted worldwide incidence rate of nsCL/P is 1 per 1000 births. The incidence of nsCL/P in the African population is at 0.3 per 1000 births. The incidence of nsCL/P in the European population is at 0.7-1.3 per 1000 births. In Asian populations, the incidence of nsCL/P is 1.4-2.1 per 1000 births. In the population in America there is an incidence of nsCL/P which is at 3.6 per 1000 births [2].

Cleft is also called a cleft, can occur in the lips which may or may not be accompanied by a cleft palate. This condition is called a cleft lip with or without palate (abbreviated as CL/P). However, this gap can

also occur in the palate alone, which is called the cleft palate only (CPO) or isolated cleft palate. Cleft lip and palate are the most common types of congenital malformations. This condition not only causes aesthetic problems but also causes functional problems. Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/321/2019 Concerning National Guidelines for Medical Services for the Management of Cleft Lip and Palate issued guidelines as standard procedures for medical services in treating Cleft Lips with or without Cleft Palates [3].Abnormalities in the face and neck, within 1 year found cleft lip and palate have a prevalence of 65%. This incidence varies between geographic locations, gender, and ethnicity. Asian ethnicity is the most common ethnic group with cleft lip and palate, while African ethnicity is the least affected. The Center for Disease and Control (CDC) estimates that every year in the United States there are 2,651 babies born with cleft lip (CL) and 4,437 babies born with 2 cleft lips with or without cleft lip with or without palate (CL/P).

According to current data, in Indonesia, especially the province of West Java, the incidence of cleft lip and palate has reached 1,596 sufferers. Sjamsudin & Maifara explained that the incidence of clefts in West Java Province is based on the location of the anatomical abnormalities as follows: 50.53% of cleft lip and palate sufferers, 24.42% of cleft lip only sufferers, and 24.42% of palate-only cleft sufferers 25.05% [4]. If based on gender, it was found that men were 55.95% and women were 44.05%. To describe the incidence of clefts based on the anatomical position of the cleft, it is 44.29% for the left cleft and 25.02% for the right cleft. It was also found that most of the majority of the samples studied had low social and economic status [4][5].Based on research conducted by Nanda Florencia at Dr. Mohammad Hoesin Palembang in 2015-2017, found 99 cases of cleft lip and palate. This study found that most cases were experienced by patients aged 1-3 years, namely 38 cases. When based on gender, most cases of cleft lip and palate were experienced by males, namely 53 cases. Based on the location of the anatomical abnormalities, cleft lip and palate were the most common abnormalities, namely 51 cases. Based on the location of the side of the most common abnormality is the bilateral side. Based on the type of procedure, the most commonly performed is the palatoplasty procedure [6].Yunitasari et al. conducted research at the Women and Children Hospital in Bandar Lampung with a total sample of 138 cleft patients. The most frequent abnormalities were cleft lip, namely 91 cases (65.9%), the rest were cleft palate and cleft lip accompanied by cleft gums (labiognatoschizis), namely 47 patients (34.1%). Of the 91 samples studied. It was found that males suffer more from cleft lip than females. Where the sex was male with a total of 52 patients (57.1%) and female with a total of 39 patients (42.9%) [7].

According to the 2013, Basic Health Research (Riskesdas) which recorded the prevalence of children with disabilities in 2010-2013, in the age range of 24-59 months, 0.08 percent had cleft palates [8]. In the 2007 Basic Health Research (RISKESDAS) in North Sumatra Province, a research was conducted on the prevalence of hereditary diseases in North Sumatra Province. It was found that the prevalence of clefts in North Sumatra was 0.7% with a prevalence in Medan City at 0.5% [1] [8] [9]. The proportion of birth effects caused by multifactorial influences is higher than those caused by more specific factors such as effects on chromosomes or genetics, where the etiology or exact cause of some birth defects is still unknown [10] [11]. The effect of the habit of smoking tobacco in pregnant women on the incidence of cleft lip with or without cleft palate is still being studied. So, the effects of teratogenic doses from tobacco cigarettes and alcohol are still being debated [12][13]. Several epidemiological studies are available on the status of vitamin A intake levels in pregnant women. However, theoretically it has been established that excessive levels of Vitamin A are teratogenic and cause congenital malformations which include one of these disorders, namely Cleft Lip with or without Cleft Palate [13].The incidence of cleft lip and palate in Indonesia is 7500 per year. Indonesia has a cleft lip prevalence of 0.2%. DKI Jakarta Province is the highest ranking for the prevalence of cleft lip, which is 13.9% which is far above the national figure (2.4‰), in Nangroe Aceh Darussalam (7.8‰). The lowest prevalence was found in the provinces of Jambi, West Kalimantan and West Sulawesi, each of which was 0.4‰ [1].

According to a study of cleft cases at Aisyiyah Hospital Padang in 2018-2020 by researchers from the Faculty of Medicine, Baiturrahmah University in Padang, it was found that the characteristics of the most common type of cleft were cleft lip and palate with unilateral defects, where this abnormality is most

commonly experienced by males. This study also found that there were more patients who had a delay in age for palatoplasty compared to those who were given timely treatment. The most performed action is lip cleft surgery (labioplasty) [14].The key to successful treatment of cleft lip and palate is multi-disciplinary management. It is based on guidance from various disciplinary centers. Indonesia does not yet have service standards for cleft lip and palate diseases with an official multi-disciplinary approach nationally. However, the Ministry of Health has issued National Guidelines for Medical Services (PNPK) which can be used as a reference in providing optimal care for patients with clefts [1].Based on the background described above, researchers are interested in researching the demographic and clinical characteristics of Cleft Lip patients with or without Cleft Palate who were operated on in the Smile Train Indonesia Cleft Surgery Program together with the Horas Sehat Foundation in Hospitals in North Sumatra, 2017 - 2022.

II. RESEARCH OBJECTIVES

General purpose

To analyze the demographic and clinical characteristics of patients with Cleft Lips with or without Cleft Palates operated on in the Smile Train Indonesia Cleft Surgery Program together with the Horas Sehat Foundation in Hospitals in North Sumatra, 2017 - 2022.

Special purpose

1) Know the characteristics of patients with cleft lip and/or palate based on the type of cleft.
2) Know the characteristics of patients with cleft lip and/or palate based on the location of the cleft defect.
3) Know the characteristics of patients with cleft lip and/or palate based on gender.
4) Know the characteristics of patients with cleft lip and/or palate
5) based on age at the time of cleft lip and/or palate surgery.
6) Know the characteristics of patients with cleft lip and/or palate
7) based on the type of operation.

III. SUBJECTS AND METHODS

Research methods

This study uses an analytic observational method with a cross-sectional design that uses an observational approach or data collection at one time (or point time approach). The data used is secondary medical record data of patients who have had cleft surgery in the Cleft Lip and/or Lelangit Operation Program by Smile Train Indonesia together with the Horas Sehat Foundation at Hospitals in North Sumatra Province for the period 1 January 2017 – 31 December 2022. Research and data collection were conducted at the Horas Sehat Foundation office, Graha Tanjung Sari Complex A15, Jalan Harmonika Baru, Tanjung Sari Village, Medan Selayang District, Medan City. The research was conducted in January 2023, immediately after obtaining approval from the Ethics Committee of the Faculty of Medicine- Dentistry and Health Sciences- Prima Indonesia University.

Research subject

The research population in this study were cleft lip and/or palate patients who were operated on in the Smile Train Indonesia Cleft Surgery Program together with the Horas Sehat Foundation in the period January 1 2017 – December 31 2022. The research sample in this study were all cleft lip patients and/or auctioneers operated on in the Smile Train Indonesia Cleft Operation Program together with the Horas Sehat Foundation in the period 1 January 2017 – 31 December 2022.

Inclusion and Exclusion Criteria

Inclusion Criteria: Patients who have had surgery in the Smile Train Indonesia program together with the Horas Sehat Foundation, Patients who are domiciled in North Sumatra Province, Patients who have had cleft surgery carried out in hospitals or private hospitals in North Sumatra Province, Patients who have had cleft surgeries carried out during their childhood. period 1 January 2017 – 31 December 2022, Gender male, female, all ages, Patients with complete documentation containing variable data to be collected. Exclusion Criteria: Patients with incomplete medical record data.

Data collection technique

Patients who had cleft surgery in the Cleft Lip and/or Tongue Surgery Program by Smile Train Indonesia together with the Horas Sehat Foundation at Hospitals in North Sumatra Province for the period January 1 2017 – December 31 2022. The tools used in this study were medical records of surgical patients Cleft Lip with or without Cleft Palatum in Smile Train Indonesia's Cleft Surgery Program together with the Horas Sehat Foundation.

How Research Works

The research was conducted according to the following stages:

1) Researchers submit by uploading research proposals to Academic Information System for review.
2) The researcher submitted an application letter to FKKGIK for provide a License Application for Samuel J.H.T. Rajagukguk To conduct research at the Horas Sehat Foundation.
3) Permit Application Letter for Samuel J.H.T. Rajagukguk For Doing research at the Healthy Horas Foundation is handed over to Healthy Horas Foundation, letter of reply in the form of Permit to Conduct Research from the Horas Sehat Foundation.
4) After the proposal has been reviewed and allowed to advance to In the next stage, the researcher submits an application for approval Ethical Clearance and Cover Letter Conducting Research at Healthy Horas Foundation Office.
5) After obtaining Ethical Clearance approval to perform research, researchers conducted research at the Horas Foundation Office Healthy by first submitting a Cover Letter Conducting Research at the Healthy Horas Foundation Office.
6) Researchers collected data from medical records documented and stored in the Horas Sehat Foundation Office.
7) Researchers perform data processing with the following procedures: a) Data Selection (Editing); is the process of checking data in the field so that it can produce accurate data. For Further data processing, the activities carried out are Check whether all research questions have been answered answered and written answers can be read consistently. b) Coding; is a coding activity specific to each variable making it easier to analyze variable data. c) Entering Data (Entry); is the process of entering data into a statistical program (d) Data Cleaning (Cleansing); is a recheck all data that has been entered (in-entry), ie comes from a data source, checking needs to be done for Check for code errors, incompleteness, etc. If necessary, make corrections or correct.
8) Researchers conducted data analysis according to the purpose and scale of the variable to be analyzed.
9) The researcher prepares the final report, dissemination and publication of the research.

Ethical Clearance

Before carrying out the research, the researcher will first seek approval from the FKKGIK UNPRI Research Ethics Committee. This research was carried out by maintaining the confidentiality of personal data or personal identity of patients and parents and/or guardians of patients. The research was carried out immediately after obtaining approval from the Ethics Committee of the Faculty of Medicine-Dentistry and the Faculty of Health Sciences, Universitas Prima Indonesia.

IV. RESULT AND DISCUSSION

RESULT

The research was conducted at the Healthy Horas Foundation Office on Jalan Harmonika Baru No. A15, Tanjung Sari Village, Medan Selayang District, Medan City, North Sumatra Province.

General Characteristics of Research Subjects

Sample data collection in this study using purposive sampling. The samples studied were cleft patients who were managed in Smile Train Indonesia's cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, totaling 193 people. The sample has met the predetermined inclusion criteria.

Distribution of Cleft Characteristics in Cleft Patients with or without cleft palates operated on in the Smile Train Indonesia Cleft Operation Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022.

Characteristics of the type of cleft in patients with cleft lip with or without cleft palate who were operated on in Smile Train Indonesia's cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra in 2017 – 2022 are as follows:

Table 1. Characteristic distribution of cleft lip patients with or without cleft palate by type of cleft

Cleft Type	Percent (f) = 193	Frequency (%) = 100
Lip cleft	31	16,1
Gum gap	1	0,5
Cleft lip + Cleft gums	8	4,1
Cleft lip + cleft gum + cleft hard palate	11	5,7
Cleft lip + cleft gum + cleft soft palate	3	1,6
Cleft lip + gum cleft + hard palate + soft palate	115	59,6
Hard palate	3	1,6
Hard palate + soft palate	5	2,6
Soft palate cleft	8	4,1
Cleft lip + hard palate + soft palate	6	3,1
Cleft lip + soft palate	1	0,5
Cleft lip + hard palate	1	0,5

Based on table 1. it is obtained that of the 193 samples, the type the most frequent cleft was a combination of cleft lip + gum cleft + hard palate + soft palate or what is called labiognatopalatoschizis, namely 115 people (59.6%), while the category of the type of cleft that was the least was cleft gum only, combination of cleft lip and soft palate, and combination of cleft lip and hard palate, each of which amounted to 1 person (0.5%).

Distribution of Cleft Defect Location Characteristics in Cleft Patients lips with or without cleft palates operated on in the Smile Train Indonesia Cleft Surgery Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022.

The characteristics of the location of cleft defects in patients with clefts with or without cleft palates who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation at hospitals in North Sumatra in 2017 – 2022 are as follows:

Table 2. Characteristic distribution of cleft lip patients with or without cleft palate based on defect location

Defect location	Percent (f) = 193	Frequency (%) = 100%
Unilateral (Left Side)	98	50,8
Unilateral (Right Side)	38	19,7
Bilateral	49	25,4
Uncategorized	8	4,1%

Based on table 2, it was found that of the 193 samples, the location of the most frequent cleft defects was unilateral defects (left side), namely 98 people (50.8%), while the locations of the fewest defects were unilateral defects (right side), namely 38 people (19.7%). There were 8 people (4.1%) with a non-categorized defect location variable, which was a category made for patients with soft palate clefts because this type of cleft does not have a classification of cleft defect location like other clefts.

Distribution of sex characteristics in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia Cleft Surgery Program in conjunction with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022

Gender characteristics in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra in 2017 – 2022 are as follows:

Table 3. Characteristic distribution of cleft lip patients with or without cleft palate based on gender

Gender	Percent (f) = 193	Frequency (%) = 100
Male	130	67,4
Female	63	32,6

Based on table 3, it was found that of the 193 samples, the sex that suffered the most from clefts was male, namely 130 people (67.4%), while the sex that suffered the least from clefts was female, namely 63 people. (32.6%).

Distribution of Optimal Treatment Time Characteristics in Patients Cleft lip with or without cleft palate operated on in the Smile Train Indonesia Cleft Surgery Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022.

Characteristics of treatment time for patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation at hospitals in North Sumatra in 2017 – 2022 are as follows:

Table 4. Characteristic distribution of cleft lip patients with or without cleft palate based on treatment time

Management time	Percent (f) = 193	Frequency (%) = 100
Optimal Labioplasty	4	2,1
Late Labioplasty	54	28
Optimal Palatoplasty	17	8,8
Late Palatoplasty	39	20,2
Late Labioplasty + Optimal Palatoplasty	16	8,3
Late Labioplasty + Late Palatoplasty	21	10,9
Other	42	21,8

Based on table 4, it was found that of the 193 samples, the most frequent category of treatment time was the late labioplasty category, namely 54 people (28%), while the least treatment time category was the optimal labioplasty category, namely 4 people (2.1 %).

Characteristic distribution of the type of surgery in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia Cleft Surgery Program with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.

The characteristics of the type of surgery for patients with cleft lip with or without cleft palate who are operated on in Smile Train Indonesia's cleft surgery program together with the Horas Sehat Foundation at hospitals in North Sumatra in 2017 – 2022 are as follows:

Table 5. Characteristic distribution of cleft lip patients with or without cleft palate based on the type of surgery

Cleft Type	Percent (f) = 193	Frequency (%) = 100
Primary lip/nose unilateral repair (partial or complete)	48	24,9
Primary lip/nose bilateral repair (partial complete)	11	5,7
Primary cleft palate repair	56	29
Fistula repair	26	13,5
Secondary cleft palate (velopharyngeal) repair	5	2,6
Lip/nose revision	7	3,6
Primary lip/nose unilateral repair + Primary cleft palate repair	28	14,5
Primary lip/nose bilateral repair + Primary cleft palate repair	9	4,7
Fistula repair + Lip/nose revision	3	1,6

Based on table 5, it was found that of the 193 samples, the category of type of operation that was most common was primary cleft palate repair, namely 56 people (29%), while the least operation was fistula repair + lip/nose revision, namely 3 people (1 ,6%).

DISCUSSION

Distribution of Cleft Characteristics in Cleft Patients with or without cleft palates operated on in the Smile Train Indonesia Cleft Surgery Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022.

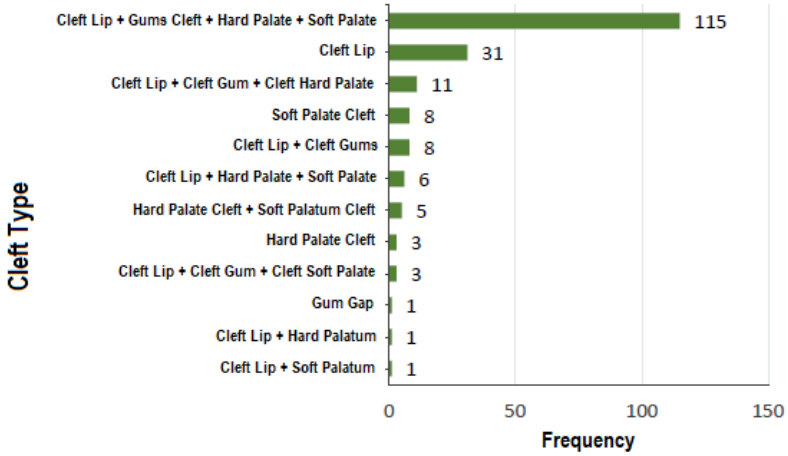

Figure 1. Bar chart of the distribution of the characteristics of the type of cleft in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.From the results of research conducted on 193 samples obtained the most characteristic type of cleft is a type of cleft with a combination of lips, gums, hard palate and soft palate or what is often called labiognatopalatoschizis, namely 115 people (59.6%). These results are in accordance with Dr.R. D. Kandou Manado in 2011 – 2013, who found that of the 142 cleft cases they examined, it was found that the most common type of cleft was labiognatopalatoschizis, namely 93 cases (65.5%) [15].

Distribution of Cleft Defect Location Characteristics in Cleft Patients lips with or without cleft palates operated on in the Smile Train Indonesia Cleft Surgery Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022

Figure 2. Bar chart of the characteristic distribution of defect locations in cleft lip patients with or without cleft palates who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.

From the results of research conducted on 193 samples obtained The most common defect location characteristic in cleft patients was the unilateral defect location category, namely 146 people (70.5%). Of these unilateral defects most commonly occur on the left side, namely as many as 98 people (50.8%), where as 38 people (19.7%) have unilateral right-sided defects. In the category of bilateral defects, there were 49

people (25.4%). There were 8 people (4.1%) who had a variable location of the defect with the type not categorized, which was a category made for patients who had a cleft type of soft palate because this cleft could not be categorized as a unilateral or bilateral defect.

The results of this study at RSU Aisyiyah Padang in 2018 -2020 on 143 cleft patients, where the results of this study found that the most common defect locations in cleft sufferers were unilateral defects, namely as many as 73 people (51%) [14] , while for defects bilateral there were as many as 70 people (49%). This is also in line with the 142 cleft patients at Prof. Dr. R. D. Kandou Manado for the period 2011 – 2013, where the study found that the most common defects were unilateral defects, namely 94 patients (66.1%) [15]. Of these unilateral defects most commonly occurred on the left side with a total of 54 people (57.4%) followed by right side defects which only amounted to 40 people (42.9%). [14] [15].

Distribution of sex characteristics in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia Cleft Surgery Program in conjunction with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022

From the results of research conducted on 193 samples obtained The most common sex characteristic of cleft patients was male, namely 130 people (67.4%). These results were in Aisyiyah Hospital Padang in 2018-2020 for 143 cleft patients, where the results of this study found that the sex that suffered the most from clefts was male, namely 82 people (57.3%) [14]. This finding is based on the medical record data of pediatric patients suffering from clefts at RSUP Dr. Mohammad Hoesin Palembang for the 2015 -2017 period, where it was found that the most sex with clefts was male, namely 53 cases (53.5%). [14] [16].

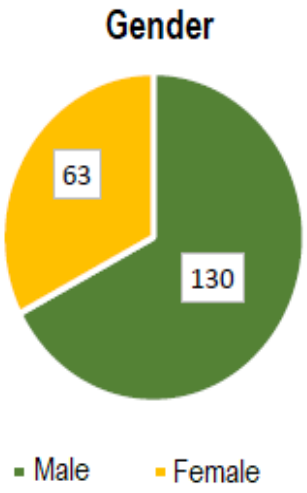

Figure 3. Pie diagram of the distribution of sex characteristics in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.The current theory is limited to discussing the predominance of certain sexes to experience certain types of clefts. However, theories about the causes and the relationship between the sexes for having a cleft or not are still very limited. Women are more dominant in experiencing cleft palate (palatoschizis) compared to men, where the ratio between men and women is 0.8: 1. Male sex is more dominant in experiencing cleft lip types with or without cleft palate (labioschizis/ labiopalatoschizis) compared to women, that is, the ratio between men and women is 1.5: 1 [16].The tendency of certain sexes to experience certain types of clefts is believed to occur due to a relationship between the duration of the process of shifting the palatal plate in the embryo, where the process of shifting the palate plate from a vertical to a horizontal position occurs half a week longer in the female sex compared to the male. This is believed to increase the risk for cleft palate. Therefore, women have a higher tendency to experience cleft palate than men [17].

Distribution of Optimal Treatment Time Characteristics in Patients Cleft lip with or without cleft palate operated on in the Smile Train Indonesia Cleft Surgery Program Together with the Horas Sehat Foundation in Hospitals in North Sumatra 2017 – 2022

The optimal management time category for labioplasty refers to the rule of ten criteria used as a guide in determining the appropriate age for patients to perform labioplasty. The rule of ten criteria contains the minimum requirements for a patient to be able to perform surgery, namely age >10 weeks (3 months), body weight >10 pounds (4.5 kg), and hemoglobin level >10 g/dL. The optimal category of labioplasty and palatoplasty category also refers to the National Guidelines for Medical Services (PNPK) issued by the Ministry of Health of the Republic of Indonesia in 2019 [1].In this study, the category of late labioplasty + late palatoplasty is a category given to patients who have cleft lip with cleft palate (labiopalatoschizis) who come for treatment when the age concerned has passed the optimal time to perform labioplasty and palatoplasty procedures. The other category is given to patients with cleft lip and palate who at that time only had labioplasty (late), but palatoplasty had not been performed. The patient's palatoplasty procedure was planned at a later time, even though at that time the patient's age had also passed the optimal time to perform paltoplasty. Other categories are also given to patients who perform fistula repair, velopharyngeal repair, and lip/nose revision. This is done because these actions are not included in the research variables.

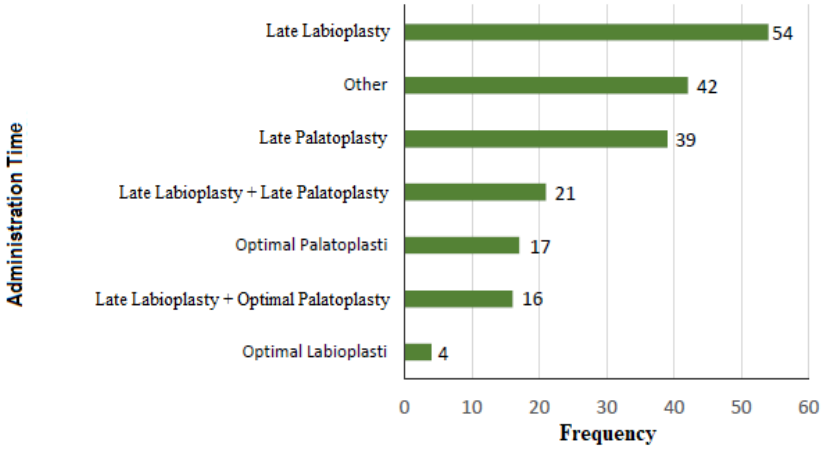

Figure 4. Bar chart of the distribution of the characteristics of the type of cleft in cleft lip patients with or without cleft palates who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.From the results of research conducted on 193 samples obtained The most characteristic treatment time for cleft patients was the category of late labioplasty, which was 54 people (28%), followed by the late palatoplasty category, which was 39 people (20.2%) and the combination of late labioplasty + late palatoplasty, which was 21 people (10). ,9%). The category of the least treatment time was optimal labioplasty, namely 4 people (2.1%). This concludes that there are more patients who come late to get treatment compared to those who come on time to get treatment.

The findings in the form of a higher rate of patient age delay in getting cleft treatment compared to the optimal time in getting treatment were also supported at the Aisyiyah Padang General Hospital in 2018 - 2020 for 143 cleft patients, where the results of the study found that the treatment time category was the most commonly found was the category of late palatoplasty, namely 62 people (4.4%) followed by late labioplasty, namely 61 people (42.7%) [14]. For the treatment time category, the optimal palatoplasty category was found with 5 people (3.5%) and optimal labioplasty with 15 people (10.5%) [14].These results are also consistent with a study of 73 cleft-type cleft patients at Dr. Wahidin Sudirohusodo Makassar in 2011 – 2012, where the results obtained were a higher number of labioplasty patients who arrived late to get medical treatment, namely 58 people (79.1%) compared to those who arrived on time, namely 15 people (20.9%) [18].

Characteristic distribution of the type of surgery in patients with cleft lip with or without cleft palate who were operated on in the Smile Train Indonesia Cleft Surgery Program with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022

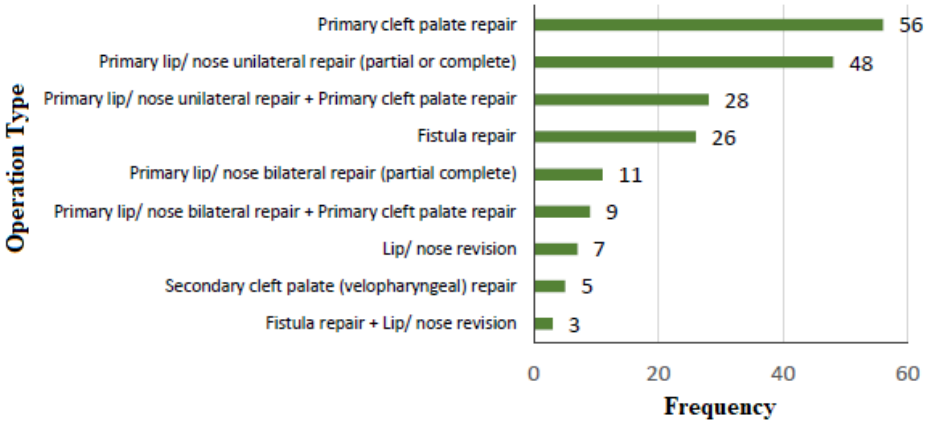

Figure 5. Bar chart of the distribution of the characteristics of the type of surgery in cleft lip patients with or without cleft palates who were operated on in the Smile Train Indonesia cleft surgery program together with the Horas Sehat Foundation in hospitals in North Sumatra, 2017 – 2022.From the results of research conducted on 193 samples obtained the characteristics of the most common type of surgery in cleft patients successively are starting from the primary cleft palate repair category, namely 56 people (29%), primary lip/nose unilateral repair, namely 49 people (24.9%), and primary nose. unilateral repair + primary cleft palate repair as many as 28 people (14.5%). The three most common categories found from the results of this study were types of labioplasty, palatoplasty, or a combination of both.

The results of this study also have similarities with research conducted at RSUP Dr. Dr. Mohammad Hoesin Palembang on 91 patients with cleft lip and palate in 2015-2017, where it was found that the most common action was palatoplasty, namely 52 actions (57.1%). Different results were found at RSU Aisyiyah Padang for 143 cleft patients, where the category of action that was most commonly performed was labioplasty, namely 76 people (53.1%) and the least was palatoplasty, namely 67 people (46.9%) [14].According to researchers, differences in research results compared to research results obtained by researchers are caused by variations in the sample of researchers [14]. Some of the research samples owned by this researcher had a labiopalatoshizis condition who had previously performed lip surgery, where the patient came to the health facility only to perform palatoplasty surgery, so that this affected the number of palatoplasty procedures. Another because that influences this difference is also caused by the types of variables studied which only consist of 2 variables, namely the labioplasty and palatoplasty categories. Meanwhile, researchers examined action variables with various procedures [14].

V. CONCLUSIONS AND SUGGESTION

CONCLUSIONS

From the results of research conducted at the Healthy Horas Foundation with research data of 193 samples, the following results can be obtained:

1) The most common type of cleft lip in cleft lip patients with or without cleft palate is the category of cleft lip + gum cleft + hard palate + soft palate (labiognatopalatoschizis).
2) The most common characteristic of the location of the cleft defect in cleft lip patients with or without cleft palate is the location of the unilateral defect on the left side.
3) The most common sex characteristic in patients with cleft lip with/or without cleft palate is male.
4) The characteristic of the most treatment time in cleft lip patients with/or without cleft palate is the category of late palatoplasty treatment time.
5) The most common type of surgery in patients with cleft lip with/or without cleft palate is the unilateral repair (partial or complete) Primary lip/nose type of surgery.

SUGGESTION

In the process of completing this entire research, researchers have some suggestions:

1) Further research is needed regarding the correlation between educational status, level of education, and socio-economic level of parents on the incidence of children with cleft lip with or without cleft palate
2) It is necessary to carry out further research regarding the correlation between the characteristics of tribal/customary status on the incidence of cleft lip with or without cleft palate
3) To stakeholders, especially in the health sector, to increase their attention to promotive and preventive efforts against cleft disease. The purpose of this is for the public to understand how to prevent clefts from occurring, and if a cleft has occurred, the public will know when is the right time to get treatment from a professional health service provider. This is important because the optimal treatment time greatly influences the outcome of the treatment.
4) For health service providers such as health centers, clinics, hospitals, and professional health workers (doctors, dentists, nurses, midwives) so that they can understand and collaborate to create a holistic and comprehensive cleft service system.
5) It is necessary to create a hospital as a health facility that becomes a Center of Excellence in cleft management.

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