The Influence of Family Function On The Quality of Life of Elderly People With Chronic Diseases

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Abstract.
This study aims to analyze the influence of family function on the quality of life of elderly people with chronic diseases in Gampong Tanjung Selamat. This quantitative study used an observational analytical design through a cross-sectional approach. The study population was all elderly people suffering from chronic diseases in the area, with a sample of 29 respondents selected using a purposive sampling technique. The independent variable was family function and the dependent variable was the quality of life of the elderly. Data collection was carried out using a structured questionnaire that had been tested for validity and reliability, then analyzed univariately and bivariately using the Chi-Square test with a significance level of 0.05. Most respondents had good family function and good quality of life, and there was a significant influence between family function and quality of life of the elderly (p = 0.003). The better the family function carried out, the better the quality of life of the elderly with chronic diseases.
Keywords*: Elderly, Family Function and Quality of Life.*

I. INTRODUCTION

Increasing life expectancy is one of the main indicators of the success of a country's health and social development, including Indonesia, because it reflects improvements in nutrition, sanitation, health services, and the socio-economic conditions of the community. As increasing life expectancy improves, the age structure of the Indonesian population is shifting towards an aging population; the proportion of elderly people (≥60 years) has increased from around 7.6% in 2010 and is projected to reach 15.77% in 2035 [1], and various national projections even indicate that Indonesia is entering an aging society era since the proportion of elderly people has exceeded 10% and has the potential to reach around 20% by the middle of this century. WHO and national studies confirm that the growth of the elderly group is an inevitable phenomenon, with the growth rate of the population aged ≥60 years as one of the highest in Indonesia [2].

Chronic diseases are a major health problem in the elderly because they are long-term, progressive, and often cause complications and multimorbidities that reduce the ability of daily activities and quality of life [3]. In the elderly group, non-communicable diseases such as hypertension, diabetes mellitus, heart disease, stroke, and osteoarthritis are among the most common and comorbid. Analysis of the 2018 Basic Health Research (Riskesdas) shows that the prevalence of hypertension and diabetes in the elderly in Indonesia is around 22.3% and 5.39%, respectively [4], while other studies in the elderly population show the proportion of doctor-diagnosed hypertension is around 32–37% and diabetes is around 17–24% depending on the context and location [5].

The quality of life of older adults with chronic illnesses is influenced by physical factors (function and independence in daily activities), psychological factors (depression, stress), social factors (family support, social relationships), and environmental and economic conditions. Chronic illness and multimorbidity often lead to activity limitations and dependence in basic and instrumental activities of daily living, leading to disability and a reduced quality of life [6]. Depression and other mental health disorders worsen all domains of quality of life, including emotional well-being and social functioning. The accumulation of these factors leads many older adults with chronic illnesses to experience a decreased ability to carry out social roles, decreased independence, and reduced subjective well-being in daily life.

One important factor in maintaining the quality of life of elderly people with chronic illnesses is family support. The family is the closest social unit that provides physical care, medication monitoring, assistance with daily activities, and ongoing emotional support [7]. Strong family support has been shown to be associated with better quality of life and mental health, through increased feelings of security, reduced

depressive symptoms, and improved psychological well-being in older adults. Furthermore, perceived family support also contributes to life satisfaction, emotional and social well-being, and helps older adults adapt to chronic illness and maintain adherence to long-term treatment and care [8].

Family functions for the elderly include meeting affective needs, health care, social and economic support, and protection for all members. When these functions function well, this is evident in the presence of affection, support, communication, shared problem-solving, and fair role-sharing, and the elderly tend to have a better quality of life, mental health, and perception of health [9].

Several studies have shown that older adults with strong family support tend to have a better quality of life than those with low support. At the Sumbersekar Elderly Posyandu, approximately 89.8% of older adults with good family support also had a good quality of life (93.2%) [10], while in Bogor, 51.8% of older adults with good family support reported a good quality of life compared to only 3.6% of those with moderate support [11]. Another study found that older adults who experienced strong family support generally fell into the moderate to high quality of life category, while those with poor support were more likely to have a low quality of life [12].

Changes in modern family structures due to urbanization, labor migration, and shifts in filial piety values have led many older adults to no longer live in extended families, but to live alone or with a partner, while children live separately and provide more economic support from afar. Older adults living alone have been shown to have higher levels of physical and mental health vulnerability, including increased depression, loneliness, and health vulnerability compared to older adults living with family. This condition can increase vulnerability to physical and mental health problems, especially for older adults with chronic illnesses [13]. This study aims to analyze the influence of family function on the quality of life of older adults with chronic illnesses.

II. METHODS

This study used a quantitative approach with an observational analytical design through a cross-sectional design to analyze the influence of family function on the quality of life of elderly people with chronic diseases. The study was conducted in Gampong Tanjung Selamat in November 2025. The population in this study were all elderly people registered in the area and known to suffer from at least one chronic disease based on information from health workers or medical control books. The sampling technique used purposive sampling by considering the suitability of the respondent's characteristics to the research objectives, resulting in 29 respondents. The independent variable in this study was family function, while the dependent variable was the quality of life of the elderly. Data collection was carried out using a structured questionnaire that had passed validity and reliability tests, consisting of a family function assessment instrument and an instrument for assessing the quality of life of the elderly covering the physical, psychological, social, and environmental domains. The data collection process was carried out door to door with the assistance of researchers to ensure respondents understood each question, considering that some respondents had a basic education level.

The inclusion criteria for this study included elderly individuals aged ≥60 years, permanently residing in Gampong Tanjung Selamat, suffering from chronic diseases such as hypertension, diabetes mellitus, heart disease, or other chronic diseases for at least the past six months, able to communicate well, and willing to be respondents by signing a consent form. The exclusion criteria were elderly individuals with severe cognitive impairment, hearing or speech impairments that hindered the interview process, were in an acute illness during the study, or did not complete the questionnaire completely. The collected data were then analyzed univariately to describe the distribution of respondent characteristics and bivariately using the Chi-Square test with a 95% confidence level ($\alpha = 0.05$) to determine whether there was an influence between family function and quality of life of the elderly. All stages of the study were conducted with due regard to research ethics principles, including maintaining the confidentiality of respondents' identities and ensuring voluntary participation without coercion.

III. RESULT AND DISCUSSION

Table 1. Respondent Characteristics (n = 29)

Characteristics	n	%
Age		
60–69 years	14	48,3
70–79 years	10	34,5
≥ 80 years	5	17,2
Gender		
Male	12	41,4
Female	17	58,6
Education		
No schooling	4	13,8
Elementary school	12	41,4
Middle school	7	24,1
High school	6	20,7
Marital status		
Married	18	62,1
Widowed/Widower	11	37,9
Type of chronic disease		
Hypertension	11	37,9
Diabetes mellitus	9	31,0
Heart disease	5	17,2
Other	4	13,8

Most of them are in the 60–69 age group, female, have primary education (elementary school), and are married, with the most common type of chronic disease being hypertension (Table 1). The majority of elderly people have good family function (51.7%), and this group has the highest quality of life (34.5%). The Chi-Square test results show a p value = 0.003 ($p < 0.05$), which means there is a significant influence between family function and quality of life of elderly people with chronic diseases, where the better the family function, the better the quality of life of the elderly (Table 2).

Table 2. The Influence of Family Function on the Quality of Life of Elderly People with Chronic Diseases

Family Functions	Quality of Life: Good		Quality of Life: Moderate		Quality of Life: Bad		p-value
	n	%	n	%	n	%	
Good	10	34,5	4	13,8	1	3,4	
Moderate	4	13,8	5	17,2	2	6,9	0,003
Bad	0	0	1	3,4	2	6,9	

The results of the study showed that most respondents were in the 60–69 year age group. This condition reflects that the early elderly group is still the dominant population in public health services. In this phase, the elderly begin to experience physiological changes and an increased risk of chronic diseases, but still have relatively good adaptive abilities. In gerontology theory, old age is seen as a final phase of life marked by physical, psychological, and social decline that gradually increases dependency so that the elderly really need support from their closest environment. Elderly who enter this phase are vulnerable to weakness, degenerative diseases, anxiety, and depression, so the existence of a strong support system is an important determinant of their functioning and well-being [14], [15].

The majority of respondents were female. This finding is consistent with health demographic studies showing that women have a higher life expectancy than men, but spend a greater proportion of their life years in ill health or disability, a phenomenon known as the female health–survival paradox [16]. Several studies have found that older women experience more chronic illness, persistent pain, and functional impairment than men of the same age, and have higher rates of depressive and anxiety symptoms [17].

The majority of respondents' education levels were in the primary education category, indicating that most elderly people have limited health literacy. This condition can affect their understanding of chronic disease management and medication adherence. According to health behavior theory and health economics, education plays a crucial role in shaping health knowledge and literacy, which then influences how individuals receive, process, and use health information to make more rational and health-beneficial decisions [18].

The marital status of respondents, who were predominantly married, indicated the presence of a spouse as a primary source of support. According to social support theory, a spouse is seen as the closest attachment figure who provides a sense of security, emotional closeness, and practical assistance in dealing with stress and functional decline in old age [19]. A study by Dang et al. (2024) showed that elderly people who live with a partner or live with a partner as their primary caregiver tend to have better psychological well-being and quality of life than those who live alone or without a partner, with lower levels of depression, stress, and suicidal ideation.

The most common type of chronic disease in this study was hypertension. This finding is consistent with the epidemiological theory of non-communicable diseases, which states that hypertension is one of the most common chronic diseases found in the elderly and is a major component of the burden of multi-morbidity in old age [20]. A study by Júnior et al. (2024) showed that the presence of one or more chronic diseases such as hypertension, diabetes, heart disease, stroke, and arthritis is associated with an increased risk of limitations in activities of daily living (ADL/IADL), decreased physical function, and the emergence of dependence on others for self-care.

The analysis results show that the majority of respondents have good family functioning. This indicates that families are still optimally performing their affective, caregiving, and social support roles. According to family function theory, well-functioning families are characterized by the ability to maintain cohesive relationships, carry out family roles appropriately, and communicate clearly and effectively among family members [22].

This study also shows that older adults with good family functioning tend to have a better quality of life. This finding aligns with social support theory, which states that adequate family support acts as a buffer that can reduce the negative impact of stress and protect mental health through the provision of emotional, informational, and instrumental support [23]. This support is associated with reduced loneliness and depression, increased use of positive coping, and improved psychological well-being in older adults and other aging groups [24].

Statistical test results indicate a significant influence between family function and quality of life in the elderly. This reinforces the assumption that the family is the primary support system in the lives of the elderly, especially for those suffering from chronic illnesses. Conceptually, good family function can act as a stress buffer for the elderly, as the family meets physical needs (care, disease monitoring, support in daily activities) as well as psychological, social, and spiritual needs, thereby reducing stress and the psychosocial impact of chronic illness [25].

IV. CONCLUSION

There is a significant influence between family function and the quality of life of elderly people with chronic illnesses in Gampong Tanjung Selamat. Elderly people who live in well-functioning families, characterized by emotional support, attention, effective communication, and assistance with healthcare, tend to have a better quality of life compared to those whose families are less than optimal. These findings confirm that the family plays a crucial role as the primary support system in maintaining the physical, psychological, and social well-being of elderly people, particularly in the face of long-term chronic illnesses.

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