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Causing Factors of Degenerative Disease towards Elderly Women

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Article Information	Abstract
	The proportion of the elderly population in Indonesia has a positive or negative impact, it is said to be positive if the elderly population is in a healthy, active and productive condition. The elderly become a burden if they have health problems such as degenerative diseases. In this study, the authors looked for the Causes of Degenerative Disease in Elderly Women. This study used 50 elderly women for sample. This research design used cross sectional, data collection techniques through questionnaires. The results showed that there was a significant correlation between degenerative diseases in the elderly with diet, physical activity, rest patterns, and health care support for the elderly. Meanwhile, smoking habit with p-value = 0.283 meant that statistically there was no correlation between smoking habits and degenerative diseases, this was because the proportion of elderly women who smoke and had degenerative diseases was less. The conclusion of the research was the productivity of women in youth and lifestyle had an effect on women's health in old age. © 2021 Journal of Ners and Midwifery

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INTRODUCTION

Getting old is a natural phenomenon as a result of the aging process. This phenomenon is not a disease, but a natural condition that is universal. The aging process is regressive and includes organo-biological, psychological and socio-cultural processes. Being old is genetically determined and influenced by a person's lifestyle (Tamher, 2009)

Glascock and Feinman (1981) Stanley and Beare (2007), analyzed the criteria for elderly from 57 countries around the world and found that the most common elderly criterion was a combination of chronological age with changes in social roles, followed by changes in a person's functional status.

One of the results of health development in Indonesia is an increase in life expectancy. By increasing the elderly population it means that the risk group in our society is becoming higher. The increase in the elderly population is not only a phenomenon in Indonesia but also a phenomenon in the world (Lilik, Ma'rifatul, 2011).

Based on the census of the RI statistical data in 2012 that based on gender, the highest proportion of elderly people is women, thus Umur Harapan Hidup (UHH) of the elderly with female gender is getting higher, whereas according to Nugraheni (2005), in the physical condition of the elderly there are several health problems along with with decreased body function. This increase in life expectancy (UHH) can result in an epidemiological transition in the health sector due to the increasing number of morbidity due to degenerative diseases.

Based on the results of Survey and Sensus Nasional (SUSENAS) (2013), the proportion of elderly people based on female gender is 8.2% of 9% of the total population. The problems faced by older people are peculiar. They experience a decrease in their physical condition and psychological problems.

The problems experienced by the elderly can certainly be anticipated from an early age if we know what are the factors that trigger degenerative diseases that are often experienced by the elderly. Therefore, in this study the authors will examine the correlation between the lifestyle of the elderly and the incidence of degenerative diseases experienced by the elderly.

METHODS

This research is an analytical study with a cross sectional design and data collection methods using a questionnaire or questionnaire, the sampling method with Quota sampling technique. The subjects studied were elderly women. The number of samples used was 50 respondents. The independent variables measured were diet, physical activity of the elderly, rest patterns, smoking habits and health care support, while the dependent variable was the elderly with degenerative diseases. The statistical test used is Chi-square. The research location is in the area of RW 05, Dukuh Village, East Jakarta.

RESULT

1. The Correlation between Diet and Degenerative Diseases in Elderly Women

Table 1 Diet and degenerative diseases Correlation in elderly women

Variabel Independent	Kategori	Degeneratif Diseases		p-value	OR
		Degeneratif	**Non Degeneratif**		
PolaMakan (Diet)	Un healthy	25 (78,1%)	6 (21,9%)	0,002	7,1 (1,9 -25,9)
	healthy	6 (33,3%)	12 (66,7%)		

Based on Table 1, it can be seen that the elderly who have a history of unhealthy eating patterns have a higher percentage of experiencing degenerative diseases, namely 78.1%, while the elderly who have degenerative diseases and a history of healthy eating patterns are only 33.3%. Chi Square test results obtained p-value = 0.002, meaning that statistically there is a correlation between diet and degenerative diseases. The analysis results obtained OR = 7.1, meaning that the elderly who have a history of unhealthy eating patterns have a 7.1 times higher chance of experiencing degenerative diseases than the elderly with a history of healthy eating patterns.

2. The Correlation between Physical Activity and Degenerative Diseases in Elderly Women

Based on Table 2, it can be seen that the elderly who have bad physical activity have a higher percentage of experiencing degenerative diseases, namely 75%, while the elderly who have good physical activity are only 44.4% who experience degenerative diseases. Chi Square test results obtained p-value = 0.031, meaning that statistically there is a correlation between physical activity and degenerative diseases. The results of the analysis obtained OR = 3.7, meaning that the elderly who have bad physical activity have a 3.7 times higher chance of experiencing degenerative diseases than the elderly who have good physical activity.

Table 2 Physical activity and degenerative diseases Correlation in elderly women

Variabel Independent	Kategori	Degeneratif Diseases		p-value	OR
		Degeneratif	Non Degeneratif		
Physical Activity	Not Good	24 (75%)	8 (25%)	0,031	3,7 (1,1-12,7)
	Good	8 (44,4%)	10 (55,6%)		

3. The Correlation between Rest Patterns and Degenerative Diseases in Elderly Women

Based on Table 3, it can be seen that the elderly who have a history of a little resting patterns have a higher presentation of degenerative diseases, namely 71.9%, while the elderly who have a history of good resting patterns are only 28.1% who have degenerative diseases. Chi Square test results obtained p-value = 0.008, meaning that statistically there is a significant correlation between rest patterns and degenerative diseases. The results of the analysis obtained OR = 5.1, meaning that the elderly who have a history of poor resting patterns have a 5.1 times higher chance of experiencing degenerative diseases than the elderly with a history of good resting patterns.

Table 3 Rest patterns and degenerative diseases Correlation in elderly women

Variabel Independent	Kategori	Degeneratif Diseases		p-value	OR
		Degeneratif	Non Degeneratif		
Rest patterns	Noot Good	23 (71,9%)	6 (33,3%)	0,008	5,1 (1,4-17,7)
	Good	9 (28,1%)	12 (66,7%)		

4. The Correlation between Smoking Habits and Degenerative Diseases in Elderly Women

Based on Table 4, it can be seen that the elderly who do not have a smoking habit have a higher percentage of experiencing degenerative diseases, namely 87.5%, while the elderly who have a smoking habit only 12.5% experience degenerative diseases. The results of the Chi Square test cannot be used because they do not meet the requirements because

Table 4 Smoking habits and degenerative disease Correlation in elderly women

Variabel Independent	Kategori	Degeneratif Diseases		p-value	OR
		Degeneratif	Non Degeneratif		
Smoking Habits	Smoke	4 (12,5%)	0 (0%)	0,283 Exact	0,8 (0,7-0,9)
	Not Smoke	28 (87,5%)	18 (100%)		

E <5 is 50%, then the fisher-exact test is used and obtained p-value = 0.283 meaning that statistically there is no correlation between smoking habits and degenerative diseases. The results of the analysis obtained OR = 0.8, meaning that the elderly who have healthy smoking habits have a 0.8 times higher chance of experiencing degenerative diseases than the elderly who do not smoke.

5. The Correlation between Health Care Support and Degenerative Diseases in Elderly Women

Based on Table 5, it can be seen that the elderly who were not supported by health workers had a higher percentage of experiencing degenerative diseases, namely 87.5%, while the elderly who were supported by health workers were only 12.5% who had degenerative diseases. The results of the Chi Square test cannot be used because they do not meet the requirements because E <5 is 25%, then the fisher-exact test is used and obtained p-value = 0.007, meaning that statistically there is a correlation between health care support and degenerative disease. The results of the analysis obtained OR = 7, meaning that the elderly who did not receive health care support had a 7 times higher chance of experiencing degenerative diseases than the elderly who received health care support.

Table 5 Health Care Support and Degenerative Diseases Correlation in Elderly Women

Variabel Independent	Kategori	Degeneratif Diseases		p-value	OR
		Degeneratif	**Non Degeneratif**		
Nakes Support	Not support	28 (87,5%)	9 (50%)	0,007 Exact	7 (1,7-28,2)
	Support	4 (12,5%)	9 (50%)		

DISCUSSION

1. Diet and degenerative Diseases Correlation in elderly women

Based on the results of the research of the elderly in RW 05, dukuh village, 62% of the elderly have an unhealthy diet, and as many as 78% of the elderly respondents who have degenerative diseases have an unhealthy diet compared to the elderly who do not have degenerative diseases.

Diet is a variety of information that provides an overview of the kinds and amounts of foodstuffs eaten by a person each day and is a characteristic of a particular community group. So it can be interpreted that diet is the regulation of the type and amount of food consumed and the frequency of consuming healthy foods. The composition of dishes or daily food menus consisting of various kinds of quality food ingredients in the right amount and proportion can be used by a person to maintain his health and fitness, so that a good diet and eating habits are needed, to meet the nutritional needs of the body. (Ayu,2013)

Conditions that occur in the environment at this time are very vulnerable for respondents to be exposed to free radicals easily if it is not balanced with good nutritional intake, it is feared that it will trigger the emergence of various degenerative diseases. Generally, before a person suffers or experiences a degenerative disease, there is a symptom that leads to the disease but it is often overlooked. This collection of symptoms is known as the metabolic syndrome. Dr. Gerard Reaven from Stanford University in 1988 called it syndrome X. This metabolic syndrome does not appear suddenly but through a long and slow process, and it is closely related to a person's lifestyle. This is the end result of an unhealthy diet with high sugar and fat content in food. This is consistent with this study because most of the elderly who have degenerative diseases still consume and do not limit their intake of fat and sweet foods or drinks.

The recommended food ingredients and food ingredients that must be avoided are considered by the elderly in choosing food ingredients as the main ingredient of their menu (Fatmah, 2010). The habit of snacking on oily foods such as fried foods or coconut milk foods will also worsen the health conditions of the elderly, especially those with degenerative diseases.

In maintaining the nutritional intake we consume, it is also necessary to pay attention to the needs needed by the body. Developing countries,

including Indonesia, have experienced excess nutrition which resulted in the high prevalence of degenerative diseases. Not to mention the effects caused by a polluted environment, wrong diet and lifestyle which actually stimulates the growth of free radicals that damage our bodies.

In this study, the answer to the elderly's eating frequency was good, the majority ate 3 times a day with full menu answers. It is even deeper when viewed from the type of food consumed, the majority of the elderly do not understand about a balanced healthy menu that is their diet (especially for the elderly who already have degenerative diseases).

The habit of consuming fatty foods (coconut milk, sweet drinks, and fried foods) has become a habit in daily consumption even though respondents know that they have degenerative diseases. This type of food should be limited for consumption by the elderly who do not suffer from degenerative diseases or who have degenerative diseases.

In our bodies, the reaction between nutrients and free radicals will produce peroxidation which in turn can cause cell damage, which is considered to be one of the causes of various degenerative diseases (Handajani, et al, 2010).

2. Physical Activity and Degenerative Diseases Correlation in Elderly Women

The results of this study showed (68%) the elderly who had bad physical activity habits was higher than the elderly who had good physical activity habits.

Increasing proportion of elderly people, cause several health problems in the elderly. Based on data from the Indonesian Ministry of Health's Center for Data and Information (2013), the biggest health problem in the elderly is degenerative diseases. It is estimated that in 2050 about 75% of the elderly with degenerative diseases will not be able to do activities.

Low physical activity can cause independent risk factors for chronic disease and it is estimated that it can cause death globally (WHO, 2011 and Kurnia, 2019). This is in accordance with this study, where the elderly who suffer from diabetes have a low amount of physical activity.

Previous research conducted by Putri (2013) reported that the physical activity of the elderly in Mekarwangi Village, Tanah Sareal District, Bogor City was classified as moderate. Most of the elderly reduce their physical activity because some of them

feel that physical activity such as sports is not suitable for their lifestyle, even though some of them are aware of its benefits (Lee, Arthur, & Avis, 2008).

In addition, the elderly said that they had experienced a decline in health, so they could no longer do physical activity (Baert, Gorus, Mets, Geerts, &Bautmans, 2011).

According to MersiliyaSauliyusta in 2016 in his research on the results of the analysis of the correlation between physical activity levels and cognitive function in the elderly, it was found that respondents with high levels of physical activity had normal cognitive functions. The results of statistical tests obtained p value = 0.000, it can be concluded that there is a correlation between the level of physical activity and cognitive function in the elderly.

3. Rest patterns and degenerative diseases Correlation in elderly women

Based on the results of the data, it can be seen that the elderly who have a bad resting pattern is higher (58%) than the elderly who have a good resting pattern. The results of research by Albertina Madeira, (2019) concerning the Correlation between Sleep Pattern Disorders and Hypertension in the Elderly showed that almost all (79%) of respondents' sleep disorders were included in the disturbed category.The results of the bivariate analysis showed p value (0.002) meaning that there was a significant correlation between sleep pattern disorders with hypertension (degenerative) in the elderly at PosyanduMawar, Merjosari Village, Dinoyo District, Malang City.

Basically the quality of sleep can affect the quality of life and a person's tension. Sleep quality has a positive correlation with quality of life, meaning that the better the quality of sleep, the better the quality of life. Conversely, if the quality of sleep has a negative correlation with the level of tension, which means that the better the quality of sleep, the level of tension will decrease.

A person with less or too long sleep tends to experience body imbalance which is characterized by frequent illness, sluggishness, lack of enthusiasm, often being sick and can have implications for hypertension due to toxins that interfere with the flow of oxygen in the blood so that it burdens the heart (Basit, et. al. 2016).

Psychic changes that occur in the elderly as a form of anxiety and restlessness in the elderly, will begin to think towards death and think about their

physical conditions that are much different in their youth, if not resolved will cause stress which can affect physical health and the spiritual health of the elderly.

4. Smoking Habits and Degenerative Diseases The Correlation in Elderly Women

Based on the results of research data, the distribution of respondents according to smoking habits is divided into 2, namely the elderly who have or still smoke and the elderly who do not smoke.

Smoking behavior is inhaling tobacco smoke which has turned into cigars and then ignited. There are two types of smoking. The first is smoking directly, called active smokers, and the second is those who indirectly smoke cigarettes. But also inhaling cigarette smoke is called passive smoking. Various kinds of human behavior in response to the stimulus it receives, one form of human behavior that can be observed is smoking behavior (Sukmana, 2008).

Smoking habits can be a triggering factor for degenerative disease when you are elderly, such as DwiRetnaningsih's 2015 study on Smoking Behavior with Hypertension in the Elderly, the results of bivariate analysis showed that there was a significant correlation between smoking behavior and the incidence of hypertension p (0.000) <0.05. Meanwhile, according to the results of the correlation coefficient analysis, it was obtained p 0.481 which means that there is a fairly close correlation between smoking behavior and the incidence of hypertension.

5. Health care providers and degenerative Diseases Correlation in elderly women

The results showed that the elderly who were not supported by health workers were higher (87.5%) than the elderly who were not supported by health workers. In RW 05, hamlet village, there are elderly posbindu, according to the informant cadres, it is just not always active because there are not always health workers on duty at the post.

According to the World Health Organization (WHO) the age limit for the elderly is 60 years and over. Elderly blood pressure can be fluctuating and can not be predicted well. Sometimes, an elderly person can have low blood pressure and then jump high after only a few moments.

Hypertension in the elderly will increase the risk of having a stroke in the future. In addition, it also increases the risk of experiencing kidney damage, heart disease, and many other serious health problems if there is no management and monitoring of blood pressure properly. Early detection and proper handling of hypertension through routine blood pressure checks at the PTM Posbindu activities is an effort to prevent complications due to hypertension.

Posbindu Elderly is a Puskesmas program with the target being the elderly (60 years and over), besides that it is also aimed at pre-elderly (45-59 years) with the aim of being ready to face old age independently and healthily. Elderly services at Posbindu include checking of daily activities, weighing, measuring body height, measuring blood pressure, health education, simple laboratory tests (blood sugar levels, uric acid, cholesterol), mental and emotional status checks, simple medication and referral efforts if needed as well as other social activities from other sectors whose activities are carried out once a month. Periodic medical examinations and health consultations for the elderly are the key to the success of efforts to maintain the health of the elderly, even though they are not sick, the elderly group needs to have their health checked regularly, because with these periodic checks, the condition of the disease can be identified better and if there are factors. who are at risk can be prevented immediately (Depkes RI, 2005 dalamMeilita, 2017).

Posbindu services for the elderly as a form of support for health workers in the area where they live can help improve the quality of healthy life for the elderly in the area.

CONCLUTION

1. Variables related to degenerative disease in the elderly womens were diet, physical activity, resting patterns, and health care support, while the variable not related to degenerative disease in the elderly was smoking habits, this was due to the proportion of respondents who had smoked and had degenerative diseases were less.

2. Based on the research of the elderly with their habit, the elderly who had poor physical activity, bad diet, less daily activities, resting patterns had a greater percentage of experiencing

degenerative diseases than those with good habit.

SUGGESTION

1. The need for further research on the correlation of activity patterns in the elderly in other aspects of the risk of degenerative diseases in the elderly.
2. More comprehensive support from health workers in the form of assistance to the community, especially during the climacteric period, to reduce the risk of developing degenerative diseases.
3. It is necessary to activate the posyandu for the elderly in each RW to monitor the health of the elderly community and to become the smallest forum in the community to foster and prepare for the elderly who are independent, healthy and happy.

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