

The Relationship between Nutritional Status and The Quality of Life for Elderly in RW 3 area of Pasar Minggu, Jakarta, Indonesia

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Abstract

Background. Person's physical abilities will decrease when elderly. The definition of elderly is someone who has reached the age of more than 60 years. Decreased physical ability can lead to reduced nutritional status which has an impact on decreasing quality of life. The aim of this study was to determine the relationship between nutritional status and the quality of life for elderly in RW 3 area of Pasar Minggu. **Methods.** This study used a quantitative correlation design with a cross sectional approach. The population of this study is the elderly in the RW 3 area of Pasar Minggu. Data was collected from 187 respondents through a questionnaire. The data obtained were analyzed by SPSS. **Result.** Study showed malnutrition 45%, normal 35%, obesity 20% and good quality of life 35%, poor quality of life 65%. Test result p value, $0.002 < 0.05$. **Conclusion.** The nutritional status of the elderly in RW 3 Pasar Minggu has a relationship with quality of life.

Keyword: elderly, nutritional status, quality of life, physical abilities

BACKGROUND

According to the law on elderly welfare (UU No. 13/1998) in paragraph 2, it is stated that an elderly person is someone who has reached the age of 60 and over.

Elderly often experience health problems. These problems start with the decline of the body's cells, so that the function and resistance of the body decreases and the risk factors for disease increase. One of the health problems that often occur in the elderly is malnutrition. Malnutrition is a state of nutritional deficiency. Malnutrition in the elderly is a serious problem that continues to increase in number. Malnutrition can cause decreased body function, impaired muscle function, decreased bone mass, immune dysfunction, anemia, decreased cognitive function, slow wound healing, long health recovery and severe morbidity and mortality (Shuremu, 2023).

The number of elderly people in Indonesia in 2014 reached 18 million peoples and it is expected to increase to 41 million peoples in 2035 and more than 80 million peoples in 2050. In 2050, one in 4 Indonesian people will be elderly people rather than babies or

toddlers. (Khofifah, 2016).

Aging is a natural process characterized by changes in the function and balance of the human body (Mabiama, et al., 2021). In 2015, the number of people aged 60 years and over was 12% in the World. In 2050, it was estimated that the problems of aging will become a major public health problem (WHO, 2015). Aging is associated with an increase in disease and changes in nutritional status

(malnutrition/obesity) (Groot, et al., 2010; Torres, et al., 2014). Malnutrition is associated with an increased risk of weakness, falls, dependence on activities of daily life, hospitalization and length of stay in hospital, increased health care costs, poor quality of life, and increased mortality (Volker, et al., 2019). While obesity is associated with decreased functional ability, metabolic syndrome, cardiovascular disease, arthritis, lung disorders, urinary incontinence, visual impairment, and cancer (Amarya et al., 2015).

Aging is a predictable and unavoidable phenomenon that has increased significantly in

this century worldwide (Mohsenpour, 2022). Malnutrition in the elderly is a major factor that interferes with health levels and raises the risk of disease and disability (Corcoran et al., 2019). Cases of elderly suffering from malnutrition occur in many countries (Moreira et al., 2016; Khoddam et al., 2019).

Enhancement in the number of elderly people will have an impact on various lives. The main impact of this increase in the elderly is an increase in the dependency of the elderly. This dependence is caused by the physical, psychological and social decline of the elderly which is described through four stages, namely weakness, limitations, functional decline, incapacity and delays that will be experienced simultaneously with the process of decline due to the aging process. The impact of the decline process due to the aging process will also affect the quality of life of the elderly (Riyanti and Ratnawati, 2015). The increasing quantity of the elderly must be balanced with an increase in the quality of life of the elderly, apart from being able to live long, the elderly are expected to be able to live healthy, productive and independent lives so that they do not become a burden to families and the government and can become valuable assets of the state in the development process (Thalib, et al., 2015).

The health status of the elderly which decreases with age will affect the quality of life of the elderly (Kiik, et al., 2018). Quality of life is an individual's overall perception of happiness and satisfaction in life and the surrounding environment (Sari and Pramono, 2014). In general, the elderly experience limitations, so that the quality of life in the elderly decreases (Yuliati, et al., 2014). The low quality of life of the elderly will have an impact on the welfare of the elderly (Hayulita, et al., 2018).

Quality of life is not only influenced by psychological and socioeconomic factors, but also nutritional status. Nutritional problems in the elderly need special attention because they can affect health status, decrease quality of life, and mortality. Malnutrition and obesity in late

adulthood can worsen functional conditions and physical health. Unhealthy eating habits can cause various kinds of health problems and affect the nutritional status of the elderly, which ultimately results in a decrease in quality of life. Food and nutrition can be important dimensions in measuring quality of life. Poor nutritional status will affect the quality of life of the elderly (Nursilmi et al., 2017).

The nutritional status of the elderly is strongly influenced by the aging process. The aging process is very individual and its development differs for each individual because it is influenced by internal and external factors. Nutritional intake from food affects the process of aging because all cell activities (body metabolism) require sufficient nutrients in addition to disease and environmental factors (Fatmah, 2013). Increasing age is not a barrier to getting adequate and quality nutritional intake. Getting older will cause several changes both physically and mentally. This change will affect a person's condition from the psychological, physiological and socio-economic aspects, most of the nutritional needs of the elderly have decreased. Nutritional problems in the elderly arise due to wrong eating behavior, namely an imbalance between nutrient consumption and recommended nutritional adequacy (Emmelia, 2017). For the elderly, meeting nutritional needs properly can help in the process of adapting or adjusting to the changes they are experiencing. In addition, it can maintain the continuity of the body's cell turnover so that it can maintain physical health and improve the quality of life (Rahmianti et al., 2014).

Nutritional status is influenced by age, gender, physical activity, economic, psychological, decreased body function and environmental factors. Nutritional status is very important to prevent or defend the body from various chronic and acute diseases and play a role in the healing process (Astuti, et al., 2019; Sartika et al., 2011).

Nutritional status is an important part of the quality of life of the elderly because nutritional status is a risk factor for

morbidity and mortality. Good nutritional status for the elderly will contribute to their health and also to the recovery process. Despite experiencing changes in the body, the elderly need to meet their nutritional needs according to the required adequacy rate. (Lewa, 2016).

The quality of life of the elderly can be improved through several programs such as the elderly posyandu, mobile health centers, elderly gymnastics, counseling and the need to provide health insurance to the elderly. By fulfilling all these aspects, a good quality of life for the elderly can be realized (Anbarasan, 2015). With the habit of regulating diet, a good lifestyle causes a person to have a good quality of life, while a poor quality of life can increase disease exposure (Nursilmi et al., 2017). This background underlies the researcher's interest in conducting research on the

Elderly affects biological functions which results in reduced fulfillment of nutritional needs (Fadilah, et al., 2019). One example is the decreased ability to chew because the number of teeth has fallen out, so that the consumption of side dishes from animal sources is reduced.

Nutritional status is a condition of the body that reflects itself on what is eaten every day. Nutritional status is said to be

theme of the relationship between nutritional status and quality of life in the elderly in the area where the researcher lives, RW 03 Pasar Minggu.

METHOD

This research method used quantitative correlation with a cross sectional approach. The sample was the elderly who live in the RW 03 Pasar Minggu area, Jakarta, Indonesia, with a total of 187 people. Samples were taken from filling in the questionnaire data and the results of checking basic health conditions in the elderly Posyandu. In this study, the independent variable is nutritional status and the dependent variable is the quality of life of the elderly. The data obtained was analyzed using SPSS

RESULT

good if the food sources consumed meet balanced nutrition for the body. This is influenced by the type of food, meal time, meal frequency. If we consume food that exceeds the need, then the body will experience obesity. Obesity itself does not mean healthy because it can lead to disease. Poor or excess nutritional status will result in unfavorable health for the elderly (Indah Pratiwi et al., 2019).

**Tabel 1. Characteristics of the Elderly
in RW 03 Pasar Minggu**

Quality of life is a benchmark in a person's level of satisfaction or dissatisfaction with aspects that affect his life. Quality of life includes independence, privacy, freedom of behavior, respect, and choices. Quality of life in the life of the elderly can be categorized into 3 types, namely; physical well-being, psychological well-being, and interpersonal well-being. So it can be concluded that the quality of life describes the superiority of elderly individuals which can be assessed from the life of the elderly. These advantages can be seen from his life principles, personal control, life goals

Tabel 2. Relationship between nutritional status and of life in the elderly in RW 03 Pasar Minggu

Nutritional Status	Quality of life				Total	<i>P Value</i>
	Good quality		Poor quality			
	f	%	f	%		
Malnutrition	4	6	80	66	84	0.002
Normal	59	89	6	5	65	
Obesity	3	5	35	29	38	
Total	66	100	121	100	187	

relation to interpersonal, personal development of the elderly, intellectual, and material conditions. (Sari and Yulianti, 2017).

Tabel 3. Nutritional Assessment

Parameter	Frequency	Percentage
Daily protein consumption		
Less	159	
Normal	28	
Daily carbohydrate consumption		
Less	23	
Normal	79	
More	85	
Daily water consumption		
Less	121	
Normal	66	
Daily fat consumption		
Less	65	
Normal	34	
More	88	
Daily vegetables consumption		
Yes	100	
No	87	
Daily fruits consumption		
Yes	134	
No	53	

Several previous researchers reported a good quality of life for the elderly. Indah Pratiwi, et al., 2019, reported that out of 89

respondents, 36 respondents (40.4%) had a good quality of life. In line with research from Nursilmi, 2017, that in the majority of

Ciherang village there were 49 respondents (66.21%) while in Jambu village there were 30 respondents (40.54%) who had a good quality of life. Research from Erwanti, 2018, found that 9 respondents (22.5%) had a good quality of life. Likewise with the results of research from Nurhidayati et al., 2021, the results showed that the quality of life was good with a total of 63 respondents (47.4%). The results of research conducted by Syafitri, 2021 with the results obtained that the average quality of life with good criteria is 21 respondents (40.4%).

Research conducted by Sharma et al., 2021, with the results obtained that the majority (48.2%) with a total of 158 respondents had a good quality of life. In line with the assessment of Kurniawati and Dewi, 2018, the results showed that 61 respondents (48.8%) had a good quality of life. Likewise with research conducted by Fatwa, et al., 2021, the results obtained were that the quality of life was good for the elderly with a total of 42 respondents (84.0%). According to research conducted by Aulia et al., 2017, with good quality of life results obtained by 27 respondents (43.5%). From the results of research conducted by Hermawan, et al., 2019, the results obtained with a value of 31.32 are a good quality of life for the elderly.

Indah Pratiwi et al., (2019), reported that 63 respondents (70.8%) received normal

nutritional status, while 26 respondents (29.2%) received abnormal nutritional status, most respondents had a good quality of life. This study shows that there is a relationship between nutritional status and quality of life. Likewise research from Nursilmi, (2017) reported results in Ciherang village there were 64 respondents (86.49%) and in Jambu village there were 48 respondents (64.86%) getting good nutritional status, and both villages have a good quality of life. Erwanti, (2018), reported results that nutritional status can affect quality of life in the elderly (p-value 0.005). Research by Nurhidayati et al., (2021), there were 47 respondents (35.3%) who had a good quality of life (47.4%). In line with Syafitri's research, (2021), that out of 22 respondents with normal nutritional status there were 14 people (63.6%) with a good quality of life, family support was significant to the respondent's quality of life at a p-value of 0.005. Similar to the research conducted by Sharma et al., (2021), there is a significant relationship between nutritional status and quality of life in the elderly by obtaining a p-value of 0.001. The results of research from Kurniawati & Dewi, (2018), showed that the elderly with good nutritional status and a good quality of life obtained the results of 27 respondents (21.6%) with good nutritional status and a good quality of life too. Research from Fatwa et al., (2021) also reported a relationship between nutritional status and

the quality of life of the elderly with the results obtained by 46% of the elderly with normal nutritional status and the quality of life of the elderly showing 80% good. In line with research conducted by Aulia et al., (2017), the results show that good nutritional status and a good quality of life also obtain a p-value of 0.004. According to research from Salminen, (2019) most of the respondents (30.7%) had good nutritional status, most of them scored (18%) had a good quality of life, this could mean that there was a significant relationship between nutritional status and quality of life in the elderly. P

The results of the analysis of the relationship between nutritional status and the quality of life of the elderly found that as many as 59 elderly people with normal nutritional status (89%) had a high quality of life. The test results obtained $p = 0.002$ less than 0.05. So it can be concluded, there is a significant relationship between nutritional status and quality of life of the elderly in RW 03 Pasar Minggu.

CONCLUSIONS

The conclusion obtained from the research results is that there is a significant relationship between nutritional status and the quality of life of the elderly in the RW 03 Pasar Minggu area. This is shown from the p value of 0.002 which is <0.05 . A good nutritional status of the elderly will also have

a good quality of life.

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