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Regarding the Relationship Knowledge of Mother Nutrition and Parenting for Young Mothers with the Nutritional Status of Children Aged 12-24 Months

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ABSTRACTS

One way to improve better and quality human resources is to pay attention to nutritional status starting from the First 1000 Days of Life in children, so that children's growth and development will also be optimal. The purpose of this study was to determine the relationship between maternal nutritional knowledge and parenting style of young mothers with the nutritional status of children under two. This type of research uses a cross-sectional design with a sample of 70 respondents taken by total-sampling technique. Data analysis was performed using descriptive tests, correlation tests, and multiple linear tests. The results showed that 54.2% had poor knowledge, 55.71% had poor parenting, and 35.71% had poor nutritional status.

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1. INTRODUCTION

Nutritional status has a very important role in determining the quality of human resources. Where, if there are nutritional problems in children, eating will greatly affect the growth and development of these children, especially in their physical condition. Nutritional problems occur due to the needs that exist in the body are not met properly, it will result in various diseases and disruption of growth and development of the life cycle, nutritional status is one of the indicators that determines the health of a toddler's body where if the nutritional status of a toddler is good then it will help the process of growth and development of children to obtain optimal maturity (WHO, 2019).

There are several factors that influence nutritional problems, namely direct factors and indirect factors. The direct factor is caused by a lack of food intake so that the body's need for nutrients cannot be met and also the factor of infectious diseases also causes a decrease in the immune system in the child's body. Meanwhile, indirect factors are caused by the low knowledge of mothers about nutrition and parenting for children under two years old. One of the things that affects the nutritional status of toddlers is the mother's understanding of nutrition and mother's parenting style in selecting food ingredients (Purba et al., 2019).

In 2020 the prevalence of stunting worldwide has decreased from 32.5% to 21.9%. However, there are 49 million children under five who experience malnutrition and almost 17 million children under five experience malnutrition in 2018. The highest prevalence is malnutrition and nearly 17 million children under five experience malnutrition in 2018, the highest prevalence of malnutrition is in the African continent and Continent of South Asia. This is because the Baduta are one of the groups that is very vulnerable to experiencing malnutrition, the nutritional needs of infants and toddlers early in life are very important, malnutrition can have very, very bad consequences and cannot be avoided, where the worst manifestations can be cause death (UNICEF, 2019).

According to Fikawati, S. dkk (2017) that nutritional problems at an early age in life can have an impact on the next age, under five years of age is a "golden age" in the formation of human resources both in terms of physical growth and intelligence, where this really needs attention and must be supported by good nutritional status because nutritional status plays a very important role in determining the success or failure of efforts to manage human resources.

Knowledge is the result of human sensing and the result of someone knowing objects through their senses such as eyes, nose, ears, and so on. When sensing to produce knowledge is strongly influenced by the intensity of attention and perception of objects (Notoadmodjo, 2017). Knowledge of parents, especially mothers, regarding knowledge of nutrition is very influential on the level of nutritional adequacy obtained by toddlers. This is because inappropriate feeding and nutritional adequacy can affect the growth and development of toddlers, therefore it is necessary to increase mother's knowledge about nutrition (Milda S, et al., 2018).

The level of one's nutritional knowledge influences attitudes and behavior in food selection, which in turn affects the nutritional status of the person concerned. Inadequate knowledge of nutrition can lead to poor eating habits, as well as an understanding of the contribution of nutrition and diet to problems of intelligence and energy capacity. (Indra and Yetti, 2013).

The pattern of caring for children is activities related to fulfilling food, physical care and caring for children (Rahmadani, et al., 2019). Parents' behavior models indirectly and directly will be learned and imitated directly by children. Parents are the closest environment that

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always makes one of the main figures the closest child idol. If children have good habits from their parents, children will easily imitate them, and vice versa.

Forms in child rearing are the attitudes and behavior of mothers and other caregivers in being close to children, providing food, caring for them, maintaining cleanliness, giving affection, and so on. Health care and nutrition in the first year of life are very important for a child's development. Not only that, parenting can be done through feeding practices, child health care, sanitation practices, and psychosocial stimulation in children. Parenting patterns are not always the same as other families. Parenting is determined by resources in the family including education, knowledge, maternal health and social support (Nugrahmi and Rusdi, 2020).

2. METHODS

This type of research is using a cross-sectional design. This research was conducted in the work area of the Kolang Health Center, Kolang District, Central Tapanuli Regency, North Sumatra Province. This research was conducted in February 2022 – May 2022. The population in this study were all mothers who had children aged 12-24 months in the working area of the Kolang Health Center. The number of children aged 12-24 months in the working area of the Kolang Health Center in 2021 is 70 people. Sampling was carried out by Total Sampling, so that the number of samples obtained was 70 mothers with children aged 12-24 months in the working area of the Kolang Health Center.

Data collection techniques in this study used a questionnaire, where the data collected included secondary data and primary data. The secondary data collected was data on the children under the age of two who were registered at the Kolang Health Center in the form of the names and ages of the children under the age of two, while the primary data collected included data on the mother's knowledge and upbringing patterns which were obtained by conducting interviews by giving questionnaires and weighing them.

Data analysis techniques in this study used correlation analysis and multiple linear regression analysis in order to determine whether there was a relationship between the independent variables and the dependent variables using the Microsoft Exell program and IBM SPSS statistics version 20.0 for windows.

3. RESULTS AND DISCUSSION

3.1. Results

Based on the results of the study, it was found that the characteristics of clowns based on gender and age can be conveyed as follows:

Table 1. Distribution of respondents based on toddler age category in the working area of the Kolang Health Center in 2021

BABY AGE	N	%
0-12 months	7	10
11-24 months	63	90
Amount	**70**	**100**
Mean ± sd	**17.59 ± 3.60**	
Min-max	**12-24**	

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It can be seen from table 1 above that the highest number of respondents were clowns in the 12-24 month age category, namely 63 children (90.00%), and the lowest number of respondents were clowns in the 0-12 month age category, namely 7 children (10.00%) with an average The mean and standard deviation of the ages of the children under two in this study were 17.59 ± 3.60 months.

Based on the characteristics of under-aged mothers based on age, education, occupation and family income, it is known that:

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Table 2. Distribution of Mother's Characteristics Based on age, education, work and family income in the working area of the Kolang Health Center in 2021

MOTHER CHARACTERISTICS	FREQUENCY	%
Age (Mean ± SD)	21.51 ± 2.03	
EDUCATION		
SD	16	22.86
JUNIOR HIGH SCHOOL	18	25,71
SMA/SMK	27	38,57
College	9	12.86
WORK		
honorary employee	4	5,71
civil servant	1	1.43
Farmer	26	37,14
Housewife	39	55,71
INCOME		
≤ 1,000,000	1	1.43
1,000,000-3,000,000	62	88.57
≥ 3,000,000- 5,000,000	7	10.00

It can be seen from table 2 above that of the 70 mothers under the age of two, it is known that the average age of the mother is 21.51 years, the highest education is high school as many as 27 mothers (38.57%), the majority work as housewives, namely 39 mothers with a percentage of 55 .71%, and most of the family income ranges from 1,000,000 – 3,000,000 as many as 62 families with a percentage of 88.57%.

Based on the nutritional status of under-fives, it can be seen in the following distribution table:

Table 3. Distribution of Respondents Based on the Baduta Nutritional Status in the working area of the Kolang Health Center in 2021

NUTRITIONAL STATUS	N	%
Malnutrition	7	10.00
Malnutrition	25	35,71
Normal Nutrition	24	34,29
More Nutrition	14	20.00
Amount	**70**	**100.00**
average	**-0.80**	
sd	**2.05**	
Min-max	**-5.26-2.95**	

Based on the results of data analysis, it was found that the nutritional status of the under-fives in this study had undernourishment with a total of 25 under-fives (35.71%) and severe malnutrition with a total of 7 under-fives (10.00%). The mean z score of the clowns in this study was -0.80 ± 2.05.

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Table 4. Distribution of Mother's Knowledge and Parenting in the working area of the Kolang Health Center in 2021

VARIABLE	FREQUENCY	%
MOTHER KNOWLEDGE		
Not enough	38	54,29
Enough	11	15,71
Good	21	30
Mean ± sd	**62.07**	**18.33**
MOTHER PARENTING PATTERNS		
Not enough	39	55,71
Good	31	44,29
Mean ± sd	**62,73**	**23,47**

Based on the research results, it can be seen in table 4 that the mothers in this study had poor nutrition knowledge with a total of 38 mothers (54.29%), sufficient knowledge with a total of 11 people (15.71%), and good knowledge of 21 people (30%) . The average nutritional knowledge of mothers in this study was 62.07 ± 18.33 percent. As well as having poor parenting patterns with a total of 39 mothers (55.71%) and mothers who had good parenting patterns of 31 mothers (44.29%). The average mother's parenting style in this study was 62.73 ± 23.47 percent.

3.2. Discussion

3.2.1. Relationship between Mother's Nutrition Knowledge (X1) and Baduta Nutritional Status (Y)

Based on the results of the Spearman rank correlation test, there is a significant relationship between the nutritional knowledge of mothers and the nutritional status of toddlers in the Working Area of the Kolang Health Center which shows a tcount > ttable (8.887>1.666) meaning that H0 is accepted and Ha is rejected. The Correlation coefficient value obtained is 0.733 (p = 0.000). Judging from this value, the criteria for the relationship between young mothers' nutritional knowledge and the nutritional status of under-fives are included in the very strong category because the correlation coefficient value of 0.733 is in the interval 0.70-1.00. From the correlation value, a positive value is obtained, which means that it is unidirectional, so that the higher the X1 value, the higher the Y value, in the sense that the better the mother's nutritional knowledge, the better the nutritional status of the toddlers in the Kolang Health Center Work Area.

Mother's knowledge of health and nutrition is closely related to education, children of mothers with high educational backgrounds will have the opportunity to grow and develop properly. The results showed that 22.86% of the respondents graduated from elementary school. Research conducted by Riyadi, et al., (2011) states that the higher the mother's education the easier it is for the mother to obtain information about nutrition and health, so that it is positively related to the increase in Baduta food consumption. This condition also explains the importance of mother's education for Baduta's nutritional quality. Education is the main problem of malnutrition, the mother's low education causes various limitations that

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affect mothers to make good decisions in health, especially parenting, allocation of nutritional resources and other information.

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The results of this study are in line with research conducted by Anshari (2022) which shows that mother's knowledge about nutrition has a significant relationship with Baduta's nutritional status. The results of the study showed that respondents who had Baduta with good nutritional status were able to answer questions correctly and accurately. This can show that Baduta and mothers who have good knowledge are able to apply the knowledge they have in daily life to fulfill Baduta and family nutrition.

3.2.2. Correlation between Mother's Parenting (X2) and Toddler Nutritional Status (Y)

Based on the results of the Spearman rank correlation test, there is a significant relationship between the parenting style of young mothers and the nutritional status of toddlers in the Working Area of the Kolang Health Center which shows a tcount > ttable (8.726 > 1.666) meaning that H0 is accepted and Ha is rejected. The Correlation coefficient value obtained is 0.727 (p = 0.000). Judging from this value, the criterion for the relationship between young mothers' parenting and the nutritional status of under-fives is included in the very strong category because the correlation coefficient value of 0.727 is in the interval 0.70-1.00. From the correlation value, a positive value is obtained, which means that it is in the same direction, so that the higher the X2 value, the higher the Y value, in the sense that the parenting style of young mothers, the better the nutritional status in the Kolang Health Center Work Area.

The parenting style of young mothers in this study was classified as poor parenting style with a total of 39 mothers (55.71%) and mothers who had good parenting styles were 31 mothers (44.29%). The average mother's parenting style in this study was 62.73 ± 23.47 percent. In line with the research by Masita, et al., (2018), in this study, mothers who had poor parenting styles totaled 33 people with a percentage of 50.76 percent. Also supported by Noorhasanah and Tauhidah's research (2021), out of 100 mothers who were respondents in the study, 67 mothers had poor parenting patterns with a percentage of 67 percent.

Unfavorable parenting style has an impact on the nutritional status of under-fives according to the weight/age index. The results of the research are supported by Riyana and Yulia (2018), that mother's parenting style is related to the nutritional status of under-fives in Wanea District, Manado City. Mothers who have poor parenting styles tend to have less optimal nutritional and health conditions for their children. In addition, toddlers whose parenting style is not good are 6.3 times more likely to experience poor nutritional status than toddlers whose parenting pattern is good. Breastfeeding and complementary foods to

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children as well as food preparation and storage are included in feeding practices. All parents must give their children the right to grow up. All children must get the best according to their body's ability so that optimal growth can be achieved. For that we need the attention / support of parents. It's not enough to grow well by feeding it, as long as you choose a food menu and just feed your child rice. Another factor that has an impact on the undernutrition status of under-fives is the lack of stimulation of upbringing for under-fives.

3.2.3. Correlation between Knowledge of Mother's Nutrition (X1) and Parenting Style (X2) with Baduta Nutritional Status (Y)

Based on the results of multiple linear regression the regression equation obtained from the calculation results is: Y = a (0.686) + β1X1 (-0.020) + β2X2 (0.051). A constant value of 0.686 indicates that the nutritional status of under five in the Kolang Health Center Work Area is 0.686 if the variable knowledge of maternal nutrition (x1) and parenting style of young mothers (x2) is 0 (zero). Based on the regression coefficient equation, it shows that the nutrition knowledge variable (x1) has a negative regression direction with a value of b1 = -0.020, which means that if the nutritional status of under-fives increases by 1%, the mother's nutritional knowledge will decrease by 0.20% assuming other independent variables constant. Based on the regression coefficient equation, it shows that the parenting style of young mothers (x2) has a positive regression direction with a value of b2 = 0.051, which means that if the parenting style of young mothers increases by 1%, the nutritional status of under-fives will increase by 0.5% assuming the independent variable others constant.

In line with the research of Sukandar and Mutalazimah (2020), there is a relationship between parenting style and mother's level of knowledge with nutritional status in Gumpang Village with p value = 0.001. Also supported by research by Casando et al (2022), there is a relationship between knowledge, education, and mother's upbringing to child nutrition. Lack of parental nutrition and health knowledge, especially mothers, is one of the causes of malnutrition in under-fives (Lisnawaty and Saputri, 2020).

Mother's knowledge about nutrition is what the mother knows about healthy food, healthy food for certain age groups and how the mother chooses, processes and prepares food properly. Mother's lack of nutritional knowledge will affect the nutritional status of her toddler and it will be difficult to choose nutritious food for her child and family. Knowledge about nutrition and food that must be consumed to stay healthy is a determining factor for one's health, the level of mother's knowledge about nutrition also plays a role in the magnitude of the nutritional problem in Indonesia.

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Mother's nutritional knowledge will affect mother's upbringing of children (Christina et al, 2022). Toddler feeding habits and inappropriate and unnoticed parenting patterns, such as lack of nutritious food and too early feeding of toddlers. This is due to the lack of knowledge from toddler mothers. Giving food too early can cause digestive disorders such as diarrhea, vomiting, and difficulty defecating which can affect the nutritional status of under-fives (Dian, 2020). Food that has a balanced nutritional intake is very important in the process of growth and development and intelligence of children. A good eating pattern must be accompanied by a balanced nutrition pattern, namely the fulfillment of nutrients that have been adjusted to the body's needs and obtained through daily food. By consuming nutritious and balanced food regularly, it is hoped that children's growth will run optimally and avoid nutritional problems.

4. CONCLUSION

Characteristics of the respondents in this study were the average age of the under-aged children and mothers in this study were 17.59 ± 3.60 months and 21.51 ± 2.03 years old with the majority of the gender of underweight being male with a total of 39 children (55.71%), the majority of the jobs of the father and mother are farmers and housewives. The average family income in this study is Rp. 1,942,143 ± 862,363 and the average size of the respondent's family is 3.46 ± 0.67. Mothers' nutritional knowledge was more in the less category with a total of 38 mothers (54.29%) with an average knowledge of maternal nutrition in this study was 62.07 ± 18.33 percent. As well as having the most parenting styles in the unfavorable category with a total of 39 mothers (55.71%) with an average parenting style in this study of 62.73 ± 23.47 percent. There is a positive and significant relationship between the nutritional knowledge of young mothers and the nutritional status of toddlers in the Kolang Health Center Work Area in 2021. There is a positive and significant relationship between the parenting style of young mothers and the nutritional status of under-fives in the Kolang Health Center Work Area in 2021. There is a positive and significant relationship between young mothers' nutritional knowledge and young mothers' parenting style and the nutritional status of under-fives in the Kolang Health Center Work Area in 2021 (Y = 0.686 -0.020x1+ 0.051x2).

5. REFERENCES

Christiana, I., Nazmi, AN, & Anisa, FH (2022). The relationship between maternal parenting and the incidence of stunting in toddlers in Kertosari village, working area of the Kertosari Banyuwangi Public Health Center: The Relationship of Mother's Parenting with Stunting Events In Toddlers At Kertosari Village Work Area Kertosari Health Center. Scientific Journal of Nursing, 8(2), 397-409.

Fikawati S, Syafiq A, Veratamala A. (2017) Nutrition for Children and Adolescents. Depok: Rajwali Press.

Indra, Yettic. W. (2013). Principles - Basic Principles of Nutritionists. Cipayung: Smart World.

Lisnawaty, L., & Saputri, N. Factors that affect nutritional status in toddlers aged 12-59 months in the working area of the Benu-Benua Health Center in Kendari City in 2020.

Masita, M., Biswan, M., & Puspita, E. (2018). Parenting Patterns of Mothers and Toddler Nutritional Status. Quality: Journal of Health, 12(2), 23-32.

DOI: http://dx.doi.org/10.17509/xxxx.vxix
p- ISSN 2775-8400 e- ISSN 2775-9857

Milda S, Riski N, Leersia YR. (2018). Relationship between Mother's Knowledge about Feeding Patterns and Toddler Status in the Working Area of the Gapura Health Center, Sumenep Regency. Amerta Nutr. 182-8.

Nugrahmi, MA, & Rusdi, PHN (2020). Teaching and Parenting Patterns Related to Stunting Incidents at the Air Bangis Health Center, West Pasaman. MIKIA: Maternal and Neonatal Health Journal, 4(2).

Purba, SS, Aritonang, EY, & Nasution, Z., (2019). The Relationship between Parenting Style and the Nutritional Status of Toddlers in the Working Area of the Batu Anam Health Center, Simalungun Regency 2018. Pena Medika Health Journal. [Online] 9(1), p. 1-16

Rakhmawati, NZ, 2014. The Relationship between Mother's Knowledge and Attitudes and Feeding Behavior for Children Aged 12-24 Months. Journal of Nutrition College, 3:43-50.

Ramadhani, FN, Kandarina, BI, & Gunawan, IMA (2019). Parenting and eating patterns as risk factors for stunting in children aged 6-24 months Papuan and non-Papuan. Public Medicine News, 35(5), 175-183.

UNICEF. 2019. Children, food, and Nutrition. [on line]. Available: https://www.unicef.org/reports/state- of-worlds-children-2019.pdf. [09 March 2022].

WHO (World Health organization). (2019). Levels and Trends in Child Malnutrition. UNICEF/Who/Whorlf Bank Group.

Yuanta Y, Tamtomo DG, Hanim D. Relationship between History of Breastfeeding and Mother Parenting with Malnutrition in Toddlers in the District of Wongsorejo Banyuwangi. Kusuma Husada Health Journal. 2018:48-56.

DOI: http://dx.doi.org/10. 17509/xxxxt.vxix
p- ISSN 2085-9783 e- ISSN 2549-6123