

Psychological analysis of mothers with cleft children

Yayun Siti Rochmah*, Rama Putranto **,Intan Maryani*

*Departement of Oral and Maxillofacial Surgery, Faculty of Dentistry, Universitas Islam Sultan Agung.

** Departement of Orthodontia, Faculty of Dentistry, Unibversitas Islam Sultan Agung

Correspondence: yayun@unissula.ac.id

Received 16 May 2023; 1st revision 20 June 2023; 2nd revision 17 July 2023; Accepted 24 July 2023;
Published online 31 July 2023

Keywords:

Psychology; Mother's stress level; Child cleft lip or palate.

ABSTRACT

Background: Parenting a child with cleft disorder required special attention, because this is related to the psychological condition of the mother. Mother's psychological problems can affect the growth and development of children. The purpose of this study was to analyze psychological of mothers with cleft children.

Method: The research method used in this research is descriptive analytic method with purposive sampling approach. Methods of data collection using a questionnaire to measure parenting stress, the short form parenting stress index (PSI) had adopted from Adibin has been tested for validity and reliability. The number of samples in this study were 150 mothers with cleft lip, palatal and cleft lip/palatal children. Statistic analysis with ANOVA test and Spearman test

Result: The results of this study indicate that there are differences in the stress levels of mothers of cleft children between cleft lips (CL), cleft palate (CP) and cleft lips and palate (CL/P) non syndromic (NS). The significance value is 0.000 ($p < 0.05$) and there were correlation between stress parenting and type cleft.

Conclusion: The conclusion obtained is that there are differences in parenting stress in mother's CL/P NS according to the type of cleft and there is a relationship between the type of cleft and the level of stress.

Copyright ©2022 National Research and Innovation Agency. This is an open access article under the CC BY-SA license (<https://creativecommons.org/licenses/by-sa/4.0/>).

doi: <http://dx.doi.org/10.30659/odj.10.1.140-145>

2460-4119 / 2354-5992 ©2022 National Research and Innovation Agency

This is an open access article under the CC BY-SA license (<https://creativecommons.org/licenses/by-sa/4.0/>)

Odonto : Dental Journal accredited as Sinta 2 Journal (<https://sinta.kemdikbud.go.id/journals/profile/3200>)

How to Cite: Rochmah *et al.* Psychological analysis of mothers with cleft children. Odonto: Dental Journal, v.10, n.1, p. 140-145, July 2023

INTRODUCTION

Indonesia is one of the countries with a high number of patients with non-syndromic cleft lip or palate, which increases by an average of 7,500 people per year.¹ The cause of cleft lip is multifactorial, divided into intrinsic and extrinsic factors. Variations of cleft abnormalities consist of cleft lip, cleft palate and cleft lips with cleft palate.²

The condition of clefts in the lips or palates will cause problems for both the patients themselves and their parents, especially the mothers who care for them. Problems experienced by children include difficulty eating and drinking, difficulty speaking clearly because some letters cannot be pronounced perfectly, frequent respiratory infections due to contamination of the respiratory tract and digestive tract, as well as psychological problems when patients start socializing, so they often feel less confident and tend to introverts.³

In Ellis' research, 2021, it was stated that there were differences in stress levels between mothers with normal children and mothers with cleft children.⁴ Children with CL/P NS conditions usually experience several problems including communication problems, teething problems, breathing problems, psychosocial problems, and nutritional problems, so support and hard work from the family, especially mothers, are needed in assisting the child's growth and development period.⁵ But in Ellis' research it was not differentiated based on the type of gap. The types of clefts vary greatly in cleft cases, including unilateral clefts, bilateral clefts, palatal clefts, unilateral clefts with palatal clefts, bilateral clefts accompanied by palatal clefts. Different cleft conditions will certainly affect their care, especially when giving milk (drinks) or food.

A child with disabilities needs the help of others more than normal children to meet their basic needs, both physical, social and educational needs. The family plays an important role, especially the mother to help with the daily basic, physical, social and educational needs of children.⁶

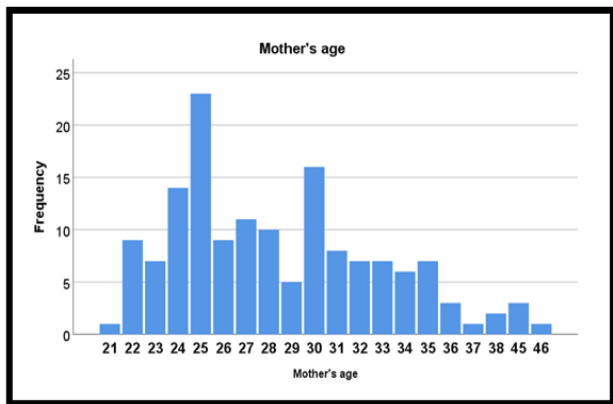
The purpose of this study was to analyze differences in parenting stress according to the type of cleft.

RESEARCH METHOD

The research method used in this study is descriptive analytic method with a purposive sampling approach which is sampling by determining special characteristics according to the required sample requirements. The total number of research subjects was 150 mothers who were divided into 3 groups, namely 50 mothers with CL children, 50 mothers with CP children and 50 mothers with CL/P children. To measure parenting stress, the short form parenting stress index (PSI) developed by Abidin 1994 was used. PSI consists of 36 questions consisting of 3 domains, namely the parent domain, the child domain and the parent-child dysfunctional relationship domain.⁷ Ethical Clearance issued by the FKG Research Ethics Commission, Sultan Agung Islamic University No. 193/B.1-KEPK/SA-FKG/IV/2020. Statistical analysis was performed by one way ANOVA test and Spearman correlation test.

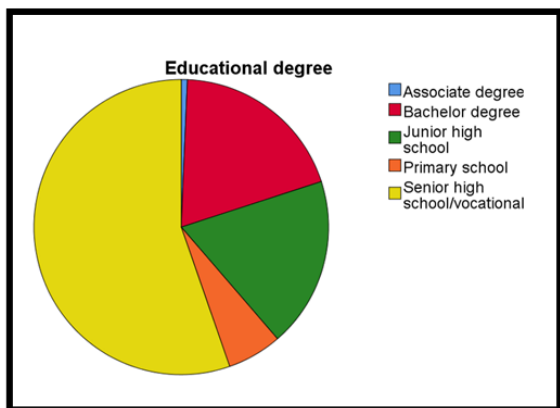
RESULT

Based on the mother's age, get a graphical picture as below



Pic 1. Demographic age's mothers

From 150 respondents, it was found that the respondents were in the age range of 21 - 46 years. The average age of respondents is 28.5 years with the most respondents aged 25 years as many as 23 people (23%) (Pic 1).



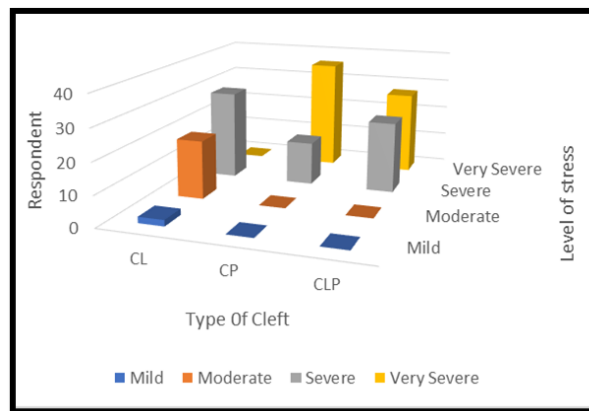
Pic.2. Demographic Graphic education of mothers

The majority of respondents had last education at the high school/vocational school level, as many as 83 respondents (55.3%). Other respondents were Bachelor graduates with 29 respondents (19.3%), Associate degree with 1 respondent (0.7%), Junior High School graduates with 28 respondents (18.7%), and Primary School graduates with 9 respondents (6%) (Pic 2).

In PSI examination, the assessment of the questionnaire is the level category (ordinal), mild,

moderate, severe, and very severe based on the total value of the questionnaire :

- 28-48 mild stress
- 49-58 Moderate stress
- 59-73 Severe stress
- <73 Very severe stress



Pic 3. Level of stress parenting

CP and CL/P most commonly cause the level of stress parenting "severe" and "very severe" (Pic 3).

Based on the results of the ANOVA different test, the following results were obtained.

		Sum of Squares	df	Mean Square	F	Sig.
Cleft * Level of Stress	Between Groups (Combined)	71.326	4	17.832	90.173	.000
	Within Groups	28.674	145	.198		
	Total	100.000	149			

Table 1. Anova Analyzis

Table 1 showed that the significant of Cleft Level of stress p=0.000, significant there are correlation between level of stress and incidence of cleft.

Correlations				
			Cleft	Level of Stress
Spearman's rho	Cleft	Correlation Coefficient	1.000	-.810**
		Sig. (2-tailed)	.	.000
		N	150	150
Level of Stress	Level of Stress	Correlation Coefficient	-.810**	1.000
		Sig. (2-tailed)	.000	.
		N	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2. Spearman Correlation Analyziz.

Table 2 showed that significant level at $p=0.000$, indicate there were significant correlation between level of stress and incidence of cleft

DISCUSSION

Physical imperfections in children really need different attention compared to normal children. Cleft lip or cleft palate not only has an impact on the child itself but also has an impact on the parents who affect it, especially the mother. A mother must pay more attention to her child who cannot grow and develop normally. Mental maturity and sincerity of mothers in caring for children with disabilities are needed so that children can grow and develop properly.⁸ In this study, it appears that the age of the mother is mostly in young adults. A mother with a child with special needs will tend to get stress from physical, psychological and social burdens. This is influenced by the level of mental maturity of the mothers.⁹

The results of the study showed that on average, mothers aged 26-35 years experienced severe stress. According to the theory of psychological maturity, a mother aged 26-35 years is more able to control her emotions, but her physical condition is considered to have decreased starting when the mother was 30 years old.¹⁰ Caring for children with CL/P NS is not an easy thing because parents often have to

deal with stressful situations due to the demands of the parenting process. One of the physical burdens that causes stress on the mother of a CL/P NS child is related to the child's ability to carry out daily activities such as eating or drinking.

In addition to the mother's age, the ability to care for children is also determined by the level of education. In this study, the highest level of education was high school. Mothers with low levels of education affect parenting roles that have the potential to cause parenting stress.^{11, 12} The nutritional status of children based on the level of education of the mother found that toddlers with poor maternal nutrition knowledge had a significant relationship with cases of undernourished toddlers. Toddlers whose mother's level of nutritional knowledge is less, have a risk of experiencing malnutrition 5.091 times greater than toddlers whose mothers have a good level of knowledge.¹³

Based on the results of the ANOVA analysis, it was found that there was a significant difference between the stress of mothers and children of CL, CP, and CL/P, where the highest stress was the stress of mothers and children of CL/P. The severity of the disorder, is directly proportional to the level of parenting stress. The more complex the cleft, the more severe the level of parenting stress.^{14 15}

The defects found in cleft cases with various variations will cause different problems when caring for them. The more complex the defect the more it needs extra attention in its care. For example, on the drinking needs of babies with CL and babies with CL/P, how do mothers give milk drinks to babies. For CL babies, the mother does

not experience difficulties, but for mothers with CL/P children, a mother will try her best so that when giving milk she doesn't choke and the baby can suck the milk bottle safely.¹⁶

Parents, and therefore especially mothers' of a child with CL/P are confronted with psychosocial and emotional problems caused by the behavior of the social environment.^{17, 18}

The absence of social support for mothers who care for children with clefts will cause mothers to feel lonely and insecure which can lead to stress. Assessing mental health in structured clinical interviews could contribute to assessing distress and parenting stress in a more detailed way.¹⁹ Mother's stress will have an impact on the child's psychosocial condition.^{20, 21}

Definition of parenting stress was a series of processes that lead to a series of unpleasant psychological and physical reactions in trying to adapt to the requirements of the parenting role.²² There are three factors that influence parenting stress namely parental characteristics, child characteristic and disturbed parent-child interaction.^{7, 22, 23} These three factors are related to one another.²⁴ Parenting stress that is not handled immediately will have an impact on the growth and development of children.²⁵ Stress management is a skill that is used effectively to overcome emotional disturbances and mental disturbances due to responses . Stress conditions that are very heavy on the mother affect interaction patterns and parenting patterns, even though at the age of five, the stage of child development is very important. We recommended that future research on distress and parenting stress assesses the influence of personal growth or positive adjustment on

distress and parenting stress with more big number respondents.

CONCLUSION

There are differences in parenting stress in mother's CL/P NS according to the type of cleft and there is a relationship between the type of cleft and the level of stress.

ACKNOWLEDGMENTS

Thank you to RSIGM Sultan Agung Hospital, Bayangkara hospital, Pandan Arang Hospital for assisting in the implementation of this research

REFERENCES

1. Sjamsudin EaM, D. . 'Epidemiology and characteristics of cleft lip and palate and the influence of consanguinity and socioeconomic in West Java, Indonesia: a five-year retrospective study'. *International Journal of Oral and Maxillofacial Surgery* 2017; 46.
2. Vieira AR FP, Filho VVL, et al. . Orofacial Cleft Frequency Differences Depending on Geopgraphic Origin: Coast vs. Inland. *Front Dent Med* 2021; 2. DOI: 10.3389/fdmed.2021.670948
3. Collett BRCY, Speltz ML. . 'Psychosocial functioning in children with and without orofacial clefts and their parents'. *Cleft Palate-Craniofacial Journal* 2012; 49: 397-405.
4. Ellis Choirurizqoh YSRdFAS. PERBEDAAN TINGKAT STRES IBU ANAK CELAH BIBIR ATAU LELANGIT NON-SYNDROMIC DENGAN IBU ANAK NORMAL. *Prosiding KONFERENSI ILMIAH MAHASISWA UNISSULA (KIMU) Universitas Islam Sultan Agung* 2020; 4.
5. Tarun Vyas PG, Sachin Kumar, Rajat Gupta, Tanu Gupta, and Harkanwal Preet Singh. Cleft of lip and palate: A review. *J Family Med Prim Care* 2020; 9: 2621-2625. DOI: 10.4103/jfmpc.jfmpc_472_20.
6. Giorgia Finardi FGP, Frank D. Fincham. Parenting a Child with Learning Disabilities: Mothers' SelfForgiveness, Well-Being, and Parental Behaviors. *Journal of Child and Family Studies* 2022; 31: 2454-2471. DOI:

- <https://doi.org/10.1007/s10826-022-02395-x>.
7. Abidin RR. Parenting Stress Index (PSI) manual (3rd ed.). Charlottesville VA: Pediatric Psychology Press 1995.
 8. Heiman T. Parents' Voice: Parents' Emotional and Practical Coping with a Child with Special Needs. *PSYCHOLOGY* 2021; 12: 675-691.
 9. Jie Ren XL, Shudan Chen, Suiqing Chen, and Yangang Nie. The Influence of Factors Such as Parenting Stress and Social Support on the State Anxiety in Parents of Special Needs Children During the COVID-19 Epidemic. *Front Psychol, Sec Health Psychology V* 10 December 2020; DOI: <https://doi.org/10.3389/fpsyg.2020.565393>.
 10. Greg J. Duncan KTHL, Maria Rosales-Rueda, and Ariel Kalil. Maternal Age and Child Development. *Demography* 2018; 55: 2229-2255. DOI: doi: 10.1007/s13524-018-0730-3
 11. Nadine J. Kaslow EaBHF. Parenting Stress and Parent Support Among Mothers With High and Low Education. *J Fam Psychol* 2015; 29: 907-918.
 12. Guoying Qian JM, Li Tian and Gang Dou. Assessing Mothers' Parenting Stress: Differences Between One- and Two-Child Families in China. *Sec Developmental Psychology* 2020; 11. DOI: <https://doi.org/10.3389/fpsyg.2020.609715>.
 13. Dewi SP. Analisis Faktor-Faktor yang Mempengaruhi Depresi pada Ibu Kandung yang Memiliki anak dengan Retradisi Mental Sekolah Luar Biasa Yayasan Pembina Anak Cacat Manado. *J-eclinic* 2018; 6: 4.
 14. Hsiao YJ. Parenteral Stress in Families of Child with Dissability. *Sage Journal* 2017; 53. DOI: <https://doi.org/10.1177/1053451217712956>
 15. Wangqian Fu RL, Yaqian Zhang and Ke Huang Parenting Stress and Parenting Efficacy of Parents Having Children with Disabilities in China: The Role of Social Support. *Int J Environ Res Public Health* 2023; 20: 2133. DOI: <https://doi.org/10.3390/ijerph20032133>.
 16. M. van Dalen WHL, V. Kraaij,, P.C.J. De Laat, S.G.M.A. Pasmans, S.L. Versnel, M.J. Koudstaal, M.H.J. Hillegers, E.M.W.J. Utens, and J.M.E. Okkerse, . Parenting Children With a Cleft Lip With or Without Palate or a Visible Infantile Hemangioma: A Cross-Sectional Study of Distress and Parenting Stress. *Cleft Palate Craniofac J* 2021; 58: 1536-1546. DOI: doi: 10.1177/1055665621993298.
 17. Nelson P GA, Kirk S, Caress AL. . . Parents' experiences of caring for a child with a cleft lip and/or palate: a review of the literature. *Child Care Health Dev* 2012; 38: 6-20.
 18. Adil Yuni Imamullah RBU, Al Supartinah. Comparison Of Dental Anxiety Measured Using Dental Anxiety Scale and GSR-Psychoanalyzer in Patients Aged 6-8 Years Old. *ODONTO Dental Journal* July 2022; 9.
 19. Konstanze Scheller JU, Christian Scheller, and Stephan Watzke. Psychosocial and socioeconomically aspects of mothers having a child with cleft lip and/or palate (CL/P): a pilot-study during the first year of life. *J Clin Exp Dent* 2020; 12: e864–e869. DOI: doi: 10.4317/jced.56288.
 20. Parastoo Namdar MP, , Farzaneh Lal Alizadeh, and Atena Shiva. Anxiety, Depression, and Quality of Life in Caregivers of Children with Cleft Lip and Palate: A Systematic Review. *Iran J Psychiatry Behav Sci* 2022; Juni 16: e113591. DOI: doi: 10.5812/ijpbs-113591.
 21. Fitri Diah Oktadewi ITS, Lisdrianto Hanindriyo. The Correlation Between Dental Caries And Oral Health Quality of Life Among Visually Impaired Children. *ODONTO Dental Journal Desember* 2020; 7.
 22. Orouji FM. Original Article: Defining Concept of Parenting Stress in Psychology. *Int J Adv Stu Hum SocSci* 2021; 10: 142-145. DOI: doi. 10.22034/ijashss.2021.278039.1046.
 23. Wake URKaAD. Magnitude and Factors Affecting Parental Stress and Effective Stress Management Strategies Among Family Members During COVID-19. *Psychol Res Behav Manag* 2022; 15: 89-93. DOI: doi: 10.2147/PRBM.S341299.
 24. Yuan Fang JL, Marloes Boele, Dafna Windhorst, Amy van Grieken, Hein Raat. Parent, child, and situational factors associated with parenting stress: a systematic review. *European Child & Adolescent Psychiatry* 2021. DOI: <https://doi.org/10.1007/s00787-022-02027-1>.
 25. Kandula UR WA. Magnitude and Factors Affecting Parental Stress and Effective Stress Management Strategies Among Family Members During COVID-19. *Psychology-research-and-behavior-management-journal* 2022; 15 83-93. DOI: <https://doi.org/10.2147/PRBM.S341299>.