MATERNAL KNOWLEDGE, ATTITUDE, AND NUTRITIONAL STATUS OF CHILDREN UNDER FIVE YEARS OF AGE

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Abstract

Public health issues in general in developing countries including in Indonesia are lack of micronutrients, especially for infants and children in the first two years of life. Nutritional problems that are of major concern to the world today are stunting. Nutritional problems are disruptions to individuals or the community caused by not fulfilling the need for nutrients obtained from food. This study aimed to analyze the associations of knowledge, maternal attitude with nutritional status of children under five years of age. Method: This type of research is a cross-sectional study. Research subjects for mothers who have children under five in the Puskesmas in the Municipality of Yogyakarta. The sample in this study was 383 children under five. Other data were collected by questionnaire for collecting anthropometric and measurements for the weight for age Z-score. The nutritional status of children under five years old weight for age is categorized as good Zscore -2.0 SD to 2.0 SD. The data were analyzed by a logistic regression. Result: Mother's knowledge of nutrition and the mother's attitude towards improving nutrition to the nutritional status of children under five with a significance value of Chi-Square 0.604 (> 0.05). Conclusion: Mother's knowledge about nutrition and mother's attitude towards nutritional improvement on nutritional status of children under five based on ordinal regression bivariate data analysis is no effect on the mother's knowledge about nutrition and maternal attitudes toward improving nutrition to the nutritional status of children under five.

Keywords: maternal knowledge, attitude, nutritional status of children

1. INTRODUCTION

The sustainable development conference on 25 September 2015 and UN member states adopted a sustainable development agenda in 2030 that agreed on a series of 17 sustainable development goals (SDGs). The second goal of the Sustainable Development Goals (SDGs) is to eliminate hunger, achieve good food and nutrition security by 2030, and improve sustainable agriculture, the seriousness and attention of the global world to nutrition issues. Two indicators in the SDGs objective that are directly related to nutritional status are prevalence of undernourishment (prevalence of undernourishment) and the prevalence of populations with moderate or severe food insecurity, which refers to the Food Insecurity Experience Scale [1]. Public health issues in developing countries including Indonesia are lack of micronutrients, especially for infants and children in the first two years of life [2]. The country of India has the most severe nutritional problems, 86 million including the effects of diarrhea on malnutrition in Dhaka, Bangladesh, over the past ten years. Preschoolers with malnutrition are increased risk for Entamoeba histolytica diarrhea, Cryptosporidium parvum / hominis, and Escherichiac enterotoxigenic [3]. Nutrition

problems that are currently major short-term children (stunting), with a shortage of 37.4%, meaning 3 - 4 out of Health, Research and Development Agency of the Republic of Indonesia of 10 under-fives in Indonesia experience short postures [4].

The age of the first 1,000 days of life in children under five is not caused by heredity but generally by malnutrition and / or experiencing pain in a relatively long time. In short toddlers children can have low body resistance, low intelligence, and low productivity when they are adults. To overcome short toddlers need to improve nutrition since the fetus in the womb, exclusive breastfeeding until the age of 6 months, and the provision of appropriate complementary foods from the age of 6 months low, low intelligence, and low productivity when mature.

To overcome short toddlers need to improve nutrition since the fetus in the womb, exclusive breastfeeding until the age of 6 months, and the provision of appropriate complementary foods from the age of 6 months [4]. More than 9 million women, babies and children in the low-income United States receive the benefits of additional nutrition programs specifically for women, infants and children (Women, Infats, Children) funded by the United States Department of Agriculture . Through special nutritional programs specifically providing nutritious food, breastfeeding counseling and nutrition for pregnant and postpartum mothers as well as children up to 5 years of age, because this program is considered the main public health nutrition program in the United States [5]. Nutritional problems are disruptions to individuals or the community caused by not fulfilling the need for nutrients obtained from food. Macro nutrition problems, especially the problem of lack of protein energy, are problems that dominate the world's attention. Lack of protein consumption results in various diseases. The pattern of protein consumption according to one's needs is very beneficial for the endurance of the heart. Consumption of Fe is also beneficial for endurance of the heart and lungs [6].

This research is important because it analyzes the relationship of knowledge, mother's attitude to the nutritional status of children under five years. Previous research had been conducted by Tioria N with the title of factors affecting the incidence of malnutrition in children under five in the working area of the Glugur Darat Health Center. This study used a cross sectional design survey, bivariate analysts with chi-square and multivariate tests using multiple logistic regression tests with the results of the study. The results showed that statistically the characteristics (knowledge, family income, number of family members) and parenting (eating care) , health foster) significantly influence the incidence of malnutrition. It can be concluded that if the mother's knowledge is good, family income is good, the number of family members is small and the implementation of dietary care and health care pattern is good, the lower the incidence of malnutrition. 25 times chance of occurrence of risk of under nutrition compared to family income above UMK Medan [9]. The results of this study are different from previous studies because this study focuses on your knowledge, your attitude and nutritional status in children under two years old and toddlers and different places of research. The results of this study indicate the knowledge and attitudes of mothers who have children under five with good nutritional status.

2. MATERIALS AND METHODS

This type of research is quantitative research with the design of this research is a cross-sectional study (Cross Sectional Study). Cross-sectional studies are useful for describing disease and exposure to a population at a certain point in time. Data generated from cross-sectional studies are prevalence data [6]. Prevalence is the proportion of cases in a population at one time [7]. The study was conducted in the working area of the Yogyakarta Municipality Health Center with the consideration that in 2016 there were still children under five with malnutrition in the amount of

589 people and children under five with the Lower line Red (BGM) of 148 under-fives [8]. The population in this study were toddlers aged 1-5 years (12 - 60 months) who were in eight health centers in the Yogyakarta Municipality area of 8,902 under-fives [8]. Research subjects for mothers who have toddlers in Puskesmas in the city of Yogyakarta. The sample uses the Slovin formula to determine the minimum sample size based on the error rate or margin of error, the sample in this study was 383 children under five [8]. Other data was collected by collecting questionnaires and anthropometric measurements for body weight / age with a Z-score [8]. The research instrument used for data collection in this study was a questionnaire, before being distributed to respondents [7]. Data analysis used with logistic regression [7].

3. RESULTS AND DISCUSSIONS

Univariate Analysis

3.1. (Table 1.) Characteristics of Respondents Based on Sex of Children Under Five Years of Age

Characteristics of Respondents	Frequency	Percentage (%)
Sex		
Boys	198	51.7
Girls	185	48.3
Total	**383**	**100**
Maternal Knowledge About Nutrition		
Well	276	72.1
Less	107	27.9
Total	**383**	**100**
Maternal Attitude for Nutrition Improvement		
Well	368	96.1
Less	15	3.9
Total	**383**	**100**
Nutritional Status (BB/U)		
Good nutrition	350	91.4
Malnutrition	28	7.3
More Nutrition	5	1.3
Total	**383**	**100**

Table 1 above shows that most of the respondent characteristics of children under five are based on male sex (51.7%). Frequency Distribution of Respondents Based on Mother's Knowledge of Nutrition in 2019 above shows that most respondents have good knowledge about nutrition (72.1%). Frequency Distribution of Respondents above shows that most respondents have good attitudes toward improving nutrition (96.1%). Frequency Distribution Based on Nutritional Status by Body Weight for age 2019 above shows that most children under five have good nutritional status based on body weight according to age (91.4%).

Bivariate Analysis

3.2. (Table 2). Effect of Maternal Knowledge and Attitudes on Children Nutrition Status

Test of Parallel Lines[a]

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	23.065			
General	20.335	2.730	4	.604

The Test of Parallel Linse is used in ordinal regression with the dependent variable ordinal scale. Table 2 above is used to test the assumption that each category has the same parameters or the relationship between independent variables and logit is the same for all logit equations. Because the Chi-Square significance value is 0.604 (> 0.05), the hypothesis is that H0 is accepted by Ho's conclusion: there is no effect on the mother's knowledge of nutrition and the attitude of the mother to improving nutrition to the nutritional status of children under five.

C. Discussion

Based on the results of research in the Yogyakarta Municipality Health Center Region in 2019 that the number of male sex children under five is more frequent with the number of sexes of female children under five. The results of the research obtained by Mother's knowledge about nutrition have a good knowledge of 276 people in the Yogyakarta Public Health Center Region in 2019. Knowledge is dominant which is very important for the formation of one's actions [10]. Knowledge of nutrition is very necessary to overcome problems that arise due to the consumption of nutrients [10]. So that family members/people will consume food to become more interested and get good health and can maintain their health [11].

The results of the research obtained by the attitudes of mothers on nutrition improvement have a good attitude of 368 people in the Puskesmas area of Yogyakarta Municipality in 2019. A person's attitude shows actions that are contrary to his attitude. A person's attitude can change with obtaining additional information about objects through persuasion and pressure from social groups. Indicator of nutritional status based on index BB / U indicates nutritional problems in general. The BB / U indicator does not indicate nutritional problems that are chronic or acute because weight is positively correlated with age and height. Indicators of low body weight can be caused by short (chronic nutrition problems) or are suffering from diarrhea or other infectious diseases (acute nutritional problems).

The relationship between mother's knowledge about nutrition and mother's attitude towards nutritional improvement on nutritional status of children under five based on ordinal regression bivariate data analysis is that there is no influence of maternal knowledge about nutrition and maternal attitudes toward improving nutrition to the nutritional status of children under five.

4. CONCLUSION

The relationship between the influence of maternal knowledge about nutrition and the attitude of mothers on nutritional improvement on nutritional status of children under five based on ordinal regression bivariate data analysis was no relationship to the influence of maternal

knowledge about nutrition and maternal attitudes toward nutritional improvement on nutritional status of children under five with a significance value of 0.604 Chi-Square (> 0.05).

Suggestions from this study are expected to increase the knowledge and attitudes of mothers with nutritional status to be better through training related to the nutrition of children under five. For the next variable, it is necessary to add the dependent variable of mother's behavior regarding nutrition of children under five with the nutritional status of children under five.

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