Factor Frequency For The Pre-Elderly And Elderly At Posyandu Elderly X Yogyakarta

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ABSTRACT

Background: Factors which are directly related to the food frequency is age, where at the age of 50 years the human body starts with health problems due to decreased organ function that affect to the food frequency and environment. In this condition of degenerative disease began to emerge, such as: arthritis, osteoporosis, diabetes mellitus, heart disease, hypertension, cancer, kidney, Alzheimer's, digestive disorders and endocrine disorders/metabolic. Objective: To find out factors related to the food frequency for the pre-elderly and elderly at Posyandu Elderly Hatsera Kampung Gendeng RW 17 Sub Baciro, Gondokusuman District Yogyakarta. Methods: This study was based on observational research with cross sectional design, aimed to explore the factors that affect the variables that exist (education, income, self-sufficiency and types of degenerative diseases). The research sample was pre-seniors and seniors who met the study criteria. Data were analyzed by chi-square test. Total samplings were 61 people. Results: The samples were consisting of pre-elderly and elderly aged 45-57 years were 29 people (47.5%) and aged 58-69 years were 32 people (52.5%). Analysis of data with the level of significant 95% (α= 0,05) obtained are: 1. There was correlation between education with food frequency (p=0.045), the significance of these variables were moderate (c=0.322). 2. The correlation between income with food frequency (p=0.047), the significance of these variables were moderate (c=0.397). 3. There was correlation between self-sufficiency with food-frequency (p=0.003), the significance of these variables were moderate (c=0.458). 4. There was correlation between types of degenerative diseases with food-frequency (p=0.016), the significance of these variables were moderate (c=0.365). Conclusion: There were significant correlation between levels of education, income, self-sufficiency, and types of degenerative diseases with food frequency.
Key words: Food frequency pre-elderly and elderly, education, income, self-sufficiency, types of degenerative diseases.

A. Background

The life cycle includes the process of growth and development, during this process many changes occur in the human body, one of the stages in the process is old age. Aging is a normal process that begins at conception and ends at death. These changes include physiological changes, cognitive changes, and psychological changes (Soekirman et al, 2006).

Population aging has taken place rapidly, especially in developing countries. In Indonesia in 2000 the proportion of the elderly population was 7.18% and in 2010 it increased by around 9.77%, while in 2020 it is estimated that the proportion of elderly people from the total population of Indonesia can reach 11.34%. Currently, the elderly population is around 24 million and in 2020 it is estimated that there will be around 30-40 million people (Menkesra, 2007).

The increase in life expectancy is influenced by: advances in health services, decreased infant and child mortality, increased surveillance of infectious diseases. The number of elderly people worldwide is currently estimated at ± 500 million with an average age of 60 years and it is estimated that by 2025 it will reach 1.3 billion (Bandiyah, 2009).

One way to increase life expectancy for the elderly is to pay attention to diet. Diet can be interpreted as a system, a way of working or an effort to do something. A healthy diet can be interpreted as a way or effort to carry out regular and healthy

eating activities. A guideline for individuals, families, or communities about healthy eating patterns is needed because these eating patterns are formed from childhood which will carry over to old age (Sari, 2010).

The frequency of eating for an elderly person is; small portion eating pattern, limited calories (1,500 or 1,700 kcal), so that body weight is within normal limits, otherwise evenly distributed throughout the day with the right time and eating schedule such as: 3x/day main meal, 2x/day snack, and 3 hours apart eat (Hardjomarsono, 2011).

Factors related to the frequency of eating is age, where at the age of 50 years and over the body usually has problems with health due to decreased body functions and affects food and the surrounding environment. Types of diseases or health disorders that often appear at the age of 50 years and over, among others: arthritis (rheumatism), brittle bones, diabetes mellitus, heart disease, hypertension, insulin resistance, problems, memory, lung disease, cancer, kidney, enlarged prostate, tuberculosis (Mycobacterium Tuberculosis), eye disease, Alzheimer's (senile), digestive disorders, and endocrine or metabolic disorders (Hardjono, 2011).

Silalahi (2006), said that at the age of 30 years, the function of the human body is still working optimally, but at the age of over 30 the aging process will begin and affect the frequency of diet, environment, lifestyle, and degenerative diseases.

The results of a preliminary study conducted on 26 November 2011, 7 and 10 January 2012, through interviews and observations obtained data on the number of pre-elderlies aged 45-59 years as many as 78 people and the elderly 60-69 years as many as 26 people, the number of elderly aged 45-69 years is 104 people. Of these 104 people, there are 3 people who have hypertension, 3 people with diabetes mellitus, and 4 people with hyperuricemia, taken from the cadre recapitulation book and (KMS) Card Towards Health (2011).

The general description of the frequency of eating from the interviews, namely, for the pre-elderly who are still productive and tied to the work service, the average eating frequency is three times a day, while the elderly who are not productive (retired) experience a decrease in the frequency of eating up to with an interval of up to two times a day (breakfast tends to be replaced with market snacks and sweet tea).

Based on the existing preliminary study data, the researcher is interested in conducting research on factors related to the frequency of eating in the pre-elderly and the elderly at Posyandu Lansia X Yogyakarta.

B. Research Method

This type of research is observational with a cross sectional design. The research was carried out at Posyandu Elderly X Yogyakarta, for 3 months. The population of this study were pre-elderly and elderly aged 45-69 years. The samples of this study were pre-elderly and elderly who met the inclusion criteria, the required sample size was: 57 people. The sampling

technique was done proportionally (simple random system). The independent variables consist of respondents' characteristics which include: education, income, independence and types of degenerative diseases. The dependent variable is the diet of the pre-elderly and the elderly. Data processing techniques are editing, coding, scoring and tabulating. The data analysis technique is univariate and bivariate analysis.

C. Results

Characteristics of Respondents

Characteristic	Detail	Frequency	Percentage
Age	45-57 58-69	29 31	47,5 52,5
Gender	Male Female	20 41	32,8 67,2
Education	Elementary Middle High	22 17 22	36,1 27,9 36,1
Income	≥ UMR 808.000., < UMR 808.000.,	41 20	67,2 32,8
Independent	Independent Dependent	48 13	78,7 21,3
Degenerative Disease	Yes No	27 34	44,3 55,7
Total		**61**	**100,0**

The characteristics of respondents aged 45-57 years are 29 respondents or 47.5% and ages 58-69 years are 32 respondents or 52.5%, so it is known that the total number of respondents who have been studied is 61 respondents or 100.0%. .

The results of data analysis revealed that the primary and higher education of the respondents were respectively 22 respondents or 36.1%. Most of the respondents' income is UMR 808.000,- as many as 41 respondents or 67.2%. This shows that most of the respondents have incomes above the UMR (Regional Minimum Wage). The number of independent pre-elderly and elderly were 48 respondents or 78.7%. This shows that the pre-elderly and the elderly are independent. The number of respondents who do not have degenerative diseases is 34 respondents or 55.7%. While 27 or 44.3% of them have different degenerative diseases. The results of the analysis show that most respondents have a frequency of eating patterns 3x/day as many as 38 respondents or 62.3%.

a. Relationship between Education and Eating Habit

Variable	Eat ≥ 3x/hr	Eat 2x/hr	Eat 1x/hr	Chi-Square (p-Value)
Elementary	11 (8,0%)	9 (14,8%)	2 (3,3%)	13,123
Middle	13 (21,3%)	3 (4,9%)	1 (1,6%)	(0,045)
High	14 (23,0%)	7 (11,5%)	1 (1,6%)	
Total	**38 (62,3%)**	**19 (31,1%)**	**4 (6,6%)**	

The closeness of the relationship between education and diet, in respondents is moderate

(c = 0.322).

b. Correlation Income with Eating Habit

Pola Makan				
Variable	Eat ≥ 3x/hr	Eat 2x/hr	Eat 1x/hr	Chi-Square (p-Value)
Income	26 (42,6%)	13 (21,3%)	2 (3,3%)	10,576
≥ UMR 808.000	12 (19,7%)	6 (9,8%)	2 (3,3%)	(0,047)
< UMR 808.000				
Total	**38 (62,35)**	**19 (31,1%)**	**4 (6,6%)**	

The closeness of the relationship between income and diet was moderate (c = 0.397).

c. Correlation between Independent with Eating Habit

Eating Habit				
Variable	Eat ≥ 3x/hr	Eat 2x/hr	Eat 1x/hr	Chi-Square (p-Value)
Independent	29 (47,5%)	17 (27,9%)	2 (3,3%)	16 ,153
Dependent	9 (14,%)	2 (3,3%)	2 (3,3%)	(0,003)
Total	**38 (62,3%)**	**19 (31,1%)**	**4 (6,6%)**	

The relationship between independence and diet was moderate (c = 0.458).

d. Correlation Between *Degenerative* Disease With Eating Habit

Variable	Eating Habit			
	Eat ≥ 3x/hr	Eat 2x/hr	Eat 1x/hr	*Chi-Square (p-Value)*
Degenerative				
Yes	20 (32,8%)	5 (8,2%)	2 (3,3%)	13,613
No	18 (29,5%)	14 (23,0%)	2 (3,3%)	(0,016)
Total	**38 (62,3%)**	**19 (31,1%)**	**4 (6,6%)**	

The relationship between types of degenerative diseases and diet was moderate (c = 0.365).

Research Limitations

1. Collecting data on education, income, independence, and types of degenerative diseases and diet using a closed questionnaire, so that the information obtained is not extensive.

2. The local elderly Posyandu activities are conducted once every two months and are held during working hours, so that many respondents are unable to attend. And when the home visit research was carried out, the researchers found 12 families who were not willing to be respondents.

D. Conclusion

1. The results of the characteristics of the respondents indicate that most of the respondents' education, namely Basic and Higher, respectively, are 22 respondents or 36.1%.

2. The results of the characteristics of the respondents showed that most of their income was UMR 808.000,- as many as 41 respondents or 67.2%.

3. The results of the characteristics of the respondents showed that most of the pre-elderly and elderly were

independent as many as 48 respondents or 78.7%.

4. The results of the characteristics of the respondents showed that most of the pre-elderly and elderly did not have degenerative diseases as many as 34 respondents or 55.7%.

5. The results of the analysis show that the majority of respondents eat 3x/day as many as 38 respondents or 62.3%.

6. The results of the Chi-Square analysis show that the variables of education, income, independence, and types of degenerative diseases are significant or have a relationship with eating frequency.

E. Suggestion

For Pre-Elderly and Elderly

The results of this study can be used by the Pre-elderly and the Elderly as a source of information and knowledge to Posyandu managers about the factors related to the frequency of eating in the pre-elderly and the elderly.

For Elderly Posyandu officers

This research can be used as consideration for carrying out Posyandu activities every month, so that the pre-elderly and elderly can be cared for properly and it is easier to monitor changes that occur in the health conditions of the pre-elderly and elderly.

The results of this study are to be used as additional literature in research in the health sector, especially in Nutrition about the factors related to the frequency of eating in the pre-elderly and the elderly.

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