Analysis of Factors Influencing Children's Nutritional Status in Kuta Onan Public Elementary School, Sub-District Sttu Jehe District Pakpak Bharat

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Abstract. *Child nutrition remains a significant issue worldwide. According to World Health Organization (WHO) data from 2022, the global prevalence of underweight children is around 26.3%, with 95.2 million children affected. In the local context, Puskesmas data reveals that 43% of children are still malnourished. This study aims to analyze the factors influencing the nutritional status of children at Kuta Onan Public Elementary School, STTU Jehe District, Pakpak Bharat Regency. The research employs an Analytical Survey method with a Cross-Sectional approach. The population consists of 267 students, with a sample of 73 students selected through Proportional Sampling. Data analysis includes univariate, bivariate with chi-square tests, and multivariate with logistic regression. The findings indicate significant influences from knowledge (p = 0.000), feeding patterns (p = 0.003), parenting (p = 0.001), and a history of infectious diseases (p = 0.001) on nutritional status. Notably, knowledge emerged as the most dominant factor, with a risk 41 times greater than other variables. Income and physical activity showed no significant effect. The study concludes that enhancing parents' knowledge about nutritious food intake and providing a balanced diet are crucial steps in improving children's nutritional status in this region.*

Keywords: Knowledge, Income, Feeding Patterns, Parenting Patterns, Physical Activity, History of Disease Infection, Nutrition Nutrition Status

1. INTRODUCTION

Nutrition is an important issue for school-aged children, because children Those who are malnourished are easily sleepy and less enthusiastic, this can happen disrupt the learning process at school which results in decreased achievement Learning and thinking power are also reduced due to inadequate brain growth optimal. Nutritional imbalance can reduce the quality of resources man. Good nutrition will produce good human resources quality, namely healthy, intelligent, and physically strong and productive. Poor nutrition will also make a child's immune system weak. Improving nutrition is needed from pregnancy, infancy, toddlers, preschool, elementary school age children, teenagers, adults, even to old age (A Sugihantono ,2024).

World Health Organization(WHO) in 2022 stated that The prevalence of wasting in world children is around 26.3% with the number of children who 95.2 million children suffer from underweight(UNICEF-WHO,2022).Nutritional problems in elementary school children currently still quite highThere are still elementary school aged children whose nutritional status prevalence (BMI/U) is in the poor category,

namely above the national prevalence (7.6%). According to gender, the prevalence of malnutrition status in boys is higher, namely 36.5%, than the prevalence of malnutrition in girls, namely 34.5%. According to place of residence, the prevalence of malnutrition in urban areas is lower (29.3%) than rural children (41.5%).North Sumatra in this case ranks 10th prevalence of extreme thinness(Agency for Health Research and Surveillance,2020).

Riskesdas 2020 shows that the nutritional status of children aged 5-12 years is 6.7% very short, 16.9% short, 2.4% very thin, 6.3% thin, 10.2% fat and 9.2% obese. %. Meanwhile, in South Sumatra, there are 9.7% very short, 16.7% short, 3.7% very thin, 6.8% thin, 10.8% fat and 9.1% obese. Based on the results of basic health research, it was found that the prevalence of nutritional status in general in North Sumatra in 2022 aged (5-12) years was 3.7% very thin, 11.5% thin, 74% normal, 5.9% fat, 4.4% obesity (Agency for Health Research and Surveillance,2020).

The state of nutritional status is something that reflects what elementary school students consume over a long period of time. In the body's metabolism, thinking processes, reasoning processes and concentration power are greatly influenced by nutrients such as energy, protein, carbohydrates which greatly influence learning efficiency (6). Students' nutritional status is closely related to students' health behavior factors. A person's behavior is greatly influenced by factors originating from within the individual. According to Green, there are three factors that greatly influence human health behavior, namely predisposing factors, enabling factors and reinforcing factors (M Adriani ,2002).

The knowledge factor is students' knowledge about healthy and nutritious food. School-age children have a habit of snacking, snacking habits tend to be part of the family culture. Snacks that do not meet health and nutritional requirements will threaten children's health. The child's appetite decreases and if this continues for a long time it will affect nutritional status. Children's knowledge can be obtained both internally and externally. For internal knowledge, namely knowledge that comes from oneself based on life experience, while externally, namely knowledge that comes from other people so that children's knowledge about nutrition increases (Nyoman I Dewa,2002).

The type of food factor, namely the choice of types of food that are nutritious or non-nutritious. In the heyday of electronic media, it is not surprising that children's food intake will be greatly influenced by the eating habits of their friends or groups.

What the group accepts (in the form of idol figures, food, drinks) will also be easily accepted. For example, the KFC advertisement is very tempting, children will quickly be tempted and try to look for the type of food advertised or food that is similar to it, usually this type of food is often called Junk food. In fact, Junk food is a type of food that does not provide benefits to the body and is even detrimental to health, because Junk food is food that is high in salt, sugar, fat and calories, but has little nutritional content. The behavior of children who like to consume excessive amounts of food affects their learning performance. Junk food can affect concentration because after consuming it there is a large increase in blood flow in the digestive tract, which can affect hemodynamics (Acmadi,2013).

The history of infectious disease is one of the diseases that often occurs in school children, where one of the causes of infection is the child's poor nutritional status, which is directly influenced by the mother's lack of knowledge, especially about nutritious food. Adequate good nutrition in children will increase resistance to disease, children who are malnourished will be susceptible to disease, especially infectious diseases. As is known, the relationship between infection and nutritional status is very close, and vice versa (Ruslianti Istiany A,2013). Parental income also greatly influences the consumption patterns of elementary school students, because with a large parental income, children will be given a lot of pocket money, so this makes elementary school students buy food that has no benefit for the body (Awaluddin A, Tursinawati T,2017).

Based on data from the Pakpak Bharat Regency education office, the number of public elementary schools in STTU Jehe District is 4 schools, namely (SD N 035945 Binalun, SD N 035946 Siburku, SD N 030420 Sibande and SD N Kuta Onan) standing in areas far from urban areas, which This means that important information about health is very limited. Plus the internet network is still limited. Therefore, parents of elementary school students in STTU Jehe District have very little knowledge about nutritious food. So that children are simply free to consume food, as long as it can be purchased then whatever type of food the children can consume as they wish.

Based on a previous survey at the Kuta Onan State Elementary School, it was found that 6 children had poor nutritional status, while 4 others had good nutritional status. As a result of the interviews, it was found that students admitted that they had insufficient knowledge about nutritious food and liked to eat snacks at stalls or in front of the school such as grilled meatballs, fried foods, etc. Apart from that, consumption at home also does not meet the nutritional needs of children because the parents' income is

not sufficient to buy nutritious food. The majority of parents work as farmers. If the family's diet is not good or the diet is less diverse, it will affect nutritional adequacy. child. Judging from the parenting patterns of parents who do not pay attention to the cleanliness of their children, such as letting children go around the house without wearing footwear and children not paying attention to the cleanliness of children's clothes or bathing activities. Apart from that, children are less active because parents forbid their children to play outside, children only do physical activity when they are at school. Then, from the results of disease data at the Community Health Center, it was discovered that many children had previously experienced infectious diseases such as pulmonary TB, diarrhea and pneumonia, this was what caused the children's growth and development to be a little slow and they experienced malnutrition.

This research is very important to carry out because nutrition is a very important part of the internal growth process development. Nutrition is related to the health and intelligence of a child. Even determining the quality of human resources. Good nutritional status is possible achieved when the body obtains sufficient nutrients that can influence physical growth and also brain development.

2. LITERATURE REVIEW

Literature Review: Factors Influencing Children's Nutritional Status

Socioeconomic Factors

Socioeconomic status plays a crucial role in determining the nutritional status of children. Families with higher income levels typically have better access to nutritious foods, healthcare, and education, which contribute to healthier children. On the other hand, lower-income families may struggle to provide adequate nutrition due to financial constraints. Studies have shown that children from low-income households are more likely to experience malnutrition, either in the form of undernutrition or obesity, due to the limited availability of diverse and nutrient-rich foods (Victora et al., 2008).

Parental Education and Awareness

The educational level of parents, particularly mothers, has a significant impact on children's nutritional status. Parents with higher education levels are more likely to understand the importance of balanced diets and proper nutrition for their children. They are also more aware of the health risks associated with poor nutrition and are better equipped to make informed choices regarding food and healthcare. Research

indicates that maternal education is positively correlated with improved child nutrition, as educated mothers are more likely to adopt healthy feeding practices and seek medical care when necessary (Smith & Haddad, 2000).

Dietary Habits and Food Security

The dietary habits of children are directly influenced by the food security of their households. Food insecurity, defined as the lack of consistent access to sufficient and nutritious food, is a major determinant of poor nutritional outcomes in children. In food-insecure households, children may not receive the necessary nutrients for proper growth and development, leading to conditions such as stunting, wasting, or obesity. According to the World Health Organization (WHO), dietary diversity is essential for meeting the nutritional needs of children, and a lack of variety in the diet can result in deficiencies in essential vitamins and minerals (WHO, 2020).

3. RESEARCH METHODS

The research design uses quantitative methods using an analytical survey with a cross sectional study approach, which is a research design where the independent variable and dependent variable are measured and collected at the same time.(9). The population in this study was all. There are 267 students at SDN Kuta Onan. Sample to be studiedis 73students, using Proportional Sampling technique. Data analysis uses univariate, bivariate and multivariate analysis. This research was conducted inPublic Elementary School Kuta Onan, STTU Jehe District, Pakpak Bharat Regency. This research will be conducted from January to August 2024.

4. RESULTS

Table 1.Distribution of Maternal Age, Maternal Education, Maternal Occupation in Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

Mother's Age	Frequency (f)	Percentage (%)
21-25 Years	8	11.0
26-30 Years	37	50.7
31-35 Years	25	34.2
> 35 Years	3	4.1
Mother's Education		
Didn't finish elementary school	12	16.4

elementary school	6	8.2
JUNIOR HIGH SCHOOL	12	16.4
SENIOR HIGH SCHOOL	37	50.7
College	6	8.2
Mother's Job		
Farmer	24	32.9
Self-employed	12	16.4
Civil servants	5	6,8
IRT	32	43.8
Total	**73**	**100.0**

Based on table 1 shows that of the 73 respondents studied, 8 respondents aged 21-25 years (11.0%), 37 respondents aged 26-30 years (50.7%), 25 respondents aged 31-35 years (25). 34.2%) and 3 respondents aged > 35 years (4.1%). Respondents with less than elementary school education were 12 people (16.4%), respondents with elementary school education were 6 people (8.2%), respondents with junior high school education were 12 people (16.4%), respondents with education There were 37 people (50.7%) from high school and 6 people (8.2%) had tertiary education. Respondents with farming jobs were 24 people (32.9%), respondents with self-employed jobs were 12 people (16.4%), respondents with civil servant jobs were 5 people (6.8%), and respondents with household jobs were 32 people. (43.8%).

Table 2. The Influence of Knowledge, Income, Feeding Patterns, Parenting Patterns, Physical Activity and History of Infectious Diseases on the Nutritional Status of Children in Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

Knowledge	Child Nutritional Status				Total		p value
	Malnutrition		Good Nutrition				
	f	%	f	%	f	%	
Not good	47	64.4	12	16.4	59	80.8	
Good	1	1.4	13	17.8	14	19.2	**0,000**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	
Income	Child Nutritional Status				Total		p value
	Malnutrition		Good Nutrition				
	f	%	f	%	f	%	

	f	%	f	%	f	%	
Low ≤ 2,716.-	45	61.7	9	12.3	57	60.0	
Height > 2,716.-	3	4.1	16	21.9	38	40.0	**0.001**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	

Feeding Patterns	**Child Nutritional Status**				**Total**		**p value**
	Malnutrition		**Good Nutrition**				
	f	%	f	%	f	%	
Not good	33	45.3	9	12.3	42	57.5	
Good	15	20.5	16	21.9	31	42.5	**0.007**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	

Parenting	**Child Nutritional Status**				**Total**		**p value**
	Malnutrition		**Good Nutrition**				
	f	%	f	%	f	%	
Not good	40	54.8	7	9.6	47	64.4	
Good	8	11.0	18	24.6	26	35.6	**0,000**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	

Physical Activity	**Child Nutritional Status**				**Total**		**p value**
	Malnutrition		**Good Nutrition**				
	f	%	f	%	f	%	
Irregular	32	43.8	7	9.6	39	53.4	
Regular	16	21.9	18	24.7	34	46.6	**0.002**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	

History of Infectious Diseases	**Child Nutritional Status**				**Total**		**p value**
	Malnutrition		**Good Nutrition**				
	f	%	f	%	f	%	
There is a history of illness	35	47.9	7	9.6	42	57.5	
No History of Disease	13	17.8	18	24.7	31	42.5	**0,000**
Total	**48**	**65.8**	**25**	**34.2**	**73**	**100.0**	

Based on table 2 Based on the results of the Chi-Square analysis test, it is known that all the independent variables studied are knowledge, income, feeding patterns, parenting patterns, physical activity and history of infectious diseases that influence the nutritional status of children in elementary school., becausep-value < 0.05.

5. DISCUSSION

The Influence of Knowledge on Children's Nutritional Status at Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

The results of research on knowledge showed that there were more respondents with poor knowledge, 59 people (80.8%) and 14 people with good knowledge (19.2%). Findings in the field show that many mothers do not understand the importance of nutrition for children's growth and development, which can lead to adopting unhealthy and balanced eating patterns. However, based on this research, it is also known that there are many children with over-nutritional status and obesity occurs in mothers with sufficient and good levels of knowledge, which means that it proves that there are other factors that can influence children's nutritional status. The higher the level of nutritional knowledge, the better the nutritional status of school children. Likewise, vice versa, the lower the level of nutritional knowledge, the worse the nutritional status of school children. Most schoolchildren know that balanced nutrition is not only about nutritious food, but also the need for exercise. Good nutritional knowledge can have a positive impact on nutritional status. Mother's knowledge and understanding limited will affect the pattern fulfilling nutrition in children. Mother who don't understand the importance of nutrition for child growth and development can lead to the application of the pattern consumption of unhealthy food and balanced in children. Still high number of mothers with level of knowledge lacking in this research as well supported by the still tall mother with a low level of education in this research.

These results are in line with research conducted by Cindi Cantika Viyani et al (2023) The relationship between maternal knowledge and children's physical activity on the nutritional status of children aged 6-12 years at SD Negeri 1 Srengsem. The results of statistical tests show that there is a relationship between maternal knowledge and the nutritional status of children aged 6-12 years at SD Negeri 1 Srengsem with a ρ value of 0.000 with a correlation coefficient of 0.475, meaning that the level of strength of the relationship is sufficient.(Cindi Cantika Viyani,2023).

Nutrition knowledge is a thing what is known about internal food relationship with health optimal. Nutritional knowledge includes knowledge about elections and daily consumption well and provides all the nutrients needed for normal body function. Selection and consumption of materials Food influences status a person's nutrition. Good nutritional status or Optimal nutritional status occurs when the body get enough nutrients body needs. Poor nutritional status occurs when the body experiences lack of one or more nutrients essential. Meanwhile, nutritional status is more occurs when the

body obtains substances excessive amounts of nutrition, thus causing that effect endanger(Supariasa, Bakri B,2015).

Good nutritional knowledge is one of the factors that can guide children to choose nutritious foods and choose healthy snacks. Knowledge is the result of human sensing and also the result of a person's knowledge of an object through their five senses. The five senses are useful for sensing an object, including sight, hearing, smell, taste and touch. To produce knowledge at the time of sensing and serious attention and response to an object. The sense of hearing and the sense of sight are the sources of a person's knowledge(Notoatmodjo S,2010).

Researchers assume thatnutritional knowledge includes knowledge about elections and consume it well every day and provides all the nutrients required for normal function body. Selection and consumption of materials Food influences status a person's nutrition. Good nutritional status or Optimal nutritional status occurs when the body get enough nutrients the body needs. Poor nutritional status occurs when the body experiences lack of one or more nutrients essential. Meanwhile, nutritional status is more occurs when the body obtains substances excessive amounts of nutrition, thus causing that effect harmful to the body.

The Influence of Income on Children's Nutritional Status at Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

The results of research on income showed that there were more respondents with low income ≤ 2,716.- as many as 54 people (74.0%) and with high income > 2,716.- as many as 19 people (26.0%). The results of the findings in the field show that high or low family income also influences the amount of pocket money received by students. A larger amount of pocket money means school children often consume the snacks they like without paying attention to their nutritional content

The low family income of the majority of students at the Kuta Onan State Elementary School is quite inversely proportional to the results of the student's low level of food availability, namely 52%. This could be caused by other factors outside the variables used by researchers, such as a large number of family members and the mother's lack of nutritional knowledge. Food availability is the first activity that determines family food consumption. The availability of good household food is a very important thing in improving family nutrition, especially in this case the nutrition of elementary school children.

In line with research by Adi Yeremia Mamahit (2023) The relationship between parental income and children's nutritional status at Gmim Tompasobaru Elementary School. The results of statistical tests using Fisher's exact test show that the p-value is 0.013, where the p value $< \alpha = 0.05$ means that there is a relationship between parental income and children's nutritional status at GMIM Tompasobaru Elementary School. The income of parents at Tompasobaru Elementary School is mostly at prosperous level II, the nutritional status of children is mostly at normal nutritional status and there is a relationship between parental income and children's nutritional status(Adi Yeremia Mamahit,2023).

Family income is the amount of money earned, which can come from personal business, ownership of goods, or working with other parties. The goal is to meet daily needs, including food needs. The researcher's assumption is that parents' income greatly influences the nutritional status of children. This is because the amount of income can influence what the family will buy and consume. Families with limited income have the opportunity or possibility of being unable to meet the necessary needs, besides that, even if a person's income excessive, but without having knowledge of how to serve good and nutritious food, this will be a serious problem that will be faced because there is no balance between the nutrients needed and the nutrients the body receives.

The Influence of Feeding Patterns on the Nutritional Status of Children in Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

The results of research on feeding patterns showed that there were more respondents with poor feeding patterns, 42 people (57.5%) and 31 people (42.5%) with good feeding patterns. The results of the findings in the field show that children's eating patterns according to gender also vary, there are more boys than girls, this can happen because they tend to like playing more than eating, this can make boys tend to be underweight at school age. This. In addition, for many children at school age, this is a period of exploration where children play more often, find out about the situation they are experiencing, often ask questions, and find it difficult to invite them to eat food, because at this time children's cognitive and motoric development can be seen, so that the role of children Parents, especially mothers, are very influential in guiding children's development.

Research by Sambo, et al., 2020, eating pattern is a description of the type, amount and composition of food eaten every day by one person. The eating patterns that

are formed are closely related to a person's eating habits. Consuming good food will make it possible to achieve good health and nutritional conditions(Maestika Sepikasari,2015). Nutritional status is the condition of the body as a result of food consumption and use of nutrients, where nutrients are needed by the body as a source of energy, growth and maintenance of body tissue, as well as regulating body processes. Good nutrition or balanced nutrition is said to be when nutritional intake is balanced with the nutritional needs needed in the body. Malnutrition is a condition where nutritional intake is less than the body's needs. Meanwhile, overnutrition occurs when nutritional intake is greater than the body's needs(Maestika Sepikasari,2015).

The result of a lack of nutritional intake during the growth period is that children cannot grow optimally and muscle formation is hampered. Lack of nutrients as a source of energy can cause a lack of energy to move, work and carry out activities. The impact of excess nutritional intake causes overweight or obesity(Thamaria, Netty,2016).

The researcher's assumption says that The importance of the mother's role in encouraging children to eat the right food portions and timeliness so that nutritional intake can be fulfilled properly, so that it can help the child's growth and development process, even though the child can It is very difficult to compromise in terms of nutritional adequacy, mothers are obliged Impairing daily nutrition can be increased, or can be stabilized, this is the mother can create and educate children so that the child has good response to his diet.

The Influence of Parenting Patterns on Children's Nutritional Status at Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

The results of research on parenting patterns showed that there were more respondents with poor parenting patterns, 47 people (64.4%) and 26 people with good parenting patterns (35.6%).The results of the findings in the field show thatThe behavior or habits of parents are always seen, assessed and imitated by their children, all of which will then be consciously or unconsciously absorbed and then become habits for their children. The results of the research show that the majority of respondents have good parenting patterns and nutritional status, there are also parent respondents who have good parenting patterns but their children's nutritional status is not good, this happens because children are difficult to manage, children who have difficult habits. eat and only choose certain foods they like, there are also parent respondents who have poor parenting patterns but their children's nutritional status is good.Based on

observations and interviews conducted with the child's parents development doubts that parents are not direct in educating child Because parent Busy in Work so that child taken care of by other families. Respondents said the consequences too much work Busy make parent No can know in a way details grow flower child with Good.

In line with research by Reynaldy Valentino P, Yoseph Leonardo S and Slamet Sunarno H (2021), The Relationship between Parenting Patterns and Nutritional Status in Kindergarten Children in the City of Yogyakarta. Based on the results of the Spearman test, a value of $p = 0.0002$ was found, which states that there is a significant relationship between parenting patterns and nutritional status.(17).

Parenting comes from the word asuh (to rear) which means looking after, looking after and educating young children. So that a child's lifestyle can be in accordance with health standards, apart from having to regulate the correct diet, it is also equally important to regulate the correct parenting pattern as well. The correct parenting style can be achieved by giving full attention and affection to the child, giving him enough time to enjoy being with all family members.(Djamarah,2016).

According to the researcher's assumptions pParenting practices in providing food in a healthy way, providing nutritious food and managing the portions consumed will improve the nutritional status of children. Good food for children must meet the requirements for adequate energy and nutrients, a balanced menu pattern with available food ingredients, the child's eating habits and tastes, food forms and portions adapted to the child's condition and paying attention to personal and environmental hygiene.

The Effect of Physical Activity on Children's Nutritional Status at Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

The results of research on physical activity are known to be more extensive Respondents with irregular physical activity were 39 people (53.4%) and regular physical activity were 34 people (46.6%). The results of the study showed that the physical activity of school children at the Kuta Onan State Elementary School experienced light physical activitywhere some Most students haven't paid attention balance of activities carried out between rest and other sports activities. No all respondents who were subjects in This study carried out every sport the week. Respondents who do sports activities every week do sports activities 1-2 times every week, namely every weekend. This is because on weekends the respondent is on school holidays and there is no school work so this time can be used to exercise. The types of

activities carried out vary, the activities that are often carried out include jogging, cycling, futsal and running. There is no duration of physical activity in this study. Physical activity carried out by elementary school children is to balance the nutritional status of children. Sports can also give children the opportunity to move their bodies, the opportunity to learn how to compete, and develop relationships with peers. Apart from that, students do other physical activitiessuch as scout extracurriculars, paskibra and so on.

From the research results, boys have heavier physical activity compared to girls. At school, boys are more active in physical activities, especially during recess and during sports lessons, for example physical activities such as playing ball and running around, while girls use their breaks to buy snacks and chat with each other. friends in class.

In line with research byNi Nyoman Ayuk WidianiAndNi Wayan Karmiani(2020),Activity Pattern Relationships Physical With Status Nutrition in Children Aged 6 - 12 years old. Shows that there is a relationship between physical activity patterns and nutritional status where the p value is <0.05. The results of this study showed that most of the 45 children (54.2%) had low physical activity patterns. Almost half, namely 33 children (39.8%), had good nutritional status. There is a significant relationship between activity level and nutritional status in children aged 6-12 years at SDK Marsudirini Jembrana.

School-aged children cannot yet pay attention to the balance of physical activity with rest and other sports. Physical activity functions to balance the calories obtained with the body's energy use process. Physical activity is categorized based on intensity and amount of calories needed, namely light, moderate and heavy. This includes every daily activity such as work, school, and other activities carried out in free time.

Researchers assume that physical activity is an important factor that influences a person's nutritional status, in this case children, but there are still many other important factors that also greatly influence children's nutritional status, including factors such as food consumption patterns such as the nutritional intake they receive. by children, genetic factors, namely a history of obesity that occurs in parents, will influence the child, socio-demographic factors such as parents' income, educational level and occupation of parents to the ethnicity of a community, and food environmental factors at school also have an influence because school-aged children will usually be

more likes snacking and eating instant food that is available in the school environment so that parents cannot supervise them.

The Influence of a History of Infectious Diseases on the Nutritional Status of Children in Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency

More research results regarding the history of infectious diseases are known There were 42 respondents (57.5%) with a history of infectious disease and 31 people (42.5%) with no history of infectious disease. The results of the research found that a history of infectious diseases in children affects the growth of toddlers, such as the nutritional status of toddlers will decrease due to a decrease in appetite. So it can cause malnutrition/low nutritional status in toddlers, a decrease in children's appetite due to the discomfort they experience, resulting in reduced nutritional intake even though children actually need more nutrients, especially to replace body tissue damaged by disease germs.

This can be explained by the body's defense mechanism, namely in children who lack food consumption in the body so that the body's ability to form new energy is reduced. This then causes the body's immune formation to be disrupted, making the body vulnerable to infection attacks. In general, families have knowledge about infectious diseases in children. However, many people refuse to have their children checked by health workers. Even though this is very important for monitoring children's health.

Another research by Reni Puspita Saria and Kurnia Agustin (2023), Analysis of the Relationship between Nutritional Status and the Incidence of Infectious Diseases in Children Under Five at Posyandu in the Colomadu I Community Health Center Area. The results of the research obtained a calculated chi square value (17,696) < table chi square (5,991) with probability equal to 0.000 < 0.05, so it can be concluded that there is a relationship between nutritional status and the incidence of infectious diseases in children.

The impact of disease on children is the same as the impact of malnutrition. In general, the presence of disease causes reduced food intake because appetite decreases. Scrimshaw said that there is a close relationship between infectious diseases and malnutrition. There is a synergistic interaction between malnutrition and infection, infection will affect nutritional status. Pathologically, the mechanism is a decrease in

nutritional intake due to lack of appetite, decreased absorption and the habit of reducing food when sick, increased loss of fluids or nutrients due to diarrhea, nausea or vomiting due to continuous bleeding, increased needs due to illness and parasites. is in the body.

The researcher's assumption regarding the results of this study is that there is a relationship between infectious diseases and nutritional status in this study because infectious diseases can cause a decrease in appetite when toddlers are sick. If a toddler does not eat, nutritional intake will not be met so that the toddler's weight will decrease. There is a reciprocal relationship between nutritional intake and the incidence of infection. Lack of intake is closely related to the high incidence of diarrheal diseases, because children who are malnourished may experience a decrease in their immune system and the presence of infectious diseases causes children to have no appetite. As a result, there is a shortage of food and drink entering the body so that children suffer from malnutrition.

6. CONCLUSION

The conclusion in this research isthere is influenceKnowledge, income, feeding patterns, parenting patterns, physical activity and history of infectious diseases influence the nutritional status of children at the Kuta Onan State Elementary School, STTU Jehe District, Pakpak Bharat Regency.

7. SUGGESTION

It is expected that this research will provide valuable information to teachers regarding the various factors that influence children's nutritional status. As an effort to promote nutritious food intake among children, it is also important for parents to manage their children's food intake to meet nutritional adequacy guidelines. Additionally, parents should support and encourage their children to engage in regular physical activity and increase their consumption of fiber-rich foods, such as fruits and vegetables, to enhance overall health.

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