

# THE RELATIONSHIP OF MOTHER'S BEHAVIOR REGARDING BALANCED NUTRITION WITH NUTRITIONAL STATUS OF THE CHILDREN AT ELEMENTARY SCHOOL NO. 98 IN NORTH CITY OF GORONTALO

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## ABSTRACT

Until now, the problem of balanced nutrition related to nutritional status is still a problem that is quite often discussed and maternal behavioral factors are considered influential in this situation. Therefore the knowledge, attitudes and actions of mothers about balanced nutrition need to be reviewed more deeply. The study aims to determine the relationship between maternal behavior regarding balanced nutrition and the nutritional status of the children at Elementary School No. 98 in North City of Gorontalo. The method in this research is correlational quantitative. The sampling technique used accidental sampling with a total sample of 30 respondents. The data was collected using a questionnaire and analyzed using the *Spearman Rank* correlation test with a significant value of  $= 0.05$ .

The result shows that most of the mother's knowledge and mother's actions about balanced nutrition were sufficient for 11 respondents (36.7%), while the mother's attitude about balanced nutrition was good for 13 respondents (43.3%), and the nutritional status of the children was mostly good with a total of 16 children (53.3%). The results of the *Spearman Rank* test show that there is no relationship between mother's knowledge about balanced nutrition, mother's attitude about balanced nutrition, mother's actions about balanced nutrition with the nutritional status of the children at Elementary School No. 98 in North City of Gorontalo with each sig value ( 2 tailed ) = 0.387, 0.868, and 0.505.

**Keywords:** Mother's behavior, Nutritional Status of the Children.

## INTRODUCTION

Nutrition plays an important role in determining the quality of human resources (HR). This is due to the existence of quality human resources which are determined by the success of the development of a nation. Nutrition and development are interrelated, which means that nutrition can determine the success of a nation and vice versa the state of a nation will affect the nutritional status of the community. Good nutritional

status is needed to support optimal growth and prevent diseases that can affect survival [18].

Nutritional status is an aspect that affects the welfare, health and development of children. Good nutritional status will support the growth cycle and optimal development of children. The body will be free from various diseases if it has sufficient nutrition and vice versa, if the nutrition in the body is not fulfilled it

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will cause nutritional problems in children [4].

Nutritional status is defined as a measure of the state of the human body caused by the use of nutrients and consumption of food needed by the body in forming several body tissues with each role in a system, thus creating growth and development, intelligence, and productivity that is healthy, fit and prosperous [16].

Nutritional status consists of 3 categories, including good nutrition, over nutrition and less nutrition. Good nutritional status means that nutritional intake is equivalent to the nutritional needs of the person concerned. While malnutrition is a condition where the body is not healthy due to low calorie and protein intake for a certain period of time. And more nutritional status is an unhealthy body condition as a result of excessive food intake from needs and lack of physical activity [16].

From an early age, children need to be prepared as the nation's next-generation with planned, precise, intensive and continuous efforts to achieve high quality physical, social, mental and spiritual growth and development. In this case, to ensure the highest achievement in the quality of growth and development and fulfill children's rights, one of the basic efforts is by increasing the child's weight which aims to meet adequate standards. The age of elementary school children in Indonesia is mostly 7-12 years old starting from grades 1 to 6. At this age, it is a strategic target in improving nutrition because the rate of growth and development occurs both physically, mentally, intellectually, and socially. ]

Most children's nutritional needs are needed for activities in the formation and maintenance of body tissues. In school-age children body composition has begun to change. Where when the child starts at the age of 7 years, the fat composition

increases and the difference begins to be seen. Boys' bodies are dominant in muscle tissue while girls' bodies are more dominant in fat [2].

The recommended energy contribution for each meal per day is 25% for breakfast, 30% for lunch, 25% for dinner and 10% for morning and afternoon interludes, respectively. By fulfilling each nutritional composition of 50% carbohydrates, 35% fat, 15% protein, and sufficient vitamins and minerals. The arrangement and shape depend on the age, activity, gender and physical condition of the child [1].

The role of nutrition in school-age children is as a provider of energy needs for physical activity, providing a source of builder for growth, to ensure the availability of nutrients in the body for growth during adolescence, and to maintain the body's resistance from infectious diseases to stay healthy [3].

In the world of health, balanced nutrition has an important role. This is because many health problems stem from nutritional problems. Intake of less or more nutrition each has a bad impact on the body which can fatally cause death. Knowledge of balanced nutrition needs to be possessed from an early age because it can help the community in preventing the negative impact of an imbalance in nutritional intake [20].

The people in question here are parents, especially mothers. Mother is the determinant of the food consumed by the child. By knowing or knowing about balanced nutrition from an early age, it can help mothers understand and provide good and healthy nutritional intake for children to support better growth and development of children. Balanced nutrition is stated in balanced nutrition guidelines which are guidelines for the Indonesian people which include a combination of eating patterns and healthy lifestyles.

Balanced nutrition is a daily diet that is following the body's needs based on the type and amount of food, taking into account the principles of food diversity, physical activity, clean living behavior and maintaining normal body weight to prevent nutritional problems [5].

Fulfillment of balanced nutrition in children has very good benefits, including providing a source of energy that supports children in their activities and plays a role in the ideal physical formation. For example, children who are malnourished will look less enthusiastic, passive and weak which can interfere with children's learning activities at school so they cannot participate in learning activities to the fullest [14].

Every day a mother is accustomed to providing food for her family, it is necessary to have knowledge and skills regarding a balanced menu so that the food provided looks attractive and healthy to consume. The lack of knowledge about nutrition and the lack of health of parents, especially mothers, are things that can cause nutritional problems in children [9].

Ignorance of food ingredients results in the wrong choice of food and low knowledge of nutrition can lead to an attitude of indifference to food. From the age of toddlers to the age of elementary school children, usually children only eat food provided by their parents at home. So that the behavior of mothers related to the fulfillment of balanced nutrition in children will greatly affect the growth and nutritional status of children. The behavior referred to here is in the form of the mother's knowledge, attitudes and actions. Therefore, mothers need knowledge, attitudes towards adequate balanced nutrition and implement them in the form of actions to fulfill children's nutritional status properly [15].

In 2016, 75 million girls and 117 million boys worldwide aged 5-19 years experienced moderate or severe

malnutrition. In the same year, 124 million children worldwide were obese, consisting of 50 million girls and 74 million boys [10].

Based on data from the 2017 PSG results by the Ministry of Health nationally, the percentage of underweight (according to BMI/U) of school children aged 5-12 years is 9.2%, consisting of 2.4% very thin and 6.8% thin. Meanwhile, for obesity problems in children aged 5-12 years as much as 20%, consisting of 10.8% fat and very fat or obese 9.2% [6].

Meanwhile, the prevalence of nutritional status of children aged 5 to 12 years in districts/cities in Gorontalo Province in 2018, namely Boalemo Regency was in the very thin category 2.42%, thin 8.13%, fat 4.31% and obesity 9.01%. Gorontalo Regency is categorized as very thin 1.40%, 8.49% thin, 9.19% fat and 5.34% obese. Pohuwato Regency is categorized as very thin 3.92%, skinny 6.78%, obese 7.86% and obese 4.62%. Bone Bolango Regency is categorized as very thin 4.42%, lean 10.14%, obese 8.41% and obese 7.06%. North Gorontalo Regency is in the very thin category of 2.05%, 11.23% thin, 5.85% fat and 5.98% obese. And for the City of Gorontalo the category of very thin 3.54%, 7.06% thin, 15.59% fat and 6.70% obese nutritional status [7].

In determining the classification of children's nutritional status, the unit standard deviation is the *Z-score*. *Z-Score* is a standard score that is measured in the form of a person's score distance from the group mean in Standard Deviation (SD) units. Standard Deviation or also known as standard deviation is the most common measure of statistical distribution. The formula for calculating the *Z-score* is [8] :

$$Z\text{-Score} = \frac{\text{Subjek individual value} - \text{reference standard median value}}{\text{reference standard deviation}}$$

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According to PMK RI No. 2 of 2020 concerning Child Anthropometry Standards, in determining the classification of nutritional status of children aged 5-18 years using body mass indicators according to (BMI/U), namely:

Malnutrition	: <-3 SD
Underweight	: -3 SD up to <-2 SD
Normal	: -2 SD up to +1 SD
Overweight	: +1 SD up to +2 SD
Obesity	: >+2 SD

With the BMI formula, is :

$$\text{BMI} : \frac{\text{Weight}(kg)}{\text{Height}(m) \times \text{Height}(m)}$$

Nutritional problems are directly caused by food consumption and the presence of infectious diseases. Little or too much food consumption can cause nutritional status to become abnormal, if a few children will experience malnutrition problems because they do not get enough food intake, if excessive children will experience in over nutrition problems/obesity. Children affected by infectious diseases tend not to have a good appetite, so there is no nutritional intake that enters the body which results in poor nutritional status because the body does not optimally utilize nutritional intake properly [13].

In addition, nutritional problems that are caused indirectly are family income, knowledge and parenting patterns. The nutritional status of children from high-income families will be better because they can provide various food sources. Parental knowledge is said to be influential because, if parents' knowledge of nutrition is good, then the food provided will be good for the growth and development of children and vice versa. Food parenting is identical to providing adequate food for children's needs which will later affect the child's nutritional status. Parents will try to prepare nutritious food and other foods but have similar nutritional content if the child has

difficulty eating, so that the child's nutritional intake is still fulfilled [13].

SDN No. 98 North City of Gorontalo, which is one of the schools in Gorontalo with state status with the status of being owned by the Regional Government which is located on Jalan KH. Adam Zakaria, East Wongkaditi Village, North City District, Gorontalo City, Gorontalo Province. 12 teachers work at SDN No. 98 North City of Gorontalo, consisting of 10 elementary school teachers, 1 operator and 1 library management teacher and 189 students in the 2021/2022 academic year.

Before the COVID-19 pandemic, teaching and learning was carried out directly in schools, but after the Covid-19 pandemic, teaching and learning activities were carried out online and at home. So that the school situation is quite quiet, the only ones in the school are the teachers and some students who come to be recorded for the academic needs of the new school year but are still limited by health protocols as recommended by the government. A preliminary study conducted on 77 children showed that 35% of children were undernourished and 5.19% of children were overweight.

## RESEARCH METHODS

This study was conducted from the end of June to early August 2021, using a quantitative approach to the Design *cross-sectional*. The population of this study was school children in grades 4,5, and 6 totaling 100 people. To determine the sample in this study using *accidental sampling technique* with a total of 30 respondents consisting of mothers and children who fit the inclusion criteria. Mothers as respondents who will fill out the questionnaire distributed by researchers, and school children whose nutritional status will be measured.

*The independent* variable in this study is the mother's behavior which consists of 3 indicators (Knowledge,

Attitude, Action) and *the dependent variable* namely the Nutritional Status of School Children.

The data analysis used in this research is the univariate analysis and bivariate analysis. Univariate analysis in this study aims to describe the characteristics of each variable in the form of a frequency distribution table. Bivariate analysis is the process of analyzing the correlation between the two variables being tested. To see the relationship between the independent variable (Mother's Behavior) and the dependent variable (Nutritional Status of School Children) the correlation test was used *Spearman Rank*.

## RESEARCH RESULTS

### A. Univariate Analysis of

#### 1. Respondents Characteristics

Based on data retrieval through questionnaires to 30 respondents, the results of the characteristics of respondents (mothers) in this study the majority had high school education as many as 9 people (30%), as household members as many as 21 people (70%), aged 31-40 people as many as 16 people (53.3%), stated that they had received information about nutrition as many as 27 people (90%), received information sources from counseling guidance as many as 13 people (43.3%). Then for the characteristics of respondents (children) the majority were aged 9-11 years as many as 23 people (76.7%), and female sex as many as 18 people (60%).

#### 2. Mother's Behavior Based on 3 Indicators of

a. Mother's Knowledge of Balanced Nutrition

**Table 1.** Frequency Distribution of Mother's Knowledge of Balanced Nutrition

Mother's Knowledge of Balanced Nutrition	Frequency (N)	Percentage (%)
Less	10	33.3
Enough	11	36.7
Good	9	30
<b>Total</b>	<b>30</b>	<b>100</b>

Source : Primary data, 2021

Based on Table 1, it is known that the majority of mothers have sufficient knowledge of 11 respondents (36.7%), while those who have at least good knowledge are 9 respondents (30%)%.

b. Mother's Attitude About Balanced Nutrition

**Table 2.** Frequency Distribution of Mother's Attitude About Balanced Nutrition

Mother's Attitude About Balanced Nutrition	Frequency (N)	Percentage (%)
Very Poor	0	0
Not Good	3	10
Enough	5	16.7
Good	13	43.3
Very Good	9	30
<b>Total</b>	<b>30</b>	<b>100</b>

Source: Primary data, 2021

Based on Table 2, it is known that most of the 13 mothers (43.3%) have a good attitude, while at least 3 respondents have a bad attitude (10%).

c. Mother's Actions About Balanced Nutrition

**Table 3.** Frequency Distribution of Mother's Actions About Balanced Nutrition

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Mother's Actions About Balanced Nutrition	Frequency (N)	Percentage (%)
Not Good	5	16.7
Enough	11	36.7
Good	9	30
Very Good	5	16.7
<b>Total</b>	<b>30</b>	<b>100</b>

Source: Primary data, 2021

Based on Table 3, it is known that the highest number of respondents who have sufficient action is 11 respondents (36.7%), while the lowest number is that they have very good and bad actions, each of which is 5 respondents (16.7%).

3. Nutritional Status of School Children

Table 4. Frequency Distribution of Nutritional Status of

Children	Frequency (N)	Percentage (%)
Malnutrition	3	10
Undernutrition	4	13.3
Good (normal)	16	53.3
Over Nutrition	5	16.7
Obesity	2	6.7
<b>Total</b>	<b>30</b>	<b>100</b>

Source: Primary data, 2021

Based on Table 4, it is known that the highest number is good nutrition with 16 children with a percentage of 53.3%, while the lowest number is obese with a total of 2 children with a percentage of 6.7%.

B. Bivariate Analysis

1. The Relationship of Mother's Knowledge Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School

Table 5. Correlation Test Results Spearman Rank Mother's Knowledge Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School

Mother's Knowledge About Balanced Nutrition	Nutrition Nutritional Status of The Children										Total	
	Malnutrition		Underweight		Normal		Over		Obesity			
	f	%	f	%	f	%	F	%	f	%	f	%
Less	2	20	2	20	4	40	2	20	0	0	10	100
Enough	0	0	1	9.1	7	63.3	3	27.3	0	0	11	100
Good	1	11.1	1	11.1	5	55.6	0	0	2	22.2	9	100
TOTAL	3	10	4	13.3	16	53.3	5	16.7	2	6.7	30	100

Sig (2-tailed) = 0.387

Source: Primary data, 2021

Table 5 above shows the correlation of the results test Spearman Rank mother's knowledge about balanced nutrition with nutritional status of school children obtained sig (2-tailed) = 0.387. This means that a mother's knowledge about

balanced nutrition has nothing to do with the nutritional status of school children.

**2. The Relationship of Mother's Attitudes Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School**

**Table 6.** Results of correlation Test *Spearman Rank* Mother's Attitudes Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School

Mother's Attitudes About Balanced Nutrition	Nutrition Nutritional Status of The Children										Total		
	Malnutrition		Underweight		Normal		Over		Obesity		f	%	
	f	%	f	%	f	%	f	%	f	f			
Very Less Good	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Good	0	0	2	6.7	0	0	0	0	1	33.3	3	100	
Enough	0	0	1	20	2	40	2	40	0	0	5	100	
Good	2	15.4	1	7,7	8	61.5	1	7,7	1	7,7	13	100	
Very Good	1	11.1	0	0	6	66.7	2	22.2	0	0	9	100	
TOTAL	3	10	4	13,3	16	53.3	5	16.7	2	6.7	30	100	

*Sig (2-tailed) = 0.868*

Source: Primary data, 2021

Table 6 above shows the results of the correlation test *Spearman Rank's* mother's attitude about balanced nutrition with the nutritional status of school children obtained a value sig(2-

tailed) = 0.868. This means that the mother's attitude about balanced nutrition has no relationship with the nutritional status of school children.

**3. The Relationship of Mother's Actions Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School**

**Table 7.** Results of correlation Test *Spearman Rank* Mother's Actions Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School

Mother's Actions About Balanced Nutrition	Nutrition Nutritional Status of School Children										Total	
	Malnutrition		Underweight		Normal		Over		Obesity		f	%
	f	%	f	%	f	%	f	%	f	%		
Poor	1	20	3	60	0	0	0	0	1	20	5	100
Enough	0	0	1	9.1	6	54.5	3	27.3	1	9.1	11	100
Good	2	22.2	0	0	6	66,7	1	11.1	0	0	9	100
Very Good	0	0	0	0	4	80	1	20	0	0	5	100
TOTAL	3	10	4	13.3	16	53.3	5	16.7	2	6.7	30	100

*Sig (2-tailed) = 0,505*

Source: Primary data, 2021

Table 7 above shows the results of the correlation test *Spearman Rank* for mothers' actions regarding balanced nutrition with the nutritional

status of school children, the value of sig (2-tailed) = 0,505. This means that the mother's actions regarding balanced nutrition have nothing to do with

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the nutritional status of school children.

## DISCUSSION

### **The Relationship of Mother's Knowledge Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School**

Based on the results of the research on the analysis, it was *Spearman Rank* explained that for the indicator of mother's knowledge about balanced nutrition with the nutritional status of school children, the value was significantly greater than the crisis limit value ( $\alpha$ ). This means that the knowledge of mothers about balanced nutrition with the nutritional status of school children at SDN No. 98 North City of Gorontalo declared no relationship.

The results of this study are not in line with the results of research obtained by Andriyanti (2017) which states that there is a relationship between a mother's knowledge in feeding and the nutritional status of toddlers. Because in this study, it was obtained that several mothers with knowledge about balanced nutrition were less but the nutritional status of children was normal and over, this was because the mother of the child stated that she often left her child and was cared for at the home of her parents and relatives who understand more about nutrition so that as long as the child is there, there to get a better nutritional intake.

Meanwhile, the results of this study are following research from Egha (2012) and Wardani (2012) which state that there is no relationship between mother's education and children's nutritional status because mothers do not think about the nutrition needed by children at their age and mothers only provide nutritional intake based on habits. only in the provision, not in the needs of the child. The research has similarities with

this study, namely the characteristics that are measured are education to see the relationship with the nutritional status of children.

In this study, maternal education was not related to the nutritional status of school children, because from the questionnaire data obtained, most mothers with low education had knowledge of well-balanced nutrition. One of the factors that can affect nutritional status is an infectious disease. This is because someone who is sick does not have a good appetite, so that person does not want to eat and no intake causes weight loss [13].

This incident was discovered by the researcher at the time of conducting the study, the researcher got a child whose BMI was included in the category of poor nutrition while the results of the questionnaire from his mother showed that knowledge, attitude and action were good. Then the researcher asked to his mother, and she stated that indeed a few days before the child was weighed he had diarrhea and decreased appetite. So the weight obtained at the time of the study was below normal. So that the researchers got the results that there was no relationship between the mother's knowledge about balanced nutrition and the nutritional status of school children at SDN No. 98 North City of Gorontalo.

Knowledge is an important general basis in shaping a person's behavior because behavior that is already based on knowledge will be more constant than behavior that is not based on knowledge. Formal education will affect a person in receiving information including information related to nutrition [12].

Good knowledge will affect the source of information obtained. The information obtained is also influenced by sources of information based on the



social environment that supports a person's high knowledge [15].

This is in accordance with the results of the study which stated on the characteristics of the respondents (mothers), that most of the mothers stated that they had received information about balanced nutrition while others had never and most of the respondents who stated that they had received information about balanced nutrition received information from counseling guidance.

### **The Relationship of Mother's Attitudes Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School**

results of the analysis *Spearman Rank* explained that the results of the study for indicators of maternal attitudes about balanced nutrition with nutritional status of school children obtained a value significantly greater than the crisis limit value ( $\alpha$ ). This means that the mother's attitude about balanced nutrition with the nutritional status of school children at SDN No. 98 North City of Gorontalo declared no relationship.

This is not in accordance with research from Ningsih S, Kristiawati, and Krisnana I which states that there is a relationship between mother's attitude in providing nutrition with undernutrition status of age children *toddler*. Because in this study, the results showed that the attitudes of mothers is good and the nutritional status of the children were also mostly good. However, with this good attitude, it is still found that children have nutritional status problems, namely poor nutritional status, as well as undernutrition status, over nutrition and obesity so that it shows that there is no relationship

between mother's attitude about balanced nutrition and the nutritional status of school children.

This is in line with research conducted by Wardani (2012) which states that a mother's behavior is not related to the nutritional status of school children. In this study, the mother's attitude was obtained very well but the nutritional status of the child was poor and more so with several other respondents who had a good attitude but the nutritional status of the child was poor, lacking, even obese. This is because the mother does not respond to the things she knows well. Even though she has a good attitude, she doesn't necessarily implement that attitude in real terms.

Ningsih (2015) says that attitudes affect behavior in three components of behavior formation, namely emotions, thoughts, knowledge and beliefs. However, the attitude has not been directly shown in action, it is necessary to have supporting factors such as family to make it into action. Actions will follow attitudes depending on how much or at least one's experience [11]. The majority of mothers are aged 31-40 years, where the age range is included in the adult age classification so that they have quite a lot of experience.

Ramadhani (2017) explains that attitude means an expression of the values possessed by a person. Attitude is a person's response in determining something that is desired, expected and becomes a determinant of someone in rejecting or taking sides with something. From that process, an attitude is actualized in the form of action [16].

### **The Relationship of Mother's Actions Regarding Balanced Nutrition with Nutritional Status of The Children at Elementary School**

The results of the analysis *Spearman Rank* show that the results of the study for indicators of maternal actions on balanced nutrition with nutritional status of school children obtained a value significantly greater than the crisis limit value ( $\alpha$ ). This means that the mother's actions about balanced nutrition with the nutritional status of school children at SDN No. 98 North City of Gorontalo declared no relationship.

The results obtained are not in accordance with the results of research from Andriyanti (2017) which states that there is a significant relationship between a mother's actions in feeding and nutritional status. Mothers' actions regarding balanced nutrition are related to nutritional status problems experienced by children, this can be seen from some of the wrong habits of mothers in fulfilling or providing nutritional needs to children because they are less able to provide food in accordance with the recommended balanced nutrition message. So, in preparing food for the family, the mother does not have a menu arrangement but cooks whatever is available using makeshift ingredients in the kitchen. This statement was obtained from the results of interviews with several respondents.

The results of this study are in line with research conducted by Wardani (2012) which revealed that the behavior of mothers in meeting the nutritional needs of children has nothing to do with the nutritional status of school children. In general, good knowledge and attitude will also affect the formation of good

actions, as well as with sufficient knowledge and attitude will also form sufficient action and lack of knowledge and attitude will form less action as well.

Thita (2018) states that attitudes will manifest in action, if accompanied by other factors such as the existence of facilities and infrastructure [19]. Meanwhile, based on the general characteristics of the respondents, the majority of mothers of children who attend SDN No. 98 Kota Utara Gorontalo is a housewife whose family income only comes from her husband so that she is included in a middle to lower economic family so that the purchasing power of facilities (facilities and infrastructure) in the form of complete and diverse food ingredients cannot be fulfilled.

When the respondent (mother) filled out the questionnaire, the researcher conducted a brief interview with the respondent and the respondent said that in terms of preparing and providing nutritional intake to children, the respondent only provided food according to the habits of preparation and did not pay attention to the variety of types of food and nutritional needs needed. by child. Mothers pay less attention to the nutrients in the food given to their children, because they assume that as long as the child has been given food and is full. Therefore, what causes this is in addition to the lack of knowledge of mothers, the economy is also very influential because with a low economy, mothers are not able to prepare complete food ingredients that are nutritionally balanced for family meals.

From the results of the overall study, it was found that although the mother's behavior in the form of knowledge, attitudes and actions of mothers about

balanced nutrition was sufficient and lacking, the nutritional status of children was mostly in a state of good nutrition (normal) and vice versa, the mother's behavior about balanced nutrition was fairly good. nutritional status of their children is in a state of malnutrition to obesity. This is why there is no relationship between maternal behavior regarding balanced nutrition and the nutritional status of children at SDN No. 98 Gorontalo City.

### Research Limitations

There are several limitations faced by researchers in the research process, including, the limited research time and the COVID-19 pandemic conditions that made the researchers only determine the number of samples of 30 people, so it was felt that it was still insufficient to describe the actual situation. This study also only uses three indicators in the independent variable that affects the dependent variable, namely the nutritional status of school children. Meanwhile, there are several other indicators and variables (such as mother's income, father's income, food consumption, parenting, infectious diseases, etc.) related to this independent variable which can explain further the possibility of having a relationship with the variable nutritional status of school children.

### CONCLUSIONS

1. Mother's knowledge about balanced nutrition at SDN No. 98 North Gorontalo City at most is sufficient with a total of 11 respondents and a percentage of 36.7%.
2. Mother's attitude about balanced nutrition at SDN No. 98 North Gorontalo City the most are good

as many as 13 respondents with a percentage of 43.3%.

3. Mother's actions about balanced nutrition at SDN No. 98 Kota Utara Gorontalo are mostly adequate with 11 respondents and the percentage is 36.7%.
4. Nutritional status of the children at SDN No. 98 North City of Gorontalo are well-nourished, namely 16 children with a percentage of 53.3%.
5. There is no relationship between a mother's knowledge regarding balanced nutrition with nutritional status of the children at SDN No. 98 North City of Gorontalo.
6. There is no relationship between the mother's attitude regarding balanced nutrition with nutritional status of the children at SDN No. 98 North City of Gorontalo.
7. There is no relationship between the mother's actions regarding balanced nutrition with nutritional status of the children at SDN No. 98 North City of Gorontalo.

### SUGGESTIONS

Based on the results of the research that has been obtained, the researchers would like to convey some suggestions including the following:

1. For health workers, they can disseminate information to the community, especially mothers and prospective mothers through counseling and nutrition counseling as well as programs related to balanced nutrition to increase mothers' knowledge about balanced nutrition.
2. For parents, especially mothers, can maintain an attitude in implementing and providing balanced nutrition to children properly and appropriately so that

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- children can grow up healthily without any nutritional problems.
3. For mothers, it can improve actions in providing balanced nutrition to children so that children get optimal nutritional intake and growth.
  4. For students at SDN No. 98 Gorontalo City, is expected to be able to maintain a body mass index and monitor body weight regularly so that it is in normal nutritional status.
  5. For further researchers, it can be used as a basis for reference with the same group of respondents and characteristics but with different variables and methods or vice versa, especially in the relationship between mother's knowledge and nutritional status of the children.
  6. For further researchers, they can examine and analyze other factors that are related to the attitude of mothers with nutritional status of the children so that they get different results.
  7. The next researcher can examine and analyze other factors that are related to the actions of mothers with nutritional status of the children using the same or different methods to obtain different results so that they can provide further interventions to improve good maternal behavior related to balanced nutrition.

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