# RELATIONSHIP BETWEEN NUTRITION STATUS, KNOWLEDGE WITH PHYSICAL ACTIVITY 24 HOUR PREGNANT WOMAN TRIMESTER III IN 5 PUSKESMAS KOTA BENGKULU

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#### Abstract

The study entitled Relationship Between Nutrition Status, Knowledge Activity with 24 Hour Physical Activity aims to Analyze the relationship between nutritional status with 24 hour physical activity, analyze the relationship of Knowledge of Activity with 24 Hour Physical Activity and analyze relationship result of Nutrition Status, Knowledge of Physical Activity 24 hours of pregnant women Trimester III at 5 public health centers Bengkulu City. Methods This study used an observational analytic, cross-sectional research design. The sample of this research is pregnant mother of Trimester III which amounted to 107 people with technique of taking sample of consecutive non random sampling. Data were collected by interview using questionnaire and data Card Mother and Child, then tested using Chi Square analysis. There was no relationship between nutritional status (p = 0.432), age (p = 0.941), parity (p = 0.148) and age (p = 0.584) with 24 hour physical activity. However, there is a relationship between knowledge and physical activity 24 hours (p = 0.016). The results of statistical tests showed that nutritional status does not have significant relationship with physical activity 24 hours while knowledge has a significant relationship with physical activity 24 hours. Pregnant women are expected more often to follow integrated service station held at public health centers so that condition of fetus more controlled.

Keywords: Nutritional status, Knowledge of activity, Physical activity.

## PRELIMINARY

Nutritional status is a measure of success in the fulfillment of nutrients to be indicated by weight and height. Nutritional status is also defined as the health status generated by the balance between need and nutrient input. Nutritional status is influenced by food intake and disease especially infectious diseases. According to Yongki (2009) history of pregnant women's nutritional status becomes an important factor to the growth and development of the fetus.

One of the factors that affect nutritional status is physical activity. Excessive energy intake and not balanced with balanced energy expenditure (with less physical activity) will lead to weight gain (Hidayati et al, 2010). Physical activity is important for the health of pregnant women to perform daily activities. Physical activity is divided into three levels ie light, moderate and heavy physical activity. Perform regular physical activity has a significant protection against the possibility of contracting several diseases. Conversely lifestyle without motion is known to risk the occurrence of these things (Subardja, 2004). Behavior of people who understand the meaning of health will seek to be able to withstand various diseases through various attempts made, for example by doing physical activity or sports. Various related studies from the results of a predecessor study on the Status of Nutrition with physical activity. According Zaif (2016) Based on the results of this study can be concluded that there is no significant relationship between maternal nutritional status history during pregnancy based on the size of LILA and weight gain Trimester III.

Knowledge and attitudes of pregnant women on physical activity during pregnancy can be influenced by the delivery of health education provided in conveying information about the importance of physical activity during pregnancy. According Notoadmojo (2012) health education is any effort planned to influence other people, either individuals, groups, or communities, so they do what is expected by the perpetrators of education or health promotion. Physical activity is any movement of the body produced by skeletal muscles that require energy expenditure Almatsier (2011). Physical activity in everyday life such as work, sports, caring, doing homework, or other activities. Physical activity that is absent (lack of physical activity) is an independent risk factor for chronic disease, and is overall estimated to cause death globally (WHO, 2008).

## **RESEARCH METHODS**

This type of research is observational with crossectional approach. The independent variable consists of nutritional status and knowledge and the dependent variable is 24 hour physical anktifitas. This research was conducted in 5 health centers of Bengkulu city. The sample in this study was 107 pregnant women in 5 health centers of Bengkulu city. The respondent characteristic data were obtained by direct interview using questionnaire. The anthropometric data is derived from the measurements of body weight, height and LILA.

Data analysis using SPSS for Windows version 17.0. include:

- 1.Descriptive analysis Descriptive analysis is obtained by tabulating the research data by using the frequency distribution of each research variable. The data included are respondent's identity, respondent's nutritional status, respondent's knowledge and 24 hour physical activity.
- 2. Analytical analysis Analytical analysis to test the correlation of each research variable. Analytical analysis used to test the relationship between nutritional status, knowledge with physical activity 24 hours pregnant women. Before testing the relationship is done normality test first with Kolmogorov Smirnov test showed that the results are normally distributed, then Chi square test statistic.

#### **RESULTS AND DISCUSSION**

Characteristics of research subjects in the form of nutritional status, knowledge of activities and activities of 24 hours pregnant women. Description of research results explain the overall research data collected are dependent variables, independent variables and characteristics of research subjects by clarifying into the table. This research data obtained research from questionnaire and other data retrieval, from 107 data subject that have been collected.

# **1. NUTRITION STATUS**

	Table 1.										
]	Frequency distribution of nutritional status										
	NO	Nutritio	nal	N	f(%)						
	NU	status		14							
	1	good	>23	24	22%						
	2	Bad	<23	83	78%						

24 pregnant women (22%) samples with mild nutritional status, 83 pregnant women (78%) samples with normal nutritional status.

## **2. KNOWLEDGE**

Table 2.									
Distribution of frequency of knowledge									
No	knowledge	n	f(%)						
1	Good	45	42%						
2	Bad	62	58%						

45 people ( $42\sqrt{6}$ ), while respondents less 62 people ( $58\sqrt{6}$ ). From the above data shows less knowledge of respondents to knowledge because most respondents have different education history.

# **3. PHYSICAL ACTIVITY 24 HOURS**

Table 3.									
The frequency distribution of physical activity is 24 hours									
-	NO	physical	Ν	f(%)					
_	110	activity	11	1(70)					
	1	Very Light	38	36%					
	2	Light	35	33%					
	3	Medium	34	32%					
	4	Weight	_	_					

4 Weight - -38 people (36%) samples with very light physical activity, 35 people (33%) of samples with mild physical activity and 34 people (32%) samples with moderate physical activity.

# C. Relationship of Nutritional Status with 24 Hours Physical Activity

Table 4.

Frequency distribution of nutritional status with 24 hour physical activity

Variable	Very light		Light		Medium		Weig ht	Р
S	Ν	%	n	%	n	%		
Nutritio nal Status								0.43 2‡

Less	6	50.0%	4	33.3 %	2	16.7%	-
Good	33	33.7%	32	33.7 %	31	32.6%	-

Chi-Square test results on the above layout obtained 0.432 (p <0.05) of the results were decided results no significant relationship between nutritional status with physical activity. Indicates nutritional status in pregnant women Trimester III in Bengkulu city that happened less nutritional status with very light physical activity by 50%, light physical activity 33% while medium 16.7% and for heavy physical activity is not present at all. Good nutrition status with very light physical activity by 33%, mild by 33.7% while moderate at 32.6% and weight no physical activity performed by mother.

# D. Knowledge Relation With 24 Hours Physical Activity

Table 5.										
Distrib	Distribution of frequency of knowledge with physical ac									hours
	Variables	Very light		Light		Medium		W ei gh t	Р	
		n	%	n	%	n	%			
	Pengetahuan									
	Kurang	16	25.8%%	27	43.5%	19	30.6 %	-	0.0 16	
	Baik	22	48.9%%	9	20.0%	14	31.1 %	-	*	

Chi-Square statistical test results obtained value P = 0.016 (p <0.05) with the results obtained determined that there is no significant influence between knowledge of physical activity of pregnant women Trimester III in Bengkulu City.

## E. Weakness of Research

The weaknesses of this study are of little research time so it is not possible to collect information on the details of the food consumed by pregnant women, daily activities, history of pregnancy and childbirth and illness suffered by the mother. Limited posyandu time and the absence of research subjects make the researcher must visit the research subject houses under integrated service station one by one. Limited study time does not allow the researcher to choose a large research site, so that the subject can be obtained more.

## CONCLUSIONS AND SUGGESTIONS

## A. Conclusion

1. In this study there were 24 pregnant women (22%) samples with mild nutritional status, 83 pregnant women (78%) samples with normal nutritional sattus.

- 2. In this study good knowledge 45 people (42%), while respondents less 62 people (58%). From the above data shows less knowledge of respondents to knowledge because most respondents have different education history.
- 3. There is no significant relationship between nutritional status and physical activity 24 hours. Chi-Square statistical test results 0.426. Because of the asymp value. Sig 0.426>0.05
- 4. There is a meaningful relationship between knowledge of physical activity performance with 24 hour physical activity. Chi-Square statistical test results asymp value. Sig 0.016 <0.05 there is a significant relationship between the group being tested.

# **B.** Suggestions

- 1. Need to do further research on other factors that affect physical activity such as age, family history, stress and pregnancy exercise.
- 2. It is recommended for pregnant women to exercise regularly to increase physical activity.
- 3. For Educational Institutions, as input materials to improve knowledge and as an accurate reference on the knowledge relationship of pregnant women with physical activity 24 hours pregnant women.
- 4. For Researchers Furthermore, should further investigate further research by adding variables related to sports activities related to physical activity of pregnant women.

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