

# The Correlation Between Knowledge of Local Food Utilization and Clean, Healthy Living Behavior with Nutritional Status of Toddlers

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ARTICLE INFO	ABSTRACT
Article history:	Background: Nutritional status issues in toddlers are caused by insufficient food intake and diseases. The most important primary
DOI:	prevention effort involve various human activities and behaviors,
10.30595/pshms.v5i.977	including meeting nutritional needs and implementing the Clean Healthy Living Behavior program. Method: This study employed a
Submitted:	quantitative approach with a Cross-sectional research design. The
Oct 13, 2023	sample consisted of 74 mothers of toddlers aged 6-59 months in Panembangan Village, Cilongok District, Banyuma Regency, selected
Accepted:	using the Sampling Fraction Per Cluster technique. Data were
Feb 25, 2024	analyzed using the Chi-Square test. Results: The study found that the most dominant level of education was junior hight school (39,2%), and
Published:	most mother were housewives (87,8%). Most parents in Panembangan
Mar 20, 2024	Village had good knowladge of local food utilization (70,3%), and there was a significant correlation between parental knowladge and
Keywords:	nutritional status, with Continuity Correction of 0.037. In terms of Clean, Healthy Living Behavior (CHLB), most respondents in
Local Food Utilization, Clean and Healthy Living Behavior, Nutritional Status	Panembangan Village exhibited good behavior (94,6%), and there was a significant relationship between CHLB and the nutritional status of toddlers, with a Fisher's Exact Test of 0,046. Conclusion: There is a correlation between knowledge of local food utilization and clean, healthy living behavior with nutritional status of toddlers.
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## 1. INTRODUCTION

Nutritional status is the result of a balance between the absorption of nutrients from food and the body's metabolic needs. The quantity of nutrients needed depends on various factors, such as age, gender, daily physical activity, body weight, and other determining factors [1]. However, nutrition significantly influences an individual's overall health condition. Achieving good nutritional status is possible when food intake containing nutrients exceeds the body's needs. In toddlers, their nutritional status can also affect their immunity [2]. Nutritious food intake does not only come from food that is expensive and difficult to reach, but food that comes from local food also has good nutrition. There are many advantages to consuming local food, such as food safety without side effects, affordability and easy access, easy to cultivate, high nutritional, and the potential to increase family income [3].

Problems with nutritional status not only originate from food shortages but also disease. Children who receive adequate food intake but frequently experience diarrhea or fever may show signs of malnutrition. The

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same, if children do not eat well, their immune systems can weaken and they become more susceptible to disease. Health and sanitation includes the availability of affordable clean water and basic health services for the entire family [4]. The Clean and Healthy Living Behavior Program can be carried out for the smallest community groups, including prevention of crucial diseases and primary prevention efforts that rely on human activities and behavior carried out by the family [5]. CHLB measures, also known as measures to promote good health, involve practices such as washing hands with soap and clean water, exclusive breastfeeding, stopping smoking, engaging in physical activity, using clean water and sanitation facilities, and eliminating mosquito larvae [5].

Based on information obtained from the Village Secretary, Panembangan Village is improving quality in the fields of agriculture and fisheries which are combined into a work program called minapadi which is being implemented by the Panembangan Village farmer group. With the Minapadi program, it can also be an opportunity to increase quality consumption for village residents, especially toddlers, so that parents' needs regarding of local food utilization are more easily achieved, diverse and also of high quality for their children. Therefore, it would be a problem if a village that has a wealth of local food that is full of nutritional sources has toddlers who will be the nation's successors with problems with their nutritional status. In essence, nutritional status is not only influenced by nutritional intake, but can also be influenced by the cleanliness of the environment around toddlers. Therefore, given the conditions in Panembangan Village, where the majority of residents' houses are still close to gardens, rivers and ricefields, they will still pay attention to cleanliness for health purposes, especially for toddlers.

Based on pre-survey data from Puskesmas I Cilongok regarding the nutritional status of toddlers which shows the nutritional status of children aged 24 to 59 months in Panembangan Village. Based on Data from Public Health Center in February 2023, the results showed that 8 children very short toddlers, and 20 short toddlers. Apart from that, for data on toddlers aged 0 to 23 months, data was obtained on 4 very short toddlers and 15 short toddlers.

This research has never been done before and can be demonstrated in several similar studies. such as research entitled the relationship between nutritional behavior and clean and healthy living behavior with the nutritional status of toddlers in Cirebon Regency [6], the relationship between nutritionally aware family behavior and clean and healthy living behavior with the nutritional status of toddlers 24-59 months [7], the relationship between the knowledge of mothers of toddlers regarding complementary foods and the nutritional status of toddlers at the Mekarbaru health center [8], maternal nutritional knowledge and family food diversification practices in Purworejo sub-district, Margoyoso sub-district, Pati [9] and the effect of providing additional modified feeding on the nutritional status of toddlers (effect of supplementary feeding modification on nutritional status of toddler) [10].

This study aimed to determine the correlation between knowledge of local food utilization and clean, healthy living behavior with nutritional status of toddlers in Panembangan Village, Cilongok sub-district, Banyumas Regency.

### 2. RESEARCH METHOD

Design uses a cross sectional method. The inclusion criteria are parents of toddlers aged 6 - 59 months, willing to be respondents and taking part in posyandu activities during the research, then the exclusion criteria are not taking part in posyandu activities at the time of the research, not willing to be respondents, toddlers who have congenital diseases and parents of toddlers who aged 0 - 5 months and 60 months. The population of this study was all parents with children attending posyandu. The number of samples in this study was 74 respondents using the Slovin formula and the technique for calculating the number of samples using Sampling Fraction Per Cluster.

The Independent Variable is knowledge of local food utilization and clean and healthy living behavior and the Dependent Variable is the nutritional status of toddlers who live in Panembangan Village, Cilongok District, Banyumas Regency. Respondent identity form, availability form as a respondent, Height measuring device, namely microtoa, digital stepping scales, Healthy Clean Living Behavior Questionnaire [6] and Knowledge Questionnaire on local food use [7][8][9]. Univariate analysis for research on respondent characteristics, knowledge of local food use, clean and healthy living behavior and nutritional status of toddlers and also bivariate analysis was carried out to analyze the relationship between knowledge of local food use and clean and healthy living behavior with nutritional status of toddlers.

## 3. RESULT AND DISCUSSIONS

### 3.1. Univariat

Univariate analysis for research on respondent characteristics, knowledge of local food use, clean and healthy living behavior and nutritional status of toddlers.

Characteristics of Respondents	n	%	
Mother's Age			
20 – 25 years old	15	20	
26 - 31 years old	31	42	
32 - 37 years old	14	19	
38 - 43 years old	12	16	
> 44 years old	2	3	
Mother's Occupation			
State Civil Apparatus	1	1	
Housewife	65	88	
Self-employed	2	3	
Private sector employee	3	4	
Trader	0	0	
Farmer	0	0	
Doesn't work	0	0	
Other	3	4	
Mother's Last Education			
Elementary	12	16	
junior high school	29	39	
senior high school	20	27	
College	13	18	
No school	0	0	
Toddlers Age			
6 - 24 months	26	35,1	
24 - 42 months	27	36,5	
42 - 59 months	21	28,4	
Toddlers Gender			
Women	37	50	
Men	37	50	

Table1. Frequency Distribution of the respondents toddlers and mothers of toddlers (n=74)

Based on table 1 above, it is known that most of the respondents of mothers of toddlers in Panembangan Village are aged 26-31 years (41.9%) with the majority mother's job being housewife (87.8%) and the majority last education is junior high school (39.2%) and the majority toddlers aged 1–3 years (48.6%) and not much different from toddlers over 3 years (36.5%) while the gender of toddlers is the same, both girls and boys.

Nutritional status of toddlers $(n=74)$						
Variable	n %					
Knowladge of local food utilization						
Good	52 70,3					
Enough	19 25,7					
Less	3	4				
Clean, healthy living behavior						
Good Behavior	70	94,6				
Bad Behavior	4 5,4					
Nutritional status of toddlers						
Very Short	0	0				
Short	0	0				
Normal	39	52,7				
Tall	35	47,3				

Table 2. Frequency Distribution of Knowladge of local food utilization, Clean, healthy living behavior and Nutritional status of toddlers (n=74)

Based on table 1 above, it is known that the majority of knowledge of local food utilization is in the good category (70.3%) and the good behavior category in clean and healthy living behavior (94.6%) with the majority of toddlers having normal nutritional status (52.7%).

According to Notoatmodjo, the influence of work on nutritional status, there are several social perspectives that influence health status, including: age, gender, employment and financial status. Education plays an important role in influencing a mother's knowledge. Mothers with higher education have a greater capacity to receive and understand information compared to mothers with low education. As a result, a higher

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level of maternal education facilitates a better understanding of various subjects, especially regarding the nutritional status of toddlers [10].

It should be noted that maternal knowledge about nutrition may not directly influence family nutritional outcomes, because mothers hold responsibility for family nutrition. However, a mother who has a good understanding of nutrition is more likely to provide high-quality food for her family. Knowledge about food nutrition greatly influences the quality, quantity and variety of food available [8]. In addition, adopting a clean and healthy lifestyle can be a preventive measure against infectious and non-communicable diseases, reducing the possibility of illness and premature death [11]. The foundation of good health lies in maintaining a balanced diet. Any nutritional disorders, whether deficiencies or excesses, can hinder the optimal development of a person's growth and development [12].

#### 3.2. Bivariat

Bivariate analysis was carried out to analyze the relationship between knowledge of local food use and clean and healthy living behavior with nutritional status of toddlers.

	Nutritional status of toddlers				
Variable	Very short (%)	Short (%)	Normal (%)	Tall (%)	
Knowladge of local food utilization					Continuity Correction
Good	0	0	82	57	
Enough	0	0	18	34	0.037
Less	0	0	0	9	
Clean, healthy living behavior					Fisher's Exact Test
Good Behavior	0	0	100	89	0.46
Bad Behavior	0	0	0	11	

Table 3. correlation between knowledge of local food utilization and clean, healthy living behavior with utritional status of toddlar

In the correlation between knowledge of local food utilization with nutritional status of toddlers, the results of the p-value calculation did not meet the requirements because more than 20% of the expected value was >5, so the insufficient category was simplified to the sufficient category. Therefore, based on the 2x2 chi square test, continuity correction = 0.037 (< 0.05) is significant, which means there is a correlation between knowledge of local food utilization with nutritional status of toddlers. Therefore, it can be concluded that the higher the knowledge about the use of local food, the better the nutritional status of toddlers or the more they will avoid problems with nutritional status in toddlers.

This research is in line with research conducted by Khoiriyah & Yuriati [13] concluded that there is a relationship between mothers' knowledge of toddlers regarding MP-ASI and nutritional status at the Mekar Baru Community Health Center. by obtaining a value of p=0.000 (<0.05). It is said to be in line with this research because it links mothers' knowledge regarding toddler intake with the nutritional status of toddlers.

In the results of the correlation between healthy clean living behavior with nutritional status of toddlers, the p-value calculation does not meet the requirements because more than 20% of the expected values are >5, so the another alternative 2x2 chi square calculation can use the Fisher's Exact Test value and obtain a value of 0.046 (< 0.05) which means there is a correlation between healthy clean living behavior with nutritional status of toddlers. Therefore, it can be concluded that the better the clean and healthy living behavior, the problems with the nutritional status of toddlers can be avoided.

This research is in line with the other [14] which states that based on the Chi-Square relationship test the results were obtained. (p=0.000, OR=23.17) which can be interpreted as a relationship between PHBS behavior and nutritional status in toddlers 24-59 months. During the research, there were shortcomings experienced by the researchers, namely that the assessment of clean and healthy living behavior was only carried out using questionnaires, not accompanied by direct observation.

#### 4. CONCLUSION AND RECOMMENDATION

The results of the research show that there is correlation between knowledge of local food utilization and the nutritional status of toddlers. This conclusion is supported by statistical analysis in the SPSS application, where the Continuity Correction of 0.037 indicates significance (<0.05). The conclusion of this study highlight a significant correlation between clean and healthy living behavior and the nutritional status of toddlers, as evidenced by SPSS calculations with a Fisher's Exact Test of 0.046 indicating significance (<0.05). The researcher suggests that for pediatric nursing science this research can provide knowledge and demonstration of direct use of local food and a solution regarding stopping active smoking in the family and for future researchers it is hoped that this research can add a questionnaire about the specific use of local food and conduct research on clean living behavior healthy by direct observation at the respondent's home.

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