Research Paper

Effect of Family Support and Nutritional Status on the Quality of Life of the Elderly in Tanjung Beringin District, Serdang Bedagai Regency

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ABSTRACT

Increasing welfare rates and declining fertility rates in Indonesia have an impact on the number of elderly people, which is slowly but surely rising. Currently, Indonesia is recorded as having 24.5 million elderly people, so starting in 2021, Indonesia's population structure is predicted to enter an aging population. The increasing number of elderly people in Indonesia is also accompanied by various problems, ranging from the emergence of various diseases, a decline in cognitive and physical abilities that affect their productivity, to a decline in their quality of life. This study aims to determine and analyze the effect of family support and nutritional status on the quality of life of the elderly. This type of research used a cross sectional method which was carried out in Tanjung Beringin District, Serdang Bedagai Regency from October 2019 to completion. The population in this study were all elderly aged 60–74 years in Tanjung Beringin District, Serdang Bedagai Regency. The results showed that family support was the most dominant factor in influencing the quality of life of the elderly with p=0.011; OR of 4.654. Based on these results, it can be interpreted that elderly people with good family support tend to have a better quality of life, which is 4.7 times compared to older people who are not supported by their families. Nutritional status is also proven to affect the quality of life of the elderly with an OR value of 3.728, meaning that elderly people who have normal nutritional status are more likely to have a good quality of life 3.7 times compared to elderly people whose nutritional status is not normal. It is recommended for families to cooperate with each other in caring for the elderly, such as supervising feeding and fluid intake and encouraging elderly people to routinely participate in elderly gymnastics activities so that their health is maintained and their quality of life improves.

Keywords: Family Support, Nutritional Status, Quality of Life

INTRODUCTION

Increasing welfare rates and declining fertility rates in Indonesia have an impact on the number of elderly people, which is slowly but surely rising. In the last 50 years, between 1971 and 2018, it is noted that the number of elderly people in Indonesia has doubled. This situation is in contrast to the number of children under five years of age (under five) which fell by almost half in the same period. At its peak since 2017, the number of Indonesia's elderly population is more than the number of children under five. If at the beginning of independence until the 1960s Indonesia experienced a baby boom (an increase in the number of baby births), at the beginning of the 21st century Indonesia experienced an elderly population boom (an increase in the number of elderly people) (Badan Pusat Statistik, 2019).

Currently, Indonesia is recorded as having 24.5 million elderly people, so starting in 2021, Indonesia's population structure is predicted to enter an aging population. In 2021, Indonesia will enter into the old population structure with 10% of the population being elderly citizens. At

that time, the number of elderly people was estimated to be more than 27 million people (Badan Pusat Statistik, 2019).

In the future, the number of Indonesia's elderly population is also certain to continue to increase along with the completion of the peak demographic bonus in 2021-2024. The increase in the population of productive age during the demographic bonus period will result in a significant increase in the elderly population. If the elderly population is healthy and productive, this could be a second demographic bonus for Indonesia.

The Indonesian Central Bureau of Statistics estimates that the number of elderly people will reach 20% of the total population or around 63.3 million people in 2045. In fact, the United Nations (UN) also predicts that 25% of Indonesia's population or around 74 million people will be elderly by 2050. The large number of people over 60 years old is certainly a challenge for development in itself because it can be a blessing, but it can also be a disaster for Indonesia. Where everything depends on the nation's ability to prepare the elderly population from an early age.

The population of North Sumatra according to the 2010 population census projection is 14,262,147 people, while the population of Serdang Bedagai Regency is 2,114,627, the second largest in North Sumatra after Medan City, which amounts to 2,247,425 people. Serdang Bedagai Regency in 2019 experienced progress marked by an increase in the Human Development Index (HDI). The HDI of Serdang Bedagai Regency reaches 73.94, making Serdang Bedagai Regency in 6th position out of 33 districts/cities in North Sumatra Province (Badan Pusat Statistik, 2019)

According to the World Health Organization Quality of Life (WHOQL) (1995), quality of life is an individual's perception based on the cultural context and the adopted value system regarding the position of the individual. Where is related to the goals, expectations, standards set by

the individual himself. Quality of life includes how individual perceptions of the good aspects they have. So that it can ensure other people live well and receive care and support until their death arrives (Putri, 2011).

The increasing number of elderly people in Indonesia is also accompanied by various problems, ranging from the emergence of various diseases, a decline in cognitive and physical abilities that affect their productivity, to a decline in their quality of life.

The quality of life itself is influenced by independence, physical and psychological conditions, social activities, social interactions, nutritional status, physical activity, and family function (Yuliati et al., 2014). According to Suharmiati's opinion, quality of life is an important indicator to assess the success of health service interventions, both in terms of prevention and treatment. The quality of life dimension includes not only the physical dimension, but also includes performance in playing social roles, emotional states, intellectual and cognitive functions as well as feelings of health and life satisfaction.

The low quality of life of the elderly is often associated with family functioning and social support. In this condition, social support from the family is needed to achieve welfare for the elderly and vice versa. The role of the family is very important in supporting the quality of life of the elderly, where the quality of life will be better if the family support is good. Family is a source of social support for other family members.

One of the most important problems related to the quality of life of the elderly is inadequate nutritional management. Nutritional problems in the elderly need special attention because they affect health status and mortality. Both malnutrition and further nutrition in the elderly will worsen functional conditions and physical health in the elderly. A lack of nutritional status will make it difficult for the elderly to carry out their daily activities as well as excess nutritional status.

Based on the results of a survey conducted in America, it is estimated that more than 50% of people aged 65 years and over experience malnutrition. The prevalence of malnutrition in Indonesia (BMI<16.49) in the elderly in 1998 was 7.23% increased to 11.56% in 2001, while the prevalence of overnutrition, namely 10.51% in 1998, became 8.11% in 2001.

According to data from the Ministry of Health in 2015, in Indonesia there were 3.4% elderly with underweight 28.3%. In addition, many elderly people who have an average energy intake are less than needed, where as many as 36.6% of the elderly suffer from vitamin deficiency and 75% of the elderly have insufficient intake of iron and folic acid.

Nutritional status is a state of the body which is a result of food consumption and use of nutrients. Malnutrition is an imbalance between body inputs and needs. that causes adverse effects on tissues and/or body shape. The high risk of experiencing malnutrition in the elderly can be a result of changes in eating behavior. Changes in eating behavior can be the result of health, social, or other conditions such as decreased ability of the sense of taste and the ability to provide food due to the aging process (Fatma, 2010).

Research by Tami et al. (2014) showed that there was no significant relationship between nutritional status and overall quality of life (p=0.306) among elderly people in Tamalanrea District.

Family support is an important factor that can affect the quality of life of the elderly because the elderly will undergo old age which has an impact on physical, psychological and social changes that require care and warm relationships with their families. The elderly with good family support will be able to increase their life satisfaction by living in prosperity. This shows that the family support of the elderly can improve their quality of life (Musholisol et al., 2013).

The low quality of life of the elderly is often related to family function, social support, both social support from partners, support from family and social support from the community. Support from family is the most important element in helping individuals solve problems. Family support will increase self-confidence and motivation to face problems and increase life satisfaction (Pratiwi, 2015).

This study aims to determine and analyze the effect of family support and nutritional status on the quality of life of the elderly.

RESEARCH METHODS

The type of research in this research is quantitative with analytical research that uses a cross-sectional approach, where researchers take measurements or carry out observations together (at once) between the independent variable and the dependent variable (Sugiyono, 2015).

This research was conducted in Tanjung Beringin District, Serdang Bedagai Regency from October 2019 to completion.

The population in this study were all elderly aged 60–74 years in Tanjung Beringin District, Serdang Bedagai Regency as many as 1,115 based on the profile data of the Tanjung Beringin Community Health Center in 2019. Based on the results of the sample calculation, the number of respondents to be studied was 96 people.

Methods of data analysis using multivariate analysis. Multivariate analysis was carried out to see whether there was any influence between the independent variables simultaneously and the dependent variable using a logistic regression test.The level of significance (α)=0.05, with the criteria: Rejected if p<α (0.05) then there was an influence between the independent variable and dependent variable. Accepted if p>α (0.05) then there is no influence between the independent variable and the dependent variable.

RESULT
Respondent Characteristics

The characteristics of the respondents include age, gender, body

weight and height of the elderly. The results showed that the majority of elderly aged in the range 60-55 years, as many as 73 elderly (80.2%), as many as 67 elderly (73.6%) with body weight >60 kg, as many as 57 elderly (62.6%) and height in the range 151-160 cm, as many as 43 elderly (47.3%).

Indicators of family support for the elderly in this study were assessed with 4 questions. Of the 91 older people studied, it was found that in the first question related to the family willing to assist the elderly in care, the majority of the elderly answered "yes", which was 70.3%. The next question is related to the family willing to pay for the treatment for the elderly, the majority of the elderly answered "yes", which is 84.6%. Regarding the family who reminded the elderly to take care of their health, the majority of the elderly answered "yes", which was 74.7%. Furthermore, regarding families that always support the social activities of the elderly, the majority of the elderly also answered "yes", which was 80.2%.

Based on the nutritional status of the elderly, it is known that more elderly people have a good nutritional status, namely as many as 52 elderly (57.2%).

Indicators of the quality of life of the elderly in this study were assessed with 13 question items. Of the 91 elderly people studied, it is known that in the first question item related to enjoying life as a whole, the majority of elderly people answered "agree", which is 59.3%. Next, whether the elderly live life with passion, the majority of the elderly answered "agree", which is 57.1%. Regarding the elderly having good health to leave the house and do their hobbies, the majority of the elderly answered "disagree", which was 35.2%. Next, if the elderly need help, family, friends or neighbors will definitely help, the majority of the elderly "agree", namely 60.4%.

Regarding whether the elderly have good health to be independent, the majority of the elderly "agree", namely 60.4%. Regarding whether the elderly are satisfied

with their abilities, the majority of elderly people "agree", namely 54.9%. The next question was whether the elderly felt safe in their place of residence, the majority of the elderly answered "normal", namely 49.5%. Regarding whether the elderly are satisfied with their current place of residence, the majority of elderly people are "normal", namely as much as 46.2%. The next question was related to the elderly in accepting the reality in their life that the majority of the elderly answered "agree", namely 57.1%.

Regarding whether the elderly feel lucky compared to most people, the majority of elderly people "agree", namely 57.1%. Regarding whether the elderly have enough money to pay the bills, the majority of the elderly answered "disagree", namely 34.1%. Regarding spending free time doing hobbies or other activities, the majority of elderly people answered "disagree", which is 33%. Furthermore, regarding the elderly who try to get involved with social activities, the majority of the elderly people respond to "ordinary", which is 35.2%.

Multivariate Analysis

The next stage after the bivariate analysis is the multivariate stage. Multivariate analysis is an analysis that is carried out simultaneously with the aim of knowing which independent variables have the most influence on the dependent variable. The variables for which multivariate analysis can be performed are those which in the results of the bivariate analysis have a p value <0.25. From the results of bivariate analysis using chi square, it is known that all independent variables (family support, physical status and physical activity) have a p value<0.25, so it can be concluded that all independent variables can be continued to the multivariate analysis stage.

The multivariate analysis used is multiple logistic regression analysis with a predictive model which aims to obtain a model consisting of several independent variables which are considered the best for

predicting the occurrence of the dependent variable. The variables that are considered influencing in the multivariate model are those that have a p value<0.05.

Table 1. Logistic Regression Analysis Results

Variable	B	S.E	Df	p value	OR
Family Support	3.606	7.738	1	0.011	4.654
Nutritional Status	1.943	9.422	1	0.032	3.728

It is known from Table 1 the results of the logistic regression analysis of the factors that affect the quality of life of the elderly. The results showed that the variable family support and nutritional status had a pvalue<0.05. This means that the variables of family support and nutritional status significantly influence the quality of life for the elderly.

The results showed that family support was the most dominant factor in influencing the quality of life of the elderly with p=0.011; OR of 4.654. Based on these results, it can be interpreted that elderly people with good family support tend to have a better quality of life, which is 4.7 times compared to older people who are not supported by their families. Nutritional status is also proven to affect the quality of life of the elderly with an OR value of 3.728, meaning that elderly people who have normal nutritional status are more likely to have a good quality of life 3.7 times compared to elderly people whose nutritional status is not normal.

CONCLUSION AND SUGGESTION

The results showed that family support was the most dominant factor in influencing the quality of life of the elderly with p=0.011; OR of 4.654. Based on these results, it can be interpreted that elderly people with good family support tend to have a better quality of life, which is 4.7 times compared to older people who are not supported by their families. Nutritional status is also proven to affect the quality of life of the elderly with an OR value of 3.728, meaning that elderly people who have normal nutritional status are more likely to have a good quality of life 3.7

times compared to elderly people whose nutritional status is not normal.

It is recommended for families to cooperate with each other in caring for the elderly, such as supervising feeding and fluid intake and encouraging elderly people to routinely participate in elderly gymnastics activities so that their health is maintained and their quality of life improves.

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