



**CORRELATIONAL OF MOTHER'S KNOWLEDGE ABOUT NUTRITION WITH NUTRITIONAL STATUS AND DEVELOPMENT OF CHILDREN IN THE APPLE PUBLIC HEALTH IN JAMBEARJO VILLAGE, TAJINAN SUB-DISTRICT, MALANG**

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**ABSTRACT**

**BACKGROUND** : Children are the population groups that show very rapid growth that requires high nutrients in every kilogram of their body. To get the proper nutrition needed a knowledge in terms of selection, and providing nutritional balanced menu (Devi, 2012) The purpose of research to determine the relationship between mother knowledge about nutrition and nutritional status and the level of early childhood development.

**SUBJECT AND METHODE** :The study design was *correlational*, Its population is mothers who have children in the village of Apple Integrated Health Post of Jambearjo numbered 89 mothers, samples were taken by purposive sampling technique, totaling 58 people. Research variables include; mother's knowledge about nutrition, nutritional status and level of development. The research instrument used a questionnaire, KPSP, anthropometric measurements with a Z-Score table. Data were analyzed using univariate and bivariate analysis using spearman rho test with a significance level of 95%.

**RESULTS** : Based on the analysis of Spearman Rho test was obtained p Value 0.000 <0.05 then H1 accepted meaning there is a relationship between knowledge and nutritional status and the level of early childhood development. Value coefficient correlation with nutritional status .590 knowledge, knowledge with the development .515

**DISCUSSION** : Based on the results above, it should be cadres of Apple public health and public health center of workers provide health information, coaching, food availability and nutrition simultaneously to the mothers and developmental delays with the provision of PMT, stimulation of early childhood development and monitoring and early detection of growth and development of infants.

**Keyword:** mother's knowledge, nutritional status, level of development, toddler

**INTRODUCTION**

The role of parents, especially mothers is very important in terms of nutrition, because when in 1000 the first day of a child's life is in dire need of support and maternal care in the provision of balanced nutrition to support the development of the child.

State of Indonesia are in serious public health problem in the case of infant stunting. 30,323, of a total of 154,188 children under five in Malang who experience chronic malnutrition due to lack of nutrition in a long time due to improper feeding nutritional needs. While the results of interviews of 10 mothers stated that 2 moms say pay attention to the nutritional content of the food their children, three mothers say breastfeeding until the child is 6 months old, 1 mother gave weaning food (PASI) since infancy because mothers work and 4 mothers had given food bananas when their children were aged less than 6 months.

Maternal knowledge is important in terms of meeting the nutritional intake for the family, especially when pregnant mothers and children under five who are experiencing rapid development body. Balanced nutrient intake in infants is very important in supporting the growth of children appropriate growth chart in order to avoid failure to thrive (growth faltering) that can cause stunting.



Stunting is one of the targets of Sustainable Development Goals (SDGs), which includes the sustainable development goals of the 2nd ie eliminate hunger and all forms of malnutrition in 2030 as well as food security. The target set is to reduce stunting cases up to 40% in 2025. Besides, the Indonesian state has become part of the SUN Movement (Scaling Up Nutrition), motion SUN Movement is an effort to improve public nutrition and the prevention of at least 20 million children not experiencing stunted growth in 2020, in line with global targets for comprehensive implementation plan in 2025 (WHO, 2014 in Atmarita 2015). Implementation of the program may be realized in the form of movement activities a healthy community through the provision of information about socialization and early detection of growth and development of young children, supplementary feeding in infants, giving Fe tablets and folic acid in pregnant women, but the success of the program depends on the strategy of intervention at a time right. This study has the objective to determine the relationship and how strong the relationship between mother knowledge about nutrition and the nutritional status of early childhood development.

### METHODE

This research is an observational analytic studycross-sectional design. The study population was mothers who have children in the village of Apples Integrated Health Post of Jambearjo working area of PKM Tajinan Malang, with 98 mothers. Samples were taken by purposive sampling technique and the amount of sample is 58 mothers. The independent variable of research is mother knowledge about nutrition while the dependent variable is the nutritional status and the development of research instruments used questionnaires mother's knowledge, anthropometric measurements and calculation of Z-scoreserta Pre-Screening Questionnaire Development (KPSP). The study was conducted during the months of April to July 2019 in the village of Apple IHC of Jambearjo working area of PKM Tajinan Malang. Data retrieval begins from the bureaucratic process of licensing of the Polytechnic of dr Soepraoen to Kesbangpolinmas then to PKM Tajinan. Data collected the raw data that is to be organized in such a way that can be presented in tables or charts/graphs so easily analyzed and conclusions drawn. Data processing is conducted through the editing stage, coding, scoring and data analysis. Univariate analysis of the data will be presented in the form of pictures and tables as well as do interpretations based on the data obtained. The bivariate analysis conducted on two variables that were related (correlated). The bivariate analysis is done by looking at the relationship between the dependent and independent variables. The bivariate analysis that will be used is spearmen Rho with  $\alpha$  of 0.05. The research was carried out with due regard to the principles of research ethics.

### RESULTS AND DISCUSSION

Knowledge is the result of individual learning through the sensing process. In conducting the early stimulation of early childhood development and the provision of food sources that meet the nutrient content for toddlers, requires a process of learning, understanding and practice.



The data above results supported by data characteristics of respondents, among others, the majority of maternal education level is primary education that is SD 9 (15.5%) and secondary school 29 people (50%), the rate of maternal age fraction 9 (15.5%) is late adult age, respondents who did not work a total of 11 people (19%) and income of respondents <Rp.1.000.000 number of 13 (22.4%) as describe in diagrams below.

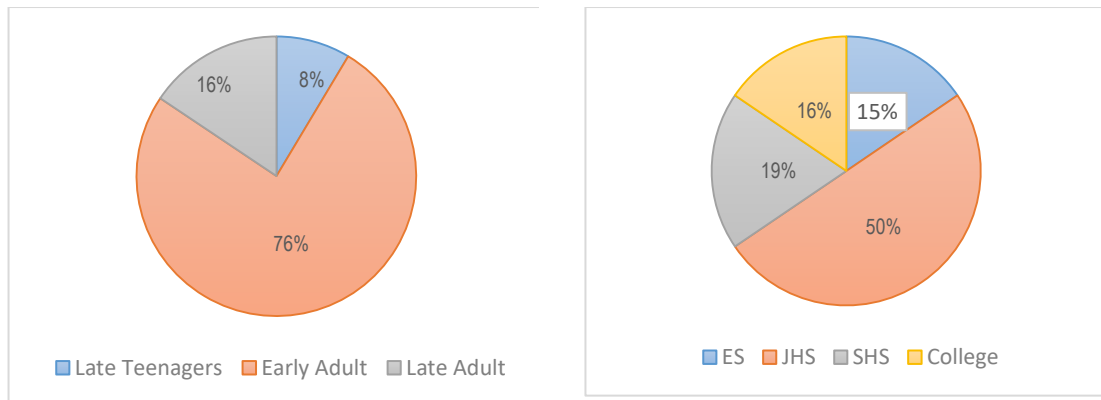


Diagram 1 and 2. Distribution if Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang Based on Age and Educational Level

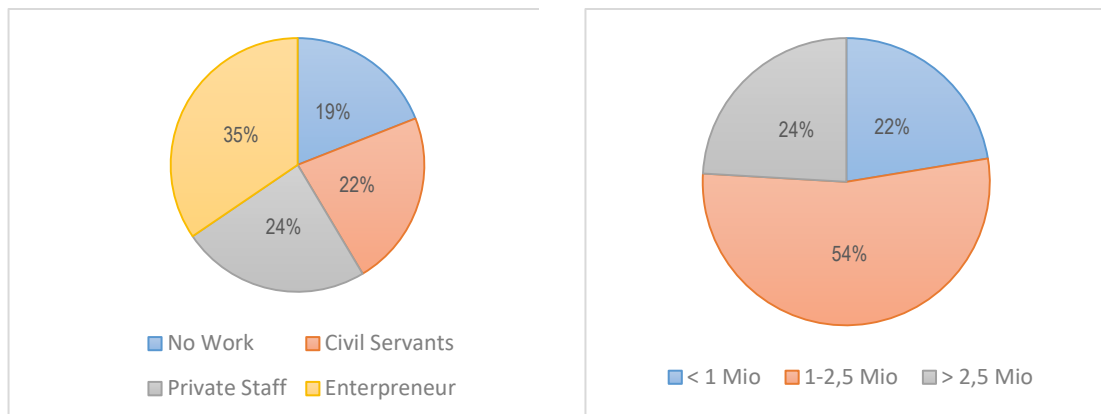


Diagram 3 and 4. Distribution if Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang Based on Occupation and Income

Based on the analysis test of knowledge of mothers about nutrition with nutritional status of children, using spearman rho test ( $\alpha$  0.05) was obtained p Value 0.000 < 0.05 then H1 is accepted so that it can be interpreted that there is a relationship between mother knowledge about nutrition with nutritional status of children. coefficient correlation value of 0.590 means that the lack of knowledge of the nutritional status of children is also getting worse.

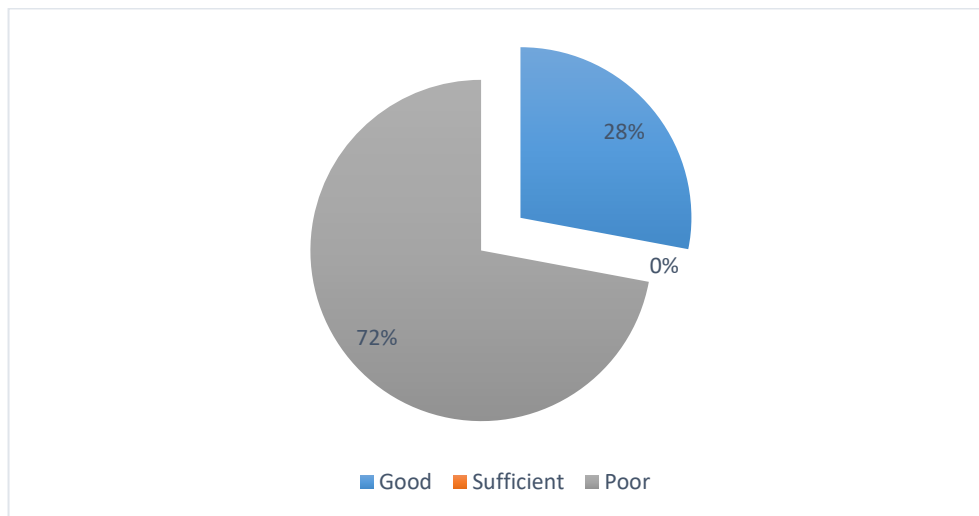


Diagram 5. Mother's Knowledge About Nutrition in Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang

Test analysis of the nutritional knowledge of mothers with early childhood development, test spearman rho ( $\alpha$  0.05) was obtained p Value 0.000 < 0.05 then H1 is accepted so that it can be interpreted that there is a relationship between mother knowledge about nutrition in early childhood development. 590 0.515 coefficient correlation value means that the lack of knowledge of the mother early childhood development will be increasingly at risk of delay

Based on the results, the p value 0.000, which means there is a relationship between knowledge and nutritional status and level of development in the work area PKM Integrated Health Post Tajinan Apel Malang regency. The above results are supported by research data knowledge of mothers about nutrition is mostly 53% less knowledge, toddler in Posyandu Apple Tajinan Health Center own growth with the status of anthropometry below the red line which is calculated by the formula Z score is malnutrition 27 infants (47%) and Malnutrition number 3 toddlers (5%) and early childhood development in more than half of Apple Integrated Health Post 34 infants (59%) is doubtful.

According Notoadmojo (2012) states that knowledge is the result of out and this happens after someone is doing the sensing. Based on Big Indonesian Dictionary (2011) knowledge is everything that is known to be associated with the learning process. This learning process is influenced by various factors from the inside, such as motivation and external factors in the form of means of information provided, as well as socio-cultural circumstances. Socio-economic status of a person will determine whether or not the necessary facilities available for the continuity of certain activities so that socio-economic status will affect knowledge. Age affects comprehension and reasoning power a person, but according to Agus, 2013 states that a person's IQ will decrease quite rapidly with age. The level of education affect the learning process, the higher the level of



education a person is more accepting of information. Conditions mothers in Integrated Health Post Apples are in the socio-economic conditions intermediate level down so it will affect mothers toddler in obtaining exposure information, limitation of infrastructure learning and the ability of mothers toddler in the provision and fulfillment of nutrition that is needed to grow and thrive, Sociodemographic conditions like these that can support the growth failure condition in toddlers.

Table 1. Frequency Distribution of Toddler in Apple IHC in Working Area of PKM Tajinan

General characteristics	total (F)	percentage (%)
Age		
0-12 Months	2	3.4
13- 36 Months	20	34.5
37-60 Months	36	63.1
Gender		
Boy	24	41.4
Girl	34	58.6
Hospital History		
Ever	28	48.3
Never	30	51.7
Exclusive breastfeeding		
Yes	41	48.3
Not	17	29.3
Birth History		
pre Term	12	20.7
term	42	72.4
Post Term	4	6.9
total	58	100

Apples Integrated Health Post childhood development in more than half of 34 infants (59%) is doubtful. The data above results are supported by a common data among others: children ages 0-12 months a number 2 (3.4%) and aged 13-36 months some 20 people (34.5%), history of pre-term birth 12 (20, 7%) and post-term 4 (6.9%), infants with a history of exclusive breastfeeding was not given a number of 17 infants (29.3%), infants with a history of illness a number of 28 people (48.3), mothers who do not work a total of 11 people (19%) and family income <Rp.1.000.000 number of 13 (22.4%).

Growth and development is very important for living organisms in an effort to preserve the survival and offspring. In general, growth (Growth) showed quantitative changes as a result of the maturation of the physical organ and system complexity nerve and muscle tissue. Changes can be measured validly growth through changes in the size, proportions change, the loss of the characteristics of the old and the emergence of new traits. Growth occurred simultaneously with the development. Development occurs progressively from phase to phase in a stable and qualitative nature characterized by physical readiness for action tertentu. perkembangan rated of cognitive, gross and fine motor skills, language and communication, as well as the ability of personal, social and emotional.

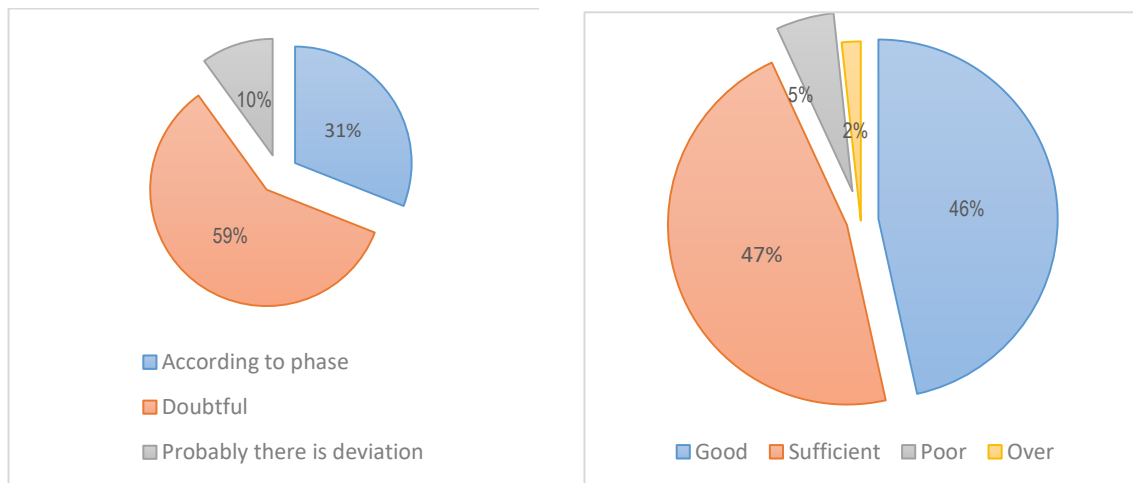


Diagram 6 and 7. Nutritional Status and Development of Toddler in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang

Acceleration of toddlers development influenced by many factors such as age, too young an age can affect an individual's ability to take action, history of illness or health conditions when screening can affect the outcome of the screening, supported also on other factors such as the condition of stunting and obstacles to the practice of parenting as minimal stimulation of development in children, due to lack of knowledge of the mother.

### CONCLUSION AND RECOMMENDATION

Based on the results of research show that there is a significant relationship between mother's knowledge about nutrition with nutritional status, growth and the incidence of stunting in children under five in IHC Apples village Jambearjo working area PKM Tajinan Malang regency, as evidenced by the p value 0.000 and there is a close relationship between variable as evidenced by coefficient correlation value between 0.5 to 0.7.

From the above results it is expected that health workers and cadres should Integrated Health Post toddlers can support government programs in the handling of cases of malnutrition, develop healthy living movement and provide health information in the form of counseling about nutrition, treatment and prevention of malnutrition in order to improve knowledge of mothers. Midwives and volunteers can cooperate better cross-program and cross-sectoral in handling cases of children malnutrition.

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