# Feeding Practices for Children in Moncongloe Sub District, Maros, South Sulawesi

Agustian Ipa<sup>1</sup>, Bambang Wirjatmadi<sup>2</sup>, Shrimarti Rukmini Devy<sup>3</sup>, Rudy Hartono<sup>4</sup>

<sup>1</sup>Doctoral Student at Faculty of Public Health, Airlangga University, Indonesia and Lecturer at Department of Nutrition, Health Polytechnic of Ministry of Health in Makassar, Indonesia <sup>2&3</sup>Lecturer at Faculty of Public Health, Airlangga University, Indonesia <sup>4</sup>Lecturer at Department of Nutrition, Health Polytechnic of Ministry of Health in Makassar, Indonesia

## Abstract

Feeding for children is not merely related to nutritious food that fits children's needs, but more broadly about what, when, where and how caregivers feed their children. The design of this study was cross sectional. The population in this study were all children under five in Bonto Bunga Village, Moncongloe Sub-District, Maros Regency. The sample size was 80 children under five. The research variables were knowledge about feeding for children, feeding practices for children, and nutritional status of children under five. The collected data were analyzed using Fisher's exact test. The result showed that: 1) the practice of feeding was significantly related to the nutritional status of children by height / age, 2) the practice of feeding was significantly related to the nutritional status of children by weight / age, 3) the practice of feeding was not significantly related to the nutritional status of children. Based on the results of the study can be concluded the practice of providing food for children associated with nutritional status based on height body / age and body weight / age.

Keywords: Feeding practices for children, Nutritional status.

## I. INTRODUCTION

The first year is a critical period for the growth and development of children, because during that period food is introduced to children (The Lancet, 2008). In Maros regency, 15.1% of children under five are underweight, 38.5% of under-fives are short-bodied and 8.4% of under-fives are thin. In Marusu sub-district, Maros regency, 14.3% of children under five are underweight, 28.7% of them are short-bodied and 5.0% of children under five are still a public health problem.

Adequate intake of nutrients during the first one-thousand-days of a child's life is a very important condition for the quality of life of children in the future (WHO, 2010). According to David Nabarro (2010), under-five children who suffer from malnutrition early in their lives will face two problems later in life that are more at risk of dying (about 3 billion out of 6 billion under-five mortality each year associated with malnutrition), and more at risk of disability.

Feeding for children is not merely related to nutritious food that fits children's needs, but more broadly about what, when, where and how caregivers feed their children (Pelto et al., 2003).

#### **II. METHODS**

The design of this study was cross sectional. The population in this study were all children under five in Bonto Bunga Village, Moncongloe Sub-District, Maros Regency. The sample size was 80 children under five. The research variables were knowledge about feeding for children, feeding practices for children, and nutritional status of children under five. The collected data were analyzed using Fisher's exact test.

#### **III. RESULTS**

The results showed that most of the respondents knew that breastfeeding should continue to be given until the child is 2 years old or older, supplementary feeding of new milk may be given after 6 months of age, food suitable for children aged 6-8 months is crushed food or food filtered, densely packed foods suitable for children aged 9-11 months, solid foods suitable children aged> 1 year. Most respondents knew about the frequency of feeding according to the age of the child. Furthermore, it could be interpreted that the level of knowledge of respondents about the feeding of toddlers was good.

Variable	n <sup>1</sup>	%
Breastfeeding age		
6 month	9	11.3
1 year	13	16.3
2 years or more	57	71.3
Do not know	1	1.3
The age began to be given complementary foods of breast milk		
<6 month	6	7.5
6 month	54	67.6
>6 month	19	23.8
do not know	1	1.3
Form of food given to children aged 6-8 months		
Crush / strain	45	56.3
Somewhat dense	29	36.3
Solid like family food	6	7.5
Forms of food given to children aged 9-11 months		
Crush / strain	7	8.8
Somewhat dense	54	67.5
Solid like family food	18	22.5
Do not know	1	1.3
Form of food given to children aged over 1 year		
Crush / strain	1	1.3
Somewhat dense	8	10.0
Solid like family food	71	88.8
The frequency of feeding the main meals in children aged 6-8 months		
1 time	2	2.0
2-3 times	3	3.8
3-4 times	68	85.0
Do not know	8	10.0
	1	1.3
The frequency of primary food feeding in children aged 9-60 months	2	2.5
	2	2.5
2-3 times	59	/3.8
3-4 times	17	21.3
5-6 times	1	1.3
do not know	1	1.3
Frequency of feeding intermittent in children aged 9-60 months		o
1-2 time	22	27.5
3-4 times	49	61.3
5-6 times	7	8.8
do not know	2	2.5

# Table 1. Knowledge about feeding for children

 $^{1}n=80$ 

The results showed that 57.5% of the respondents were not breastfeeding at this time. Most children (83.8%) began to be fed complementary feeding at the age of 6 months (83.8%). Most of the breastfeeding supplements (60.0%) were manufacturers. The first form of complementary feeding was food that was crushed or filtered (73.8%). Forms of food given today were solid foods such as family meals (78.8%). Most of the main food frequencies today were 2-3 times (65.0%), whereas the feeding is given 1-2 times (35.0%). Furthermore, it could be interpreted that the practice of feeding for children was good.

Dama International Journal of Researchers, www.damaacademia.com, editor@damaacademia.com

Variable	$n^1$	%
Mother is still breastfeeding right now		
Yes	34	42.5
No	46	57.5
The age of the first time given complementary food of breast milk		
<6 month	6	7.5
6 month	67	83.8
>6 month	7	8.8
Types of Maternal Milk Companion Food first given		
Create your own (local)	29	36.3
Manufacturer	48	60.0
Combination (Homemade and Manufacturing)	3	3.8
The first form of MP-ASI mother gives to child		
crush / strain	59	73.8
Flabby / somewhat dense	18	22.5
Solid like family food	3	3.8
The kind of food your mother gives you at this moment		
Liquid (Breast milk or formula milk)	1	1.3
Crush / strain	5	6.3
Flabby / somewhat dense	11	13.8
Solid like family food	63	78.8
Consistency / consistency of food given today		
Watery	3	3.8
Thick	7	8.8
Solid like family food	70	87.5
How many times is the child's mother given the main food in a day today		
1 time	5	6.3
2-3 times	52	65.0
3-4 times	20	25.0
5-6 times	2	2.5
do not know	1	1.3
How many times is the mother's child fed a distraction in a day		
1-2 time	28	35.0
3-4 times	25	31.3
5-6 times	16	20.0
7-8 times	3	3.8
do not know	8	10.0
<sup>1</sup> n=80		

# Table 2. Feeding Practices for Children

Table 3. The Nutritional Status of Children

Variabel		n	%
Weight / Age:	Less	21	26.3
	Good	59	73.8
Height / Age:	Short	29	36.3
	Normal	51	63.8
Weight / Height:	Thin	3	3.8
	Normal	77	96.3

	Table 4.	The relationsh	ip between	feeding practices	and nutritional	status of	children b	)y height /	' age
--	----------	----------------	------------	-------------------	-----------------	-----------	------------	-------------	-------

	Nutritional Status		(he	eight / age)	Total			
Feeding Practices	Normal		S	Short	1	p-value		
	n	%	n	%	n	%	-	
Good	32	40.0	27	33.8	59	73.8	0.003	
Less	19	23.8	2	2.5	21	26.3	0.003	
Total	51	63.8	29	36.3	80	100.0		

Dama International Journal of Researchers, www.damaacademia.com, editor@damaacademia.com

Table 4 shows that the results of the Fisher's exact test were p-value = 0.003. It was further concluded that the practice of feeding was significantly related to the nutritional status of children by height / age.

	Nutritional Status		(weight / age)		Total			
Feeding Practices	No	ormal	S	Short	- Totai		p-value	
	n	%	n	%	n	%		
Good	39	48.8	20	25.0	59	73.8	0.000	
Less	20	25.0	1	1.3	21	26.3	0.009	
Total	59	73.8	21	26.3	80	100		

Table 5. The relationship between feeding practices and nutritional status of children by weight / age

Table 5 shows that the results of the Fisher's exact test were p-value = 0.009. It was further concluded that the practice of feeding was significantly related to the nutritional status of children by weight / age.

Table 6. The relationship between feeding practices and nutritional status of children by weight / height

	Nutrition	nal Status	(weig	ght / height)	т	otal	
Feeding Practices	Normal		Short		TOTAL		p-value
	n	%	n	%	n	%	-
Good	56	70.0	3	3.8	59	73.8	0 562
Less	21	26.3	0	0.0	21	26.3	- 0.303
Total	77	96.3	3	3.8	80	100.0	

Table 6 shows that the results of the Fisher's exact test were p-value = 0.563. It was further concluded that the practice of feeding was not significantly related to the nutritional status of children by weight / height.

|--|

Knowledge of Feeding	Practices of Feeding for Children				Total			
Knowledge of Feeding	Good		Less				p-value	
	n	%	n	%	n	%	-	
Good	38	47.5	13	16.3	51	63.8	0.020	
Less	21	26.3	8	10.0	29	36.3	0.838	
Total	59	73.8	21	26.3	80	100.0		

Table 7 shows that the results of the Fisher's exact test were p-value = 0.838. It was further concluded that the knowledge of feeding was not significantly related to the practice of feeding for children.

#### **IV. DISCUSSION**

Children aged less than 5 years are at a time of critical growth and development. This period is characterized by rapid physical growth, especially the brain. At this time, mental development also takes place quickly. Growth and development of children affected by genetic and environmental factors. One of the environmental factors that plays a major role is the nutritional adequacy of children.

The practice of feeding for children is closely linked to the nutritional status of children. If children do not get sufficient nutritional intake, then these children are at risk for growth and developmental disorders. The results of research on children in Asia show that children's growth declined during the weaning period at the age of 6-18 months. This is consistent with one characteristic of children aged 6-18 months ie as a passive consumer of food, in this case, the child really depends on the care and feeding by his mother. Therefore, attention should be paid to the type, quantity and quality of food given to children (Kasdu, 2004).

The results of this study indicate that there was a significant relationship between feeding practices with nutritional status based on height / age and body weight / age, but there was no significant relationship between feeding practices with nutritional status based on body weight / height. The results also show that there was no significant relationship between the level of knowledge with the practice of feeding for children.

This condition is similar to the results of research Sarasani (2005), Warin-wind (2006) that the practice of good feeding found many children with good nutritional status. Children aged less than 5 years are generally passive consumers, in which case, the food they consume depends on what their mother provides. Their milk teeth have grown, but have not been used to chew food that is too hard. However, children should be directed to adult dietary patterns (As'ad, 2002).

In 1998, UNICEF and WHO published a conceptual framework on the causes of nutritional problems in children. In this conceptual framework it can be seen that the root cause of malnutrition is the economic, political and social crises in society that lead to low food availability, poverty and high rates of inflation and unemployment.

While the main issues in society are the lack of empowerment of human resources, low level of education, lack of knowledge and skills. Indirect factors from malnutrition are inadequate food supply due to economic crisis and low purchasing power, inadequate child care pattern due to low knowledge, parent education and poor environmental sanitation and difficult access to basic health service providers that impact on the pattern consumption and the occurrence of infectious diseases, which in turn be the direct cause of malnutrition.

# V. CONCLUSION

Based on the results of the study can be concluded the practice of providing food for children associated with nutritional status based on height body / age and body weight / age.

## References

- 1. As'ad, S. (2002). Gizi-Kesehatan Ibu dan Anak. Direktorat Jenderal Pendidikan Tinggi Departemen Pendidikan Nasional.
- 2. Badan Penelitian dan Pengembangan Kesehatan. (2008). Laporan Nasional Riset Kesehatan Dasar Tahun 2007. Departemen Kesehatan Republik Indonesia, Jakarta.
- 3. Dinkes Provinsi Sulsel. (2013). Laporan Pemantaun Status Gizi Daerah Nice Project Tahun 2012. Dinas Kesehatan Propinsi Sulawesi Selatan.
- 4. Huxley. (2003). The Four Style of Parenting. http://www.myria.com
- Özaltin, E., Hill, K., Subramanian, S.V. (2010). Association of maternal stature with offspring mortality, underweight, and stunting in low to middle income countries. JAMA. 2010;303(15):1507–16. doi:10.1001/jama.2010.450
- 6. Perangin-angin, A. (2006). Hubungan Pola Asuh dan Status Gizi Anak 0-24 bulan pada Keluarga Miskin di Kelurahan Gundaling-I Kecamatan Brastagi Kabupaten Karo tahun 2006. Skripsi FKM, Universitas Sumatera Utara
- 7. Sarasani. T. (2005). Praktek Pemberian makan dan Status Gizi Anak Usia 0-24 Bulan ditinjau dari Pekerjaan Ibu. Skripsi, FKM USU, Medan.
- 8. The Lancet. (2008). Maternal and Child Undernutrition, Special Series.
- 9. The state of the world's children 2013. Children with disabilities. New York: United Nations Children's Fund; 2013 (http://www.unicef.org.uk/Documents/Publication-pdfs/sowc-2013-children-with-disabilities.pdf, accessed 21 October 2014).
- 10. WHO. (2010) Indicators for assessing infant and young child feeding practices part 2: measurement Geneva, World Health Organization
- 11. WHO. Child Growth Standards: http://www.who.int/childgrowth/en/.