

# Artikel 2

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**Submission date:** 01-Sep-2021 11:43AM (UTC+0700)

**Submission ID:** 1639292503

**File name:** 1639141445\_-\_Hartono,\_Rudy\_Rudy\_Hartono.pdf (707.82K)

**Word count:** 2980

**Character count:** 15978

# Feeding Style for Children Aged 0-59 Months of Buginese Ethnicity

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## Abstract

Background. The study of Feeding Style of children in ethnic Buginese was focused on caregiver styles to feeding practices that influences nutritional stunting. The purpose of this study was to determine feeding style of Bugis ethnicity. Method. The cross sectional study and the sample size is 300 subjects, selected by random sampling. Located in Makassar City, South Sulawesi Province Indonesia (starting January-December 2019). Enumerators in this study were students of the Applied Nutrition & Dietetic in Nutrition Department of the Health Polytechnic Makassar. Research ethics was obtained at the Makassar Health Polytechnic Ethics Commission. The results showed that stunting prevalence for children in Buginese ethnicity was 22,7% and Feeding Style consists of four groups namely caring ( *indulgent* ), compromise ( *authoritative* ), free ( *uninvolved* ) and completely regulating ( *authoritarian* ). The conclusion is that the style of Bugis ethnic child feeding style consists of four groups namely *indulgent*, *authoritative*, *uninvolved*, and *authoritarian*.

**Key words:** Buginese, Feeding Style, Children.

## Introduction

Stunting prevalence data collected by the World Health Organization (WHO), Indonesia is included in the third country with the highest prevalence in the Southeast Asia/South-East Asia Regional (SEAR) region. The average prevalence of stunting toddlers in Indonesia in 2005-2017 was 36.4%. The determinant factor of nutritional problems is multidimensional<sup>1,2</sup>. The five factors are based on the conceptual framework of the causes of household and family factors include the low quality of nutritional intake during pre-concepti<sup>12</sup> pregnancy and the breastfeeding phase. Besides, the nutritional status of the mother during pregnancy determines the height status of the child being born<sup>3,4,5</sup>.

Inadequate complementary feeding and breastfeeding are real phenomenon in urban communities

in Makassar. Factors are the lack of knowledge about complementary feeding, and the occupation status of mothers outside the home so that they lack of attention to giving feeding their children<sup>6,7</sup>. Feeding style lead to quality and quantity of micro and macronutrient intake for children. Feeding style depends on the family resources and type care givers by the gate keepers<sup>8</sup>. Ethnic Buginese is a very strong ethnic character in the economic field and the ability to survive anywhere, but others things remains to height stunting prevalence across region their lives<sup>9,10,11,12</sup>. Objectives of these study to investigate nutritional stunting and feeding style for children in Buginese ethnicity.

## Research Method

The subjects of this study were obtained from Bugis Ethnic<sup>10</sup> who live in Makassar Indonesia. The population is all mothers who have children aged 6-59 months in Makassar City. Criteria for inclusion of Buginese ethnic samples in Makassar City. (1) The mother is from the ethnic Bugis and the husband is also from the ethnic Bugis (2) Having children aged 6-59 Months in September 2019 ; Have lived for at least the past 6 months in Makassar City, willing to participate in this

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research, mother comes from ethnic Bugis descent and husband is also Bugis descent. The sample size in this study is based on the estimated prevalence of stunting in Makassar City as a Bugis ethnic center that is 35.7%, using 80% power test with 95% confidence, design effects 1 and 5 with the addition of 10% additional data estimated not to participate in research this is because they refuse or are not present at the time of screening.

The questionnaire was tested using structured questions using official data on children aged 0- 59 (age, gender, weight and height/length; parental occupation, education level and feeding style). Child's weight is measured using electronic SECA scale with an accuracy of 0.1 kg and a length of the child (for children aged 0-23 months) or height (for children aged 24- 59 months) was measured using high board/long local made with an accuracy of 0, 1 cm. SECA scales are

calibrated every morning, before data collection, using a standard weight of 5 kg. Duplicate anthropometric measurements were carried out for 10% of the sample; the coefficient of variation in subjects from duplicate measurements in children and women is less than 5%. All enumerators receive training at least two days before data collection, and those responsible for taking anthropometric measurements receive one additional training day. Supervisors are tasked with supervising the work of enumerators and facilitating good relations with community members. Stunting is defined as Z-score for height Z-scores for age  $<-2$  SD.

Statistical analyses used to exploratory factor of feeding style instrument by Kaiser Meyer-Olkin (KMO) Measures of Sampling Adequacy and Bartlett's Test of Sphericity.

## Results

### Demographic Characteristics

**Table 1. Demographic Characteristics of Buginese Ethnicity Families**

| Demographics | Categories           | Mother |      | Father |      |
|--------------|----------------------|--------|------|--------|------|
|              |                      | n      | %    | n      | %    |
| Occupation   | Officials Government | 7      | 2,3  | 17     | 5.7  |
|              | Private employee     | 33     | 11.0 | 168    | 56.5 |
|              | Labor/internship     | 9      | 3,0  | 100    | 32.7 |
|              | Housewife            | 249    | 83.0 | 0      | 0    |
|              | others               | 3      | 1    | 4      | 2,3  |
| Education    | 0-6 years            | 32     | 10.6 | 33     | 11.1 |
|              | 7-12 years           | 214    | 71.4 | 211    | 70.3 |
|              | College              | 54     | 18.0 | 56     | 18.7 |

Based on the results of this research it is known that the main occupation of mothers is as housewives as many as 249 people (83.3%), Father's occupation is as a private employee and laborer, 168 (56.5%).

## Distribution of Stunting Children on Ethnic Bugis

**Table 2. Distribution of Buginese Ethnic Stunting Children**

| Status |          | n   | %     |
|--------|----------|-----|-------|
| 1      | Stunting | 68  | 22.7  |
| 2      | Normal   | 232 | 77.3  |
| Total  |          | 300 | 100.0 |

<sup>8</sup> Based on the results of this study it is known that the percentage of stunted children in the Bugis ethnic group in Makassar City is 22.7%.

### Style of Child Feeding Ethnic Bugis

The style of child feeding of ethnic Bugis in this study was originally designed in 18 question items. Based on all of these items later, a confirmation analysis of the indicators was carried out and the results left 16 realible question items. The factor analysis is carried out to group the parenting style variables into the parenting <sup>4</sup> style groups according to the Buginese ethical practice. Based on the results of the factor analysis, then four groups of parenting styles on child feeding of Bugineses ethnicity. In accordance with the terms in the previous study of parenting style, there are four types, namely (1) indulge (2) Authoritative (3) Uninvolved and (4) Authoritarian. Variable style parenting based on the four types above are as follows:

Parenting style indulgence has the characteristic features as follows (1) giving opportunities for children to choose which foods he will eat (2) Not specify how many snacks should be eaten children (3) giving opportunities for children to try foods that have not been he has ever felt (4) Letting the child do anything in his food when he eats (5) If the child, is bored with certain foods, offers other foods (6) the child's food is the same type of side dish as family food and (7) The family has eating habits, mealtime. Authoritative parenting style has several main characteristics namely ; (1) Encourage the child to eat food (2) If the child has wrong eating habits, then forbid it (3) Encourage the child to enjoy his food.

Uninvolved parenting style has characteristics (1) Providing interesting food for children, (2) If the child is sad, he entertains with food (3) Provides something to the child, if he has good eating habits. The authoritarian parenting style is characterized by feeding the child after the father eats.

## Discussion

The prevalence of stunting children in Buginese ethnicity is 22.7%, where this percentage is still above the threshold set by WHO as a threshold for health problems with a prevalence of <20%. Based on these parameters, it can be proven that the ethnic Bugis made a significant contribution to the percentage of stunting in South Sulawesi in 2018. South Sulawesi Province ranks fourth in the highest percentage of stunting in Indonesia. Various factors were analyzed in this study by the conceptual framework published by Unicef in 2006<sup>13,14</sup>.

Based on the concept map of the occurrence of stunting compiled by <sup>11</sup> unicef 2006 consists of several factors that affect stunting, namely household and family factors, child factors and complementary foods for breastfeeding, breastfeeding factors, hygiene sanitation factors, infectious disease factors, health-seeking behavior, parenting feeding style or style of care for child feeding, and caring practices or stimulation of child development. All of these variables are included in the scheme of the conceptual framework of determinants of global stunting factors<sup>15,16</sup> In this study, an analysis of risk factors is by the empirical evidence in the city of Makassar, especially in the ethnic Bugis.

Household and family factors in this study were tested <sup>7</sup> with child stunting status and it is known that the mother's age, father's age, mother's education, and father's education did not have <sup>6</sup> significant effect on stunting of children under five. The number of family members and the number of children under five in one household as an economic burden variable also does not consistently affect stunting. In this study, several variables cannot be proven except for the work status of parents. Permanent employment with wages that can meet food and clothing needs is a protective factor while other jobs are a risk factor. This proves that the father's work status has a very strong influence on the incidence of child stunting.

Factors child and complementary feeding breast milk in this study were tested against the risk of stunting and discovered some facts that status pre-lacteal feeding

did not affect stunting, as well as several other variables; child food forms, frequency of eating, who makes food for children, who feeds children. All of these variables do not differentiate a child's height status. The only variable that is very influential today is the child's appetite as a protective factor.

Feeding Style is one of the variables that have a risk of stunting. This study has grouped ethnic Bugis childcare styles into four categories. This category is based on the same study in Turkey on Feeding Style by Sibel Oztruk, 2018<sup>17</sup>. The study in Turkey took the location of the Turkic ethnic group with 19 items that had been tested for validity and reliability. The condition of Indonesia, especially the buginese ethnicity, is culturally different from Turkey, so this study carried out modifications and adjustments to the context of Indonesian culture in general and specifically the Bugis culture. Parenting style *indulgence* has the characteristic features as follows: (1) giving opportunities for children to choose which foods he will eat (2) Not specify how many snacks should be eaten children (3) giving opportunities for children to try foods that have not been he has ever felt (4) Letting the child do anything in his food when he eats (5) If the child, is bored with certain foods, offers other foods (6) the child's food is the same type of side dish as family food and (7) The family has eating habits, mealtime<sup>18,19</sup>.

*Authoritative* parenting style has several main characteristics namely ; (1) Encourage the child to eat food (2) If the child has wrong eating habits, then forbid it (3) Encourage the child to enjoy his food (4) avoid himself or process his child's food Parenting style *uninvolved* own traits - traits (1) M giving eat interesting for children, (2) If the child was sad, he entertained with food (3) giving something to the child if he has good eating habits. The *authoritarian* parenting style is characterized by feeding the child after the father eats<sup>20,21</sup>.

Caring practice or social psycho stimulation in this study, shows the maximum parameters ranging from play opportunities, time together with children, play equipment, gross motor exercises, and fine motor skills. This fact proves that the exposure to social psycho stimulation in children is homogeneous in all subjects so that its effects on population stunting cannot be known. This study found no strong evidence that caring practice is a risk factor for stunting<sup>22,23,24,25</sup>.

## Conclusion

The percentage of stunted children with ethnic Bugis as much as 22.7%. The way of feeding Buginese ethnic children is consisting of four groups namely caring (*indulgent*), compromise (*authoritative*), free (*uninvolved*) and completely regulating (*authoritarian*).

**Conflict-of-Interest Statement:** Between subjects and researchers there is **no conflict of interest**.

**Source of Funding:** This **research** received funding from **the government of the Republic of Indonesia Ministry of Health**, a foreign cooperation research scheme.

**Ethical Clearance :** Research ethics number 1123/KEPK-PTKMKS/X/ 2019 obtained from the Makassar Health Polytechnic Research ethics committee.

## References

1. Health Research and Development Body Ministry of Health Republic of Indonesia. Basic Health Research Report of Indonesia Year 2018. *Riskesdas 2018*. 2018:182-183.
2. Torlesse H, Cronin AA, Sebayang SK, Nandy R. Determinants of stunting in Indonesian children: Evidence from a cross-sectional survey indicate a prominent role for the water, sanitation and hygiene sector in stunting reduction. *BMC Public Health*. 2016. doi:10.1186/s12889-016-3339-8
3. Prendergast AJ, Humphrey JH. The stunting syndrome in developing countries. *Paediatr Int Child Health*. 2014;34(4):250-265. doi:10.1179/2046905514Y.0000000158
4. Hall C, Bennett C, Crookston B, et al. Maternal Knowledge of Stunting in Rural Indonesia. *Int J Child Heal Nutr*. 2018;7(4):139-145. doi:10.6000/1929-4247.2018.07.04.2
5. Rachmi CN, Agho KE, Li M, Baur LA. Stunting coexisting with overweight in 2·0-4·9-year-old Indonesian children: Prevalence, trends and associated risk factors from repeated cross-sectional surveys. *Public Health Nutr*. 2016;19(15). doi:10.1017/S1368980016000926
6. Beal T, Tumilowicz A, Sutrisna A, Izwardy D, Neufeld LM. A review of child stunting determinants in Indonesia. *Matern Child Nutr*. 2018;14(4):1-10. doi:10.1111/mcn.12617

7. Alam MA, Mahfuz M, Islam MM, et al. Contextual factors for stunting among children of age 6 to 24 months in an under-privileged community of Dhaka, Bangladesh. *Indian Pediatr.* 2017;54(5):373-376. doi:10.1007/s13312-017-1109-z
8. Panjwani A, Heidkamp R. Complementary Feeding Interventions Have a Small but Significant Impact on Linear and Ponderal Growth of Children in Low- and Middle-Income Countries: A Systematic Review and Meta-Analysis. *J Nutr.* 2017;jn243857. doi:10.3945/jn.116.243857
9. Nancy J. Southeast Asia -- Bugis Weddings : Rituals of Social Location in Modern Indonesia by Susan Bolyard ... 1991;(May).
10. Pelras C. The Bugis. *J Asian Stud.* 1996;57(4):1226.
11. Ammarell G. Bugis Migration and Modes of Adaptation To Local Situations. *Ethnology.* 2002;41(1):51-67.
12. Nurman Said. Religion and Cultural Identity Among the Bugis. *Islam Stud.* 2004:12-20.
13. WHO. *Indonesia - Global Nutrition Report.*, 2013-2014 (2017). www.globalnutritionreport.org.
14. de Onis M, Branca F. Childhood stunting: A global perspective. *Matern Child Nutr.* 2016;12:12-26. doi:10.1111/mcn.12231
15. Melaku YA, Gill TK, Taylor AW, Adams R, Shi Z, Worku A. Associations of childhood, maternal and household dietary patterns with childhood stunting in Ethiopia: Proposing an alternative and plausible dietary analysis method to dietary diversity scores. *Nutr J.* 2018;17(1):1-15. doi:10.1186/s12937-018-0316-3
16. Aguayo VM, Menon P. Stop stunting: Improving child feeding, women's nutrition and household sanitation in South Asia. *Matern Child Nutr.* 2016;12:3-11. doi:10.1111/mcn.12283
17. Ozturk S, Yildiz E. The Psychometric Properties of the Turkish Version of the Caregiver's Feeding Styles Questionnaire. *Int J Caring Sci.* 2018;11(2):812-818. <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=131851621&site=ehost-live>.
18. Savage JS, Hohman EE, Marini ME, Shelly A, Paul IM, Birch LL. INSIGHT responsive parenting intervention and infant feeding practices: Randomized clinical trial. *Int J Behav Nutr Phys Act.* 2018;15(1):1-11. doi:10.1186/s12966-018-0700-6
19. Bastaitis K, Ponnet K, Mortelmans D. Parenting of Divorced Fathers and the Association with Children's Self-Esteem. *J Youth Adolesc.* 2012;41(12):1643-1656. doi:10.1007/s10964-012-9783-6
20. Little EE, Legare CH, Carver LJ. Mother-infant physical contact predicts responsive feeding among U.S. breastfeeding mothers. *Nutrients.* 2018;10(9):1-16. doi:10.3390/nu10091251
21. Manuscript A, Behavior PF. Depend on Feeding Style. 2014;47(7):705-709. doi:10.1002/eat.22324. Parent
22. Reinbott A, Schelling A, Kuchenbecker J, et al. Nutrition education linked to agricultural interventions improved child dietary diversity in rural Cambodia. *Br J Nutr.* 2016;116(8):1457-1468. doi:10.1017/S0007114516003433
23. Akombi BJ, Agho KE, Hall JJ, Wali N, Renzaho AMN, Merom D. Stunting, wasting and underweight in Sub-Saharan Africa: A systematic review. *Int J Environ Res Public Health.* 2017;14(8):1-18. doi:10.3390/ijerph14080863
24.  Ili A, Margolies A, Santacroce M, et al. Using a Community-Based Early Childhood Development Center as a Platform to Promote Production and Consumption Diversity Increases Children's Dietary Intake and Reduces Stunting in Malawi: A Cluster-Randomized Trial. *J Nutr.* 2018;148(10):1587-1597. doi:10.1093/jn/nxy148
25. Roche ML, Marquis GS, Gyorkos TW, Blouin B, Sarsoza J, Kuhnlein H V. A Community-Based Positive Deviance/Hearth Infant and Young Child Nutrition Intervention in Ecuador Improved Diet and Reduced Underweight. *J Nutr Educ Behav.* 2017;49(3):196-203.e1. doi:10.1016/j.jneb.2016.10.007

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