THE EFFECTS OF SOCIAL GROUP DINAMICS TOWARD THE NUTRIENT STATUS OF CHILDREN IN 1-3 YEARS OLD IN KEDIRI CITY

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Abstract

The kids are very precious asset for parents. Every parents hope that their children can grow and develop well, and get good education to maximize their potencies, talent also skill. To reach that hopes, the parents have responsibilities and roles in learning process, and also their growth and development by giving stimulation in order they can grow and develop in line with their ages. One of children's growth period that can be seen is their nutrient status. The aim of this study is to know the effects of social group dynamics toward nutrient status among kids in 1 to 3 years old in Kediri City.

The research method is *pre-experimental* by using research design *pra-post test*. The population in this research are all of the mothers who have children in 1 to 3 years old in Campurejo Village, Mojoroto District of Kediri City. By using *Simple Random Sampling,* it was got 52 respondents. There are 2 variables, namely independent and dependent variables. Independent variable is social group dynamics, and dependent variable is the nutrient status of the children in age 1 to 3 years old. The instruments of this research is the book of "Kartu Menuju Sehat (KMS)". The data were analyzed by using *Wilcoxon Match Pairs Test*, and then data analysis used SPSS v.20 Program.

The result of this research showed that before given social group dynamics, there were 23 respondents (44.23%) have good nutrient status. While after given social group dynamics, there were 27 respondents (51.9%) have good nutrient status. Based on the result of statistical test by using*Wilcoxon Match Pairs Test,* it was got Z value -2.183 with $\alpha \leq 0.05$. H1 is accepted. It means there is influence between social group dynamics and nutrient status in 1 to 3 years old children.

The mother's knowledge about balance nutrient which is needed by the children can give positive effects toward their nutrient status, so the growth of the children can increase in line with their ages. For the health officers, it is suggested to improve the mothers' knowledge by holding special class for the mothers who have children under-five years old. The materials are education about nutrition in general, and it can be done by many ways such as role play, simulation or direct practice to serve food and its creativities

Keywords: social group dynamics, nutrient status, children in 1 to 3 years old

INTRODUCTION

National development in the recent years tends to develop economics and the quality of human resources. The usage of human and nature resources require optimal nutrient status grade and good health. World Health Organization (WHO) states that

nutrient status is the main pillar of health and prosperity during the whole life cycle. The low nutrient status which is still exist in Indonesia will influence directly toward the growth and development of children. It can decrease children's cognitive ability, so that the development of the children delays (Soekirman, 2000 : 6).

Nutrient is one of important factors to determine the quality of human resources. The lack of nutrient will cause serious effects such as the failure of physical growth and the delay of development and intelligence. The other effects are decreasing productivities, and low immunity against diseases that will increase illness and mortality risk (Ariani, 2017:214).

The nutrient problem can be obesity and lack of nutrient (protein calories). The lack of nutrient can be caused direct and indirect factors. The Indirect factors include unavailable of food in households, inappropriated caring pattern, low education, low knowledge and skill of the parents while the directs factors are unbalance of food intake and infectious disease. The effects of low nutrient toward mental and brain development depend on severity, duration and period of brain growth itself. If the lack of nutrient happens in toddler period, especially in the golden period, the brain cannot develop in normal way. Unfortunately, this condition is difficult to be recovered. Thus, it is worried that the children who have lack of nutrient in toddler period will have permanent development disorder in the next years.

A survey of two poor neighborhoods in Kingston, Jamaica is reported that nutritional indicators, weight for age and weight for height, as well as developmental levels declined with the children's age. Multiple regression analysis showed that stunting (ht/age) and weight for age had significant effects on DQ, whereas wasting (wt/ht) did not. (Selvam, 2015).

This study investigates associations between food insufficiency and cognitive, academic, and psychosocial outcomes for US children and teenagers ages 6 to 11 and 12 to 16 years. The results demonstrate that negative academic and psychosocial outcomes are associated with family-level food insufficiency and provide support for public health efforts to increase the food security of American families (Alaima et all, 2001).

The effects of nutritional supplementation, with or without psychosocial stimulation, of growth-retarded (stunted) children aged 9-24 months were assessed in a study in Kingston, Jamaica. These findings suggest that poor mental development in stunted children is at least partly attributable to undernutrition. (Armond, 2004).

Malnutrition in the modern world does not only comprise the consequences of protein energy shortage. There is also recognition of a growing concern for obesity in children and teenagers and insights into the health consequences of vitamin and trace element deficiencies, including iron, vitamin D and vitamin A, although every vitamin and mineral is critical to good health (RJ Green, 2015).

RESEARCH METHOD

The research method is *pre-exsperimental* by using research design *pra-post test*. The research population are all of the mothers who have children in age 1 to 3 years old in Campurejo Village, Mojoroto District, Kediri City. The sampling technique used is

Simple Random Sampling, and it was got 52 respondents. The research variables consist of 2 variables, namely independent variable and dependent variable. The independent variable is social group dynamics, and the dependent varible is nutrient status of the children in age 1 to 3 years old.

The research is Kartu Menuju Sehat (KMS) book. The data are analyzed by using *Wilcoxon Match Pairs Test*., and the data analysis used is SPSS v.20 Program.

THE RESULT AND DISCUSSION

Result

Table III.1 The Frequency of Distribution Nutrient Status of the Children in 1-3 Years Old before Implementing of Social Group Dynamics

	Nutrient Status								**Total**
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	
Bad	0	0	2	3.85	0	0	0	0	**2**
Thin	0	0	13	25	8	15.38	0	0	**21**
Good	1	1.92	1	1.92	19	36.5	2	31.85	**23**
Overweight	0	0	0	0	0	0	6	11.54	**6**
Total									**52**

Based on Table III.1, from 52 respondents there are 23 respondents (44.23%) have good nutrient status, and 2 respondents (3.85%) have bad nutrient status.

Table III.2 The Frequency of Distribution Nutrient Status of the Children in 1-3 Years Old after Implementing of Social Group Dynamics

	Nutrient Status								**Total**
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	
Bad	0	0	0	0	1	1.92	0	0	**1**
Thin	2	3.85	13	25	1	1.92	0	0	**16**
Good	0	0	8	15.38	19	36.5	0	0	**27**
Overweight	0	0	0	0	2	3.85	6	11.54	**8**
Total									**52**

Based on Table III.2, from 52 respondents there are 27 respondents (51.92%) have good nutrient status, and 1 respondent (1.92%) has bad nutrient status.

Table III.3 The Cross Tabulation of Social Group Dynamics Analysis toward Nutrient Status of the Children in 1 to 3 Years Old

Thin

Nutrient Status_Pre * Nutrient Status_Post Cross tabulation

			Nutrient Status_Post				
			Badk	Thin	Good	Overweight	Total
Nutrient Status_Pre	Badk	Count	0	2	0	0	2
		% within Nutrient Status_Pre	.0%	100.0%	.0%	.0%	100.0%
	Thin	Count	0	13	8	0	21
		% within Nutrient Statusi_Pre	.0%	61.9%	38.1%	.0%	100.0%
	Good	Count	1	1	19	2	23
		% within Nutrient Status_Pre	4.3%	4.3%	82.6%	8.7%	100.0%
	Overweight	Count	0	0	0	6	6
		% within Nutrient Status_Pre	.0%	.0%	.0%	100.0%	100.0%
Total		Count	1	16	27	8	52
		% within Nutrient Statusi_Pre	1.9%	30.8%	51.9%	15.4%	100.0%

Based on Table III.3, from 52 respondents it can be seen that before implementing social group dynamics, there are 23 respondents (44.23%) who have good nutrient status. After implementing social group dynamics, there are 27 respondents (51.92%) who have good nutrient status.

Tabel III.4 Statistical Test of Social Group Dynamics Effects toward the Children's Nutrient Status in Age 1-3 Years Old

Ranks

		N	Mean Rank	Sum of Ranks
Nutrient Status_Post - Nutrient Status_Pre	Negative Ranks	2 [a]	10.50	21.00
	Positive Ranks	12 [b]	7.00	84.00
	Ties	38 [c]		
	Total	52		

a. Nutrient Status_Post < Nutrient Status_Pre

b. Nutrient Status_Post > Nutrient Status_Pre

c. Nutrient Status_Post = Nutrient Status_Pre

Test Statistics[b]

	Nutrient Status Post - Nutrient Status_Pre
Z	-2.183[a]
Asymp. Sig. (2-tailed)	.029

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Based on Table III.4, the result of statistical test by using *Wilcoxon Match Pairs Test* is Z value -2,183 with $\alpha \leq 0{,}05$. H1 is accepted. It means that there is influence of implementing social group dynamics toward nutrient status of the children in age 1-3 years old.

DISCUSSION

1. Nutrient Status of the children in Age 1-3 Years Old before Implementing Social Group Dynamics

Based on Table III.1, from 52 respondents there are 23 respondents (44.23%) who have good nutrient status, 21 respondents (40.38%) who have lack of nutrient, 6 respondents (11.53%) who have overweight, and 2 respondents (3.85%) who have baad nutrient status.

The good nutrient status is needed to in the children's growth and development process from age aspect. If the lack of nutrient in under-five years old children happens continously, it can decrease the quality of human resources (Shirin S, 2016).

The result of research shows that most of the respondents have good nutrient status. The mothers' knowledge about nutrient necessities has very important role because the fulfillment of adequate nutrient can create the better next generation. However, the awarness of giving adequate nutrient hassn't been understood well.

Based on Table III.1, it is known that there are 2 respondents (3.85%) who have bad nutrient status. Some factors can be causes of nutrient intake disorders. The direct cause is usually inadequate nutrient intake compare with the children's need especially under-five years old kids. The over fondness toward certain kinds of food will cause the body cannot fulfill the complete nourishment (Hasdianah, Siyoto, 2014 :104).

Most of the children in age 1-3 years old have interest of certain food, so their consumption pattern is also only that kind of food. This condition insists the mothers to give that favourite food frequently to the children. As the result, the children will have lack of certain nutrient needed because of less various food consumed.

The Nutrient Status of the Children in Age 1-3 Years Old after Implementing Social Group Dynamics

Based on Table III.2, from 52 respondents there are 27 respondents (51.92%) who have good nutrient status, 16 respondents (30.76%) who have lack of nutrient, 8 respondents (15.38%) who have overweight and 1 respondent (1.92%) who has bad nutrient status.

Information is the main source to get knowledge, because someone's knowledge will increase if he or she gets information. The more information got, the higher knowledge obtained (Wawan&Dewi, 2010).

Giving information or education to the mothers will influence the mothers' knowledge about serving good food intake either the kind of food given or the variety of food so that it influences toward nutrient status of their children. One of nutrient status changings which can be seen is the increasing of weight shown in weighing at Posyandu (Integrated Service Post) for under-five years old children.

According to Liza (2012), a child in under-five years old needs nutrients to help the development of brain optimally, and also to keep the healthy and strong body. Under-five years old age is critical age which a child will grow fast physically and mentally.

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Nutrient is a very important part of growth and development, because it has close relation with health and intelligence. Therefore, the mothers must pay attention the nutrient intake of their children, especially the nutient content of the food given.

2. The Effects of Social Group Dynamics toward Nutrient Status of the children in Age 1-3 Years Old

Based on Table III.3, from 52 respondents before implementing social group dynamics, there are 23 respondents (44.23%) who have good nutrient status, and after implementing social group dynamics there 27 respondents (51.92%) who have good nutrient status.

The result of statistical test by using *Wilcoxon Match Pairs Test* got Z value -2.183 with $\alpha \leq 0.05$. H1 is accepted. It means there is influence of social group dynamics toward nutrient status of the children in age 1 to 3 years old.

According to Mubarak (2011), the source of information can help to fasten someone in getting new knowledge. It explaines that after someone gets the source of information so it will be analyzed further by thinking, processing, asking, classifying and reflecting.

Social group dynamics intervention by giving information to the mothers influnces their knowledge and thought pattern about the importance of adequate nutrient for their children. Later, the mothers have more pay attention in giving food to their children so that it can change the nutrient status indicated by the increasing of weight in the next Posyandu visit.

Based on Table III.3, it is known that there are 21 respondents (40.38%) who have lack of nutrient status before implementing social group dynamics, and there are 16 respondents (30.76%) who have lack of nutrient after implementing social group dynamics.

The result of research shows that there is significant difference where the number of the children who have lack of nutrient decrease after implementing social group dynamics, namely 5 respondents (9.62%). It shows there is changing of thought pattern and knowledge from the mothers about nutrient intake for their children, so that it change the mothers' behavior. At last the mothers give food to their children in line with the portion needed.