

Relationship Of Children's Eating Patterns During The Covid-19 Pandemic With The Nutritional Status Of Preschool Age Children In Tugala Village, Sirombu District, West Nias Regency 2022

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ARTICLE INFO

Article history:

Received Oct 31, 2022
Revised Nov 08, 2022
Accepted Nov 29, 2022

Keywords:

Covid-19 Pandemic
Nutritional Status

ABSTRACT

Monitoring the nutritional status of children at the West Nias Health Office is carried out twice a year in February and August. Monitoring was carried out to determine the nutritional status of children in every region in West Nias Regency and to find out some descriptions of the prevalence of children's nutritional status with several indicators. Indicators that can be used to determine the nutritional status of children in the area can be seen from indicators of children's weight according to age (W/A), indicators according to height for age (TB/U), and indicators of weight according to height (BB/TB). According to the local Health Office, the highest prevalence of malnutrition is in West Nias Regency, reaching 9.89%. From the data above, it has been shown that before the COVID-19 pandemic that occurred in the world and in Indonesia itself, nutritional problems that occurred in children were still high, especially coupled with the occurrence of cases of the spread of COVID-19 that had occurred in various countries around the world. The impact caused by the COVID-19 pandemic will be malnutrition due to various reasons, including: (1) poor diet due to declining finances, (2) non-standard nutrition, low level of hygiene, low access to health, and high spread of disease. This research is a research method approach Crosssectional. The research sample is 67 people.

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INTRODUCTION

The new coronavirus has been around for two years and is having a far-reaching and ongoing impact around the world. There is increasing evidence in the literature that COVID-19 may have a negative effect on mental illness in healthy patients and populations. The unprecedented changes

brought about by COVID-19, such as social isolation, school closures, and family stress, are negatively impacting people's mental health, especially children (Bai et al., 2022).

Based on data World Health Organization (WHO), United Nations Children's Fund (UNICEF) dan World Bank Grub in 2019 nationally there are levels and trends of malnutrition that occur in children (Syarifah, Widjiartini, Sarumpaet Sori muda, 2012). The forms of malnutrition presented in the study included stunting of 21.9% or about 149 million children under five globally, with the highest prevalence in East Africa at 35.2% and the lowest in North America 2.6%. While the second wasting affects 7.3% or about 49 million children under five years, with the highest prevalence in South Asia 14.6% and the lowest in North America 0.4%. The third form of malnutrition is overweight which is estimated to affect 5.9% or about 40 million children under five years, with the highest prevalence in South Africa at 13.0% and the lowest in West Africa 2.1%.

Monitoring of the nutritional status of children by the West Nias Health Office is carried out twice a year, namely in February and August, it aims to determine the nutritional status of children in each region in West Nias District and to find out some descriptions of the prevalence of children's nutritional status with several indicators (Yunitasari et al., 2022). Indicators that can be used to determine the nutritional status of children in the area can be seen from the indicators of children's weight according to age (W/U), indicators according to height for age (TB/U), and indicators of weight according to height (BB/TB). According to the Health Office (2019), the prevalence of malnutrition was the highest in West Nias Regency, reaching 9.89% (Puspasari, 2022).

From the data above, it has been shown that before the COVID-19 pandemic that occurred in the world and in Indonesia itself, nutritional problems that occurred in children were still high, especially coupled with the occurrence of cases of the spread of COVID-19 that had occurred in various countries around the world. According to (Lynne M. Z. Lafave, Alexis D. Webster, Ceilidh McConnell, 2021), (Yunitasari et al., 2022) in his latest research, there are several impacts caused by the COVID-19 pandemic on children's eating patterns, namely: (1) From a survey that has been conducted around 36% of respondents stated that they often reduce their food portions because of financial problems and unsafe food needs. (2) loss of income results in underweight and micronutrient deficiencies.

After conducting a preliminary study in West Nias Regency, precisely in Tugala Village, Sirombu District. Researchers have obtained data obtained from interviews with nutritionist staff of the Sirombu Health Center showing that the nutritional status of the Sirombu Health Center working area in 2021 reached $1/1477 = 0.07$ cumulatively, 13 children were malnourished. Lack of nutrition is caused by less food consumption, upbringing and disease. Meanwhile, the highest cases of malnutrition were in Tugala Village. The largest population of preschool age children is obtained as many as 67 populations of the number of preschool age children there are 5 people who experience malnutrition.

Based on the background of the problem, the researchers are interested in conducting research on the relationship between children's eating patterns during the Covid-19 pandemic and the nutritional status of preschool children in Tugala Village, Sirombu District, West Nias Regency 2022.

RESEARCH METHOD

This type of research is a cross-sectional approach, namely a research approach in which data collection on several research variables is carried out at different or different times, with the aim of knowing whether there is a relationship between one variable and another. The sample in this study was preschool children 3-5 years old. The total number of samples is 67 equal to the existing population.

The diet questionnaire used was adopted from previous research, namely Riamah & Erlita (2020). The eating pattern instrument consists of 7 open-ended questions respondents answer in their own sentences (4 of which contain the identity of the respondent/parties who fill out the questionnaire such as parents/childcare providers. 3 of them contain the identity of the child as the sample). While 2 closed-ended questions respondents were given answer choices to fill out the questionnaire (2 of which contained answer choices related to the education and occupation of the child's parents). The questions presented have 24 items.

Analysis of this research data using

a. Univariat

This type of analysis is used for one-variable research. The analysis is used in descriptive research, using descriptive statistics. Analysis of univariate data in this study which then analyzed the description of each variable and then from each variable would produce a frequency or percentage, namely: age, gender, parental education, parental occupation, diet, nutritional status.

b. Analysis Bivariat

This type of analysis is used to see the relationship between two variables. The two variables are the main variables, namely the influence variable (independent) and the affected variable (not independent). The bivariate analysis in this study was to find out the relationship between children's eating patterns during the COVID-19 pandemic and the nutritional status of preschool-aged children in West Nias Regency, precisely in Tugala Village. The data on the two variables of this study have an ordinal measurement scale, so the statistical test used is Gamma.

RESULTS AND DISCUSSIONS

Table 1. Frequency Distribution of Parents' Work and Education

No	Characteristics	Frekuensi (f)	Persentase
1	Parents' job		
	Civil Servants/Retired Civil Servants	5	7,5%
	Private Employee/Entrepreneur	11	16,4%
	Trader	4	6,0%
	Farmer	9	13,4%
	Laborer	9	13,4%
	Housewife	27	40,3%
	Etc	2	3,0%
Total	67	100%	
2	Education		
	Junior high education	2	3,0%
	Senior high education	53	79,1%
	Bachelor education	12	17,9%
Jumlah	67	100%	

Based on Table 1. It can be seen that most of the work of parents as housewives are 27 people (40.3%) and the lowest is other work (craftsmen) 2 people (3.0%). The highest level of parental education in secondary education is 53 people (79.1%) and the lowest level of education is at least 2 people (3.0%). The results obtained in this study indicate that the job characteristics of parents in Sirombu, Tugala Village, West Nias Regency are mostly housewives (IRT) as many as 27 people

with a percentage of 40.3%. The author maps out that the pandemic experienced by the whole world has directly had an impact on increasing food insecurity around the world. The food insecurity experienced by the world indirectly also affects children's nutrition (Dondi et al., 2021). This study has investigated that with the lock-down imposed in Indonesia and the West Nias area in particular, there have been changes in eating habits and changes in body weight in the population of 6-month-old children and the elderly. high, low level of parental education (Perrigo et al., 2022).

These results are similar with research (Zemrani et al., 2021) Pandemi COVID-19 most have deteriorated health and caused great upheavals around the world. The phenomenon that occurred in West Nias also experienced the same change, namely with the highest employment rate reaching 41.1%, which stated that housewives (IRT). The condition of the level of work of such parents is very influential on the socio-economic family. Families with low socioeconomic status directly affect the fulfillment of food needs, child feeding practices, health care practices and environmental sanitation which can ultimately affect the intake of children's nutritional status including poor diet, mental health impacts, social isolation, screen addiction and addiction. lack of schools and health care.

Table 2. Frequency Distribution of Children's Age and Gender

NO	Characteristics	Frekuensi (f)	Persentase
1	Usia		
	Usia 36-47 bulan	31	46,3%
	Usia 48-60 bulan	36	53,7%
	Jumlah	67	100%
2	Jenis Kelamin		
	Laki-laki	26	38,8%
	Perempuan	41	61,2%

Based on Table 2 above, the most preschoolers aged 48-60 months were 36 children (53.7%), while those aged 36-47 months were fewer in number, namely 31 children (46.3%). The gender of preschool age children is more female 41 children (61.2%). According to (Fahim et al., 2021) Bangladesh as a country of 75 million people struggles to be freed from the grip of subjugation, food insecurity and extremely high rates of malnutrition among children and women. Malnutrition rates in children and women as well as micronutrient deficiencies are still high.

Economic access (affordability) is the main factor that causes nutritional problems to occur, this affordability results in food insecurity compared to food availability, and increases processed foods by four times, triggering the occurrence of overweight/obesity rates (Aggeli et al., 2022). The second contributing factor is related to disease, inadequate access to health services, lack of access to clean water and inadequate sanitation.

Table 3. Frequency Distribution of Children's Nutritional Status and Diet

No	Characteristics	Frekuensi (f)	Persentase
1	Status Gizi		
	Kurang	5	7,5%
	Normal	47	70,1%
	Lebih	15	22,4%
	Jumlah	67	100%
2	Pola Makan		
	Kurang	4	6,0%
	Cukup	44	65,7%

Baik	19	28,4%
Jumlah	67	100%

Based on Table 3 of 67 preschool age children, most of 47 children (70.1%) have normal nutritional status, while a small proportion of 5 children (7.5%) are undernourished. The results of the diet of preschool age children, mostly 44 children (65.7%) had an adequate diet, while a small portion of 4 children (6.0%) had a poor diet. This research is in line with research (Bueno et al., 2020) mentioning that the majority of children infected with COVID-19 are asymptomatic or have mild to moderate disease (94.1%) placing the focus on preventing the spread of the disease in children. If the feeding pattern of a child is good, the better the nutritional status of the child, because the food consumed by the child can affect the nutritional status of the child.

Therefore, consuming a good daily diet can increase the growth and development of children and get the nutritional intake needed by the body. so if a person's food consumption is good then his nutritional status will be good and vice versa. Similar researcher (Efrizal1, 2004) said that with the COVID-19 pandemic, the level of public consumption during the pandemic increased. The COVID-19 pandemic has also caused limited access to health services because it is carried out online, including monitoring the growth of toddlers at the posyandu which is carried out regularly, is also hampered and leads to not properly monitoring the growth of toddlers.

The results of the analysis of other research conducted by (Pérez-Escamilla et al., 2020) The future well-being of much of the world now depends on the reconfiguration of current ineffective food, nutrition, health and social protection systems to ensure food security and nutrition for all. There are several factors that can affect the nutritional status of children, one of which is diet, because diet is a very important factor that can affect a person's nutrition. According to a report submitted by the Indonesian Ministry of Health (Syarifah, Widjiartini, Sarumpaet Sori muda, 2012) said that diet is a very important behavior that can affect a person's nutritional status. This is because the quantity and quality of food intake consumed by a person can affect that person's nutrition so that it can cause health problems such as stress and disruption of children's sleep patterns (Bai et al., 2022).

Table 4. Gamma Correlation Test Results Relationship of Children's Diet During the COVID-19 Pandemic With Nutritional Status of Children Aged 3-5 Years.

Pola Makan	Kurang		Normal		Gizi Lebih		Total		p-value	r- sign
	F	%	F	%	F	%	f	%		
Kurang	4	6,0	0	0,0	0	0,0	4	6,0	0,001	0,756
Cukup	1	1,5	36	53,7	7	10,4	44	65,7		
Baik	0	0,0	11	16,4	8	11,9	19	28,4		
Total	5	7,5	47	70,1	15	22,4	67	100%		

Based on Table 4 the results can be that the majority of the diet is adequate with normal nutritional status as many as 36 children (53.7%). Good diet with more nutrition as many as 8 children (11.9%). While the pattern of eating less with less nutritional status as many as 4 children (6.0%). Based on bivariate analysis using the gamma test, a significance value of p value of 0.001 or p value <0.005 means that there is a significant relationship with the value of the strong correlation ($r = 0.756$) in a positive direction, so that the closeness of the two variables is in a strong range with an interval coefficient of 0. .60 – 0.799, which means that the better the eating pattern of children 3-5 years, the children have normal nutritional status.

Similar research results say (Borger et al., 2021) for families in the United States with low financial resources can receive free or cheaper federally funded school meals. Food insecurity in

children is a major public health problem given its association with poor diet. The results of the analysis conducted by (Nadhiroh & Fauziyah, 2022) The research says that if a child's diet is getting better, the nutritional status of the child will be better, and vice versa, the worse the diet, the worse the nutritional status of the child, because eating patterns and nutritional status are interrelated. This eating behavior that is often done during this pandemic is what shapes children's eating habits.

The nutritional status of children is influenced by postnatal environmental factors, nutrition, economy, and health status. Therefore, it is very important that the correct and good diet is needed so that the nutritional status of children can be optimal and there are no abnormalities. According to (Efrizal1, 2004) related to the regulation of balanced nutrition, stated that a good diet is a condition where the amount of consumption or food consistency is directly related to nutritional status. Because the quantity and quality of food consumed by a person can affect nutritional intake so that it can affect individual health.

CONCLUSION

There is a relationship between diet and nutritional status of children aged 3-5 years during the COVID 19 pandemic at the Sirombu Health Center in Tugala Village with a p value of 0.001, .60 – 0.799. It is hoped that parents will be able to increase their insight or knowledge in the provision of food containing good nutrients to be given to children and regularly attend the local posyandu so that they can monitor the nutritional status of children and children's eating patterns so that children can grow and develop optimally. It is also hoped that nurses will be able to socialize and conduct regular counseling in each posyandu in the working area of the Sirombu Health Center, in order to improve the nutritional status of children and prevent the prevalence of malnutrition and overnutrition.

ACKNOWLEDGEMENTS

The author would like to thank all participants who are willing to provide assistance so that the research can be completed properly. The first acknowledgment is to the head of the West Nias Health Service, especially all the author's employees for collecting data for the implementation of this research. The authors' gratitude goes to all mothers who have agreed to provide data and answer questionnaires during the interviews. The author is also very grateful to all my colleagues and friends who helped the writer for their support and support to me and all my students that I cannot mention one by one to write this research into an enhanced article.

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