Knowledge Study, Income Level and Socio-Culture of the Nutritional Status of toddler

Marniati, 2Enda Silvia Putri, 2Susy Sriwahyuni, 4Khairunnas, 5Maiza Duana
1Department of Public Health, Faculty of Public Health, Universitas Teuku Umar, Meulaboh, Indonesia
2Department of Nutrition, Faculty of Public Health, Universitas Teuku Umar, Meulaboh, Indonesia
3Department of Public Health, Faculty of Public Health, Universitas Teuku Umar, Meulaboh, Indonesia
4Department of Nutrition, Faculty of Public Health, Universitas Teuku Umar, Meulaboh, Indonesia
5Department of Public Health, Faculty of Public Health, Universitas Teuku Umar, Meulaboh, Indonesia

Corresponding author: Marniati, marniati@utu.ac.id

ABSTRACT

Toddler Nutrition Status is a state of balance or manifestation of nutrition in the form of certain variables. The high incidence of malnutrition in Suka Makmue Subdistrict is centered as the main target in improving nutrition. The objective is to analyze the Knowledge Study of Income and Social Culture Level of Toddler Nutrition status in Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency. This type of research is Analytical Surveys with cross-sectional approach. The total number of samples is 33 mothers of toddlers. Univariate and Bivariate analyzes were further tested with Chi Square. The results after a deeper study of the three variables have an influence on the nutritional status of children under five namely Knowledge (Pvalue 0,000 <α 0,05), income level (Pvalue 0.001 <α 0.05), and socio-cultural (Pvalue 0.003 <α 0.05). Suggestion Health workers should be more active in delivering information about the importance of the nutritional status of children under five.

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Introduction

Malnutrition is a condition of malnutrition resulting from an imbalance of micro nutrients and macro nutrients. Parental diets can help create problems related to the nutritional status of toddlers. Giving children the right opportunity to consume food does not guarantee toddlers free from nutritional statistics. (Max, A. 2020). The toddler period is a very important period for future survival, therefore, health conditions, including the nutritional status of toddlers (Zogara, et al, 2020), need to be considered. Nutrition problems have a broad dimension if the consumption of nutrition in infants is not balanced it will result in nutritional status problems. (Fajriani, et al, 2020). The nutritional status of children under five can be used as an indicator of the nutritional state of the community. Nutritional status can be known through the nutritional prevalence of children aged 1-5 years because these age groups are most vulnerable to nutritional disorders (Gusrianti, at al 2020). Toddler is a golden period to optimize brain growth and development, but it becomes a critical period if you don't get proper nutrition. Lack of mother's knowledge about toddler nutrition, eating problems, and diet can affect the nutritional status of toddlers (Hanim, B, 2020). Child development is the result of organ maturation, especially the central nervous system. Development occurs throughout life which consists of several stages, one of which is a toddler. Toddler age occurs from 1 to 3 years, where the development of children occurs very quickly and is a golden period in children. Success in mastering developmental tasks at the age of five requires a strong foundation during a
The problem with nutritional status is that more nutrition is no less interesting in Indonesia, more than 4.5% of Indonesian children suffer from over nutrition (Rikesdas, 2013). According to Sedia Oetama (2010), nutrition is more defined as a state of imbalance between calorie consumption and energy needs where consumption is too excessive compared to energy needs or usage. Obesity is a term that is often used to refer to being overweight. The word obesity that comes from the Latin word means overeating, but currently obesity or overweight is defined as a disorder or disease characterized by excessive accumulation of fat tissue (Vinda, 2012). Everyone's needs for food are not the same, because the needs for various nutrients are also different. Knowledge, attitude, age, gender, type of work and other factors determine the needs of each person for food to become less protein energy (Syahmien, M, 2010).

The prevalence data for children under five with growth and development impairment was 28.7% and Indonesia was included in the third country with the highest prevalence in the Southeast Asian region (Risna, et al, 2020). In terms of region, more than 70% of cases of malnutrition in children are predominantly Asian, while 26% in Africa and 4% in Latin America and the Caribbean. Half of the 10.9 million cases of child deaths are dominated by cases of malnutrition. Because malnutrition can affect other diseases as well, such as measles and malaria (WHO, 2018). Based on Basic Health Research data (Rikesdas, 2018), the prevalence of malnutrition and malnutrition children in Indonesia reaches 19.6% and over 4.5% nutrition. This figure is increased compared to the 2018 Riskesdas data and 17.9% Riskesdas 2019 by 17.0%. Among the 34 provinces, Aceh ranked 11th (7.9%) for the malnutrition category, for the Acehnese lacking category ranked 7th (18.4%) and for the category of over nutrition Aceh ranked 29th (2.9%) in Indonesia (Indonesia Health Profile, 2018). Based on the Aceh Health Profile the number of nutritional problems under five years (toddler) in Aceh Province continues to increase every year, the number of toddlers experiencing undernourishment reaches 24.8%, in 2019 to 17. Of 23 districts in Aceh, Nagan Raya Regency occupies ranked 18th for nutritional problems in infants (Aceh Health Profile, 2018, 2019). Nagan Raya Regency has 11.7% underfives with 27 cases of malnutrition and 11 cases of malnutrition, all 38 cases total (profile of Nagan Raya Health Office, 2018).

From the recapitulation of the Cot Kuta Health Center in 2016, the number of toddlers in 2015 was 322 toddlers with 5 malnutrition categories (1.5%) with a BGM of 1 toddler and over 25 (7.7%) toddlers, while in 2016 there were 361 toddlers with the category of undernutrition as much as 10 (2.8%) with BGM 3 toddlers, while overweight 41 (11.36%) toddlers, the incidence of nutritional problems continues to increase from 2016 to 2017 in the work area of the Cot Kuta Health Center. Each village in the work area of the Cot Kuta Health Center has a high incidence of undernutrition and over nutrition, namely Blang Muling which is centered as the main target in improving nutrition (Cot Kuta Health Center, 2016). From the data there are 33 toddlers, with good nutrition category 15 (45%), excess nutrition 12 (36%) and malnutrition 6 (18%) with BGM 2 people. (Profile of Blang Muling Village, 2018) The survey results many mothers who do not understand and do not know how to meet the nutritional status of their toddlers. They claim that they rarely monitor their toddler weight regularly due to insufficient income reasons, and rarely provide nutritious supplementary food for their toddlers, our social culture does not allow any food to be given to children under 5 years later some mothers also claim that their toddlers are very regularly consuming the food that is bad for us is good, they think that the more toddlers they consume and the more fats the toddler the healthier the child is. From the above problems, it is necessary to do research on the nutritional status of children under five in Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency.

Literature review
Knowledge
Broadly speaking according to (Notoatmodjo, 2012) domain level of knowledge (cognitive) has six levels, including: knowing, understanding, using, describing, inferring and evaluating. The main characteristic in the level of knowledge is the memory of something he knows well through experience, learning, information received from others.
**Income Level**
Revenues are gross inflows of economic benefits arising from the normal activities of an entity during a period, if the inflows result in an increase in equity that does not originate from investment contributions (Kieso et al. 2011).

**Socio-cultural**
Everything related to the values that exist in the community, in which there are statements about intellectual points and artistic values that can be made as a characteristic that exists in the community itself (Wawan, 2010).

**Nutrition Concept**
Nutrition is a chemical bond that is needed by the body to carry out its functions, namely producing energy, building, maintaining and regulating life processes (Almatsier, 2010). Handling of toddler nutrition problems can be done through the development of food products in the form of Moringa flour cookies and Moringa oatmeal flour cookies that are given to toddlers, and then assessed an increase in body weight and nutritional status. (Irwan, ar al, 2020).

**Toddler Nutrition Status**
Toddler nutritional status is a state of balance in the form of certain variables or the embodiment of nutrition in the form of certain variables (Supariasa, et al. 2012). Children under five are children who have reached the age of one year or more popular with the understanding of children under five years old (Muaris, H. 2006). According to Sutomo, A, (2010). Toddler is one of the periods of human age after infants with an age range starting from two to five years, or commonly used to calculate the age of 24-60 months. This age period is also referred to as preschool age (Aminuddin, 2014).

**Method**
This type of quantitative research is analytic with cross sectional approach (Notoatmodjo, 2012). This research was conducted in Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency in March 2019. The population of mothers under five is in Blang Muling village and the determination of the sample with the Total Sampling method is 33 mothers of toddlers. Univariate and bivariate analysis was further tested with chi-square

### Results
Univariate analysis shows that the frequency distribution of Knowledge, Income Level and Social Culture has a significant influence on the nutritional status of toddlers where tilapia (Pvalue <α 0.05)

#### Knowledge
Review of Mother's Knowledge of Toddler Nutrition Status

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Nutritional Status</th>
<th>Total</th>
<th>Pvalue</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well</td>
<td>Not Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>12</td>
<td>85.7</td>
<td>2</td>
<td>14.3</td>
<td>14</td>
</tr>
<tr>
<td>Not Good</td>
<td>3</td>
<td>15.8</td>
<td>16</td>
<td>84.2</td>
<td>19</td>
</tr>
</tbody>
</table>

Viewed from the table above there is a significant effect on nutritional status in infants, the (P.value = 0,000 <α = 0.05)

#### Income Level
Study of income level on nutrition status in Toddlers

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Nutritional Status</th>
<th>Total</th>
<th>Pvalue</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well</td>
<td>Not Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>12</td>
<td>80.0</td>
<td>3</td>
<td>20.0</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>3</td>
<td>16.7</td>
<td>15</td>
<td>83.3</td>
<td>18</td>
</tr>
</tbody>
</table>

The table above shows that there is an influence of income level on the nutritional status of children under five years of age (Pvalue = 0.001 <α = 0.05)

#### Socio-cultural
Socio-Cultural Study of Nutrition Status in Toddlers

<table>
<thead>
<tr>
<th>Sociocultural</th>
<th>Nutritional Status</th>
<th>Total</th>
<th>Pvalue</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well</td>
<td>Not Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>10</td>
<td>83.3</td>
<td>2</td>
<td>16.7</td>
<td>12</td>
</tr>
<tr>
<td>Does not Support</td>
<td>5</td>
<td>23.8</td>
<td>16</td>
<td>76.3</td>
<td>21</td>
</tr>
</tbody>
</table>

can be seen from the socio-cultural table there is an influence on the nutritional status of toddlers results (P.value = 0.003 <α 0.05)
**Discussion**

**Review of mother’s knowledge of nutritional status in infants**

Knowledge is everything that is known based on human experience itself and knowledge will increase according to the process of experience they experience. (Mubarak, 2018). Knowledge about the environment and knowledge efforts obtained by respondents came from various sources, such as books, mass media, education and education through relatives. New information about things from the mass media provides a new cognitive basis for the formation of knowledge (Notoatmodjo, 2012).

The results of the above research are supported by research by Maharani, S (2013) where the result is obtained that Pvalue = 0.001 so that there is a significant relationship between maternal knowledge and nutritional status of children under five. Mother is closely related to the nutritional status of children under five, where if someone has a good level of knowledge, it is probable that the nutritional status of toddlers will also be good. Then, (Intan, S, Y 2015) also proved that the results of the study with Pvalue = 0,000 so that there is a close relationship between the knowledge of mothers and the nutritional status of children under five, where if a mother has good knowledge then the mother will have a good understanding of fulfillment nutrition for the toddler. According to the researchers’ observations, poor mother’s knowledge will affect the nutritional status of the toddler. Because mothers do not understand in meeting nutritional needs. From the results of research that is influential is the mother’s knowledge, in meeting the nutritional needs of toddlers because not until the nutrition of toddlers is not met (20.3%) who have poor nutritional status.

The income level study on the nutritional status of children under five from table 4.2, which uses the chi square test obtained value (P.value 0.003 <α 0.05), social culture on the nutritional status of infants in Blang Muling Village, District of Suka Makmue, Regency Nagan Raya.

There is an influence of the level of family income on nutritional status in children under five with p value = 0.050, looking at factors that inhibit cross-sectoral collaboration between the health center and the village so that they can find solutions to increase family income, move the posyandu cadre to monitor the nutritional status of children under five. Nutritional status of children under five years old, can be handled immediately and the use of home yards to produce food can also be used to improve family health (Kemen, 2014). In line with the study (Aminuddin, 2014) The level of income affects the nutritional status of children under five in the working area of the Rajabasa Indah Health Center in the city of Bandar Lampung in 2014 with a value (p = 0.004). According to (Azhar, H, 2010) revealed that the chi square test results obtained value of P.value 0.002 so that a significant influence the level of income in fulfilling food on the nutritional status of children. ThenTantri, J (2012) also said that there was a significant influence between the level of family income on the nutritional status of children under five with the results of the chi square test obtained P. value = 0.001 t. a person’s income level is not sufficient to meet the nutritional needs of their toddlers. From the research results, a very basic problem is the level of community income because it is important create a surrounding environment as land for additional income

**Study the level of income on Nutrition Status in Toddlers**

The results obtained from Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency, out of 18 respondents who have a high income level, there are 15 people (83.3%) who have poor nutritional status and there are 3 people (16.7%) good nutritional status. While from 15 respondents who have high income levels, there are 12 people (80.0%) solusi dari permasalahan tersebut adalah dengan menambah pengetahuan ibu dalam memenuhi kebutuhan gizi balita karena tidak sampai gizi balita tidak terpenuhi. (80.0%) solusi from the problems above is by increasing knowledge of mothers in meeting the nutritional needs of their toddlers. From the results of the study with Pvalue = 0.001 so that there is a significant influence the level of income in fulfilling food on the nutritional status of children under five with p value = 0.050, looking at factors that inhibit cross-sectoral collaboration between the health center and the village so that they can find solutions to increase family income, move the posyandu cadre to monitor the nutritional status of children under five. Nutritional status of children under five years old, can be handled immediately and the use of home yards to produce food can also be used to improve family health (Kemen, 2014). In line with the study (Aminuddin, 2014) The level of income affects the nutritional status of children under five in the working area of the Rajabasa Indah Health Center in the city of Bandar Lampung in 2014 with a value (p = 0.004). According to (Azhar, H, 2010) revealed that the chi square test results obtained value of P.value 0.002 so that a significant influence the level of income in fulfilling food on the nutritional status of children. ThenTantri, J (2012) also said that there was a significant influence between the level of family income on the nutritional status of children under five with the results of the chi square test obtained P. value = 0.001 t. a person’s income level is not sufficient to meet the nutritional needs of their toddlers. From the research results, a very basic problem is the level of community income because it is important create a surrounding environment as land for additional income

**Social and cultural studies of Nutritional Status in Toddlers**

Based on the results obtained by Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency, of the 21 respondents who had poor social culture there were 16 people (76.3%) who had poor nutritional status and there were 5 people (23.3%) who had good nutritional status. While from 18 respondents who have supportive social culture, there are 10 people (83.3%) who have good nutritional status and there are 2 respondents (16.7%) who have poor nutritional status. Socio-cultural studies of nutritional status with the
chi square test, the value of (P.value 0.003<α 0.05) social and cultural status regarding the nutritional status of children under five in Blang Muling Village, District of Makmue, Nagan Raya Regency.

Society has a culture that includes rules, norms, outlook on life which are used as a reference in regulating the culture of community life. The socio-cultural background in Blang Muling Village, Suka Makmue Subdistrict, Nagan Raya Regency is the Acehnese and Javanese people. Here patrilineal lineage patterns then in family customs, the role of husband / father is very influential. the father / husband as the head of the household is an intermediary in the determination of fate including those who control the economic resources of the family (Sampurno, 2020). Culture influences malnutrition such as the prohibition of eating certain things for adherents of a religion and certain norms adopted by the local community. This pattern of habits regarding a society and the food habits it follows, develops around the meaning of food and the use of suitable food. This cultural pattern affects the types of food that will be produced, processed, distributed, prepared, served (Mubarak, 2018). The results of socio-cultural observations are less supportive of the possibility of poor gizibal status, this can be seen from the results of research because a person's social culture that does not meet the nutritional needs of toddlers will continue. not good. From the results of research, it is important to always consider social and cultural considerations. In order to create a sense of caring to provide nutrition for toddlers. in a social and cultural way that can improve toddler nutrition.

**Conclusion**
The conclusion of the Knowledge study was most influential (p = 0,000; OR = 3,200; 95% CI). Income Level (P = 0.001), and Social Culture (P = 0.003) on Nutritional Status of Toddlers in Blang Muling Village, District of Suka Makmue, Nagan Raya Regency

**Suggestion**
Health workers should be more active in delivering information about the importance of the nutritional status of toddlers to mothers, so that mothers are more active in overcoming family nutrition in order to fulfill their toddler nutrition.

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