# FACTORS ASSOCIATED WITH ELDERLY NUTRITIONOUS STATUS AT WERDATAMA POSYANDU TEMBILAHAN YEAR 2014

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#### Abstract

An elderly person is someone who reached age 60 or above. The changes in physiology function can reduce the food absorption which resulted in lower nutrition status for elderly people. Fatmah, 2010 explained that 3.4% elderly people in Indonesia who live in the city suffer for low nutrition is 28.3%, excess weight is 6.7%, obesity is 3.4% and ideal weight is 4.2%. Some factors which caused nutrition problems according Fatmah (2010) are disturbance of food taste, malfunction of disgestion, food consumption habit, lifestyle, some diseases and knowledge. This research aims to know the relationship among, knowledge factor, gender, and smoking habit towards the nutrition status on elderly people in "Posyandu" of Werdatama in Tembilahan in 2014. This research is analytic quantitative with cross-sectional design. The total sample was 94 by using quota sampling method. The research was hold on June 2014 in "Posyandu" of Werdatama Tembilahan. The collecting of data using questioner (primary data). The data was analysised by using *chi-square* test. The research result showed that gender have relationship toward nutrition status on elderly by score of P value 0.005 (OR= 4,196 (CI 95% 1,475-11,935)), smoking habit have relationship toward nutrition status on elderly person by score of P value 0.002 (OR= 4,750 (CI 95% 1,701-13,263)) and there have relationship between knowledge toward status nutrition on elderly person by score of P value 0.006 (OR=4,227 (CI 95% 1,441-12,400). For that reason, It is suggested to the health worker to improve their services on elderly posyandu and motivate the male elderly people to actively participate in posyandu activity as well as counseling regarding the nutrition status of elderly

Keywords: gender, smoking habit, knowledge, elderly nutrition status

# **BACKGROUND**

An elderly (Lansia) is a natural process that will inevitably be experienced by everyone who was blessed with longevity. Someone is called elderly if age has more than 60 years. The results of the national socio-economic survey in 2012 recorded a population of approximately 18.55 million elderly people, or 7.78 percent of the total population of Indonesia. This number increased from year to year. An increasing number of the elderly population has a positive or negative impact to the life of elderly.

The increase in the elderly population indicates the success of the development in the health sector is mainly due to increased life expectancy will increase the number of elderly people. On the other hand an increase in the number of elderly people will give a lot of consequences for life. The consequences may involve health problems such as degenerative diseases, metabolic diseases and psychosocial disorders ( Fatmah, 2010).

The elderly had many changes as an increasment of the age both changes structure and body functions, cognitive ability and mental status changes, changes in the structure and function of the body of the elderly occurs in almost all systems of body, such as the systems of nerve, respiratory, endocrine, cardiovascular and muscuskeletal capabilities. One of the changes occurred in the structure and function of the gastrointestinal system.

(Herry, 2008) in his study explained that changes in the gastrointestinal system can cause a decrease in the effectiveness of utilization of nutrients which can cause nutrition problems typical of the elderly. Nutrition problems that occur on the elderly may be low nutrition or excess nutrition.

(Fatmah, 2010) explains that the elderly in Indonesia who live in urban areas in a state of low nutrition is 3.4%, less weight 28.3%, excess weight 6.7%, obesity is 3.4% and ideal weight is 42.4%. (Fatmah, 2010) explains that the risk factor for low nutrition on the elderly is caused by several factors such as low appetite, impaired dentition, dispagia, impaired function of the sense of smell and taste, respiratory, gastrointestinal, neorologi, infection, disability physical and other diseases such as cancer. In addition, the lack of knowledge of both food intake and the presence of physiological factors such depression is a risk factor malnutrition. While excess nutrition in the elderly usually related with lifestyle and

excessive consumption patterns even from a young age children.

Posyandu of elderly as one of the health services for the elderly are recorded and monitored to determine the threat of early disease or health issues including nutrition and developmental problems in Posyandu of Werdatama.

This research aims to determine the relationship of gender, smoking habit and knowledge of nutrition status of the elderly in Posyandu of Werdatama in 2014.

### **METHODS**

This research is *analytic* by using *cross* sectional design. The research was conducted on June 2014 in "Posyandu" Werdatama Tembilahan. The population in this study is targeted at the elderly who are in Posyandu of Werdatama Tembilahan both male and female. By using a sample size calculation to estimate the proportion of absolute deviation obtained 94 samples. These samples were selected by *quota* sampling technique.

The data was collected by interviewing respondents in accordance with the list of questions in questioner. Furthmore after the interview then conducted weighing and height measurement to assess the nutrition status based calculation of Body Mass Index.

Data processing was carried out in the stages of *editing*, *coding*, *processing*,

cleaning and tabulating. Data analysis was performed namely univariate analysis, bivariate analysis with using chi square test.

### **RESULTS**

# **Univariate Analysis**

Among the three variables is known that there is no homogeneous variables (one category has a value <15%). Variable risk that one category of > 50%, is gender, smoking habit and knowledge.

Table 1
The resume of Univariate Analysis Result

No	Variabel	<b>(f)</b>	Percentage (%)		
1.	Gender				
	Male	23	24.5		
	Female	71	75.5		
Total		94	100		
2.	Smoking Habits				
	Smoke	28	29.8		
	Do not smoke	66	70.2		
Total		94	100		
3.	Knowledge				
	Less	20	21.3		
	Good	74	78.7		
Total		94	100		
4.	Nutrition Status Low Nutrition and				
	Excess Nutrition	21	22.3		
	Normal Nutrition	73	77.7		
Total		94	100		

## **Bivariate Analysis**

Table 2 shows that gender, smoking habit and knowledge have a significant relationship to the nutrition status on elderly.

- 1. Elderly sex with male have a chance to 4.196 times for low or excess nutrition status (OR = 4.196 (95% CI 1.475 to 11.935).
- 2. Elderly who smoke have a chance to 4,750 times for low or excess nutrition status (OR = 4.750 (95% CI 1.701 to 13.263).
- 3. Elderly who has less in knowledge have a chance to 4.227 times for low or excess nutrition status (OR = 4.227 (95% CI 1.441 12.400).

Table 2
The resume of Bivariate Analysis
Result

No	Variabel	Nutrition Status Elderly			OR/				
		Excess Nutrition and Low Nutrition		Normal Nutrition		Total		(CI 95%	P (value)
		(f)	(%)	(f)	(f)	(N)	(%)		
	Gender								
1	Male	10	43.5	13	56.5	23	100	4.196	0.005
	Female	11	15.5	60	84.5	71	100	(1,475- 11,935)	
	Total	21	22.3	73	77.7	94	100		
	Smoking Habit								
	Smoke								
2	Do not smoke	12	42.9	16	57.1	28	100	4.75	0.002
		9	13.6	57	86.4	66	100	(1.701- 13.263)	
	Total	21	22.3	73	77.7	94	100		
	Knowledge								
3	Less	9	45	11	55	20	100	4.227	0.006
	Good	12	16.2	62	83.8	74	100	(1.441- 12.400)	
	Total	21	22.3	73	77.7	94	100	· 	

### **DISCUSSION**

Data quality is determined by the relevance of the data, data validation, the accuracy and completeness of the data arrival time, while the accuracy of the data includes the data relevance, validity and reliability of the data (Lapau, 2007). The results of this study indicate the relevance of the data because of the correspondence between the data collected with the achievement of specific objectives and hypothesis verification.

External validity of a study when the study sample was drawn from a population with *probability sampling*. In this research determined how many samples are required (set quota). The quota that is used as the basis to take the necessary sample unit. Any member of the population are not taken an important issue allotments or *quotum* are met, thus no external validity in this study. While internal validity is composed of *random error* and *systematic error*.

Reliability is how much the instrument can measure consistently over time and person, in this study only once thus the reliability of the measurement data by the data in the study can not be determined (Lapau,2012)

The results of research conducted by the writer in posyandu of werdatama Tembilahan, the results showed that male gender on the nutrition status of groups of excess and low as many as 10 people 43.5%, smaller than the normal nutrition group as many as 19 people (79.2%). The results of statistical tests based on the relationship of gender on the nutrition status of the elderly in the Posyandu of Werdatama Puskesmas Gajah Mada 2014 obtained p value = 0.005 which is the value less than 0.05 means that there is a relationship between the gender to nutrition status on the elderly with a value OR is 4.196 (95% CI 1.475 to 11.935) means that there is a significant relationship between the gender on the nutrition status of the elderly. Which elderly with male gender have the opportunity to 4.196 times the nutrition status of low or excess.

The results of the research above in accordance with the theory that elderly male require more calories as protein and fat. This is due to the different levels of physical activity in male and female.

The elderly who smoke on the nutrition status of groups of excess or low as many 12 people (42.9%), smaller than the normal nutrition group as many as 16 people (57.1%). The results of statistical tests based on the relationship of smoking habits on the nutrition status of the elderly in Posyandu of Werdatama Puskesmas Gajah Mada 2014 p value = 0.002 which is a small value of 0.05 means that there is a relationship between smoking habits on

nutrition status on the elderly with OR is 4,750 (95% CI 1.701 to 13.263) means that there is a significant relationship between smoking habits on nutrition status on the elderly. Which elderly who smoke have a chance to 4,750 times low or excess nutrition status.

Smoking may reduce the ability to smell and taste food as well as interfering with the absorption of vitamin C (Arisman, 2009). This theory supports the research, that smoking can affect nutrition status.

Lack of knowledge on the nutrition status of groups of excess and low as many as 9 people 45.0%, smaller than the normal nutrition group as many as 11 people (55.0%). The results of statistical tests based on the relationship of knowledge on the nutrition status of the elderly in Posyandu of Werdatama in obtained p value = 0.006 which is the value less than 0.05 with OR is 4.227 (95% CI 1.441 to 12.400) means that there is a significant relationship between knowledge on the nutrition status of the elderly. Which the elderly who has less in knowledge have the opportunity to 4.227 times the nutrition status of low or excess.

A person with knowledge that is based on good nutrition will pay attention to the nutrition state of each of the food that they consume, with the aim that these foods provide the appropriate nutrition needed by the body is often called a balanced nutrition so there is no nutrition problems.

### **CONCLUSION**

Based on the chapter describe the results of research and discussion chapters, then the researcher conclude as follows:

- Gender male can lead to low nutrition or excess 4,196 times than the female gender
- 2. The smoking habit can lead to low nutrition or excess 4,750 times than that do not have the smoking habit
- 3. The lack of knowledge can lead to low nutrition or excess 4,227 times than good knowledge.

# **REFERENCES**

Arisman (2009). *Gizi Dalam Daur Kehidupan : Buku ajar Ilmu Gizi,* Jakarta :EGC

Hasil Survei Sosial Ekonomi Nasional (2012).

Departemen Kesehatan RI (2003).Tatalaksanaan Gizi Usia Pedoman Lanjut Untuk Kesehata. Tenaga Jakarta Direktorat Bina Gizi Masyarakat Ditjen Binkesmas Depkes Ri

Fatmah (2010). *Gizi Usia Lanjut*. Jakarta : Erlangga

Herry (2008). Hubungan Karakteristik, Gaya Hidup dan Asupan Faktor Gizi Terhadap Status IMT pada Lansia di Tiga Posyandu Kelurahan Rangkapan Jaya Lama Kecamatan Pancoran Mas, Kota Depok, 2008. (Skripsi). Depok: Fakultas Kesehatan Masyarakat di Universitas Indonesia

Lapau (2012). Metode Penelitian Kesehatan, Metode Ilmiah Penulisan Skripsi, Tesis, dan Disertasi, Yayasan Pustaka Obor Indonesia: Jakarta

Notoatmodjo (2010). *Metodologi Penelitian* Kesehatan. Jakarta : Rineka Cipta