

# THE EFFECT OF FOOD CARE PATTERNS AND HEALTH CARE PATTERNS ON THE NUTRITION STATUS OF CHILDREN IN THE DISTRICT ATINGGOLA NORTH GORONTALO DISTRICT

Sri Masyita Djailani<sup>1)</sup>, Yolana H. Dunggio<sup>2)</sup>, and Arpin<sup>3)</sup>

<sup>1,2,3)</sup> Bina Mandiri Gorontalo University

E-mail: [srinasyitadj@gmail.com](mailto:srinasyitadj@gmail.com)

## ABSTRACT

This research aims to find out the influence of Food Care Patterns and Health Care Patterns on the nutritional status of children under five in Atinggola District, North Gorontalo Regency. This study uses observational analytic with a quantitative approach. In this study, the number of population obtained in the Atinggola Health Center, North Gorontalo Regency, was 118 toddlers using the Slovin formula, the sample size was 21 people. The results of this study showed that 15 toddlers (71.4%) had good nutritional status, 2 toddlers (9.5%) had bad nutritional status, 12 toddlers (57.1%) had good food parenting patterns and 9 had enough. people (42.9%), health care pattern with good category is 19 people (90.4%), enough is 1 person (4.8%) and lacking is 1 person (4.8%), nutritional status of toddlers with good category as many as 15 toddlers (71.4%), malnutrition as many as 3 toddlers (14.2%) and bad nutrition as many as 2 toddlers (9.5%). The results of the *chis-square test* were obtained for the parenting pattern variable with a value of  $p = 0.023$  and for health parenting the value of  $p = 0.02$  was lower than the value of  $\alpha$  (0.05) so that it could be concluded that there was an effect of parenting and health care on nutritional status of children under five in Atinggola District, North Gorontalo Regency in 2022.

**Keywords:** eating parenting, health parenting, nutritional status.

## INTRODUCTION

The percentage of children under five who are undernourished and severely malnourished in rural areas is higher than in urban areas. Thus, for Indonesia, health is an unfinished homework. Then the emphasis on health as a key element of sustainable development has regained its momentum by becoming the third goal of the post-2015 development agenda: "*ensure healthy lives and wellbeing for all at all ages*" [3].

Indonesia's development is carried out to improve the quality of people and society that produces superior Indonesian people thereby increasing brain intelligence and physical health through

education, health and nutrition improvement. So this is stated in the National Medium Term Development Plan (RPJMN) [3].

The goals and targets of the post-2015 national development agenda are that by 2030 it will end hunger and ensure access to safe, nutritious and sufficient food for all people, especially the poor and those who are vulnerable to nutrition, including infants and toddlers. Then it will end all forms of malnutrition including achieving the 2025 international targets for reducing stunting and wasting in toddlers and addressing the nutritional needs of adolescent girls [3].

Submit: Nov 8<sup>th</sup>, 2025

Accepted: Dec 15<sup>th</sup>, 2025

Published: Dec 24<sup>th</sup>, 2025

Nutritional problems can occur in all age groups of children under five. Toddlers are an age group that is prone to nutrition and disease. This group is the age group that is most vulnerable to suffering from nutritional consequences, and the numbers are in large portions. Some of the conditions or assumptions that cause toddlers to be nutritionally vulnerable include: toddlers are just in a transition period from baby food to adult food, usually toddlers already have younger siblings, or their mothers are already working full time so that the mother's attention has diminished, toddlers have not yet can take care of themselves, including choosing food, and toddlers have started playing on the ground, and are already able to play outside their own homes, so they are more exposed to dirty environments and conditions that allow them to be infected with various diseases [14].

Based on the results of the National Basic Health Research (RISKESDAS) that in 2007 cases of malnutrition in Indonesia amounted to 5.4%, then in 2010 it decreased by 4.9%, but in 2013 cases of malnutrition again increased by 5.7% (Risekesdas, Balitbang, Ministry of Health, 2013). Riskesdas data for 2018 shows that there is still a high prevalence of malnutrition in toddlers in Indonesia, including as many as 17.7% of toddlers are undernourished in Indonesia (BB/U), as many as 30.8% of toddlers are stunted (PB/U and TB/U). and 10.2% of children under five were underweight (BB/BB or BB/TB). For Gorontalo Province the prevalence of malnutrition is 6.8% while nationally it is 3.9%, malnutrition is 19.3% , nationally is 13.8%, good nutrition is 69.1% and nationally is 79.2%.

The North Gorontalo District Health Office in 2019 recorded 35% of toddlers with good nutritional status, then following toddlers with poor nutritional status there were 25% of toddlers and

finally there were toddlers with poor nutritional status there were 40% of toddlers.

The economic crisis and poverty factors greatly determine the nutritional status of children under five because they are influenced by purchasing power. The characteristics, growth and development of toddlers also depend on the social processes carried out by adults, the interactions between adults and children (caregivers). In addition, it is also influenced by the provision of MP-ASI and vitamin A [4].

Another factor that affects nutritional status is parenting style, one of the parenting styles that is related to children's nutritional status is parenting style. Parenting patterns regarding meeting nutritional needs as parenting practices applied by mothers to children related to meeting nutritional needs [4].

Caring for children also does not start after the baby is born, but when the baby is still in the womb, care is carried out. Nutritional needs during pregnancy must meet the needs of both the mother and the fetus. The quality and amount of food needs to be supplemented with sufficient nutrients and energy to support the growth of the fetus running well. Mothers who experience malnutrition during pregnancy will cause several problems such as low baby weight, health problems in toddlers, impaired child intelligence due to poor brain development, premature birth, stunted fetal growth, birth defects, and so on [10].

Based on previous research conducted in Makassar City, it was stated that parenting styles in feeding infants are related to infant growth. Based on research conducted in Depok, it was stated that the upbringing of factory worker mothers was significantly related to socio-economic factors, family circumstances, family health conditions and family environment [15].

Nutritional status is a socially defined position assigned to a group or member of another person. Nutrition is the chemical bonds needed by the body to perform its functions, namely to produce energy, build and maintain tissues and regulate life processes. Nutritional status is the state of the body as a result of food consumption and use of nutrients [7].

Children aged 1-3 years are passive consumers, meaning that children receive food from what their mother provides. Under these conditions, toddlers should be introduced to a variety of foodstuffs. The growth rate at this age is greater, however, the stomach capacity is still smaller. Therefore, the diet given is small portions with frequent frequency. At preschool age, children become active consumers, that is, they are able to choose the food they like. At this time, children are starting to like snacks. If this is allowed, the snacks chosen can reduce nutrient intake. Therefore, environmental conditions and family attitudes are very important in feeding children so that children are not anxious and worried about their food [16].

There are two causes that affect the nutritional status of children under five, namely direct causes and indirect causes. There are two direct causes, namely nutritional intake and infectious diseases. Nutritional intake can be caused due to an unbalanced intake of food consumed or food that does not meet the nutritional elements needed, while infection causes damage to several organs of the body so that they cannot absorb nutrients properly, while indirect causes affect nutritional status, namely not enough inadequate parenting food, and sanitation, clean water/ basic health services are inadequate [3].

Classification of the nutritional status of toddlers according to weight/age is divided into 4, namely: Poor nutrition: (<-3 SD), Malnutrition: (-3 SD to <-2 SD),

Good nutrition: (-2 SD to 2 SD), Overnutrition : (>2 SD).

One way of assessing nutritional status is related to body size adjusted for a person's age and nutritional level. In general, anthropometry measures the dimensions and body composition of various ages and levels of nutrition. Anthropometric methods are very useful for seeing energy and protein imbalances. However, anthropometry cannot be used to identify specific nutrients.

The food consumption survey is an assessment of nutritional status by looking at the amount and type of food consumed by individuals and families. The data obtained can be either quantitative or qualitative data. Quantitative data can determine the amount and type of food consumed, while qualitative data can determine the frequency of eating and how a person or family obtains food according to nutritional needs.

The toddler period is a very important period of life in which the process of growth and development takes place very rapidly, namely physical growth and psychomotor, mental and social development. Psychosocial stimulation must be started early and on time to achieve optimal psychosocial development. In supporting the physical growth of toddlers, practical guidelines for food with balanced nutrition are needed, one of which is by eating a variety of foods that meet nutritional adequacy. The nutritional needs of toddlers include energy, protein, fat, carbohydrates, water, vitamins and minerals.

Energy is a transferable object through fundamental interactions, which can be changed in form but cannot be created or destroyed. Energy is the ability to do work. The daily energy requirement in the first year is 100-200 kcal/kg BW. For every three years of age, the energy requirement drops by 10 kcal/kg BW. Energy use in the body is 50% or 55

kcal/kg BW/day for basal metabolism, 5-10% for Specific Dynamic Action, 12% for growth, 25% or 15-25 kcal/kg BW/day for physical activity and 10 % wasted through feces. Energy-containing nutrients consist of protein, fat, and carbohydrates. Then it is recommended that the amount of energy needed is obtained from 50-60% carbohydrates, 25-35% fat, and 10-15% protein [1].

Protein is a source of essential amino acids needed as building blocks, namely growth and protein formation in serum, hemoglobin, enzymes, hormones and antibodies; replace damaged body cells; maintain the acid-base balance of body fluids; and energy sources [1].

It is recommended to give 2.5-3 g/kg BW for infants and 1.5-2 g/kg BW for school children until adolesensia. The amount of protein given is considered adequate if it contains all the essential amino acids in sufficient quantities, is easily digested and absorbed by the body, then the protein given must be partly high quality protein such as animal protein [1].

Fat requirements are not stated in absolute numbers, it is recommended that 15-20% of total energy come from fat. In Indonesia, energy derived from fat is generally around 10-20%. Fat input after 6 months of age as much as 30-35% of total energy is still considered normal, but it shouldn't be any lower [1].

It is recommended that 60-70% of total basal energy come from carbohydrates. In breast milk and most infant formulas, 40-50% of the calorie content comes from carbohydrates, especially lactose. It is better if the carbohydrates eaten consist of polysaccharides such as those found in rice, wheat, potatoes and vegetables. Sugar contained in sweet drinks, jams, cakes, confectionery and chocolate should be limited and not exceed 10% of total energy. Monosaccharides and other disaccharides are found in fruits and milk

and dairy products. Fruit, milk and dairy products are sources of vitamins and trace elements for a growing child. Foods that are too sweet can cause tooth decay in children. Carbohydrates are needed by growing children as a source of energy [1].

Essential vitamins and minerals are nutrients that are important for growth and health. Vitamins are classified as fat-soluble vitamins (ADEK) and water-soluble vitamins, namely B complex vitamins (B1, B2, Niacin, B6, pantothenic acid, biotin, folic acid, and B12) and vitamin C. Vitamins for toddlers are used for: Vitamins A functions for the growth of epithelial cells and as a regulator of sensitivity to light stimulation in the nerves and eyes, Vitamin B1 functions for carbohydrate metabolism, water balance in the body and helps the absorption of fatty substances in the intestine, Vitamin B2 functions in transferring light stimulation to the eye nerves and enzymes, and functions in the process of oxidation in cells, Vitamin B6 functions in the manufacture of red blood cells and in the process of growth and work of nerves, Vitamin C functions as an activator of various types of fermenters breaking down proteins and fats, in oxidation and dehydration in cells, important in the formation of platelets, Vitamin D functions to regulate calcium and phosphorus levels, and Together with the thyroid gland increase the absorption of lime and phosphorus from the intestine and affects the work of the endocrine glands, Vitamin E functions to prevent bleeding for pregnant women and prevents miscarriage and is needed when cells are dividing, Vitamin K functions in the formation of prothrombin which means it is important in the process of blood clotting At the age of 1-5 years children often experience deficiencies vitamins A, B, and C so children need to get 1-1 1/2 cups or 100-150 g of vegetables a day.

Choose yellow or orange fruits and sour fruits such as papaya, banana, mango, pineapple and orange. Give 1-2 pieces of papaya a day (100-200 g) or 1-2 oranges or other fruit [1].

Parenting is all forms and processes of interaction that occur between parents and children which can influence the development of the child's personality. Parental interaction in a lesson determines the child's character later [16].

Based on the positive deviation study conducted by Soekirman, it was concluded that parenting style has a significant effect on the incidence of malnutrition. Children who are raised by their mothers with love, understand the importance of breastfeeding, posyandu, and cleanliness, even though they are in poor conditions, the children remain healthy [9].

Various studies have shown that the personality of parents greatly determines the pattern of interaction between mother and child. The influence of the character structure of mothers who care for toddlers has a very large effect on the relationship between mother and child. The pattern of parenting in every family is not always the same. This happened because the care of the children was handed over to the grandmother who had limited knowledge of the importance of providing nutritious food [13].

Parenting is a pattern of interaction between parents and children, namely how parents behave when interacting with children, including how to apply rules, teach values or norms, give attention and affection and show good attitudes and behavior so that they become role models for their children. [12].

Feeding parenting is a parenting practice applied by mothers to children related to feeding. Parenting patterns include who prepares meals, feeding practices (feed or not), supervise mothers

when not being fed, determine meal schedules, determine meal schedules [19].

Food patterns that are not balanced between intake and needs, both the amount and type of food, such as eating foods that are high in fat, consuming less vegetables, fruit and so on, and eating food that exceeds the body's needs can cause obesity or overweight. Diet shows how to fulfill a person's nutritional needs for a person manifested in the form of consumption of types of food, amount of food and frequency of eating [2].

Consumption of a diet that is low in quality or low in nutrition results in a condition or state of undernutrition. It is better if consumption of good food will make it possible to achieve good health and nutritional conditions [12].

Food will affect the growth and physical and mental development of children. Therefore food must be able to meet the nutritional needs of children. Food preparation must be able to meet the nutritional needs of toddlers. Food arrangements, namely food arrangements must be adapted to the age of toddlers in addition to getting nutrition, food arrangements are also good for maintenance, recovery, growth, development and physical activity. Educating children is essentially a real effort on the part of parents to develop the total potential that exists in children. The future of the child in the future will greatly depend on the experience the child gets, including parenting styles [23].

Insufficient food intake is caused by various factors, including the unavailability of adequate food, children who do not get enough or don't get balanced nutritious food, and wrong eating patterns. The nutritional needs that toddlers need are water, energy, protein, fat, carbohydrates, vitamins and minerals. Each gram of protein provides 4 calories, fat 9 calories and carbohydrates 4 calories. The distribution of calories in toddler food

in a balanced diet is 15% from protein, 35% from fat, and 50% from carbohydrates. A steady calorie excess daily of around 500 calories leads to a 500 gram weight gain in a week. Infection has a contribution to the deficiency of energy, protein and other nutrients due to decreased appetite so that children's food intake is reduced. Energy requirements at the time of infection can reach twice the normal requirement due to increased basal metabolic needs [1].

Parenting health is a factor that can affect the health status of children under five. Health parenting is the ways and habits of parents/families serving the health needs of toddlers. suggested that one of the parenting styles related to the health and nutritional status of children under five is health parenting. This parenting style includes parenting that is preventive in nature, such as giving immunizations and parenting when the child is sick. Children aged 12-59 months (toddlers) are children who are still dependent on the care and upbringing of their mothers. Therefore health and food caregivers in the first year of life are very important for the child's development [18].

One that supports aspects of child growth and development is basic health care, specifically immunization, because it can significantly reduce child morbidity and mortality. By reducing child morbidity and mortality, it will provide opportunities for children to grow and develop properly. Thus it can be seen that basic health care which includes posyandu, breastfeeding, immunization tends to reduce the risk of morbidity in children because the child's immune system tends to be stronger, so that children can grow well. The pattern of health care cannot be separated from the hygiene practices applied by the mother. Hygiene practices that support health care patterns include defecation habits, hand

washing habits, food hygiene and access to modern health facilities [6].

The role of a mother caring for children every day has a high influence on growth because of good parenting, children are cared for and nutrition is also fulfilled .

## RESEARCH METHODS

This type of research is observational analytic research with a quantitative approach. This study aims to obtain the influence of food parenting and health parenting patterns on the nutritional status of children under five.

This research will be carried out in the Atinggola District, North Gorontalo Regency starting from September-October 2022.

The population of this study were toddlers in the Atinggola District, Kab. North Gorontalo, as many as 118 babies. Sample is a sample is part of the number and characteristics possessed by the population [22].

Sampling using simple random sampling through lottery. Primary data was obtained from the outcome data at the time of conducting the research, using a questionnaire conducted on parents who had toddlers. Secondary data was obtained from previous data that already existed in relevant agencies, namely from government publications. research instrument on food parenting and health parenting patterns on nutritional status. data analysis with univariate analysis and bivariate analysis with Chi-square test ( $P < 0.05$ ).

## RESEARCH RESULT

Based on the research, two analyzes were obtained, namely based on univariate and bivariate analysis. The univariate results are presented in the form of a frequency distribution table obtained from a research study on the influence of food parenting and health care patterns on the

nutritional status of children under five in the Atinggola subdistrict, North Gorontalo Regency, as follows:

**Table 1.** Distribution of respondents based on education and occupation in Atinggola District, North Gorontalo Regency.

No	Education	Frequency (n)	Percentage (%)
1.	elementary school	5	23.8
2.	Secondary school	5	23.8
3.	High school	11	52.4
Total		21	100

  

No	Work	Frequency (n)	Percentage (%)
1.	IRT	12	57,1
2.	Cadre	4	19
3.	Trader	5	23,8
Total		21	100

Source: Primary data, 2022

Based on the table above, the results of the education of the respondents in Atinggola Subdistrict, Utara Gorontalo Regency, Gorontalo Province in 2022 were obtained in the category of primary school (SD) as many as 5 people (23.8%), secondary school as many as 5 people (23.80) and high school as many as 11 people ( 52.4%). While the respondent's job variable in Atinggola Subdistrict, Gorontalo Utara Regency, Gorontalo Province in 2022, there were 12 housewives (57.1%), 4 cadres (19%) and 5 traders (23.8%) . The distribution of respondents based on education and occupation can be seen in table 1.

**Table 2 .** Distribution of respondents based on food upbringing patterns in Atinggola District, North Gorontalo Regency

No	Feeding patterns	Frequency (n)	Percentage (%)
1.	Well	12	57,1
2.	Enough	9	42,9
Total		21	100

Source: Primary data, 2022

Based on table 2, the results of the food parenting pattern of respondents in

Atinggola District, North Gorontalo Regency, Gorontalo Province in 2022, resulted in 12 people (57.1%) good food parenting patterns and 9 people (42.9%) enough. There were 12 people with good food parenting patterns and 9 people with enough food. Food parenting patterns were in the good category as many as 12 people because based on the results of filling out the questionnaire the respondents answered directing children under five to choose good food, allowing children to play after eating, providing a pleasant atmosphere by singing and playing when giving children. The pattern of parenting food with enough for 9 people because based on the results of filling out the questionnaire the respondents answered not allowing children to play after eating because toddlers did not finish eating food, mothers gave food while often angry at children. The results of this study are in line with previous studies, which showed that 94 people (86.2%) were in the good category of breastfeeding and food parenting and 15 people (13.8%) were not good [21].

**Table 3 .** Distribution of respondents based on health care patterns in Atinggola District, North Gorontalo Regency.

No	Health care patterns	Frequency (n)	Percentage (%)
1.	Good	19	90.4
2.	Enough	1	4.8
3.	Less	1	4.8
Total		21	100

Source: Primary data, 2022

Based on table 3, the results of the health care pattern of respondents in Atinggola District, North Gorontalo Regency, Gorontalo Province in 2022, showed that 19 people (90.4%) had good health care patterns, 1 person (4.8%) was sufficient, and 1 person was lacking. people (4.8%). Obtained health care pattern with good category as many as 19 people, 1 person is enough and 1 person is

less. There are 19 people with a good health care pattern because based on the results of filling out the questionnaire the respondents answered that the home environment such as the bathroom is cleaned every day, children under five are accustomed to washing their hands before eating, the mother has a supply of medicines. The health care pattern is in the sufficient category for 1 person because based on the results of filling out the questionnaire the respondents answered the home environment such as the bathroom being cleaned once a week instead of every day, children under five are not used to washing their hands before eating, the mother does not have a supply of medicines. The health care pattern was in the less category of 1 person because based on the results of filling out the questionnaire the respondents answered that the home environment such as the bathroom had never been cleaned because the mother was often sick, children under five were not used to washing their hands before eating, the mother did not have a supply of medicines due to economic factors.

**Table 4.** Frequency distribution of nutritional status based on the BB/U index of children under five in Atinggola District, North Gorontalo Regency in 2022

No	Nutritional status of toddlers	Frequency (n)	Percentage (%)
1.	Malnutrition (<-3 SD)	2	9.5
2.	Malnutrition (<-2 SD sd > -3 SD)	3	14.2
3.	Good nutrition (-2 SD sd +2 SD)	15	71.4
4.	More nutrition (>2+2 SD)	1	4.8
Total		21	100

Source: Primary data, 2022

The results of research in the Atinggola sub-district, North Gorontalo district in 2022 based on the BB/U index

showed that the nutritional status of toddlers with good nutrition category was 15 toddlers ( 71.4%), undernourished 3 toddlers (14.2), malnutrition 2 toddlers (9.5%) and over nutrition 1 toddler (4.8%). The nutritional status of under five under five under five is due to the results of research in the field showing that the behavior of mothers in providing food patterns to their under five is not good, causing the nutritional status of children to experience under nutrition. Mother's behavior that is coercive or does not persuade her child to provide the menu of food she cooks, does not accompany the child when eating at the age when the child can eat alone. There are some mothers who have fed flour porridge or porridge mixed with bananas when their babies were under 6 months old.

The nutritional status of toddlers in the category of malnutrition is 2 toddlers, there are still cases of malnutrition in toddlers not only poverty, social and economic cases but many things that influence one of them is parenting style of mothers who are inadequate especially regarding nutrition from the results of filling out questionnaires from several mothers who do not know the composition of nutrients in food for toddlers.. The nutritional status of toddlers in the overweight category is 1 toddler because based on the results of filling out the questionnaire the respondents answered that the food given to toddlers contains lots of stimulating spices, and fried and foods that contain a lot of sugar, so that toddlers experience more nutrition. Nutritional status is a measure of success in fulfilling nutrition, including the balance between the amount of nutrient intake and the amount needed by the body for various biological functions such as physical growth, development, activity or productivity, health maintenance and others (Kemenkes RI, 2017). Weight and height are used to indicate the nutritional

status of toddlers. The classification of nutritional status problems based on anthropometry consists of; wasting (BB/TB < -2 SD), stunting (TB/U < -2 SD), and underweight (BB/A < -2 SD). The results of this study are in line with research conducted by (Hasrul. et al, 2020) found The results of the nutritional status of children under five under the category of underweight were 12 people (40%), well nourished by 17 people (56.7%) and over nutrition by 1 toddler (3.3%).

**Table 5.** The effect of food care and health care on the nutritional status of children under five in Atinggola District, North Gorontalo Regency in 2022.

No	Variable	Sig
1.	Parenting patterns of food-nutritional status	0.023
2.	Health care-nutritional status	0.02

Source: Primary data, 2022

Based on table 5, the results of the chi-square test obtained a value of  $p = 0.023$ , thus it can be concluded that there is an influence of parenting patterns on the nutritional status of children under five in Atinggola District, North Gorontalo Regency. As for the health care pattern, the results of the chi-square test obtained a value of  $p = 0.02$ , thus it can be concluded that there is an effect of health parenting on the nutritional status of children under five in Atinggola District, North Gorontalo Regency.

The results of the chi-square test obtained a value of  $p = 0.023$ , thus it can be concluded that there is an influence of parenting patterns on the nutritional status of children under five in Atinggola District, North Gorontalo Regency because there are 12 toddlers whose parenting pattern is in the good category.

Parenting is a factor that is closely related to the growth and development of toddlers. The toddler age period is a

period when children still really need a sufficient supply of food and nutrition. Malnutrition at this time can cause growth and development disorders physically, mentally, socially and intellectually. The toddler period is a period of children who are still dependent on the care and care of their mother. Therefore, health and food caregivers in the first year of life are very important for children's development. Parenting can be related to breastfeeding and food care[20]

## DISCUSSION

After conducting research on the effect of food parenting and health parenting on the nutritional status of children under five in Atinggola District, North Gorontalo Regency in 2022, the authors can draw the following conclusions:

1. The results of the chi-square test for the food parenting pattern variable obtained a value of  $p = 0.023$  which is smaller than the value of  $\alpha (0.05)$ . Thus it can be concluded that there is an effect of food parenting on the nutritional status of children under five in Atinggola District, North Gorontalo Regency because as many as 12 toddlers (57.1%) parenting food with good category.
2. The results of the chi-square test for the variable health care pattern showed that the results of the chi-square test obtained a value of  $p = 0.02$  which is smaller than the value of  $\alpha (0.05)$ . Thus it can be concluded that there is an effect of health parenting style on the nutritional status of children under five in Atinggola Subdistrict, North Gorontalo Regency because as many as 19 toddlers (90.4%) have good health care patterns.

## SUGGESTION

Based on the research results that have been obtained, there are several suggestions that need to be taken into

consideration by researchers and research, including:

1. For students

Further research is needed to develop the effect of food parenting and health parenting on the nutritional status of children under five in Atinggola District, North Gorontalo Regency.

2. Place of research

With this research, it is hoped that the Atinggola Subdistrict, Atinggola Subdistrict, North Gorontalo Regency and the North Gorontalo District Health Office and health workers, especially the nutrition officers at the puskesmas, will further increase counseling about good parenting for toddlers, especially from poor families. This is to train and motivate health cadres at posyandu in disseminating information to mothers about proper parenting for toddlers as a stunting prevention effort.

3. For readers

With this research, it is hoped that it can add insight into knowledge related to food parenting and health care patterns in the Atinggola sub-district and the factors that influence them . Especially those who are interested in knowing more about food parenting and health parenting.

## REFERENCES

- [1] Adriani, M; Wirjatmadi, B. (2016) *Peranan Gizi dalam Siklus Kehidupan*. Jakarta. Prenadamedia Group
- [2] Almatsier, S. (2014). *Prinsip Dasar Ilmu Gizi*. Jakarta : Penerbit PT Gramedia Pustaka Utama.
- [3] Bappenas. (2014). *Agenda pembangunan pasca 2015* . Jakarta : Sekretariat MDGs Nasional.
- [4] Depkes. (2012). *Riset Kesehatan Dasar Tahun*. Penelitian dan Pengembangan Kesehatan Departemen Kesehatan RI.
- [5] Dinas Kesehatan Kabupaten Gorontalo Utara, (2019). *“Profil Kesehatan Gorontalo Utara”*. Dinkes: Gorontalo utara
- [6] Harsono. (2015). *Buku Ajar Neurologi Klinis* (6th ed.). Yogyakarta: Gajah Mada University Press.
- [7] Hasrul, Hamzah dan Hafid. 2020. *Pengaruh Pola Asuh Terhadap Status Gizi Anak*. *Jurnal Ilmiah Kesehatan Sandi Husada* Volume 9 nomor 2 Desember 2020.
- [8] Hasdianah H.R, H. Sandu Siyoto, Yuly Peristyowati. (2014) *Pemanfaatan Gizi, Diet dan Obesitas*. Nuha Medika. Yogyakarta
- [9] Indriyani,S. (2017,29 Oktober). *Gizi buiruk dan pola asuh anak*. Diakses 11 februari.
- [10] Isman. 2019. *Hubungan Pola Asuh Ibu dengan Kejadian Stunting Pada Anak Usia 24-59 Bulan di Desa Kademangan Wilayah Kerja UPTD Puskesmas Surade Kabupaten Sukabumi Tahun 2019*. Skripsi. Fakultas Ilmu Kesehatan Program Studi Kesehatan Masyarakat Universitas Bhakti Kencana.
- [11] Munawaroh S (2015). *Pola asuh mempengaruhi status gizi balita*. *Jurnal Keperawatan*, 6 (1): 44-50.
- [12] Nafratilawati, M. (2014). *Hubungan Antara Pola Asuh Dan Kesulitan Makan Pada Anak Prasekolah Di TK Leyanan Kabupaten Semarang*. <http://perpusnwu.web.id/karyailmns/3569.pdf>. Diakses (22 Okt2016).
- [13] Nisa, F. Z. (2013). *Pola asuh salah akibatkan gizi buruk. penyampaian dilakukan dalam menyongsong diselenggarakannya simposium internasional “wellness, healthy lifestyle and nutrition”* (Skripsi, Universitas Gajah Madjah Mada). Diakses dari

- <https://ugm.ac.id/id/berita/8461-pola-asuh-anak-salah-akibatkan-gizi-buruk>.
- [14] Notoatmodjo. (2011). *Kesehatan Masyarakat : Ilmu dan Seni*. Jakarta : Rineka Cipta.
- [15] Oemar, R. (2015). *Pola Asuh Dalam Kesehatan Anak Pada Ibu Buruh Pabrik di Depok*. Jurnal penelitian. Program Studi Kesehatan Masyarakat, Sekolah Tinggi Ilmu Kesehatan Indonesia Maju.
- [16] Proverawati, A. (2017). *Buku Ajar Gizi Untuk Kebidanan*. Nuha Medika.
- [17] Rakhmawati, I. (2015). Peran Keluarga Dalam Pengasuhan Anak. *Jurnal Bimbingan Konseling Islam*, 06, 14.
- [18] Siwi, Sintia Arianti. (2015). Hubungan antara pola asuh dengan status gizi pada balita usia 2-5 tahun. Karya tulis ilmiah strata satu. Universitas Muhammadiyah Surakarta. Soetjningsih. *Tumbuh kembang anak*. Edisi 2. Jakarta: EGC, 2017.
- [19] Sophia, A., Siti Madanijah. (2014). *Pola Asuh Makan Ibu Serta Preferensi Dan Konsumsi Sayur Dan Buah Anak Usia Sekolah Di Bogor*. Bogor: J. Gizi Pangan 9(3). ISSN 1978-1059.
- [20] Suhardjo, 2016. *Pangan Gizi dan pertanian*. Jakarta : UI-Press.
- [21] Sartika dan Yunita. 2019. *Pengaruh Pola Asuh Ibu Terhadap Status Gizi Anak Usia 6-24 Bulan Keluarga Miskin Di Kelurahan Tegal Sari Mandala Iii Kecamatan Medan Denai Kota Medan Tahun 2019*. *Jurnal Keperawatan Flora Volume 12 nomor 2 tahun 2021*.
- [22] Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, penerbit Alfabeta, Bandung.
- [23] Yusiana M. (2012). Pola Asuh Orang Tua Terhadap Tingkat Kreativitas Anak. <http://download.portalgaruda.org/article.php?article=424689&val=278&title=POLAASUH%20MEMPEN%20GARUHI%20STATUS%20GIZI%20BALITA%20mei%202017>.