

Knowledge and parenting patterns with toddler's growth and development

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ABSTRACT

Many factors are related to the growth and development of children. The parent factors are important, such as knowledge and parenting pattern. The purpose of the study is to analyze the correlation between knowledge and parenting patterns with toddler's growth and development in Pre-school class in urban area of Srijaya of Palembang city within year 2017. This study is an observational research with a Cross-sectional study design; it was conducted in September to October 2017. This study was conducted in Pre-school class in urban area of Srijaya of Palembang city. The population was all toddlers who attended Pre-school Class in Srijaya Palembang in year 2017. Research Samples are all toddler who follow the Pre-school class in Srijaya Palembang in year 2017 that meet the criteria of inclusion and exclusion. This research using primary data. The instrument use questionnaire for knowledge and collection of biodata. For parenting variables we use Parenting Style Questioner (PSQ). In growth variable we do the measurement of body weight and height, while variable of development done by using KPSP. The result is there is correlation between mother's knowledge with child growth ($p=0.047$) and child development ($p=0.001$). There is relationship between parenting pattern with child growth ($p=0.047$) and child development ($p=0.001$). Conclusion: there is correlation between mother's knowledge with child growth and development and there is correlation between parenting pattern with growth and development of child.

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1. INTRODUCTION

Early age is a golden period of development. At that time there was a tremendous surge in child development that did not occur in the next period. Experts call it the golden age of development (golden age) [1]. More than 200 billion children under five in developing countries cannot reach potential developments [2]. These children have low schooling skills and have limited economies as adults. Loss of potential development is estimated as the caused of the deficit of 20% of income in adulthood [3]. Development is the level of ability of a child's individual function as a result of maturity of the nervous system and psychological reactions, not only determined by genetic (nature) or the environment (nurture), but more than a combination of both [4]. Progress can be defined as "progressive and continuous change (continuity) in the individual from birth to death [5]. Developments occur simultaneously with growth. Development is a construction that works together between biological, cultural and individual factors [6].

Data on the development of children is still difficult to obtain. This is different from child growth data (nutritional status) can be known. Based on the data, it is known that the prevalence is very underweight in the national year 2013 is still quite high at 5.3 percent, there is a decrease compared to 2010 (6.0 %) and 2007 (6.2%). Similarly, a wasted prevalence of 6.8 percent also showed a decrease of 7.3 percent (in 2010)

and 7.4 percent (in 2007) [7]. Overall, the prevalence of underweight and very underweight children decreased from 13.6 percent in 2007 to 12.1 percent in 2013. There are 17 provinces where the underweight prevalence is higher than the national rate [8].

Public health problems have been taken seriously when the underweight prevalence is between 10.0 and 14.0 percent, and is considered as critical when ≥ 15.0 percent [9]. In the year 2013, the national prevalence of underweight in children under five is still 12.1 percent, which means Indonesia's lean problems are still a serious public health problem [8]. Growth of children related to nutritional status based on the data above shows that nutritional status is still a serious problem in the community. Child development is also an important thing to note because if not detected since the early development, it cannot be known whether there is a problem of development in children or not. Although many researcher have been researching about the development of children.

There are 12 children from 93 students have problems at developmental levels that are not appropriate with pre-school age [10]. Another research showed that the relationship between parenting pattern with the development of pre-school age children with a value of p value=0.013 [11]. Various studies were conducted related to the development and growth of children but none has assessed both. Many factors are related to the growth and development of children. One of them is parent's factors that are knowledge and parenting pattern. Based on this background, the researchers will conduct a study entitled "The correlation between knowledge and parenting pattern with toddler's growth and development in pre-school class in urban area of Srijaya Alang-alang lebar district of Palembang City within year 2017".

2. RESEARCH METHOD

This study used an observational research design with a Cross-sectional study design. Independent variables and dependent variables were collected in one time [12]. The research was conducted in September-November 2017. The research was conducted in pre-school class in urban area of Srijaya Alang-alang lebar distric of Palembang city within year 2017. The study population is toddlers who follow the pre-school class in urban area of Srijaya Alang-alang lebar distric of Palembang city within Year 2017. Research samples are all toddlers who follow the pre-school class in urban area of Srijaya Alang-alang lebar `district of Palembang city within year 2017 that meet the criteria of inclusion and exclusion.

Sampling technique using non-probability sampling method is a consecutive sampling. Data in this research is primary data. The instrument used is a questionnaire for knowledge and collection of biodata. Questionnaire of knowledge revealed validity $r=0.444$, reliability $\alpha=0.955$. For favorable there are score 2 if true and score 1 if wrong. Un-favorable there are score 2 if wrong and score 1 if true. Highest score 40, lowest score 20. Good category: 31-40, not good: 20-30. Parenting variable is using Parenting Style Questioner (PSQ). Analysis on this research is univariate and bivariate analysis. Univariate analysis is to see the frequency distribution of each variable studied, while the bivariate analysis is using Chi-square test [12]. Child growth assessment height measurement, weight and Child development assessment with KPSP.

3. RESULT AND DISCUSSION

Research on the correlation between maternal education and parenting patterns with the toddler's growth and development in pre-school class in urban area of Srijaya Alang-alang lebar distric of Palembang city with in Year 2017 has been done to 30 toddlers. Against all subjects, basic data collection includes characteristics, height measurement, weight weighing, parenting style, child development.

3.1. Characteristics of research subjects

The numbers of research subjects are 30 toddlers who attend pre-school class located in urban area of Srijaya Alang-alang lebar distric of Palembang city within Year 2017 in accordance with the criteria of inclusion and exclusion. Characteristics of study subjects include sex, age of child, mother's age, mother's education, mother's job, father's education, father's job. These characteristics are presented in Table 1.

Based on Table 1 it can be seen that the proportion of respondent is the same as 50% of men and 50% of women. Mother's age and father's age are all >20 years old. Maternal education is mostly moderate education (53.3%); respondent partially unemployed (83.3%). Almost the same as maternal education more than half of education is moderate education (70%). 96.7% of fathers work. Development of children 63.3% accordingly, nutritional status of children 83.3% good nutritional status and 63.3% authoritative parenting patterns and knowledge of mother less than 36.7%. The correlation between mother knowledge and child growth can be seen in Table 2. Based on the Table 2, it can be seen that there is a meaningful correlation between the mother's knowledge about child's growth and development ($p=0.047$).

Table 1. Characteristics of respondent

No.	Variable	n	%
Sex			
1	-Male	15	50
	-Female	15	50
Age			
2	>20 Years old	30	100
Mother's Education			
3	-Basic	5	16.7
	-Middle	16	53.3
	-High	9	30
Job			
4	- Not work	25	83.3
	- work	5	16.7
Father's age			
5	>20 years	30	100
Fathers education			
6	-Basic	3	10
	-Middle	21	70
	-High	6	20
Fathers job			
7	- Not work	1	3.3
	- work	29	96.7
Mothers knowledge			
8	- less	11	36.7
	- well	19	63.3
Nutritions status			
9	- Obese	5	16.7
	- good	25	83.3
Child Development			
10	- doubt	11	36.7
	- corresponding	19	63.3
Parenting pattern			
11	- non authoritative	11	36.7
	- authoritative	19	63.3

Table 2. The relationship between mother's knowledge and children's growth

Mother's knowledge	Obesity	Growth		total	%	p*	X ²	Rp	95%CI	
		%	Good		%					
less	4	36.4	7	63.6	11	100				
well	1	5.3	18	94.7	19	100	0.047	4.852	10.286	0.972-108.807
total	5	16.7	25	83.3	30	100				

*Chi-Square test

Based on Table 3 it can be seen that mother's knowledge about toddler's growth and development relate to child development ($p=0.001$). A less knowledgeable mother would risk 38.25 times of her child to experience dubious developments 95% CI (4.591-318.655).

Table 3. Correlation between mother's knowledge and child development

Mother's knowledge	Child development	total	%	p*	X ²	Rp	95%CI
	doubt	%	corresponding	%			
less	9	81.8	2	18.2	11	100	
well	2	10.5	17	89.5	19	100	0.001
total	11	36.7	19	63.3	30	100	15.248

*Chi-Square test

This study also assessed the correlation between parenting pattern toddler's growth. The results can be seen in the Table 4. Based on Table 4 there is correlation between parenting pattern with toddlers growth ($p=0.047$). Children who get non-authoritative parenting 10.286x children are risk for obesity 95% CI (0.972-108.807).

The correlation between parenting and child development can be seen in Table 5. In this table, it can be seen that there is a correlation between parenting with the development of children ($p=0.001$), children who received non-authoritative parenting will experience a dubious child. The results showed that there is a relationship between knowledge and toddler's growth ($p=0.047$) and there is correlation between mother knowledge with toddler's development ($p=0.001$). This research is in line with Pratiwi's research

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(2014), that there is a correlation between knowledge and children's growth and development ($p=0.001$). This research is also in line with Munthofiah's research [13]. There is a significant correlation between mother knowledge with nutritional status (OR 4.02 CI 95% 6.29-46.09).

Table 4. Correlation between parenting pattern and children growth

Parenting pattern	Children growth				total	%	p*	X ²	Rp	95%CI
	Obesity	%	Good	%						
- non authoritative	4	36.4	7	63.6	11	100	0.047	4.852	10.286	0.972-108.807
- authoritative	1	5.3	18	94.7	19	100				
Total	5	16.7	25	83.3	30	100				

*Chi-Square test

The correlation between parenting and child development can be seen in Table 5. In this table, it can be seen that there is a correlation between parenting with the development of children ($p=0.001$), children who received non-authoritative parenting will experience a dubious child. The results showed that there is a relationship between knowledge and toddler's growth ($p=0.047$) and there is correlation between mother knowledge with toddler's development ($p=0.001$). This research is in line with Pratiwi's research (2014), that there is a correlation between knowledge and children's growth and development ($p=0.001$). This research is also in line with Munthofiah's research [13]. There is a significant correlation between mother knowledge with nutritional status (OR 4.02 CI 95% 6.29-46.09).

Table 5. Correlation between parenting pattern and child development

Parenting pattern	Child development				total	%	p*	X ²	Rp	95% CI
	doubt	%	corresponding	%						
- non authoritative	9	81.8	2	18.2	11	100	0.001	15.248	38.25	4.591-318.655
- authoritative	2	10.5	17	89.5	19	100				
Total	11	36.7	19	63.3	30	100				

Maternal knowledge is the level of understanding of mother about the children's growth. Maternal knowledge is very important in children who are undergoing growth period, because if the mother understands about child growth then, the child's growth will be optimal. This research is also related to Suryati. She found that there is a relationship of mother's knowledge about development of 38.25 times compared with children who received authoritative parenting [14].

Child development with the development process of children aged 4-5 years old. There is a correlation between mother's knowledge with nutritional status of children. Knowledge does play an important role in determining child development [15-16]. The knowledge of mothers in Makassar City in Antang Health Center about infant growth generally have enough knowledge. There are more mothers who have enough knowledge about babies' growth than mothers who have lack of knowledge. Parents have an important role to stimulate the potential of the child. Generally parenting task left to the mother and their knowledge based on their level of education. If the mother has high level of knowledge, they will be more active in finding information to improve skills in parenting [16].

There is relationship between mother's knowledge with the quality of parenting and children's development. Child development requires knowledge of mother. Mother is the main character in the development of the child because the mother is the person closest to her child. Mother's knowledge is needed so that mother can give right stimulation in accordance with growth stage and development to achieve optimal result [17-18]. This study shows that there is correlation between parenting pattern with growth ($p=0.047$) and parenting pattern with toddler's development ($p=0.001$). Parenting have relationship with the growth and development of children. Parenting patterns also correlated with nutritional status. Nutritional status is influenced by the parenting pattern that includes mother's attention/support to the child in the practice of feeding (complementary feeding in children as well as food preparation and storage), psychosocial stimulation, health care (hygiene practice and environmental sanitation and infant care in sick). A good parenting pattern will affect nutritional status. If the pattern off oster children in the family is good then the nutritional status will be good too [19].

Like wise with research that there is a relationship between parenting pattern with child development $p=0.044$ and research in PAUD Aisyiyah Nur'aini Ngampilan Yogyakarta showed that there is a relationship between parenting with social and language development [20-21]. There is relationship

between parenting pattern with the development of pre-school age children [$p=0.014$] [22]. Parenting pattern is the behavior that parents apply to children and is relatively consistent over time. This pattern depends on how the behavior and attitude of parents to their children, and the effect can be felt by the child in terms of negative or positive. Parenting style is a psychological construction that showed by parents to their children in the way they cared them. It includes all the activities in parenting, both individually and collectively. Parenting is the way or method of caring to make their children grow and develop into socially mature individuals [22, 25].

Parenting patterns is the interaction between parents and children in communicating, educating, nurturing, and continuing over time. With the right parenting applied to the children, they can interact with the environment about the world around and recognize the prevailing social life environment. According to Baumrind there are three parenting styles of parents: Authoritative, authoritarian, and primitive that used to nurture children based on Nurturing, Maturity demands, communication and control over child behavior. The attitude of parenting shows natural cultivation arising from the values taught, the treatment of the parents, the responsive behavior and the demand [6, 21].

Parenting by parents is the best way that parents can take in educating children as a manifestation of a sense of responsibility to the child [27-28]. Parental parenting to children is a form of interaction between children and parents during holding parenting activities which means parents educate, guide, and discipline and protect children to achieve maturity in accordance with prevailing norms in the local environment and society [22-24]. Quality parenting during early childhood is very important. Several studies have demonstrated significant associations between the quality of the parent-child relationship and wide variety of physical, emotional and social outcomes in children [29-31]. The quality of the parent-child relationship has an important effect on a wide range of child outcomes, including mental health throughout the life course [32] healthy lifestyles [33], physical health [34], social skills [35], and educational attainment [36].

7. CONCLUSION

The research confirmed that there is correlation between mother's knowledge with the toddler's growth and development. There is correlation between parenting patterns with the toddler's growth. There is a relationship between parenting pattern with the toddler's development in pre-school class, in urban area of Srijaya Alang-Alang Lebar distric, Palembang city, Indonesia.

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