






THE EFFECT OF PARENTING STYLE ON NUTRITIONAL STATUS OF TODDLERS IN SURABAYA

Lisa Febrinda Nadhila¹ , Astika Gita Ningrum¹ , Mahendra Tri Arif
Sampurna² 

¹ Midwifery n Study Programme, Faculty of Medicine, Universitas Airlangga
Surabaya

² Department of Pediatric , Faculty of Medicine, Universitas Airlangga, Surabaya

Correspondence Address:

Surabaya, Indonesia

Email: lisa.febrinda.nadhila-2019@fk.unair.ac.id

Abstract

Background: Nutrition is crucial for sustaining a golden phase over the first two years. Nutritional problems that develop early on will lead to more difficult future health problems. The most prevalent nutritional problems are found within the ages of 12 to 24 months. the purpose of this study is to analyze the effect of parenting style on nutritional status of under two years babies. **Methods:** This study is an observational reasearch with cross-sectional approach. 685 toddlers and their parents made up the study's population, and a total of 75 were selected by accidental sampling. Anthropometric measures and questionnaires were used to gather the data. PSDQ (Parenting Style and Dimension Questionnaire) were used to identify parenting style. **Results:** democratic parenting style was most frequently observed (61.3%), while the majority of children under two had normal nutritional status (64%). Parenting styles for children's nutritional status were examined using the chi-square test, which revealed a value of 0,018. **Conclusions:** There is a relationship between parenting style and nutritional status of toddlers. This study is intended to provide health center with information for health promotion activities focused on improving child nutrition and parenting styles.

Keywords: dietary diversity, parenting style, nutritional status, toddler

INTRODUCTION

Child's growth and is an important process, especially in the first 2 years of life (Rahayu *et al.*, 2018). At this phase, nutrition has a crucial role to optimize this process. The highest position in prevalence of child nutrition problems in Indonesia is occupied by 12-24 months toddlers. National Basic Health Research in 2018 reported 38.87% of toddlers aged 12-23 months are stunted (Kemenkes, 2019), this figure is above the age group of 0-5 months (23.15%) and 6-11 months (22,98%) in East Java (Riskesdas Jatim, 2018).

Pacar Keling Health Center in Tambak Sari District is one of the 5 areas with the most nutritional status problems in Surabaya, it is also in the top 3 of underweight toddlers (10.83%) compared to Jagir Health Center (10.40%) and Banyu Urip (9.88%) (Dinas Kesehatan Provinsi Jawa Timur, 2020). This health

e-ISSN 2656-7806 ©Authors.2023



Published by Universitas Airlangga .This is an **Open Access (OA)** article distributed under the terms of the Creative Commons Attribution Share-Alike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>).

DOI: 10.20473/imhsj.v7i3.2023.267-275



center tends to have a high prevalence of undernourished and underweight toddlers. Based on clinical practice report from the Poltekkes Surabaya (Khotimah and Mazidah, 2022), there are also 60.95% of poor families and very low quality of service health in this health center.

The age group of 12-24 months is an important part that needs more attention because at this phase, growth failure begin to appear (Kemenkes, 2016). Growth and development problems in toddlers can be risk of other health problems. Several studies have proven that children's nutritional status is associated with retarded cognitive development, heart defects, and low quality of life (Setyaawati, 2012; Wulandari, Ontoseno and Umiastuti, 2018; Ashar *et al.*, 2021).

Children's nutritional status is influenced by 2 factors, directly and indirectly. Parenting style is a one of indirect factor to impact nutritional status (Kemenkes, 2017). The parenting style concerns the way parents take care for their child, including feeding practice. Baumrind (1966) classifies parenting styles based on demandingness and responsiveness dimensions into permissive, authoritarian and authoritative. Different types of parenting may have various effects on a child's nutritional health. Children's food intake is heavily influenced by parents, who play the primary role in child feeding practice, which may have an impact on the nutritional status of the child.

Based on the background that has been described and to determine the relationship of parenting style to nutritional status, it took the initiative to conduct research on the effect of parenting style on the nutritional status of 12-24 months toddlers in Pacar Keling Health Center Surabaya.

METHODS

This quantitative research used an observational analytic study design with a cross sectional approach. The population in this study were 685 of 12-24 months toddlers and their parents lives in working area of Pacar Keling Health Center Surabaya. A minimum of 10% of the population was used for accidental sampling, resulting in a final number of 68,5. 75 respondents who fit the inclusion criteria were obtained after sampling 100 newborns and their parents. Another 25 were disqualified because they weren't age-matched and showed rejection (were fussy, crying).

This research was conducted in the area of Pacar Keling Health Center, Tambak Sari District, Surabaya City in January-March 2023. The research data was collected using observation and questionnaire distribution. Parenting Style and Dimension Questionnaire (PSDQ) is used to measure the patterns of parent-child relationships. The nutritional status is carried out by observation with anthropometric measurements.

The Ethics Committee for Health Research, Faculty of Medicine, Universitas Airlangga has granted this study an ethically appropriate statement with the number 58/EC/KEPK/FKUA/2023. The data manage by editing, coding, data entry, cleaning, and tabulating techniques. chi-square test is used to analyze parenting styles on toddlers nutritional status

RESULT AND DISCUSSION

The respondents of this research were 75 babies and their parents. Based on the analysis, the following results were obtained,

Table 1. Subject's Demographic Characteristics

Characteristics	Frequency	Percentage (%)
Sub-District Area	41	54.7
Pacar Keling	34	45.3
Pacar Kembang		
Total	75	100
Parent's Age	61	81.3
20-35 years old	14	18.7
> 35 years old		
Total	75	100
Parent's last education	13	17.3
Higher Education	51	68
Middle School	11	14.7
Primary School		
Total	75	100
Parent's occupation	29	38.7
Housewife	45	60
Private-Employee	1	1.3
Civil Servant		



Total	75	100
Sex of Child	34	45.3
Male	41	54.7
Female		
Total	75	100

Pacar Keling Surabaya Health Center has two sub-districts within its area, those are Pacar Keling and Pacar Kembang. Based on the results of the research on 75 respondents, there were 41 parents and toddlers who lived in Pacar Keling and 34 others in Pacar Kembang. The average age of parents was dominated in the range of 20-35 years, namely 61 people (81.3%). Besides that, parents' last education was also calculated where most respondents had secondary education (68%). Most subjects work in the private sector (60%) and are housewives (38.7%), while only a very few work as civil servants (1.3%). The babies in this study itself were also distinguished between boy and girl to be assessed for measurement using the z-score curve. Of the 75 babies, there were 41 girls (54.7%) and 34 boys (45.3%).

Table 2 Frequency Distribution of Parenting Styles

	Frequency	Percentage (%)
Parenting Style		
Authoritative	46	61,3
Authoritarian	20	26,7
Permissive	9	12
Total	75	100
Nutritional Status (Weight-for-Age)		
Malnutrition	27	36
Normal	48	64

The table above has presented the number of parents with 3 indicators of parenting style. Authoritative parenting tends to be used more, that are around 61.3% of all respondents, then followed by authoritarian as much as 26.7% and permissive that is got 12% of samples. The nutritional status of toddlers tends to be good, there are 48 respondents have normal weight (64%), but there are also a lot

of the number for children with malnutrition. A total of 12 children with moderately underweight (16%), and its followed by 15 children with overweight (20%).

Table 3. The Relationship between Parenting Style and Nutritional Status

Category	Nutritional Status (weight-for-age)				Total		Sig (p)
	Abnormal		Normal				
	f	%	F	%	f	%	
Authoritative	13	26.26	33	71.73	46	61.33	0.018
Authoritarian	7	35.00	13	65.00	20	26.66	
Permissive	7	77.77	2	22.22	9	12.00	
Total	27	36.00	48	64.00	75	100	

The parenting style was dominated by an authoritative style with a total of 46 parents, out of this number 33 parents were having a normal weight babies (71.73%), while malnourished children were found in permissive style (77.77%). Based on the calculation of chi-square analysis, a significance value (p) of 0.018 was obtained. This number is smaller than alpha 0.05, so it can be concluded that there is a relationship between parenting style and the nutritional status weight-for-age index in 12-24 months toddlers in Pacar Keling Health Center, Surabaya.

The association between parenting practices and toddlers' nutritional status was examined using a bivariate test. A hypothesis was accepted because chi-square analysis produced a significant value (p) of 0.018, which is lower than alpha 0.05, and indicated that there is an association between parenting style and nutritional status.

A child's diet and even nutritional status will be impacted by different parenting styles. The quantity and quality of food that kids eat has a big impact on their nutritional health, so it's important to carefully examine and prepare ahead. Parenting style, defined as the attitudes and behaviors of parents in terms of their proximity to their children, such as feeding, keeping the home clean, and showing affection, is directly related to the type and quantity of food that children eat. Iskandar (2022) asserts that in order to prevent food choices from obstructing a



child's growth, particularly in toddlers with still-developing cognitive capacities, parents must play a role in the food decisions made.

The result of this study show that authoritative parenting styles seem more to be prevalent and produce greater results than other parenting methods. It is shown from 71.73% of authoritative parents have babies with normal nutritional status. Children with authoritative parents grow become self-reliant, dependable adults while still abiding by some of their demands. Parents and children interact during the feeding process to decide on eating norms like meal schedules or menus. Baumrind (1966) stated that children should be able to self-regulate their eating habits while still being under parent's demand.

Even while children of authoritarian parents are more likely to be normal weight, many of them nevertheless have nutritional problems. In addition to parenting style, nutritional status can be evaluated based on education, occupation, and financial stability of the family (Utami *et. al*, 2018). This makes it feasible for children who has unhealthy weight in authoritative parents have a good approaches to parenting but not having an adequate education and wealth. Education and parenting knowledge are closely associated, therefore parents with low levels of education are more likely to be aware of unhealthy eating habits, such as selecting upscale foods without considering a balanced diet. Since families often struggle to provide enough food for their children, both in terms of quality and quantity, the economic component is directly tied to this issue. This statement is supported by the results of a demographic survey at Pacar Keling Health Center which states that the education and economy of parents is on average at the middle-low level.

In children aged less than two years, parents have a major role in complementary feeding practice. Authoritarian parenting is characterized by parental interaction in the form of high demands and low responses (Robinson *et al.*, 1995). This parenting style represents complete parental control over children's habits with strong demands, such as strict rules, restrictions on food choices, and pressure to eat (Rhee *et al.*, 2015). This is done to ensure the child gets certain foods at certain times, regardless of child needs and desire. This type of behavior tends to focus on the wishes of parents, thus allowing for force-feeding of children in the

form of the amount or type of food. A study found that authoritarian parenting was associated with excess Body Mass Index (BMI) (Alahmadi, 2019). In this parenting style, parents have a more active role, causing children to ignore their personal perceptions of hunger or satiety, as a result, children will continue to eat before the food prepared by their parents runs out.

Authoritarian style makes children to be more passive while parents handling the control over them, so that children will only eat according to parental demands rather than what they want. Children may lose their appetite or perhaps act fussy during mealtime as a result (Bonavantura Nursi Nggarang, 2019). Thus it can be concluded that the nutritional status of children is also influenced by appetite, which it can be present when parents practice authoritarian parenting to children.

The permissive parenting style, which is distinguished by the presence of high responsiveness and low demandingness, actually has a larger rate of underweight toddlers than the other two types of parenting. With low parental control, this parenting style typically let the child to live their life as they would like. When offering complementary food, the child's preferences are taken into consideration, whereas parents typically go with their own preferences. The ability of children to control their own eating habits has an impact because it prevents the proportions and varieties of food from being regulated based on balanced nutrition. The end of this process then causes the child's nutritional intake is not fulfilled and nutritional problems arise. Research conducted by Fatihah (2021) supports this statement by bringing the result that most parents with permissive parenting have children with low nutrition. In addition, it is also reinforced by Hidayathillah Eni (2018) which states that permissive and neglected parenting style tend to have more potential to produce underweight children.

CONCLUSIONS AND SUGGESTIONS

This study results showed that there was a relationship between parenting style and nutritional status in toddlers. This study is intended to provide Pacar Keling health center with information for health promotion activities focused on improving child nutrition and parenting styles. The next researcher can talk more about the relationship between parenting and nutritional status because this reasearch only



investigate the three primary parenting styles of the nutritional health of children under the age of two.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

ACKNOWLEDGEMENTS

The author thank all team members during the research, the staff and people of the Pacar Keling Health Center. In this research there is no fundings.

REFERENCES

- Alahmadi, R. A. (2019) 'The Effects of Parenting style and Feeding Style on Child Weight Status : A Systematic Review'.
- Ashar, H. *et al.* (2021) 'Status Gizi Dan Perkembangan Pada Anak Baduta Di Kabupaten Wonosobo', *Buletin Penelitian Sistem Kesehatan*, 24(2), pp. 128–135. doi: 10.22435/hsr.v24i2.4009.
- Baumrind, D. (1966) 'Baumrind, D. (1966). Effects of authoritative parental control on child', *Child Development*, 37(1966), pp. 887–907.
- Bonavantura Nursi Nggarang, O. J. B. (2019) 'Hubungan Pola Asuh Orang Tua Dengan Perilaku Sulit Makan Anak Usia Prasekolah Di Taman Kanak-Kanak Arengkoe Pagal', *awasan Kesehatan*, 4(1), pp. 15–22. Available at: <https://stikessantupaulus.e-journal.id/JWK/article/view/56>.
- Dinas Kesehatan Provinsi Jawa Timur. (2020) 'Profil Kesehatan Provinsi Jawa Timur 2019', *Dinas Kesehatan Provinsi Jawa Timur.*, p. tabel 53. Available at: www.dinkesjatengprov.go.id.
- Fatihah, H. M. N. (2021) *Pola Asuh Orang Tua Terhadap Status Gizi Kurang Anak Usia 6-24 Bulan Di Wiliayah Kerja Puskesmas Karangduren Kabupaten Jember*.
- Hidayathillah Eni, A. P. M. (2018) 'Hubungan Pola Asuh Orang Tua Dengan Status Gizi Pada Balita Usia 1 - 5 Tahun di Desa Selokgondang Kecamatan Sukodono Kabupaten Lumajang', *Infokes. Sekolah Tinggi Ilmu Kesehatan Surabaya*, (Vol 8 No 01 (2018): Jurnal Info Kesehatan), pp. 19–27. Available at: <https://stikes-surabaya.e-journal.id/infokes/article/view/14>.
- Iskandar, N. (2022) 'Peran Orang Tua, Pola Makan dan Pemberian Gizi Seimbang

- terhadap Status Gizi Balita', *Jurnal Interprofesi Kesehatan Indonesia*, 1(4), pp. 156–163. doi: 10.53801/jipki.v1i4.30.
- Kemenkes (2016) *Status Gizi Balita dan Interaksinya, Mediakom Edisi 76*. Available at: <https://sehatnegeriku.kemkes.go.id/baca/blog/20170216/0519737/status-gizi-balita-dan-interaksinya/> (Accessed: 10 November 2022).
- Kemenkes (2017) *Penilaian Status Gizi*. 1st edn. Jakarta: BPPSDMK.
- Kemenkes (2019) 'Laporan Nasional RISKESDAS 2018', *Kementerian Kesehatan RI*, 1(1), p. 1. Available at: <https://www.kemkes.go.id/article/view/19093000001/penyakit-jantung-penyebab-kematian-terbanyak-ke-2-di-indonesia.html>.
- Khotimah, V. K. and Mazidah, Y. Z. (2022) *Laporan Praktik Kerja Lapangan di Puskesmas Pacar Keling, Poltekkes Kemenkes Surabaya*. Surabaya. Available at: <http://repo.poltekkesdepkes-sby.ac.id/id/eprint/5512>.
- Rahayu, A. et al. (2018) *Buku ajar*. 1st edn. Edited by P. Rahmi. Yogyakarta: CV Mine. Available at: <http://kesmas.ulm.ac.id/id/wp-content/uploads/2019/02/BUKU-AJAR-1000-HARI-PERTAMA-KEHIDUPAN.pdf>.
- Rhee, K. E. et al. (2015) 'Development of the General Parenting Observational Scale to assess parenting during family meals', *International Journal of Behavioral Nutrition and Physical Activity*, 12(1). doi: 10.1186/s12966-015-0207-3.
- Riskesdas Jatim (2018) *Laporan Provinsi Jawa Timur RISKESDAS 2018, Kementerian Kesehatan RI*.
- Robinson, C. C. et al. (1995) 'Authoritative, Authoritarian, and Permissive Parenting Practices: Development of a New Measure', *Psychological Reports*, 77(3), pp. 819–830. doi: 10.2466/pr0.1995.77.3.819.
- Setyaawati, V. A. V. (2012) 'Peran Status Gizi terhadap Kecerdasan Kognitif pada Masa Golden Age Period', *Jurnal VISIKES*, 11(2), pp. 105–112.
- Utami, R. D. P., Nggadjo, F. X. and Murharyati, A. (2018) 'Hubungan Antara Pendidikan, Pekerjaan Dan Ekonomi Orang Tua Dengan Status Gizi Pada Anak Usia Pra Sekolah', *Jurnal Kesehatan Madani Medika*, 9(1), pp. 64–70. doi: 10.36569/jmm.v9i1.29.
- Wulandari, A. P., Ontoseno, T. and Umiastuti, P. (2018) 'Hubungan Status Gizi Anak Usia 2-5 Tahun dengan Kelainan Jantung Bawaan Biru di RSUD Dr Soetomo Surabaya', *Sari Pediatri*, 20(2), p. 65. doi: 10.14238/sp20.2.2018.65-9.