# CLINICAL EVALUATION OF 51 PATIENTS WITH CLEFT LIP AND/OR PALATE IN SOCIAL WORK AT HOSPITAL

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#### Abstract

The study aims to evaluate the surgical outcomes, including post-operative complications, in patients undergoing cleft lip and palate surgery in social work. The study was conducted on 51 patients in three social work settings, with inclusion criteria of age over 3 months, weight over 10 pounds, and normal chest x-ray results. Patients with syndromic or cardiac abnormalities were excluded from the study. The surgery was performed by a team of oral and maxillofacial surgeons with a minimum of 2 years of surgical experience. The study found that post-operative complications were relatively rare and could be managed well. This study has important implications for improving the quality of healthcare services for patients with cleft lip and palate, as well as increasing public awareness of the importance of proper medical care for this condition.

**Key words**: cleft lip and palate, social work, surgical outcome, post-operative complications

### Introduction

One of supporting the enforcement of Islamic law is to conduct activities that are beneficial to the ummah by helping their difficulties and helping to treat their illnesses. Social work activities are also usually performed by teamwork. Cleft lip surgery in social work is very challenging because the time and cost effective must be carried out, but surgical outcomes including anatomy and physiology must be achieved (Murthy, 2019; Shkoukani et al., 2013). Good results and satisfying patients are highly expected by all parties both surgeons, hospitals, and funders (Nilsson et al., 2016). Together, the burden will become easier." And cooperate in righteousness and piety, but do not cooperate in sin and aggression. And fear Allah ; indeed, Allah is severe in penalty."(Al Maidah : 2) (Al-Wa'iy, 2010; Zubairu, 2016).

Cleft Lip and palate is described as a feature of more than 350 syndromes, one of the commonest congenital deformities found in the new-born because of failure in fusion of maxillary and premaxillary processes and palatal processes (Nalabothu, 2021). The incidince varies with ethnicity, approximately 1 in 600 until 1000 births. A sex predilection exists as well, as a cleft lip and palate is twice as common in males to females is 3:2.Unilateral cleft are most common (80%). Left side being affected twice as often as the right side (Desai & Prajapati, 2019).

In infant with a unilateral cleft lip generally performed between 3 and 6 months of age (Mcheik & Levard, 2010). Delaying procedures until at least decreases for growth of the lip structures for accurate reconstruction (Desai & Prajapati, 2019). The final goal of primary unilateral cleft lip to produce

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symmetrical lip and nose form with natural balance in the center of the face (Andersson et al., 2012; Daniel et al., 2017). The bilateral cleft lip is a more challenging because the incisive bone or prolabium is often grossly distorted and procumbent, and the columella is very underdeveloped or even absent. Treatment depends on the width of cleft (Desai & Prajapati, 2019).

Children are not miniature version of adults and some of the disease conditions are often exclusively present in them (McCance & Huether, 2014). Therefore, surgery of cleft lip and palate in children will require careful consideration and thorough knowledge and clinical application in process (Kwari et al., 2010).

This study was carried out to evaluate the surgical output including postoperative complications in patients underwent cleft lip and palate surgery social work, and to obtain demographic data related to surgical procedures and long-term management of patients with cleft lip.

# **Research Methods**

51 patients were held in 3 social works, 1 social work with 9 patients held in August 2018 as many as 9 patients in Sari Asih Ar Ar Rahmah, the second social work held in March 2019 in Sari Asih Serang handled 17 patients, 25 patients were treated in November 2019 in the same place as the second social work. All parents of patients have signed informed consent and had an explanation of the surgical procedure and have agreed that photos can be used and published for scientific activities.

The inclusion requirement for labioplasty procedures is age more than 3 months; weight more than 10 pounds; normal chest x-ray; and leukocyte count not less than  $10000/\mu$ L. The patient's haemoglobin more than 10 g/dL The presence of concomitant syndromic or cardiac abnormalities is a condition of exclusion as a participant in social work. Labioplasty performed under general anesthesia with an endotracheal tube taped to the midline of lower lip without distorting the commisure.

The inclusion requirement for palatoplasty procedures is age more than 18 months; weight more than 20 pounds; normal chest x-ray; and leukocyte count not less than 10000/ $\mu$ L. The patient's haemoglobin more than 10 g/dL if accompanied by a cleft lip then ensured labioplasty has been operated before. The presence of concomitant syndromic or cardiac abnormalities is a condition of exclusion as a participant in social work. All patients had standard preoperative and examination, special care was taken in assessing with oral maxillofacial surgeon, paeditrician, anesthesiologist.

The team of doctors who performed the surgery were all oral maxillofacial surgeons with a minimum of 2 years surgical experience. The surgical technique used depends on the surgeon's preference, for the unilateral cleft lip used Cronin, Tennison, Millard, or Onizuka method. There are many possible variations of the bilateral cleft lip. Bilateral cleft lip is used the Noordhoff or Manchester methods. Palatoplasty procedure are VY Pushback.

Length of stay (LOS) for labioplasty patients is 1 day, the second day observation and education of wound care were done to all patients and then scheduled for control day 7 to remove the stitches. Post operative care includes keeping the wound clean by preventing crusting and using antibiotic ointment.

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Length of stay for palatoplasty patients is 2 to 3 days, depending on the patient's condition. 2 patient postponed 1 day after, and scheduled to remove the obturator.

# **Results and Discussion**

Table 1. Distribution of	patients according age (N	=51)
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		88	Total
Range	Surgical	Surgical Prosedur	
	Labioplasty	Palatoplasty	
3-6 months	9	-	9
6-12 months	11	-	11
12-18 months	6	-	6
18-24 months	-	6	6
Over 2 years	2	17	19
	28	23	51

Table 2. Distribution of patients according to gender (N=51)				
Diagnosis	Male	Female	Total	
Unilateral Cleft Lip	12	8	20	
Sinistra				
Unilateral Cleft Lip Dextra	5	1	6	
Bilateral Cleft Lip	3	-	3	
Cleft Palate Unilateral	13	3	16	
Cleft Palate Bilateral	2	4	6	
	35	16	51	

Table 3. Distribution of patients according to diagnosis (N=51)

Diagnosis	Total
Unilateral Cleft Lip	26
Bilateral Cleft Lip	3
Palatoschisiz	22
Total	51

Table 4. Complication after surgery (N=51)						
Surgery	Additional LOS	Asymmetry lip	Oronasal fistula	Wound Infection	Scar	Total
Labioplasty	-	2	-	2	1	5
Palatoplasty	4	-	2	-	-	6



Figure 1. Unilateral Labioplasty



Figure 2. Bilateral Labioplasty



Figure 3. Palatoplasty

1.96 % (1) patients had a scar, 3.92 % (2)patients had a fistula, 3.92% (2) patients had an infected wound, 7.84% (4) patients had febrile 1 day after surgery. 94 % (50) patients expressed satisfaction with the results of the operation even though the level of satisfaction must be assessed with more adequate parameters.

# Discussion

The goal of primary lip repair is to reconstruct a functional lip with minimal scarring and normal appereance (Matsunaga et al., 2016). The Timing for primary lip repair or labioplasty is usually between 3 and 6 months after birth, the rule of ten's to ensure that infant is fit for surgical procedure. This rule implies that the infant should be 10 weeks of age, weight at least 10 pounds, haemoglobin level at least 10g/100 ml (Andersson et al., 2012; McIntyre et al., 2016). 19 patients (67%) in this study passed the standard labioplasty, which is 3-6 months, this is due to patients who lack information about the best time for surgery and there are cost constraints.

Unilateral deformity should correct the alignment of the orbicularis oris muscle, and create cupids bow and philtral column on affected side. 30 patients with unilateral lip consisted of 20 (76,9%) unilateral cleft lip sinistra, 6 (23,1%) unilateral lip dextra had been treated in these 3 social works, and the evaluation results were 2 patients experiencing asymetry and planned to be improved in the next social work. Bilateral cleft lip is much challenging and the result ar often less

satisfactory than those of unilateral cleft lip (Andersson et al., 2012). 4 bilateral cleft lip patients who worked on social work, 1 was repaired because of having scar.

Wounds that communicate with the oral cavity is a significant risk for postoperative infection should have prophylaxis antibiotic and post operative antibiotics given in 3-5 days dependending on the potential risk for subsequent infection, however on day 14<sup>th</sup> there were complaints of infected wounds in 2 patients, presumably due to poor wound care.

The main principle of cleft palate repair is to detach and retropose the abnormal insertion and join the muscle of both halves of the soft palate, timing of palate repair to achieve optimal speech with minimal facial growth disturbance when soft ad hard palate repair completed before speech development, it still debates in cleft literature, most oral surgeon performed one staged palatoplasty by 16-18 months of age (Andersson et al., 2012; Miloro et al., 2004). In this study 17 patients (74%) were operated on at age 24 months. Delayed treatment of some patients is due to the patient's factor and financial incapacity as well as access to a place of health care.

One of the complication of primary cleft palate repair is failure of healing in oronasal fistulae. The report of an incidence of fistula formation from 2-43%. Incidence of oronasal fistuale depends on several variables, including experinece of surgeon and age of time repair (Andersson et al., 2012). on the 5<sup>th</sup> day all patients with palatoplasty were scheduled to open the obturator, 2 patients came in an intact obturator, on the 14t<sup>h</sup> day there was an oro antral fistula. 2 patient (8.6%) in this social work with oroantral fistula is planned for palatoplasty repair 6 months after the first operation.

#### Conclusion

A favorable outcome for cleft lip and/or palate surgery in social work is to conduct a pre-surgical assessment with surgeon, pediatrician and anaesthetist. Education and informed consent for patients before and after surgery are strongly recommended to avoid post-surgical complications.

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