# THE RELATIONSHIP OF MOTHER'S NUTRITION KNOWLEDGE AND TODDLER EAT PATTERN (1-3 YEARS) TO NUTRITIONAL NUTRITIONAL STATUS IN TIGARAKSA HEALTH CENTER, KABUPAEN TANGERANG

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### Abstrak

Status gizi merupakan suatu keadaan akibat dari keseimbangan antara konsumsi dan penyerapan zat gizi dan penggunaan zat-zat tersebut, atau keadaan fisiologik akibat dari tersedianya zat gizi dalam seluler tubuh. Gizi anak merupakan salah satu masalah kesehatan di Indonesia hal ini disebabkan oleh faktor internal (pola makan batita, umur batita) dan faktor eksternal (tingkat pendidikan ibu, pengetahuan ibu, pekerjaan ibu, dan dukungan keluarga). Penelitian ini bertujuan untuk mengetahui hubungan pola makan batita dan pengetahuan ibu tentang gizi terhadap status gizi batita di Puskesmas Tigaraksa Kabupaten Tangerang tahun 2018. Penelitian ini menggunakan pendekatan crosssecsional. Sampel dalam penelitian ini sebanyak 74 responden. Analisis data meliputi analisis univariat dan bivariat dengan menggunakan uji statistik chi-square. Hasil penelitian menunjukkan bahwa variabel pengetahuan gizi ibu tidak ada hubungan terhadap status gizi pada batita Di Puskesmas Tigaraksa Kabupaten Tangerang dengan p  $Value (0,0788) > \alpha (0,05)$  dan pada variabel pola makan batita ada hubungan terhadap status gizi pada batita Di Puskesmas Tigaraksa Kabupat<mark>en</mark> Tangerang dengan *p Value*  $(0,033) \le \alpha (0,05)$ . Disarankan, puskesmas dapat melakukan penyuluhan tentang manfaat gizi anak serta faktor yang mempengaruhi kebaikan gizi pada anak secara lebih maksimal terutama untuk ibu-ibu agar dapat memberikan asupan gizi yang baik untuk anak.

Kata kunci : Pengetahuan Ibu, Pola Makan Batita, dan Status Gizi Batita.

#### Abstract

Nutrition status is a condition resulting from a balance between consumption and absorption of nutrients and the use of these substances, or physiological states resulting from the availability of nutrients in the cellular body. Child nutrition is one of the health problems in Indonesia, which is caused by internal factors (child's diet, child's age) and external factors (mother's education level, mother's knowledge, mother's job, and family support). This study aims to determine the Relationship of Mother's Knowledge and under three children dietary habit on Nutrition Status of Toddlers at Puskesmas Tigaraksa, Kabupaten Tangerang in 2018. This research used cross-secsional approach. The sample in this research is 74 respondents. Data analysis includes univariate and bivariate analysis using chi-square statistical test. The result of the research shows that maternal nutritional knowledge variable is not related to nutritional status in toddlers In Puskesmas Tigaraksa Tangerang Regency with p Value  $(0,0788) > \alpha (0,05)$  on the nutritional status of under three children In Tigaraksa Public Health Center of Tangerang Regency with p Value  $(0.033) \le \alpha (0.05)$ . Recommended, clinics can do counseling about the benefits of child nutrition as well as the factors that affect the nutritional goodness in ch<mark>ild</mark>ren in more maximum esp<mark>ec</mark>ially to mothers in order to provide good nutrition intake for children.

Keywords: Mother's Nutrition Knowledge, Nutrition Status of under three children and Under three children Dietary Habit.



#### **PRELIMINARY**

Nutrition is one of the health problems in various countries, both in developed and developing countries. This nutritional problem is followed by increasing population, so that daily needs cannot be met. But the problem of nutrition does not only affect health, but will have an impact on the development of human resources that will be in the future (Sari, 2011).

Nutritional conditions will be determined by internal and external factors. External factors that influence, among others, the availability of food in an area, the neighborhood, and health services available in the area of residence. While the internal factors, among others, is the lack of food and the ability of the body to use these foods. Yetti Nency (2008) suggested that malnutrition is caused by insufficient food intake, because there is no adequate food available, children do not get enough nutritious balanced food, and the wrong diet.

Parents play a role in paying attention to the child's nutritional problems. As it is known that a mother is a figure who is the foundation in managing family meals. So, indirectly family food welfare will depend on the mother. The better the management of food done by the mother, the better the family diet will be. The thing that underlies the management of family meals is the knowledge of nutrition owned by the mother. Indirectly eating habits that are done by the mother will affect children's eating habits. Eating habits that are repeated will form a diet for both adults and children, a good diet is characterized by the adequacy of nutrients Oktavianis (2016).

Childhood childhood is a passive consumer class, which is not able to take and choose their own food. According to Padma Ernawati (2012), that nutrition is important in brain growth and development, 98% occur in toddlers.

So if there is a mistake giving nutrition to toddlers will interfere with the child's brain development.

Nutritional status can determined through laboratory examination or anthropometry. Anthropometry is the easiest way to determine nutritional status. TB / U, BB / U, and BB / TB are recommended as good indicators to determine the nutritional status of toddlers. Examination of the nutritional status of the community, in principle is an effort to find cases in the community, especially those who are considered vulnerable groups such as toddlers.

The prevalence of malnutrition and malnutrition in toddlers, there were 3.4% of toddlers with malnutrition and 14.4% of malnutrition. The problem of malnutrition in toddlers in Indonesia is a public health problem that is in the moderate category (the WHO indicator is known to be malnutrition-less than 17.8%).

According to the results of the study, data from Tigaraksa Health Center, Tangerang District showed that the 24 existing Puskesmas. monitoring of nutritional status in toddlers with a specific sample was obtained, 1 health center with a malnutrition case was Sodong Health Center (30.9%) as many as 39 toddlers (Tangerang District Health Office: 2016). This study will discuss the relationship between maternal nutritional knowledge and toddler diet to toddlers' nutritional status at the Tigaraksa Health Center, Tangerang Regency.

#### **METODH**

The study was conducted at the Tigaraksa Health Center, Tangerang Regency, held in October 2017. The sampling technique was carried out by simple random sampling, namely mothers who had 1-3 years old toddlers who were recorded at Tigaraksa Health Center, Tangerang Regency. The data studied study in this are the

Universitas Esa Unggul Universita **Esa** ( characteristics of respondents (age, level of education, and employment status), nutritional status, nutritional knowledge, and diet. Measurement of nutritional status using anthropometric measurements included body weight, and height, while variables of nutritional knowledge and dietary patterns used questionnaires. The data is then performed bivariate analysis using Chi-Square test with p-value (5 0.05).

#### RESEARCH RESULT

#### **Univariate Analysis Results**

Table 1 Characteristics of Maternal Age Distribution

| Mother's age | N  | %    |
|--------------|----|------|
| 12-16 year   | 5  | 6.8  |
| 17-25 year   | 19 | 25.7 |
| 26-35 year   | 44 | 59,5 |
| 36-45 year   | 6  | 8.1  |

The results of the study in Table 1 show that of the 74 respondents, most mothers were aged 26-35 years, amounting to 59.5%, then mothers aged 17-25 years, and 36-45 years respectively at 25.7% and 8, 1%, and at least mothers aged 12-16 years were 6.8% respectively.

Table 2 Characteristics of Maternal Education Distribution

| 200000000000000000000000000000000000000 |    |      |  |
|---|----|------|--|
| <b>Mother's Education</b>               | N  | %    |  |
| No School / No                          | 1  | 1.4  |  |
| Elementary School                       | 1  | 1,4  |  |
| Primary School                          | 1  | 1,4  |  |
| Junior High School                      | 19 | 25,7 |  |
| Senior High School                      | 51 | 68,9 |  |
| College                                 | 2  | 2,7  |  |

The results of the study in Table 2 show that out of 74 respondents, most mothers have a high school education, which is 68.9%, then mothers with junior high school education are 25.7%, and mothers who have tertiary education are 2.7%, and the least mothers who have graduated from school and elementary school are 1.4% respectively.

Table 3 Distribution of Maternal Job Characteristics

| <b>Employment Mother</b> | N  | %    |
|--------------------------|----|------|
| Government               | 2  | 2,7  |
| Employees                |    |      |
| Farmer                   | 1  | 1,4  |
| Housewife                | 68 | 91,9 |
| Trader                   | 3  | 4,1  |

The results of the study in Table 3 show that from 74 respondents, most mothers work as housewives, which is 91.9%, then mothers who work as traders and civil servants are 4.1% and 2.7% respectively, and the least the mother who works as a farmer is 1.4%.

Table 4 Characteristic Distribution Mother's Knowledge

| Mother's  | N  | %    |
|-----------|----|------|
| Knowledge |    |      |
| Less      | 33 | 44,6 |
| Adequate  | 15 | 20,3 |
| Good      | 26 | 35,1 |

The results of the study in Table 4 show that from 74 respondents, most mothers have less knowledge about nutrition, namely 44.6%, and 35.1% have sufficient nutrition knowledge and the least number of mothers who have good nutrition knowledge is 44, 6%.

Table 5 Characteristic Distribution of Age of Toddlers

| rige of Todale  | 13 |      |
|-----------------|----|------|
| Age of toddlers | N  | %    |
| 1 Year          | 18 | 24,3 |
| 2 Year          | 35 | 47,3 |
| 3 Year          | 21 | 28,4 |

The results of the study in Table 5 show that from 74 respondents, the most toddlers are 2 years old, that is 47.3%, then toddlers who are 3 years old are 28.4% and the least toddlers aged 1 year are 24.3%.

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Table 6 Distribution of Toddler Feeding
Characteristics

| Pola Makan Batita | N  | %    |
|-------------------|----|------|
| Less              | 22 | 29,7 |
| Adequate          | 24 | 32,4 |
| Good              | 28 | 37,8 |

The results of the study in Table 6 show that from 74 respondents, the most toddlers have a good diet, which is 37.8%, then toddlers who have a sufficient diet are 32.4%, and the least toddlers who have less diet are 29, 7%.

Table 7 Distribution of the Characteristics of Toddler Nutritional Status

| Nutritional Status<br>of Toddlers | N  | %    |
|-----------------------------------|----|------|
| Malnutrition                      | 6  | 8,1  |
| Good Nutrition                    | 66 | 89,2 |
| Obesity                           | 2  | 2,7  |

The results of the study in Table 7 show that from 74 respondents the most toddlers have good nutritional status of 89.2%, then toddlers who have less nutritional status of 8.1%, and the least toddlers who have more nutritional status are 2, 7%.

**Bivariate Analysis Results** 

Table 8 Results of Bivariate Analysis

| V       | ari | able        | p Value |
|---------|-----|-------------|---------|
| Toddler |     | Nutritional | _       |
| Status  | *   | Mother's    | 0,788   |
| Knowled | lge |             |         |
| Toddler |     | Nutrition   |         |
| Status  | *   | Toddler     | 0,033   |
| Dietery |     |             |         |

Based on the results of the analysis in Table 8, the relationship between nutritional status of toddlers and maternal knowledge (p value = 0.788)> 0.05 so that Ha was rejected which meant that there was no significant relationship between toddler nutritional status and maternal knowledge. While

the relationship between toddler nutritional status and toddler diet (p value = 0.033) 5 0.05 then Ha was accepted which means that there was a significant relationship between toddler nutritional status and toddler eating pattern at health centerTigaraksa, Tangerang Regency.

#### **DISCUSSION**

Nutritional status is a condition resulting from a balance between consumption and absorption of nutrients and the use of these substances, or physiological conditions due to the availability of nutrients in cellular body (Khaidir, 2015). Body conditions as a result of food consumption and use of nutrients can be distinguished by poor nutritional status, good nutritional status and over nutritional status (Almaitser, 2010). Assessment of nutritional status using anthropometry is used to see the imbalance between energy and protein (Supariasa, 2001). The anthropometric index commonly used to assess nutritional status is BB / U (body weight according to age), TB / U (height according to age), and BB / TB (body weight according to height). It can be seen from 74 toddlers in Tigaraksa Health Center Tangerang, most toddlers have good nutritional status of 89.2%, then toddlers who have less nutritional status of 8.1%, and the rest of toddlers who have more nutritional status is 2.7

The results showed that most mothers aged 26-35 years in late adolescence were 59.5%, then mothers aged 17-25 years in late adolescence, and 36-45 years in late adulthood of 25, respectively. 7% and 8.1%, and the least number of mothers aged 12-16 years in early adolescence was 6.8%. Mothers who are married at a young age will difficulty understanding nutritional problems faced, especially in fulfilling toddler nutrition. The younger the mother's age at the time of having a child, the less experience she has about the fulfillment of toddler nutrition, the

Iniversitas Esa Unggul Universita **Esa** L young mother tend to be less concerned about toddler's nutritional needs (Sediaoetama, 2008).

Based on the level of education of respondents, most mothers had a high school education of 68.9%, then mothers with junior high school education at 25.7%, and mothers with tertiary education at 2.7%, and at least mothers with education, and elementary school, each of which is 1.4%. Soekanto (2012) explains the factors that influence knowledge other than age are the level of education. According Santy to (2009).a person's background educational is important element that can affect nutritional conditions. This because with a higher level of education it is expected knowledge or information about nutrition will be better.

While based on the work of respondents, the most mothers worked as housewives amounting to 91.9%, then mothers who worked as traders and civil 4.1% 2.7% servants were and respectively, and the least mothers worked as the farmer is 1.4%. The influence of mothers working on maternal and child relationships depends largely on the age of the child when the mother starts work. If he starts working before the child is used to always being with him and before a relationship is formed then the effect will be small, but if the relationship between mother and child has been formed then the effect will cause the child to feel lost and under-noticed (Hurlock, 2012).

Most respondents have knowledge about malnutrition that is equal to 44.6%, and 35.1% have good nutrition knowledge while the remaining 20.3% mothers have good nutrition knowledge which is 44.6%. The level of knowledge about nutrition is needed by mothers to care for their children. The needs and nutritional adequacy of toddlers depend on consumption food

given by mother. Understanding good nutrition is important so that nutritional intake becomes balanced in the body, especially in toddlers. Lack of nutritional knowledge results in reduced ability to apply information in daily life and is one of the causes of nutritional disturbances (Suhardjo, 2012).

In this study based on the results of Chi-Square test there was no correlation between maternal nutritional knowledge with nutritional status in toddlers, it was known by rejecting the alternative hypothesis (Ha) and accepting the hypothesis (H0) because p Value  $(0.788) > \alpha \ (0.05)$ .

The results of this study are in line with research conducted by Ima Nurapriyanti (2015), which states that there is no influence between the level of knowledge with nutritional status. Likewise, another study presented by Hutagalung (2012) found that there was no relationship between the level of knowledge of mothers and nutritional status of toddlers with Value. This shows that although knowledge is not a direct factor affecting the nutritional status of toddlers, this nutritional knowledge has an important role. Because by having sufficient knowledge, especially about health, one can find out various kinds of health problems that might arise so that solutions can be sought (Notoatmodjo, 2013).

The results of this study indicate that at Tigaraksa Health Center, Tangerang District, most respondents explained that toddlers tend to have a less eating pattern, which is 37.8%. This shows that there is still a need for attention and improvement in toddler eating patterns to support nutrition obtained by toddlers. Meanwhile, toddlers who have an adequate diet are 32.4%, and the least toddlers who have a good diet are 29.7%. From the data, there are many toddlers' eating patterns, the results of which are less because most toddlers in the Tigaraksa Health Center, Tangerang Regency many

Iniversitas Esa Unggul Universita Esa L people do not consume vegetables and fruits in the food menu that is consumed every day so that affect the lack of the toddler's diet. A good diet is a diet that contains staple foods, side dishes, fruits and vegetables and eaten in sufficient quantities according to needs (Baliwati, 2010).

Based on the results of the Chi-Square test there is a relationship between toddler eating patterns with nutritional status in toddlers, it is known by rejecting the hypothesis (H0) and accepting the alternative hypothesis (Ha) because p Value  $(0.033) \le \alpha (0.05)$ . The results of this study are in line with research conducted by Putri Rona Firmana, (2015), who said that there was relationship between diet and nutritional status in toddlers Semarang. The better the diet applied by parents to children, the more nutritional status of the child increases. Conversely, if nutritional status is reduced if parents apply the wrong diet to children. The results of this study were also reinforced by Tella (2012) in Mapanget who said that the relationship between diet and nutritional status is very strong where balanced nutritional intake of food plays an important role in the child's growth process coupled with a good and regular diet that needs to be introduced early, among others, with the introduction of meal hours and variations in food can help coordinate the need for healthy eating patterns in children. Conditions of good nutritional status can be achieved if the body gets enough nutrients to be used efficiently, thus enabling physical growth, brain development, work ability to achieve optimal health levels (Depkes RI, 2013).

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the analysis there was no significant relationship between maternal knowledge with toddler nutritional status (p = 0.788), whereas in the variable toddler diet there was a

relationship with nutritional status of toddlers (p = 0.033).

Nutritional status of toddlers is an important thing that must be considered by parents so that children's nutritional intake can be met. The toddler's food processing must be maintained, as well as the knowledge of the mother of toddler nutrition needs to be increased to increase knowledge about toddler nutrition. including reading books, tabloids, magazines, and using posyandu as a means to explore information about toddlers to improve maternal knowledge about nutrition. and factors related to toddler nutrition improvement.

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