

**THE RELATIONSHIP BETWEEN NUMBER OF FAMILY MEMBERS AND WEIGHT GAIN IN TODDLERS IN THE WORKING AREA OF THE BATU AJI COMMUNITY HEALTH CENTER**

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**ABSTRACT**

**Background :** The current state of nutrition for the Indonesian people is still not encouraging. Various nutritional problems such as malnutrition and malnutrition, lack of Vitamin A, iron deficiency anemia, disorders due to lack of iodine and excess nutrition (obesity) are still widely spread in cities and villages throughout the country. The factors that influence this situation include the level of family ability to provide food according to the needs of family members, family knowledge and behavior in selecting, processing and distributing food at the household level, the availability of clean water and basic sanitation facilities as well as the availability and accessibility of food. quality public health and nutrition services (Depkes RI, 2007). The purpose of this study was to determine the relationship between the number of family members and the weight gain of children under five in the Batu Aji Community Health Center.

**Method :** This research is an analytical survey or research that tries to explore how and why this health phenomenon occurs. Then analyze the dynamics of the correlation between phenomena or between risk factors and effect factors, by means of a cross sectional approach or collecting data at the same time. This research was conducted in the working area of Puskesmas Batu Aji, Posyandu Tulip Lestari, Posyandu Pelangi, and Posyandu Kasih, the working area of Puskesmas Batu Aji, Batam City. The population in this study were 596 mothers who had toddlers at Tulip Lestari Posyandu, Pelangi Posyandu, and Posyandu Kasih, the working area of Puskesmas Batu Aji, Batam City. Researchers want to measure the relationship between the dependent and independent variables using the Chi Square test. The statistical test criteria used Chi Square.

**Result :** It can be seen that the frequency of the number of family members most of the members of the extended family is 62 people (62%). that there are more respondents who have children above the red line as many as 71 people (82.6%). Chi-Square obtained a p-value of 0.542 because the p-Value > 0.05 means that Ho is accepted

**Conclusions :** It is known that there is no relationship between the number of family members and body weight under the red line for under-five children in the working area of the Batu Aji Health Center, Batam City with a p value = 0.542

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**Keywords: Family, Increase, Weight, Toddler**

**PRELIMINARY**

Toddlerhood is a process of rapid growth which requires attention and affection from parents and the environment. Besides, toddlers need balanced nutrition so that their nutritional status is good, and their growth process is not

hampered because toddlers are a vulnerable age group and need attention (Syatriani, 2011).

The World Health Organization (WHO) notes that at least 23% of children under five in the world are underweight or under the red line. In the United States, the number of children under

the red line is 12.8%. This number is still small compared to the Netherlands. In developing countries, the number of children under five who are under the normal weight is as much as 26% (WHO, 2013).

Indonesia is in the top five for cases of malnutrition. Nationally, it is estimated that around 4.5% of 22,000,000 children under five or 900,000 under five suffer from malnutrition or malnutrition. However, cases of malnutrition in children under five have decreased from 31% in 1990 to 17.9% in 2010. There are several areas that still have a lot of malnutrition, namely West Java 580,000 people, North Sumatra 300,000 people, Banten 179,000 people, Riau 140,000 people. person. South Sumatra 129,000 people, Lampung 128,000 people, South Sulawesi 124,000 people.

The current state of nutrition for the Indonesian people is still not encouraging. Various nutritional problems such as malnutrition and malnutrition, lack of Vitamin A, iron deficiency anemia, disorders due to lack of iodine and excess nutrition (obesity) are still widely spread in cities and villages throughout the country. The factors that influence this situation include the level of family ability to provide food according to the needs of family members, family knowledge and behavior in selecting, processing and distributing food at the household level, the availability of clean water and basic sanitation facilities as well as the availability and accessibility of food. quality public health and nutrition services (Depkes RI, 2007).

According to Faiza et al (2007), there is a significant relationship between eating patterns and the incidence of malnutrition. Families with poor dietary habits had a 12.8 times chance of suffering from malnutrition compared to children who came from families with good eating habits. However, according to Mulyaningsih (2008), there is no significant relationship between the diet of toddlers and the nutritional status of toddlers. The diet that is used by parents is a major milestone in the occurrence of nutritional problems. Toddlers often experience a difficult phase of eating, which can interfere with their growth and development. This is because the amount and nutrients that enter the body do not match their needs, which will give rise to malnutrition problems and rush

According to data from the Batam City Health Office in 2017 regarding the coverage of services for children under five by sex in the work area of the Puskesmas in Batam City, it is that the highest number of toddlers is at the Batu Aji Health Center in Batam City with 17,851 children under five (Batam City Health Office, 2017).

According to research by Suhendri (2009) regarding the factors related to the nutritional status of children under five at Sepatan Public Health Center, Sepatan District, Tangerang Regency in 2009, it was found that the age of toddlers who experienced malnutrition was mostly at the age of 13-36 months, namely 60.7%, Mother's education is low ( $\leq$  SLTP), namely 77.6%, mothers with good knowledge are 97.2%, from families whose mothers do not work at 89.7%, family income is still low, namely as many as 105 people or around 98.1%.

Based on data from Puskesmas Batu Aji 2017, there are four villages, namely Bukit Tempayan with 2531 toddlers, Buliang with 6441 toddlers, Kibing with 4298 children under five and Tanjung Uncang with 4581 under five. Buliang Village, namely 6411 toddlers. But the toddlers who experienced the highest malnutrition were in Kibing Village with a total of 4298 toddlers

The purpose of this study was to determine the relationship between the number of family members and the weight gain of children under five in the Batu Aji Community Health Center

### RESEARCH METHODS

This research is an analytical survey or research that tries to explore how and why this health phenomenon occurs. Then analyze the dynamics of the correlation between phenomena or between risk factors and effect factors, by means of a cross sectional approach or collecting data at the same time. This research was conducted in the working area of Puskesmas Batu Aji, Posyandu Tulip Lestari, Posyandu Pelangi, and Posyandu Kasih, the working area of Puskesmas Batu Aji, Batam City. The population in this study were 596 mothers who had toddlers at Tulip Lestari

Posyandu, Pelangi Posyandu, and Posyandu Kasih, the working area of Puskesmas Batu Aji, Batam City. Purposive Sampling is a sample determination technique by selecting a sample from among the population according to what the researcher wants. The measuring instrument in this study used interviews and questionnaires to mothers who had toddlers in a guided manner. Researchers want to measure the relationship between the dependent and independent variables using the Chi Square test. The statistical test criteria used Chi Square

**RESEARCH RESULT**

**Table 1 Based on the number of family members in mothers under five in the working area of the Batu Aji Community Health Center, Batam City**

Number of family members	N	(%)
Big	62	62
Small	24	24
<b>TOTAL</b>	<b>90</b>	<b>100</b>

It can be seen that the frequency of the number of family members most of the members of the extended family is 62 people (62%).

**Table 2 Based on KMS for mothers under five in the working area of Puskesmas Batu Aji, Batam City**

KMS	N	(%)
Weight Below the Red Line	15	17,4
Weight Above The Red Line	71	82,6
<b>TOTAL</b>	<b>86</b>	<b>100,0</b>

It can be seen that there are more respondents who have children above the red line as many as 71 people (82.6%)

**Table 3 Relationship between number of family members and body weight below the red line for children under five in the working area of Puskesmas Batu Aji, Batam City**

Number of Family Members	KMS				Total	P – Value
	Weight Below the Red Line		Weight Above The Red Line			
	N	%	N	%		
Small	3	4,2	21	19,8	24	0,542
Big	12	10,8	50	51,2	62	
<b>Total</b>	<b>15</b>	<b>15</b>	<b>71</b>	<b>71</b>	<b>86</b>	<b>100</b>

The status of the number of family members with weight below the red line for children under five is obtained, 24 families who have family members ≤ 4 people, where there are 21 families with under the red line (19.8%) and those with under-five children under the red line. above the red line 3 people (4.2%), and 62 family members ≥ 4 people, where those who have children under the red line 12 (10.8%) and those who have children under the red line are 50 people (51 , 2%) Chi-Square obtained a p-value of 0.542 because the p-Value > 0.05 means that Ho is accepted, it can be concluded that there is no significant relationship between the number of family members and the weight of children under the red line in the region. Batam City Health Center Work in Batu Aji

**DISCUSSION**

The results of this study are different from those of Miko (2003) and Kalsum (2005). Miko's research (2003) shows that the incidence of malnutrition in children with ≥ 5 family members is more (35.9%) compared to children whose number of family members is ≤ 4 people (9.1%) in Bojong Asih District, Tasikmalaya Regency.

However, the number of family members can also affect the nutritional status of children under five in the household concerned. The larger number of family members without being followed by an increase in the amount of income will worsen the nutritional status of the family as a whole. Due to the large number of children in families with sufficient socioeconomic conditions, it will result in reduced attention and

affection received by the children. This is especially so if the child is too close.

The results showed that from the results of the Chi Square test, the p value was 0.542 to  $p > 0.05$ . This proves that there is no significant relationship between the number of family members and body weight under the red line in children under five. Where the respondents who have family members  $\leq 4$  people are 24 families, where the families who have children under the red line are 3 people (4.2%) and those who have children under the red line are 12 people (19.8%), and members  $\geq 4$  people, where those who have children under the red line 12 (10.8%) and those who have children under the red line are 50 people (51.2).

The results of this study are different from those of Miko (2003) and Kalsum (2005). Miko's research (2003) shows the incidence of malnutrition in children with  $\geq 5$  family members (35.9%) compared to children whose number of family members  $\leq 4$  people (9.1%) in Bojong Asih District, Tasikmalaya Regency.

The results of this study concluded that the number of family members did not affect the nutritional status of children under five. However, the number of family members and the number of children under five in the family will affect the level of food consumption, namely the amount and distribution of food in the household. With a large number of family members without being accompanied by an unequal distribution of food, it will cause the children under five in the family to suffer from malnutrition.

However, the number of family members can also affect the nutritional status of children under five in the household concerned. The larger number of family members without being followed by an increase in the amount of income will worsen the nutritional status of the family as a whole. Due to the large number of children in families with sufficient socioeconomic conditions, it will result in reduced attention and affection received by the children. This is especially so if the child is too close.

Whereas in families with less socioeconomic conditions, the large number of children will result in not only a lack of love and attention to children, but also primary needs such as food, clothing and housing are not fulfilled. So that the

number of siblings is very influential on the nutritional status of children.

## CONCLUSION

It is known that there is no relationship between the number of family members and body weight below the red line in children under five in the Work Area of Puskesmas Batu Aji, Batam City with a p value = 0.542

## SUGGESTION

For the posyandu, from the results of this study, it is hoped that it can be used as input or material for thoughts and provide knowledge about nutrition to mothers of toddlers and are advised to continue to collaborate with local health workers or puskesmas to continue providing education about nutrition

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