

## Quality Of Elderly Life With Chronic Diseases In The Working Area Of Kembangan District Hospital

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### KEYWORDS

Quality of life, Elderly,  
Chronic disease, WHOQOL-  
Bref.

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### ABSTRACT

The success of health development in Indonesia has increased the life expectancy of the Indonesian people. West Jakarta Kembangan Hospital has responsibility for improving the quality of life of the elderly in their working area, in line with Government Policy Number 17 of 2014 concerning Geriatric Service Standards in Hospitals. The aim of the study was to analyze the quality of life of elderly people with chronic diseases in the working area of Kembangan Hospital, West Jakarta in 2023. This study used a quantitative approach with a cross-sectional design, with an elderly population in the working area of Kembangan Hospital and a sample size of 60 elderly people by Simple Random Sampling. The proportion of high quality of life for the elderly (63.3%) and low quality of life for the elderly (36.7%), marital status, education, employment, income and status of residence as well as the length of chronic disease in the elderly are related to the quality of life for the elderly, while age, gender, name of chronic disease and the number of chronic diseases are not related to the quality of life of the elderly. The dominant variable related to the quality of life of the elderly is income with OR = 0.269. Suggestions that can be recommended to the Kembangan Hospital are reactivating geriatric services through promotive efforts for elderly health so that chronic diseases in the elderly can be detected early and receive optimal treatment so as to improve the quality of life of the elderly, can open geriatric innovation services that are "One Stop Service for the Elderly".

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### 1. Introduction

A happy and healthy life is the dream of every human being in general and the elderly in particular. As an elderly human being, of course, he has his own hopes and needs for life to live the rest of life given by Allah Almighty. It is said to be happy at least if the necessary hopes and needs have been fulfilled so that it can be interpreted as having achieved a good quality of life.

The increasing number of elderly population is currently an important issue for the world, including Indonesia. Indonesia in 2010 experienced an increase in the number of elderly population

from 18 million people (7.56%) to 25.9 million people (9.7%) and will continue to increase where in 2035 to 48.2 million people (15.77%) (Statistik & Indonesi, 2020). With the number of elderly people continuing to increase in the coming year, it will certainly create new problems for the Government. Challenges for the government for social and economic welfare are related to the provision of budgets for the fulfillment of life, public and political accessibility and health aspects given limited physical conditions (helplessness) and long-term disease care.

According to *the World Health Association* (WHO), elderly people are a group of people aged 60 years or more, along with Law Number 13 of 1998 concerning the welfare of the elderly, what is meant by the term elderly is someone who has reached the age of 60 years and over. Because of age, of course, the elderly also experience biological changes including physical and psychosocial, which these changes will affect all aspects of life including health. The elderly also experience a decrease in physiological functions in the body, resulting in vulnerability to health problems / disease disorders (Kurnianto, 2015)(Choi et al., 2020)(Shang et al., 2020)(Fülöp, Larbi, Dupuis, & Pawelec, 2003).

The results of the Indonesian Medical Gerontology Association (Pergemi) Survey in 2022 found that 24.6% of the elderly population in Indonesia had a history of chronic diseases, with the majority of hypertension at 37.8%, diabetes mellitus at 22.9%, rheumatic diseases at 11.9% and 11.4% heart disease (Indonesia & Indonesia, 1992).

In the Kembangan Regional General Hospital, many elderly people are active, and special health services for the elderly have been provided at Kembangan Regional Hospital by providing geriatric services as a national program. This service includes outpatient, acute inpatient and chronic inpatient services according to the level of service type. The existence of the Covid-19 pandemic and the PPKM (Enforcement of Community Activity Restrictions) policy from the government to prevent the wider spread of Covid-19 and suppress high mortality resulted in the absence of adequate elderly activities in the work area of Kembangan Hospital. This situation certainly has an impact on meeting the needs of the elderly, especially in getting health services related to chronic diseases they suffer

The quality of life of the elderly can be judged by their physical, psychological, social relationships and environment (Organization, 2011). WHO defines quality of life as the perception of individuals whether male or female in terms of the cultural context and value system in which they live, related to living standards, expectations, pleasure and attention, fully integrated including physical, psychological, level of freedom, social relationships and tranquility of the environment.

Although seniors with chronic illnesses have many challenges, they still have the potential to lead happy and meaningful lives. The success of treatment and treatment of chronic diseases in the elderly can certainly affect the quality of life of the elderly. The quality of life of the elderly can be measured using a questionnaire from WHO, namely *WHOQOL-BREF* (Organization, 2019).

## 2. Materials and Methods

This study is a type of Observational Analytical research using Cross Sectional research design. This research was conducted in June 2023, located in the working area of Kembangan Hospital, West Jakarta with a large sample of 60 elderly respondents. Inclusion criteria include chronological age according to KTP 60 years and over, have a chronic disease, live in the Kembangan sub-district, can read and write in Indonesian and is not in hospital. Sampling using *Simple random sampling* in the working area of Kembangan Hospital.

Research instruments to measure the characteristics of the elderly as an independent variable are questionnaires that have been constructed by the researchers themselves, while instruments to measure the dependent variable, namely the quality of life of the elderly use standard measuring instruments in the form of questionnaires from WHO, namely *WHOQOL-BREF* which have been translated into Indonesian and have been validated and reliable for use in Indonesia.

Data analysis using univariate analysis using proportion or percentage data, bivariate analysis using *Chi Square* to see the relationship between characteristics and quality of life of the elderly and multivariate analysis to determine the dominant variables related to the quality of life of the elderly using SPSS version 25.

### 3. Result and Discussion

**Table 1 Frequency Distribution of Quality of Life of the Elderly**

No	VARIABEL	KATEGORI	FREKUENSI (n)	PROPORSI (%)
	Quality of life of the elderly	Low	38	63,3
		High	22	36,7
	Physical Domain	Low	56	93,3
		High	4	6,7
	Psychological Domain	Low	44	73,3
		High	16	26,7
	Domain Inter Social Action	Low	49	81,7
		High	11	18,3
	Domain Ling Kungan	Low	33	55,0
		High	27	45,0

Based on table 1, it can be seen that the quality of life of the elderly is high as many as 38 elderly with a proportion of 68.3%. The physical, psychological, social interaction and environmental domains are in the high category with a greater proportion.

**Table 2 Frequency Distribution of Elderly Characteristics**

No	CHARACTERISTIC	CATEGORY	FREQUENCY (n)	PERCENTAGE (%)
1	Age	Young	54	90,0
		Intermediate	6	10,0
2	Gender	Man	25	41,7
		Woman	35	58,3
3	Marital Status	Marry	58	96,7
		Not	2	3,3
4	Status	Tall	49	81,7
	Education	Low	11	18,3
5	Employment Status	Work	38	63,3
		Not	22	36,7
6	Income	Tall	39	65,0
		Low	21	35,0
7	Residence Status	Family	39	65,0
		Not	21	35,0
8	Chronic Disease Name	Hypertension	30	50,0
		DM	14	23,3
		Arthritis	2	3,3

		Hyper,HyperDM,Heart	4	6,7
		DM,Heart	2	3,3
		Hyper,DM,Jan	3	5,0
		Hyper,DM,Art	1	1,7
9	Number of Chronic Diseases	1 PKronis	46	76,7
		≥ 2 PKronis	14	23,3
10	Duration of chronic disease	≤ 5 Years	32	53,3
		≥ 6 Years	28	46,7

Based on table 2, it was found that the elderly with the category of young elderly as many as 54 people (90.0%), female gender more than men, namely 78 elderly (58.3%), married status 96.7%, higher education status 81.7%, working status 63.3%, high income 65.0%, residence status 65%, hypertension as much as 50%, elderly who have 1 chronic disease as many as 46 people (76.7%) and who suffer from chronic diseases less and up to 5 years there are 53.3%.

**Table 3 The Relationship of Elderly Characteristics with the Quality of Life of the Elderly**

No	VARIABLE	p value	OR
1	Age	0,108	4,000
2	Gender	0,526	1,417
3	Marital Status	0,000	0,568
4	Education Status	0,004	0,150
5	Employment Status	0,029	3,360
6	Income	0,008	0,175
7	Residence Status	0,465	1,500
8	Number of Chronic Diseases	0,069	3,048
9	Duration of chronic disease	0,045	3,000

From table 3 it is found that marital status, education, employment, income and duration of chronic diseases suffered by the elderly have a significant relationship, judging from the *p value* of each, where  $\leq 0.05$

**Tabel 4 Multiple Logistic Regression Final Results**

VARIABLE	B	p value	OR	CI 95%
Education	-1,270	0,097	0,281	0,063-1,256
Income	-1,312	0,034	0,269	0,080-0,907

Table 4 shows that 2 variables, namely education and income, are variables related to the quality of life of the elderly but the variable income is the dominant factor related to the quality of life of the elderly with a value of OR = 0.269, meaning that the elderly with high income have 0.3 times more quality of life.

Based on data processing of research that has been carried out, the following results are obtained:

-Age: less variable because the category of plenary elderly is not found. This is in line with data from the Central Statistics Agency (BPS) in 2021 to find that the elderly in DKI Jakarta are dominated by young elderly groups,1 which is also seen in the working area of Kembangan Hospital.

Female sex is more numerous than male, this may be age related. In women UHH is higher in women.

Marital status, 95% of the elderly are married meaning that having a family means getting family support, influencing social interaction and achieving psychological well-being that can improve the quality of life.

Education, employment and income status are interrelated and related variables. With higher education, a person has the opportunity to have a better job that affects income as well. This research shows that the elderly with higher education, have good jobs and incomes.

-Living status with family means having full family support so that it has a positive impact on the quality of life of the elderly.

- Chronic diseases suffered by elderly respondents based on the highest number are hypertension, diabetes mellitus, combination of hypertension with diabetes mellitus, combination of hypertension with heart, and arthritis. According to Riskesdas (2018), the most chronic diseases are hypertension, diabetes mellitus, heart, stroke and ARI.<sup>9</sup> This is in accordance with data from a survey by the Indonesian Medical Gerontology Association (Pergemi) in 2022 found that 24.6% of the elderly population in Indonesia had a history of chronic diseases, with the majority of hypertension at 37.8%, diabetes mellitus at 22.9%, rheumatic diseases at 11.9% and 11.4% of heart disease (Jacob, Breuer, & Kostev, 2016; Zhao, Wong, Zhu, & Yang, 2018).

-Elderly who have 1 more chronic disease than those who have two or more chronic diseases. This is in accordance with Zhao's research that the elderly aged 60 years and over generally suffer from one in four chronic diseases. Likewise, Jacob's study found that more than 50% of elderly samples over 65 years suffer from one to three chronic diseases, even 25% suffer from four and more chronic diseases.

- The results of this study found that elderly respondents who had suffered from chronic diseases 5 (five) years and under were 53.3% (32 people) and 46.7% (28 people) had suffered from 6 (six) years and over. This happens because generally chronic diseases cannot be cured completely and require long-term treatment management. Chronic diseases suffered over many years can cause complications if not treated properly and medical, social, and psychological problems can arise due to the duration of the chronic illness.

### **The relationship between age and the quality of life of the elderly**

The aging process is a natural phenomenon experienced by every individual, including the elderly. With age, biologically the human body undergoes significant changes. In this study,  $P = 0.108$  was obtained which is greater than 0.05 meaning that there is no significant relationship between age and the quality of life of the elderly. This is the same as the results of research by Putri et al. (2018) conducted in Jakarta, to identify factors that contribute to the quality of life of the elderly. The results showed that age did not have a significant relationship with the quality of life of the elderly ( $p > 0.05$ ). It said education level, marital status, and social support were factors more related to the quality of life of the elderly than age (Cahyawijaya et al., 2023).

### **The relationship between sex and the quality of life of the elderly**

From the study, it was found that there was no relationship between gender and the quality of life of the elderly. The OR value obtained in this study is = 1.417, meaning that the elderly with female sex have a 1.4 times more chance of having a high quality of life compared to the elderly with male sex. This is in line with research conducted by Ratnawati and Kurniati (2020) in the Tanah Tinggi Health Center area, Jakarta to measure the quality of life of the elderly found that gender is not significantly related to quality of life, there are other factors such as socioeconomic status and health conditions are more related to the quality of life of the elderly (Ratnawati, Ati, & Indarto, 2022). Different things were obtained from a study by Rahmaningsih et al (2020) conducted in Depok to compare the quality of life of elderly men and women. The results showed that elderly women have

a lower quality of life than elderly men (Rahmaningsih & Andriani, 2020). These differences are related to physical health problems and social support. Elderly women tend to experience more physical health problems, such as osteoporosis and bone disorders, which certainly affect quality of life.

#### **The relationship between marital status and the quality of life of the elderly**

Marital status is one of the important factors that can affect the quality of life of the elderly. Marital status reflects a person's social circumstances and interpersonal relationships in their life. The results showed that there was a relationship between marital status and the quality of life of the elderly.

Another relevant research is research by Karisma et al (2019) conducted in West Pejaten Village, Pasar Minggu, South Jakarta. The study also examined the relationship of social support with the quality of life of the elderly (Karisma, H., Sutopo, J., Lestari, 2019). The results of the study show that social support from family and community has an important role in improving the quality of life of the elderly.

#### **The relationship between educational status and the quality of life of the elderly**

The results of this study obtained p value (*p value*) =  $0.006 \leq 0.05$  meaning that there is a relationship between educational status and the quality of life of the elderly. Along with research by Kusumawati and Kristina (2020) in Surabaya, which aims to evaluate the relationship between elderly education and quality of life. The results showed that there was a significant relationship between elderly education and quality of life ( $p < 0.05$ ) (Kusumawati, R., Kristina, 2020). Seniors with higher levels of education have better access to information, knowledge, and resources that can improve their quality of life. Higher education levels can also influence the health behavior of the elderly, thus helping in preventing disease and maintaining overall health.

#### **The relationship between employment status and the quality of life of the elderly**

The results of the study found a value of  $p = 0.029 \leq 0.05$  meaning that there is a relationship between employment status and the quality of life of the elderly. In this study, the value of  $OR = 3,360$  means that the elderly with working status are 3 times more likely to experience a high quality of life compared to the elderly who are not working. The relevant research is conducted by Siregar, (2021) in Semarang. This study aimed to evaluate the relationship between the work of the elderly and quality of life. The results showed that there was a significant relationship between the work of the elderly and the quality of life ( $p < 0.05$ ). That is, the elderly who are still actively working tend to have a better quality of life compared to the elderly who do not work in this study (Siregar, R. S., Darmawan, H. A., Sumaryani, 2021).

#### **The relationship between income and the quality of life of the elderly**

Income is one of the socioeconomic factors that can affect a person's welfare and quality of life. From the study,  $p \text{ value} = 0.008 \leq 0.05$  means that there is a relationship between income and the quality of life of the elderly. Research relevant to this study is Wulandari and Syafiq's (2021) research in Bandung which aims to evaluate the relationship between elderly income and quality of life. The results showed that there was a significant relationship between elderly income and quality of life ( $p < 0.05$ ) (Wulandari, R., Syafiq, 2021). Seniors with higher incomes have better access to resources and services health, food, shelter, recreation and transportation that can improve their quality of life. In addition, income also plays a role in increasing the sense of security and financial stability of the elderly. With sufficient income, the elderly can more easily meet their daily needs, overcome financial challenges that may arise, and have more choices in their lifestyle. All of this certainly contributes to improving the quality of life of the elderly.

#### **The relationship between residence status and the quality of life of the elderly**

The relationship between living status and family is one of the important aspects in influencing the quality of life of the elderly. Residence status with family reflects the level of social



support and family involvement in the daily lives of the elderly. The results of research on living status with family or non-family have condition results that are similar to the results of research on the relationship between the elderly and marital status. In this study,  $p\text{ value} = 0.465 \geq 0.05$  was obtained, meaning that there was no relationship between residence status and the quality of life of the elderly. Research by Handayani and Kusumaningrum (2019) conducted in Surakarta, aims to identify the relationship between living status and family with the quality of life of the elderly. The results showed that the status of living with family has a significant relationship with the quality of life of the elderly of seniors who live with families tend to have better levels of quality of life compared to those who live alone. Living with family provides better social and emotional support for the elderly, which can improve psychological well-being and reduce loneliness (Handayani, N., Kusumaningrum, 2019).

#### **The relationship of the number of chronic diseases with the quality of life of the elderly**

The results of this study obtained  $p\text{ value} = 0.069 \geq 0.05$  meaning that there is no relationship between the number of chronic diseases and the quality of life of the elderly. In line with research conducted by Nurhidayah, et al (2020) in Semarang, which aims to evaluate the relationship between the number of chronic diseases and the quality of life of the elderly. The results showed that there was no significant relationship between the number of chronic diseases and the quality of life of the elderly ( $p > 0.05$ ) (Nurhidayah, R., Murti, B., Santoso, 2020). That is, the number of chronic diseases suffered by the elderly does not significantly affect the quality of life of the elderly.

Different things were found in a study by Wibowo and Kurniawan (2019) conducted in Semarang aimed to identify the relationship between the number of chronic diseases and the quality of life of the elderly. The results showed that the number of chronic diseases has a significant relationship with the quality of life of the elderly (Wibowo, A. S., Kurniawan, 2019). Seniors who suffer from more than one chronic disease tend to have a lower quality of life compared to those who suffer from only one or no chronic disease. More chronic diseases can cause physical limitations and disruptions in carrying out daily activities, thus affecting the quality of life. Research by Rahayu, Nurhayati, and Rahmaningtyas (2018) conducted in Surabaya, also shows that the number of chronic diseases has a negative influence on the quality of life of the elderly (Rahayu, A., Nurhayati, E., Rahmaningtyas, 2018). Seniors who suffer from more chronic diseases tend to have lower levels of life satisfaction and experience more limitations in activities. Various chronic diseases can affect various aspects of quality of life, including physical, emotional, social, and environmental aspects so that the relationship between the number of chronic diseases and the quality of life of the elderly does not apply *generally* (comprehensive) because each individual has a different level of tolerance and adjustment to the chronic disease he suffers. Some seniors may be able to cope and manage their chronic illnesses so well that they do not unduly affect their quality of life, meanwhile, other seniors may experience a significant decrease in quality of life.

#### **Long Relationship of Chronic Disease with Quality of Life of the Elderly**

From the results of the study, a  $p\text{ value} = 0.045 \leq 0.05$  means that there is a relationship between the length of chronic disease and the quality of life of the elderly. The value  $OR = 3,000$  is obtained. This means that the elderly with chronic diseases  $\leq 5$  years have a 3 times more chance of experiencing a high quality of life compared to the elderly who have long suffered from chronic diseases  $\geq 6$  years. One of the relevant studies is conducted by Aini, et al (2021) in Semarang, aiming to evaluate the relationship between the length of chronic illness and the quality of life of the elderly. The results showed that there is a significant relationship between the length of chronic disease and the quality of life of the elderly, meaning that the longer a person suffers from chronic disease, the lower the quality of life experienced by the elderly (Aini, R., Widyastuti, A. M., Handayani, 2021). Another relevant research was conducted by Sari, et al (2018) in Surabaya. This study also examined the relationship between the length of chronic illness and the quality of life of the elderly. The results of the study also showed that there was a significant relationship between the length of chronic

disease and the quality of life of the elderly ( $p < 0.05$ ) (Sari, D. A., Pradanie, R., Kartika, 2018). The study also concluded that the longer the elderly suffer from chronic diseases, the lower the quality of life experienced by the elderly.

Another different study was conducted by Santoso and Wirawan (2017) in Yogyakarta. This study also examined the relationship between the length of chronic illness and the quality of life of the elderly. The results showed that there was no significant relationship between the length of chronic disease and the quality of life of the elderly ( $p > 0.05$ ) (Santoso, W. D., Wirawan, 2017). This suggests that the quality of life of the elderly is influenced by a variety of complex and multidimensional factors, and the duration of chronic illness is only one of many factors that can affect the quality of life of the elderly. Factors such as social support, physical activity level, mental health, and level of independence also play an important role in determining the quality of life of the elderly. Because each individual has a different level of tolerance and adjustment to chronic diseases. Proper and regular management and management of chronic disease care can help minimize the negative impact on the quality of life of the elderly.

#### **Factors most related to the Quality of Life of the Elderly**

In this study, it was found that the 1 highest dominant variable was income with  $p$  value =  $0.034 < 0.05$ , meaning that income was significantly related to the quality of life of the elderly in the working area of Kembangan Hospital, West Jakarta. Research by Sukirno and Kustanti (2017) found that income has a positive effect on the quality of life of the elderly because it provides financial security. Sufficient income also provides access to health services needed to maintain the physical and mental health of the elderly (Sukirno, S., Kustanti, 2017).

The researchers' assumption is that income is the most dominant factor affecting the quality of life of the elderly in the working area of Kembangan Regional Hospital because the Meruya area is an urban area, where living costs including housing, food, and health services, tend to be higher and access to various health and social services requires adequate financial resources. Seniors with sufficient income can more easily meet their physical needs and access the health services needed to maintain their health. Research by Kusumawardhani, et al (2021) found that the income of the elderly in urban areas is positively related to the quality of physical life of the elderly because it contributes to meeting basic needs (Kusumawardhani, N. A., Manik, R. S. M., Aswari, 2021). In addition, income also plays a role in the social quality of life of the elderly in urban areas. In dense urban environments, there tend to be many social and cultural activities that can improve the quality of life of the elderly. Research by Astuti and Dharmawan (2019) found that the income of the elderly in urban areas is positively related to their social quality of life because it provides opportunities to engage in social activities (Astuti, Y. S., Dharmawan, 2019). Elderly income also has an impact on the psychological quality of life of urban elderly. In busy and often demanding urban environments, stress and anxiety levels can increase. Seniors with sufficient income tend to be better able to deal with psychological challenges. By having an adequate income, the elderly can more easily cope with feelings of social isolation and financial anxiety. Research by Wulandari and Hartati (2021) found that the income of the elderly in urban areas is positively related to the psychological quality of life because it provides a feeling of security and financial stability (Wulandari, N. D., Hartati, 2021).

#### **4. Conclusion**

Chronic diseases suffered by the elderly in the working area of Kembangan Hospital, West Jakarta, the most are hypertension, diabetes mellitus, hypertension and diabetes mellitus, hypertension and heart disease, and arthritis.

The quality of life of the elderly in the working area of Kembangan Hospital, West Jakarta, found a high quality of life of 63.3% and a low quality of life of 36.7%.



Some sociodemographics of the elderly in the working area of Kembangan Hospital, West Jakarta, such as marital status, education, employment and income and residence status are related to the quality of life of the elderly, while age and gender are not related to the quality of life of the elderly.

The duration of chronic diseases suffered by the elderly is related to the quality of life of the elderly, where the longer the chronic disease suffered by the elderly, the lower the quality of life of the elderly.

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