PHSAJ - Public Health Sebelas April Journal
Volume 2, No. 1, Mei 2023

https://ejournal.unsap.ac.id/index.php/phsaj

RELATIONSHIP BETWEEN THE IMPLEMENTATION OF A NUTRITION-CONSCIOUS FAMILY WITH NUTRITIONAL STATUS OF CHILDREN UNDER THE RED LINE

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Article Info

Article history:

Received Mei 12, 2023
Revised Mei 20, 2023
Accepted Mei 26, 2023

Keywords:

Toddlers
Implementation of nutrition
Nutritional status
Nutritional problem

ABSTRACT

In the current era, toddlers are malnourished due to a lack of balanced nutritional intake which has an impact on stunting participants. Short-term risks due to malnutrition are increased morbidity and mortality of developmental disorders, increased burden of care and treatment. The purpose of this study was to determine the relationship between the application of nutrition-aware families using the nutritional status of toddlers below the Red Line. The benefits of this study increase knowledge about health issues for the community, especially young mothers, the importance of perfect handling so that toddlers do not suffer from malnutrition, less, and more nutrition. The approach in this study used Cross Sectional. The independent variable in this study is the application of nutrition-aware families, the dependent variable is the nutritional status of toddlers below the red line. Data collection using field information in the form of a Guttman scale. The study was conducted at one of the health centers in Sumedang district. The population of people who have toddlers with nutritional status below the red line is 19 people. Sample using total holistic population. from the analysis it is known that there is a correlation between the application of family nutrition awareness with the nutritional status of toddlers below the Red Line using a p-value of 0.002 and an OR value of 1.853. Suggestions researchers can maintain and increase the application of nutrition-conscious family attitudes similar to adding a variety of foods and it is also expected that the community routinely brings their toddlers to the posyandu every month to determine the growth and development of their toddler nutrition.

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1. INTRODUCTION

Nutrition is one of the primary determinants of the quality of human resources. Poor nutrition not only increases morbidity and mortality, permanently also reduces productivity, inhibits brain growth cells that cause stupidity and underdevelopment. there is a very close bond between the level of nutritional conditions using culinary consumption.

Nutritional status is a very crucial health indicator where the age of toddlers is a group that is very vulnerable to nutritional conflicts, especially in stunting patients, which means the condition of growth failure in children under five years of chronic lack of nutrition as a result of less height at their age. Short-term risks due to malnutrition are increased morbidity and mortality of developmental and growth disorders. Long-term risks can cause disruption of reproductive health, learning concentration and decreased work productivity (Lestari, 2015).

A Nutrition Aware family is one in which all family members practice balanced nutritional behavior, can recognize health and nutritional problems for each family member, and can take steps to overcome nutritional problems encountered by each family member. a nutrition-aware family if it has good nutritional behavior, which is characterized by using regular toddler weight gain, delivering breast milk (ASI) alone to babies from birth to six months of age (exclusive breastfeeding), diverse cuisine, using iodized salt and taking nutritional supplements as recommended by health workers (Adriani Merryana & Bambang Wiratmadji, 2014).

Based on the results of monitoring the causes of under-five malnutrition due to lack of balanced nutritional intake, inadequate health care, low family income levels and others. The nutritional status of 41 toddlers carried out at the Puskesmas produced the following results, 16 people (three.9%) were malnourished, 21 people (5.1%) were well-nourished, 1 person (0.24%) was overnourished and three people (0.73%) were malnourished (Riskesdas, 2018).

The number of toddlers reported in the work area of the health center in 2021 was 41 toddlers including 16 male toddlers and 25 female toddlers. The number of toddlers who were weighed was 41 toddlers, the number of D / S percentages was 100% including the number of male and female children. The number of BGM toddlers is 19 toddlers, the highest number is in one of the villages in the pusklesmas of 4 BGM toddlers including the number of male and female toddlers. Based on preliminary studies, researchers are interested in conducting research so that the community, especially mothers, is concerned about the importance of perfect handling so that toddlers do not suffer from malnutrition, less, as well as more nutrition.(Riskesdas, 2018). The general objective of this research is to determine the relationship between the application of family nutrition awareness and the nutritional status of BGM toddlers in the Rancakalong Health Center working area.

2. METHOD

The design of this research is quantitative research using a Cross Sectional design that is narrative. The population, namely, all families who have toddlers 0-59 months using BGM in Rancakalong District, Sumedang Regency, totaling 19 toddlers. in sampling using the total population which is a sampling technique, where the number of samples is the same using the population.(Sugiyono, 2014)

Simple random sampling technique Sampling techniques from members of the population are carried out randomly without regard to the strata contained in that population. so that the characteristics of the sample do not deviate from the origin of the population, then before sampling it is necessary to determine the inclusion criteria as well as the exclusion criteria. Inclusion criteria means criteria or what needs to be met by each member of the population who can be taken into the sample. While the exclusion criteria are members of the population who cannot be taken as samples. The research instrument used is general news, the measuring scale uses Guttman. Data collection techniques are primary data and secondary data.(Arikunto, 2006)

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1 Univariate Analysis

In Univariate analysis, the frequency distribution of each variable will be displayed, both independent variables and dependent variables, while the results of univariate analysis are described as follows:

1. Frequency distribution of Consuming a Variety of Foods on the Nutritional Status of BGM Toddlers.

Table 1
Frequency distribution of Consuming a Variety of Foods on the Nutritional Status of BGM Toddlers.

Category Consume Variety food	Frequency	Percentage (%)
Not Diverse	8	42,1%
Various	11	57,8%
Total	**19**	**100%**

Based on table 1.1 on the frequency distribution of consuming a variety of foods in the working area of the Rancakalong Health Center, Rancakalong District, it was found that most of the respondents consumed a variety of foods, 11 people or (57.8%).

2. Frequency Distribution of Regular Weighting Categories on the nutritional status of BGM toddlers.

Table 2
Frequency Distribution of Regular Weighting Categories on the nutritional status of BGM toddlers in the Rancakalong Health Center Working Area in 2022

Category Considering Body weight Regularly	Frequency	Percentage (%)
Good	14	73,6%
Not good	5	26,3%
Total	**19**	**100%**

Based on table 4.2 on the frequency distribution of categories of regular weighing on the nutritional status of BGM toddlers in the working area of the rancakalong health center, rancakalong sub-district, it was found that most of the regular weighing was categorized as good, namely, 14 people or (73.6%).

3. Frequency Distribution of Categories of Using Iodized Salt on the Nutritional Status of BGM Toddlers.

Table 3
Frequency Distribution of the category of Using Iodized Salt on the Nutritional Status of BGM toddlers in the Rancakalong Health Center Working Area in 2022.

Category Using Salt Iodized	Frequency	Percentage (%)
Good	15	78,9%
Not good	4	21,0%
Total	**19**	**100%**

Based on table 3 about the frequency distribution of categories using iodized salt on the nutritional status of BGM toddlers in the working area of the Rancakalong Puskesmas, Rancakalong District in 2022, it was found that most of the respondents who had been studied and categorized as good with a frequency of 15 people or (78.9%).

4. Frequency distribution of categories of providing nutritional supplements according to recommendations (Vit A) on the nutritional status of BGM toddlers.

Table 4
Frequency Distribution of Categories of Providing Nutritional Supplements as Recommended (Vit A) on the Nutritional status of BGM Toddlers in the Rancakalong Health Center Working Area in 2022

Category Provide Nutritiona Supplements As recommended (Vit A)	Frequency	Percentage (%)
Good	19	100%
Not good	-	-
Total	**19**	**100%**

Based on table 4 on the frequency distribution of categories of providing nutritional supplements as recommended (Vit A) on the nutritional status of BGM toddlers in the working area of the Rancakalong Puskesmas, Rancakalong District in 2022, it was found that all respondents who had been studied were categorized as good with a frequency of 19 people or (100%).

5. Frequency Distribution of Exclusive Breastfeeding Categories on the Nutritional Status of BGM Toddlers.

Table 5
Frequency Distribution of Exclusive Breastfeeding Categories on the Nutritional Status of BGM Toddlers in the Rancakalong Health Center Working Area in 2022.

Category Breastfeeding Exclusive	Frequency	Percentage (%)
Good	7	36,8%
Not good	12	63,1%
Total	**19**	**100%**

Based on table 5 on the frequency distribution of categories of exclusive breastfeeding on the nutritional status of BGM toddlers in the working area of the Rancakalong Health Center, Rancakalong District in 2022, it was found that most of the respondents who had been studied were categorized as not good with a frequency of 12 people or (63.1%).

6. Frequency distribution of nutritional status categories of BGM toddlers.

Table 6
Frequency Distribution of Nutritional Status of BGM Toddlers in the Working Area Rancakalong Health Center in 2022

Category Status BGM Toddler Nutrition	Frequency	Percentage (%)
Good Nutrition	6	31,5%
Undernourished	13	68,4%
Total	**19**	**100%**

Based on table 6 on the frequency distribution of nutritional status categories of BGM toddlers in the working area of the Rancakalong Health Center, Rancakalong District in 2022, it was found that most of the respondents who had been studied were categorized as less with a frequency of 13 people or (68.4%).

7. Frequency Distribution of Kadarzi Status Categories on the Nutritional Status of BGM Toddlers.

Table 7
Frequency Distribution of Kadarzi Status Categories in the Working Area Rancakalong Health Center in 2022

Category Status Kadarzi	Frequency	Percentage (%)
Already Kadarzi	9	47,3%
Not yet Kadarzi	10	52,6%
Total	**19**	**100%**

Based on table 4.7 about the frequency distribution of the Kadarzi Status category on the nutritional status of BGM toddlers in the Rancakalong Puskesmas work area in Rancakalong District in 2022, it was found that most of the respondents who had been studied were categorized as not yet kadarzi with a frequency of 10 people or (52.6%).

3.1.2 Bivariate Analysis

In this bivariate analysis, a cross tabulation between the independent variable and the dependent variable was first carried out, using the Chi Square statistical test. This section will present the results of research conducted on respondents in the Rancakalong Health Center Working Area, the relationship between the application of KADARZI to the Nutritional Status of NGM Toddlers in the Rancakalong Health Center Working Area, Rancakalong District in 2022.

Table 8
Cross Tabulation of Kadarzi Status on Nutritional Status of BGM Toddlers in the Rancakalong Health Center Working Area in 2022.

Application KADARZI	Nutritional Status of BGM Toddlers				Total		*P Value*
	Less		Good		*f*	%	
	f	%	f	%			
Not yet Kadarzi	5	26,3%	5	26,3%	10	52,6%	
Already Kadarzi	8	42,1%	1	5,2%	9	47,3%	
Total	13	68,4%	6	31,5%	19	100%	0,002

Based on table 8 about the cross tabulation of the relationship between the application of Kadarzi to the nutritional status of BGM toddlers, it is known that respondents with nutrition-conscious family characteristics (already kadarzi) were 42.1% of nutritional status less and 5.2% of good nutritional status, while from 19 respondents with family characteristics not aware of nutrition (not kadarzi) were 26.3% of nutritional status less and 26.3% of good nutritional status. This shows that respondents with nutrition awareness (KADARZI).

By using the Chi Square statistical test where the degree of confidence used is 95% and a = 0.05, the p value is 0.002. Where the p value is <0.05, so the null hypothesis is rejected or in other words, statistically it is proven that there is a significant relationship between the application of Family Nutrition Awareness on the Nutritional Status of BGM Toddlers.

3.2 Discussion

According to table 1, the frequency distribution of consuming various culinary varieties in the Rancakalong Health Center Working area, Rancakalong District, it was found that most of them consumed a variety of foods with a total of 19 respondents categorized as compound, namely, 11 people or (57.8%). Eating a variety of foods is a family consuming food is a family consuming staple foods, side dishes, vegetables, and fruit every day. (MOH RI, 2018) Diverse food is guaranteed to provide great benefits to health. because certain nutrients, which are not contained in one type of food, will be complemented by similar nutrients from other culinary ingredients. Likewise, each culinary bahn in a balanced assortment of dishes will complement each other.

The culinary arrangement of the balanced nutrition guidelines of the Indonesian Ministry of Health is diverse, if in each meal the dish consists of staple foods + side dishes, vegetables, grains or staple foods + side dishes + vegetables, also not diverse, if each meal consists of only two or one type of food.

Based on Table 2 discourse of the Frequency Distribution of Regular Weight-Weighing Categories in the Working Area of the Rancakalong Health Center, Rancakalong District found that most of the regular weight weighing categorized as good, namely, 14 people or (73.6%).

Monitoring the nutritional status of toddlers can be done by weighing toddlers at home or weighed at the posyandu or elsewhere every month or at least once every 2 months. Can be monitored by looking at the weighing records of toddlers in the KMS during the last month, namely If babies aged >6 months are weighed 4 or more times in a row are evaluated as good and If less than 4 times are considered not good. If babies 4-5 months old are weighed three times or more are evaluated and if less than three times are evaluated as not good. If infants aged two-3 months are weighed 2 or more times consecutively, it is considered good and if less is considered not good, and in infants who are still 0-1 month old, it is good if they have been weighed and not good if they have never been weighed.(Teknologi et al., 2022)

Based on table3 about the frequency distribution of categories using iodized salt in the Rancakalong Health Center Work area, Rancakalong District in 2022, it was found that most of the respondents who had been studied and categorized as good used a frequency of 15 people or (78.9%).

Iodized salt consumed every day is useful to prevent the onset of iodine deficiency disorders (GAKY). Gaky can inhibit the development of intelligence levels in children, endemic goiter, and cretin.(Khulafa'ur Rosidah & Harsiwi, 2019). To find out whether the salt used by the family contains iodine or not can generally be done in 2 ways, namely, seeing the presence or absence of an iodized salt label or conducting an iodine test. claimed to be good when labeled and when tested iodine is purple, not good when not labeled and when tested using iodine the hue does not change.(Biswan et al., 2018)

According to table 4 discourse of the frequency distribution of categories of providing nutritional supplements as recommended (Vit A) in the working area of the Rancakalong Health Center, Rancakalong District in 2022, it was found that all respondents who had been studied were categorized as good with a frequency of 19 people or (100%).

Consumption of nutritional supplements recommended by the Indonesian Ministry of Health (2007) is a high dose of vitamin A capsules (blue capsules for infants aged 6-11 months, red capsules for toddlers aged 12-59 months).(Rachman, Ika, 2016). Infants and toddlers vitamin A capsules are useful for eye health, especially in the process of vision where vitamin A plays a role in helping the adaptation process from detailed areas to dark places. Vitamin A deficiency causes abnormalities in vision due to the process of metaplation of epithelial cells, as a result of which the glands do not produce fluids that can cause dryness in the eyes, called conjunctive xerosis, If this condition continues, bitot spots will form and lead to blindness. (Adriyanti, 2017)One coverage of infant visits 6-11 months and coverage of services for children under five 12 59 months in basic health services contained in the minimum service standards is the award of high dose Vitamin A capsules, 100,000 IU (blue) for infants and or 200,000 IU (red) for children under five by 2 pieces per year.(Dwiyanti et al., 2004)

According to table 4.five regarding the frequency distribution of the category of exclusive breastfeeding in the working area of the Rancakalong Health Center, Rancakalong District in 2022, it was found that most

of the respondents who had been studied in the category were not good using a frequency of 12 people or (63.1%).

Breast milk (ASI) is able to fulfill the baby's nutrition to grow and become healthy until he is 6 months old. Colostrum, which is breast milk that comes out in the first days, should be given to babies. After the baby is 6 months old, breast milk alone can no longer fulfill the baby's nutritional needs. therefore, after the age of 6 months, the baby needs to receive complementary foods (MP-ASI). Complementary feeding is given to babies gradually according to their age, body growth, and intelligence development. Even so, the gift of breast milk is still continued until the child is 24 months old. its benefits mean to help the child's growth and development, maintain and increase the child's body resistance to infectious diseases, and familiarize the relationship between the mother and her child back and forth.

The results showed that the prevalence of toddlers in the undernutrition category in the Rancakalong Health Center area is still high, but there are no subjects included in the poor nutrition category. Nutrition affects the growth and development of toddlers. Children under five are in the transition period from baby food to adult culinary. In addition, toddlers are also unable to take care of themselves, including determining their food, as a result of which the attitude of parents is needed.(Susilowati et al., 2021)

The origin of 19 respondents whose level of application of nutrition-conscious families was not good using the nutritional status of toddlers using the good category as many as 4 toddlers (21.0%). in respondents whose level of application of nutrition-conscious families was not good with the nutritional status of toddlers using the undernutrition category as many as 6 toddlers (31.5%). While the origin of 19 respondents whose level of application of nutrition-conscious families is good whose nutritional status of toddlers with good categories is 1 toddler (five.2%). in respondents whose level of application of nutrition-conscious families is good whose nutritional status of toddlers with nutritional categories is less than 8 toddlers (42.1%).

As a result of the calculation of the chi square (2x) test between the application of a nutrition-conscious family using the nutritional status of BGM toddlers obtained a p-value using a value of 0.002 smaller than 0.05, as a result Ha is accepted which is there is a significant correlation between the application of a nutrition-conscious family with the nutritional status of BGM toddlers. This can be interpreted that the better thisu applies a nutritionally conscious family attitude, the better the nutritional status of the toddler. therefore, the low nutritional status of toddlers can mistakenly be caused by the mother, who takes care of and takes care of her child, does not have a good Kadarzi attitude. Kadarzi attitude means response or reaction to a stimulus. health attitude is the action of a person's actions in maintaining and improving their health, for example the success of the family in achieving a nutrition-conscious family. (Kusumaningati et al., 2018)

This is because respondents are still difficult to weigh their toddlers routinely to the posyandu or puskesmas. the attitude of weighing toddlers can be influenced by several factors such as the condition of the toddler who is not possible to take to the posyandu because of illness and family busyness. Weighing toddlers regularly every month is done to find out growth disorders that could not be observed before, which can be caused by lack of mkan, recurrent illness, or ignorance about children's food. One of the indicators of successful implementation of a nutrition-conscious family is exclusive breastfeeding from birth to six months of age. The respondents did not implement this. Exclusive breastfeeding for less than six months can be one of the factors that cause the consumption level of toddlers to be low because weaning is too early as a result if left for a relatively long time will hypnotize their nutritional status, which can cause malnutrition.

The use of iodized salt is intended to meet the iodine needs of each family member, especially toddlers who are still in the process of growth, Iodine in the body is needed to produce the hormone thyroxine. Thyroxine is very important for physical growth as well as motor and mental development of children. Low levels of thyroid hormone in the bloodstream caused by iodine deficiency can cause inhibition of human growth and development. Nutritional status with the BB/U index means that the indicator sits acute nutritional case to be the impact of the situation that lasts long enough. the impact of the application of nutrition-conscious families has a tendency to affect the nutritional status of toddlers in the long term.

A good nutrition-conscious attitude in the household of toddlers with kadarzi indicators is directly related to using weight monitoring as an early indication of rapid changes in nutritional status. Several series of analyses on the correlation of the application of a nutrition-conscious family using the nutritional status of children under five can emphasize that a nutrition-conscious family is valid and reliable and can be applied in order to overcome sitting nutritional cases in children under five. The attitude of nutrition-conscious mothers can be a way for mothers to overcome nutritional dilemmas as a result can improve the nutritional status of toddlers.

4. CONCLUSION

Based on the results of the research and discussion described in the previous chapters, the conclusions that can be drawn from this research are:

1. To find out the illustration of the application of nutrition-conscious families that have not been good using the nutritional status of toddlers using the good category as many as 5 toddlers (26.three%). at the level of application of nutrition-conscious families that have not been good using the nutritional status of toddlers with the category of undernutrition as many as 5 toddlers (26.three%).
2. To find out the picture of the application of a good nutrition-conscious family whose nutritional status of toddlers with good categories as much as 1 toddler (five.2%). on respondents whose level of application of a good nutrition-conscious family with nutritional status of toddlers using the category of undernutrition of 8 toddlers (42.1%).
3. There is a relationship using the Chi square statistical test where the degree of religion used is 95% and a = 0.05 obtained a p value of 0.002. Where the p value <0.05, as a result the null hypothesis is rejected or in other words statistically it is proven that there is a significant correlation between the application of the Nutrition Aware family to the Nutritional Status of BGM Toddlers.

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