# **Correlation Between Toddler Care and Nutrition Status**

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Abstract:

Nutritional Status is one of the indicators of children's health. During the five years (infancy) is an important period where the child needs nutritional adequacy to support his physical growth. Children are dependent on the mother role in parenting and child care. This research aimed to find out the correlation of toddler care consists of feeding practices, psychosocial stimulation and health care with nutritional status. Observational research analytic with cross-sectional design. The research was carried out in the Porong subdistrict of Sidoarjo Regency, East Java on October 2017. The sample in this research are some of the mothers who have toddlers in the Porong subdistrict of Sidoarjo Regency totaled 72 people by using simple random sampling technique. Data analysis using Fisher's Exact test with a confidence level of 95%. Results: most (86.1%) toddler have normal nutrition status and 13.9% toddler has a status of malnutrition. Most of the feeding practices (86.1%) is appropriate, 13.9% are not appropriate. Psychosocial stimulation majority (83.3%) is good and 16.7% psychosocial stimulation is not good. Health care majority (91.7%) is good and 8.3% not good. As the result there is a relationship of feeding practices with toddler nutritional status (p = 0.03), there is psychosocial stimulation relationship with nutritional status toddler (p = 0.418).

## 1 INTRODUCTION

The progress of a country is affected by the quality of human resources. One of the criteria of quality human resources can be seen from the degree of health. The degree of health is a reflection of the health of individuals, groups, or communities that are described with the age of life expectancy, mortality, morbidity and nutrition status of the community (Pratiwi et al., 2016).

Currently the major public health problem in Indonesia is nutritional problem (Kamila et al., 2018). Nutritional problems occurring in each life cycle, starting in the womb (the fetus), baby, child, adult, and elderly. The period of the first two years of life is a critical period and during this period of growth and development that occurs very rapidly (Istiono et al., 2009).

Toddler age is the period where the process of growth and development to occur very rapidly. At this time the toddlers requires the intake of nutrients in sufficient quantity and quality that is more, because in general the physical activity is quite high and still in the learning process. If the intake of nutrients is not met then the growth fisik and intellect toddler will experience the disorder, which will eventually cause them to become a lost generation (Welasasih, 2012).

According to the data Riset Kesehatan Dasar on the year 2007 in Indonesia of known prevalence of toddlers with poor nutrition 5.4%, 13% less nutrition, nutrition good nutrition 77.20% and 4.30% more (Abriyani, 2011). The numbers of Genesis toddler malnutrition in East Java of 17.4%, or it could be said to have exceeded the national target for the year 2015 are less than 20%, However, the prevalence of malnutrition which describes the occurrence of a problem of chronic malnutrition (TB/U) is still quite high, i.e. of 34.8% Although it is still lower than the national figure of 36.5% (Welasasih, 2012).

Nationally, prevalence of less weight in the year 2013, there are 13.9% less nutritional status as a toddler. If the national prevalence compared to year 2007 (18.4%) and in 2010 (17.9%), the prevalence of malnutrition in the toddler years 2013 is seen to increase. In the year 2010 consisted of

13.0% less nutritional status toddler (Endah Retnani Wismaningsih et al., 2016).

According to the East Java Health Office data through a nutritional status monitoring activities that Toddler Nutrition status BB/TB (Wasting) in East Java starting in 2012 to 2016 by experiencing fluctuating. The year 2012 (12.4%), the year 2013 (11.7%), the year 2014 (8%), the year 2015 (11.5%), the year 2016 (9.7%) (Dinas Kesehatan Jawa Timur, 2016).

Schroeder 2001 stated that malnutrition affected by functional outcomes (e.g. cognitive, nutritional status/growth, mortality, feeding intake, care/parenting the availability of food, infectious diseases, and health services) (Welasasih, 2012).

Nutritional status of the child is a growing parameters. Care of mothers against children affect a growing child through food sufficiency and State of health (Pratiwi et al., 2016). The adequacy of the food can be seen from the pattern of eating everyday. Eating patterns depending on nutritional knowledge owned by the mother. During this time parents is very important to educate his children especially on parenting dining, parenting dining here include the manner and the situation of eating that will eventually make a donation status of its nutrition value (Kamila et al., 2018).

Based on this it needs to be examined the correlation of toddler care consists of feeding practices, psychosocial stimulation, health care and with nutritional status.

## 2 METHOD

This type of research is observational analytic with cross-sectional design that is used to determine the relationship between the free variables with variables bound.

The research was carried out in district of Porong District of Sidoarjo, East Java on October 2017. The sample in this research are some of the mothers who have toddlers in the Porong subdistrict of Sidoarjo amounted to 72 people. Using the simple random sampling technique.

The data collected is the primary data obtained through interviews using questionnaires to mothers who have toddlers. The data already collected, processed, tabulated and then conducted the analysis. Prior to processing the data, first data edited return to examine the completeness of data collected, then given the code in order to classify the answers. Further data is entered into the computer and done back cleaning data to look at the possibility of an error at the time of entering data. After the data is clean then bivariat analysis of data.

data analysis using Fisher's Exact test with a confidence level of 95%.

# 3 RESULTS AND DISCUSSION RESULTS

The analysis of the results of the study consist of univariate bivariat and presented in the form of a table. The results of the univariate analysis consists of nutritional status, feeding practices, psychosocial stimulation, health care

Table 1 Distribution of Toddlers According to Nutritional Status

Nutritional Status	Frequency	Percentage (%)		
Normal	62	86,1		
Malnutrition	10	13,9		
Total	72	100		

Table 1 shows that the distribution of toddlers according to nutritional status is mostly a toddler with a normal nutritional status (86.1%) and toddlers with 13.9% malnutrition status.

Table 2 Distribution of Toddlers According to The Practice of Feeding

Practice of Feeding	Frequency	Percentage (%)
Appropriate	62	86,1
Not appropriate	10	13,9
Total	72	100

Table 2 shows that the distribution of toddler feeding practices according to most (86.1%), and inappropriate 13.9% of toddlers.

Table 3 Distribution of Toddlers According to Psychosocial Stimulation

Psychosocial Stimulation	Frequency	Percentage (%)
Good	60	83,3
Not good	12	16,7
Total	72	100

Table 3 shows that the distribution of toddler psychosocial stimulation according to the majority (83.3%) was good, while the psychosocial stimulation is not good of 16.7%.

Table 4 Distribution of Children According to Health Care

Health care	Frequency	Percentage (%)
Good	66	91,7
Not good	6	8,3
Total	72	100

Table 4 shows that the distribution of toddler health care according to the majority (91.7%) are good, and not well of 8.3%.

Bivariat analysis encompasses correlation between the practice of feeding and toddler nutrition status, correlation between psychosocial stimulation and toddler nutrition status, and the relationship with nutritional status health care toddlers.

Tabel 5 Correlation between the practice of Feeding and Toddler Nutrition Status

Practice of Feeding	Nutritional Status				T-4-1		
	Normal		Malnutrition		Total		
recuing	n	%	N	%	n	%	
Appropriat e	57	91, 9	5	8,1	62	100	
Not appropriate	5	50	5	50	10	100	p=0, 03
Total	62	86, 1	10	13,9	72	100	0.0

Table 5 feeding practices relationship with nutritional status toddler feeding practices that are obtained in accordance with normal nutrition status of 91.9%. Feeding practices that comply with the malnutrition of 8.1%. Feeding practices that are not in accordance with normal nutrition status of 50%. Feeding practices that do not comply with the malnutrition 50%.

Analysis with Fisher's exact test statistic obtained p value 0.05 < (0.03), means that there is a relationship of the practice of feeding with nutrient status of toddlers.

Table 6 Correlation Between Psychosocial Stimulation and Toddler Nutrition Status

Davahagasi	Nutritional Status				Tot		
Psychosoci al Stimulation	Normal		Malnutritio n		al		
Sumulation	n	%	n	%	n	%	
Good	5	93,	4	6,7	6	10	
	6	3	4		0	0	p=
Not good	5	50	6	50	1	10	0,
Not good	5	30	U	0 30	2	0	01
Total	6	86,	1	13,9	7	10	
	2	1	0	13,9	2	0	

Table 6 relationship psychosocial stimulation with nutritional status showed good psychosocial stimulation toddler with normal nutritional status of 93.3%. Psychosocial stimulation with malnutrution amounted to 6.7%. Psychosocial stimulation is not good with normal nutritional status of 50%. Psychosocial stimulation is not good with malnutrition of 50%.

Analysis with statistical tests of fisher exact p value < 0.05 (0.01) means that there is a

relationship of psychosocial stimulation with nutritional status of toddlers.

Table 7 Correlation Between Health Care and Toddler Nutrition Status

		Nutrition	ıal Stat				
Health	No	rmal	Malı	nutritio	T	Total	
Care	n		n				
	n	%	n	%	n	%	P =
Good	61	92,4	5	7,6	66	100	0,41 8
Not good	1	16,7	5	83,3	6	100	
Total	62	91,7	10	8,3	72	100	

Table 7 health care relationship with nutritional status health care obtained good toddler with normal nutritional status of 92.4%. Health care either by malnutrition of 7.6%. Health care is not good with normal nutritional status of 16.7%. health care is not good with malnutrition of 16.7%. Analysis with statistical tests of fisher exact p value obtained  $> 0.05 \, (0.418)$  then it means there is no relationship with nutritional status health care toddlers.

### **DISCUSSION**

Nutritional disorders in toddlers at large in quantity never decreases. The cause of the onset of malnutrition on toddlers can be seen several factors the causes of which were the direct cause, not direct causes, root of the problem and the subject matter. The direct cause of factors namely food and infectious diseases that might be inflicted on the child. An indirect cause of which is food security at family, parenting, health care, and environmental health (Istiono et al., 2009).

According to (Kamila et al., 2018) in parenting a child eating there are several aspects to note, namely the attention or support through the mother against child, the practice of breastfeeding and complementary feeding of BREAST MILK as well as psychosocial stimulation against the child. Caregiving patterns related to the nutritional status of the child is parenting. Parenting is the practice of eating that is applied to the child's mother to a toddler who is concerned with the ways and situations. The number and quality of the food needed for the consumption of the child it is important that a well thought out, planned, and carried out by mothers or caregivers. Parenting children's meal will always be related to feeding

activity, which ultimately will contribute its nutrition value status.

On the research indicates there is a practice of the feeding relationship with nutritional status toddler (p=0,03). The results of this research study results supported Purwani (2013 in (Astuti et al., 2014) about the pattern of feeding with nutrient status of children aged 1 to 5 years in Kabunan Garden of Pemalang stating there the relationship between meaningful patterns or singnifikan feeding with nutritional status in children.

The pattern of feeding in children depends on eating habits, socioeconomic circumstances, understanding and awareness about nutrition, as well as the provision of local food (Istiono et al., 2009).

Providing food for the family is a mother's duty that must be capable of providing sufficient and special dishes on their children. Mom can create a pleasant atmosphere while children eat, pay attention to the hygiene of foodstuffs, accompanying her daughter when it was about to eat, choose what foods to given and favored his son with the hope that the child will spend it (Astuti et al., 2014).

Education parents especially mothers was instrumental also in the growth process of the child. A good education will gain any information from outside especially on how childcare is good. If the mother has no knowledge of parenting eat then the impact on balitanya IE: cause the body to become thin, prone to disease, impaired growth and development (Kamila et al., 2018).

When food is not well chosen then the body will experience a shortage of essential nutritional substances of particular use of food by the body depend on the digestion and absorption and metabolism of nutrients. When you order food or incorrectly in the quantity and quality of food consumption affects a person's nutritional status (Astuti et al., 2014).

Dishes are consumed not only consists of one dish, but can be more than one that when it shall be served with a combination of complementary human needs. One of the dishes contain few nutrients that complement each other. The arrangement of the dishes are the staple food, side dishes, vegetables, fruits, milk and eggs as well as the food interludes (Welasasih, 2012).

Research results also showed there is a relationship of psychosocial stimulation with nutritional status toddler (p=0,01). Mothers always paying attention to meal time, adjust the hours of sleep and children after returning from work will

devote all affection to their children as well as a greater emphasis on how to give the fed the child so that the child will eat. The growth of the child is not only influenced by the frequency of feeding, but also by the psychology of children (Astuti et al., 2014).

A good psychosocial stimulation related to children's health so that indirectly may affect the nutritional status of children. The quality of psychosocial parenting itself depending on the circumstances of the family, society and the environment. But the nutritional status is not only influenced by psychosocial parenting. There are many other factors that affect the nutritional status of the toddler as economic factors, family education (Pratiwi et al., 2016).

In contrast to the results of research Desmika et all (2012 in (Astuti et al., 2014) about the relationship between nutritional status with the development of a rough childhood 1-5 year in ketelan heart fruit posyandu Banjarmasin Surakarta i.e. There is no significant relationship between the status nutrition with a rough childhood motor development.

This is because mom always gives his son time to play around, most mothers have a habit of feeding the potluck and not pay attention to the nutritional intake is needed. This state of affairs persisted so the child will lack nutrients mainly protein and fat so that it can inhibit growth and eventually become short and very short (Grantham-McGregor, 2018).

The health care relationship with nutritional status toddler shows no relationship (p=0,418). This is supported by research (Astuti et al., 2014) about how the health care relationship with nutritional status in toddler Clinics Walantakan Regency of Minahasa. This is due to the role of parents in the care of his actions were influenced by the mother's knowledge in clean and healthy life patterns, bringing a child into the posyandu to weigh in once a month, the availability of clean water and drinking water as well as if the child is sick mother immediately brought him to place health services. In the short time frequent weight changes and antibodies as a result of decreased appetite, pain, diarrhea, infection or due to lack of food consumption.

But the results of this study are inconsistent with research done (Pratiwi et al., 2016) concluded that there is a meaningful relationship between the parenting health with nutritional status of toddlers in the working area of clinics of Belimbing. a toddler is a group prone to nutrition and health. The most frequent diseases suffered by children is

infection. Sick children would be his nutritional absorption is impaired thereby affecting the nutritional status of children. Parenting health preventive efforts is measured as the granting of immunization as well as parenting when children are sick.

The results of this study in accordance with Lubis (2008) on toddlers in the working area Clinics Coast Mirror Tanjung Pura Langkat North Sumatra who mentioned that there is a significant relationship between the parenting health with nutritional status of toddlers. Research conducted on child et al Yulia toddler who was the pickers in Pangalengan tea family mentioned that health parenting role against the nutritional status of the child (Pratiwi et al., 2016).

#### 4 CONCLUSIONS

The conclusions of this research are as follows:

- 1. There is a relationship of the practice of feeding with nutrient status of toddlers
- 2. There is a relationship of psychosocial stimulation with nutritional status toddler
- No relationship with nutritional status of care toddlers

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