

THE RELATIONSHIP BETWEEN *FRAILTY SYNDROME* AND QUALITY OF LIFE IN ELDERLY HYPERTENSION PATIENTS IN THE WORKING AREA OF THE GAYAMAN MOJOKERTO PUBLIC HEALTH CENTER

Tasya Aprilia Widyaningrum , Ima Rahmawati , Rizky Meuthia Pratiwi

PPNI Bina Sehat University, Mojokerto, Indonesia

Corresponding Author: tasyapria2001@gmail.com

ABSTRACT

Frailty syndrome is syndrome marked geriatrics with decline reserves physiological so that increase vulnerability elderly to various stressors. Conditions This often occurs in the elderly with hypertension and can lower quality life , namely perception individual to condition his life which includes aspect physical , psychological , social , and environmental . Research This aim analyze the relationship between frailty syndrome and quality life in patients hypertension elderly in the UPTD Puskesmas Work Area Gayaman Mojokerto. Research This use design analytic correlational with cross-sectional approach . Population totaling 438 patients hypertension elderly with sample of 82 selected respondents use purposive sampling technique . Data collected use the FRAGILE and WHOQOL-BREF questionnaires , then analyzed in a way univariate and bivariate using the Spearman Rank test (Spearman Rho) with level significance $\alpha = 0.05$. Analysis results show p- value = 0.000 ($p < 0.05$), so there is significant relationship between frailty syndrome and quality life in patients hypertension elderly . Coefficient value correlation of -0.574 indicates connection strong with direction negative , which means the more tall the level of frailty syndrome, the more low quality life . Research This show that improvement the level of frailty syndrome is related with decline quality life in patients hypertension elderly . Condition This show importance detection early and intervention nursing in a way comprehensive For prevent worsening of frailty and maintaining quality life elderly .

Keywords: *Frailty syndrome, quality life , hypertension , elderly*

INTRODUCTION

Elderly life is the final stage of the human life cycle, characterized by the aging process, which can lead to frailty syndrome. This condition is characterized by muscle weakness, decreased gait speed, and chronic fatigue (Putra et al., 2021). This risk increases significantly if the elderly also have hypertension. Uncontrolled high blood pressure triggers microvascular damage and oxidative stress, accelerating sarcopenia (muscle wasting) and cognitive decline, thus accelerating the transition from pre-frailty to frailty in the elderly (Rahman & Setiati, 2020).

The result of the accumulation of these health problems has a direct impact on the drastic decline in the quality of life of the elderly. This decline in quality of life can be seen from various domains, namely the physical domain which is characterized by limited activity and decreased mobility, the psychological domain which is related to feelings of anxiety, depression, and decreased motivation, the social relationship domain which includes reduced social interaction and support from the surrounding environment, and the environmental domain which includes limited access to health facilities and less supportive living conditions.

The current phenomenon of many elderly people experiencing frailty syndrome, exacerbated by hypertension, impacts their quality of life. If this decline in quality of life is

not addressed promptly, it will trigger systemic impacts, including a drastic reduction in independence, limited mobility, and the risk of fatal medical complications such as injuries from falls, secondary infections, and repeated hospitalizations, which can worsen the elderly's physical condition (Saraswati et al., 2022).

According to the World Health Organization, an estimated 1.28–1.4 billion people worldwide aged 30–79 years live with hypertension. Hypertension, or high blood pressure, is one of the biggest public health problems in Indonesia. The Indonesian Ministry of Health, through the 2023 SKI, reported a hypertension prevalence of 30.8% in the population aged ≥ 18 years, down from 34.1% the previous year (Ministry of Health of the Republic of Indonesia, 2023). However, other reports state the prevalence rate reached 34.11%, placing Indonesia fifth in the world in the number of hypertension sufferers (Soewondo, Ferrario, & Tahapary, 2022). Hypertension in Indonesia is dominated by essential hypertension (90–95% of cases), and is the fourth leading risk factor for death with a percentage of 10.2% according to a 2011–2021 NCD cohort study (Central Bureau of Statistics, 2025). The study conducted (Zulfa, et al. 2025) involved a total of 96 elderly respondents aged >60 years who were diagnosed with hypertension and 51% showed Frailty syndrome. Frailty syndrome generally occurs in elderly aged <65 years and its prevalence increases with age. Based on research, the prevalence of frailty in those aged >60 years ranges from 3% - 37%, depending on population characteristics and measurement methods. In addition, frailty increases significantly in those aged <75 years and is higher in those aged <80 years. The prevalence of frailty can reach $<20\%$ - 30% $<$ high of the population (Feilding Ra & Boyle PA, 2025).

Based on a preliminary study conducted at the Gayaman Community Health Center UPT on April 20, 2026, it was shown that the number of hypertension patients reached 438 people, both those who visited the Community Health Center directly and through the Integrated Primary Service Post (ILP) in their working area. The results of the examination during interviews with patients at one of the elderly health posts suffering from hypertension showed that 3 respondents said they felt tired quickly and had reduced daily activities. Reduced daily activities in the elderly with hypertension can be seen from the decreased ability to carry out basic activities and instrumental activities. Basic activities that have decreased include self-care activities such as bathing, dressing, walking in the house, and changing positions (for example from sitting to standing). In addition, instrumental activities are also disrupted, such as cooking, cleaning the house, shopping, gardening, participating in social activities in the environment (for example, elderly health posts), to light physical activities such as morning walks or gymnastics. Elderly people with hypertension tend to limit these activities because they easily feel tired, dizzy, or worry that their health condition will worsen during activities.

As a result, the frequency and duration of activities are reduced compared to normal. This decline indicates limited physical function, which impacts the independence and quality of life of older adults. This decline in quality of life can be seen in limitations in physical activity, psychological disorders, and reduced social interaction. If this condition is not properly managed, it can increase the risk of complications, dependency, and even reduced productivity in older adults in the Gayaman Community Health Center area.

The aging process is an unavoidable biological phase, where a person is categorized as elderly if they reach the age of 60 or older. Chronologically, this group is divided into young elderly (60–69 years) and old elderly (>70 years), at which age physiological reserves

begin to decline in various organ systems. This decline often triggers the emergence of various geriatric syndromes, one of which is physical vulnerability or frailty syndrome (Irfan & Rijal, 2026).

The pathophysiology of frailty syndrome in the elderly involves complex mechanisms centered on homeostatic failure. With aging, pro-inflammatory cytokines (such as IL-6 and TNF- α) increase, triggering chronic low-grade inflammation. This condition leads to decreased muscle mass and strength, or sarcopenia, impaired energy balance, and decreased gait speed. As a result, the elderly become highly vulnerable to mild external stressors that can lead to disability or dependency (Jurnal Mitra Kesehatan, 2024).

This fragility condition is exacerbated by the presence of hypertension. Chronic hypertension in the elderly causes significant microvascular damage, including to the peripheral and cerebral circulation. Uncontrolled blood pressure accelerates muscle fatigue and decreases activity tolerance, which are key components of the Fried's frailty phenotype. This hemodynamic imbalance places hypertensive elderly at higher risk of experiencing a more rapid decline in physical function than normotensive elderly (Zulfa et al., 2025).

These factors indirectly aggravate the physical, psychological, social relationship, and environmental conditions of the elderly. Therefore, comprehensive treatment efforts are needed to reduce the burden of frailty syndrome and improve the quality of life of the elderly, including through increasing regular physical activity, optimal management of hypertension, providing health education, increasing family and social support, and optimizing access to health and community services (Landi et al 2021; Apostolo et al., 2022).

The relationship between hypertension and frailty directly impacts the quality of life of older adults. Elderly individuals with frailty syndrome often feel helpless, experience impaired mobility, and are at increased risk of falls. This decreased independence in activities of daily living (ADLs) leads to social isolation and psychological distress, ultimately lowering quality of life scores across both physical and mental dimensions (Irfan & Rijal, 2026).

To address these issues, a multifactorial intervention approach is needed. Hypertension management in frail elderly individuals should not only focus on pharmacological therapy but should also be accompanied by targeted physical exercise to improve muscle strength and balance (Jurnal Mitra Kesehatan, 2024).

Based on the data that has been collected, the researcher is interested in examining the relationship between frailty syndrome and quality of life in elderly hypertension patients in the working area of the Gayaman Mojokerto Community Health Center UPTD.

METHOD

This study uses a correlation analytical design with a cross-sectional approach which aims to analyze the relationship between frailty syndrome as an independent variable with quality of life as a dependent variable in elderly hypertensive patients in the working area of the Gayaman Mojokerto Community Health Center UPTD. The cross-sectional approach was chosen because the measurement of both variables was carried out simultaneously at one time through observation and filling out the research instrument, so that the relationship between frailty syndrome and quality of life can be analyzed based on the respondent's condition during the research.

The study population was all elderly patients with hypertension in the working area of the Gayaman Mojokerto Community Health Center (UPTD). The study sample consisted of 82 respondents selected using a non- probability sampling technique with a purposive sampling approach, namely the selection of respondents based on certain criteria or characteristics that have been determined by the researcher. The sample consisted of patients who met the inclusion and exclusion criteria of the study and came from three Integrated Health Posts (Posyandu), namely Posyandu Melati 1, Melati 2, and Melati 3. The determination of the number of samples was carried out using the Slovin formula with an error rate of 10%.

Data collection was conducted in the Gayaman Community Health Center (Puskesmas) working area of Mojokerto after the researcher obtained ethical approval and research permits. Prior to data collection, the researcher approached potential respondents, explained the purpose and objectives of the study, and then requested their participation. Respondents who agreed to participate then filled out a consent form and were given a research questionnaire. Frailty Measurement syndrome was assessed using the FRAUD instrument, while quality of life was measured using the WHOQOL-BREF questionnaire. The WHOQOL-BREF consists of 26 statements covering the domains of physical health, psychological health, social relationships, and the environment, while frailty The syndrome is assessed based on indicators of slowness, weakness, fatigue, low physical activity, and weight loss.

The collected data was then processed through editing , coding , scoring , and tabulating . The processed data was then analyzed using SPSS. Univariate analysis was used to describe the characteristics of the respondents and the distribution of each research variable in the form of frequency distributions and percentages. Bivariate analysis was conducted using the Spearman correlation test. Rank (Spearman Rho) as a non- parametric statistical test to determine the relationship between frailty syndrome and quality of life in elderly hypertensive patients. This test was used because the research variables have an ordinal scale or data that is not normally distributed . The significance level used was $\alpha = 0.05$, with the conclusion that if the p-value ≤ 0.05 , there is a significant relationship, whereas if the p-value > 0.05 , there is no significant relationship.

FINDING AND DISCUSSION

RESEARCH RESULT

Table 1Frequency Distribution of Respondent Characteristics in Elderly Hypertension Patients in the Work Area of the Gayaman Mojokerto Community Health Center UPTD

Characteristics Respondent Demographics	F	%
Gender		
Man	13	15.9
Woman	69	84.1
Age		
60-69 years	49	59.8
70-79 years	27	32.9
≥ 80 years	6	7.3

Last education		
No school	14	17.1
Elementary School (SD)	45	54.9
Junior High School (SMP)	14	17.1
Senior High School (SMA)	8	9.8
College	1	1.2
Work		
Doesn't work	11	13.4
Farmer	21	25.6
Self-employed	5	6.1
Retired	1	1.2
Other	44	53.7
Marital status		
Not married yet	1	1.2
Marry	36	42.7
Widow/Widower	45	54.9
Long time suffering from hypertension		
<5 years	63	76.8
5-10 years	17	20.7
>10 years	2	2.4
Consumption of hypertension medication		
Regular	29	35.4
Irregular	53	64.6
Physical activity		
Active	10	12.2
Quite active	70	85.4
Less active	2	2.4
Smoking habit		
Yes	8	9.8
No	74	90.2
Family support		
Good	12	14.6
Enough	70	85.4
Total	82	100.0

Source: Primary Data 2026

Table 1 shows that of the 82 respondents, based on gender, almost all were female (69 respondents) (84.1%). Based on age, most respondents were aged 60-69 years (49 respondents) (59.8%). Based on their last education, most respondents had an elementary school education (45 respondents) (54.9%). Based on occupation, most respondents belonged to the other category (44 respondents) (53.7%). Based on marital status, most respondents were widows/widowers (45 respondents) (54.9%). Based on the duration of hypertension, most respondents had suffered from hypertension for <5 years (63 respondents) (76.8%). Based on consumption of hypertension medication, most respondents did not regularly

consume hypertension medication (53 respondents) (64.6%). Based on physical activity, almost all respondents were quite active (70 respondents) (85.4%). Based on smoking habits, almost all respondents did not have a smoking habit (74 respondents) (90.2%). Based on family support, almost all respondents received sufficient family support, as many as 70 respondents (85.4%).

Table 2Frequency Distribution of Respondents Based on Frailty Syndrome in Elderly Hypertension Patients in the Work Area of the Gayaman Mojokerto Community Health Center UPTD

Frailty Syndrome	F	%
<i>Fit</i>	7	8.6
<i>Pre -frail</i>	22	26.8
<i>Frail</i>	57	64.6
Total	82	100.0

Source: Primary Data 2026

Based on Table 2, it shows that the majority of elderly hypertension patient respondents in the work area of the Gayaman Mojokerto Health Center UPTD experienced *frailty. syndrome* in the *frail category* as many as 53 respondents (64.6%).

Table 3Frequency Distribution of Respondents Based on Quality of Life in Elderly Hypertension Patients in the Work Area of the Gayaman Mojokerto Community Health Center UPTD

Quality of life	F	%
Good quality of life	7	8.5
Poor quality of life	75	91.5
Total	82	100.0

Source: Primary Data 2026

Based on Table 3, it shows that almost all elderly hypertension patient respondents in the working area of the Gayaman Mojokerto Health Center UPTD have a poor quality of life, as many as 75 respondents (91.5%).

Table 44Cross Tabulation of *Frailty Relationship The Relationship Between Quality of Life and Syndrome* in Elderly Hypertension Patients in the Gayaman Mojokerto Community Health Center UPTD Work Area

Frailty Syndrome	Quality of life				Total	
	Good		Bad			
	f	%	f	%	f	%
Fit	7	8.5	0	0	7	100
Pre -frail	0	0	22	26.8	22	100
Frail	0	0	53	64.6	53	100
Total	7	8.5	75	91.5	82	100
r: 0.574 <i>p value</i> : 0.000 α : 0.05						

Source: Primary Data 2026

Based on Table 4, it is known that of the 82 respondents, all 7 respondents in the fit category (100%) had a good quality of life and no respondents had a poor quality of life. Meanwhile, in the pre-frail category, 22 respondents (100%) all had a poor quality of life and none had a good quality of life. Similarly, in the frail category, all 53 respondents (100%) had a poor quality of life.

Spearman's data test results rho p value (0.000) means it is smaller than the alpha value (0.05). Thus, H_0 is rejected, which means there is a relationship between frailty and syndrome with quality of life in elderly hypertensive patients. *Correlation value coefficient* 0.574 which means the level of strong relationship with the direction of the relationship between the two variables is negatively correlated, meaning the higher the frailty syndrome, the higher the quality of life.

DISCUSSION

Frailty Syndrome

Frailty Syndrome is a geriatric condition influenced by various factors, including the aging process, psychosocial conditions, chronic diseases, and the use of various types of medication (polypharmacy). The aging process causes a decline in physiological function, muscle mass, and the body's energy reserves, making the elderly more susceptible to frailty. In addition, psychosocial factors such as depression, social isolation, and low family support can accelerate the decline in physical function. Chronic diseases such as diabetes mellitus, heart disease, stroke, and long-standing hypertension also contribute to the formation of frailty through chronic inflammation and decreased functional capacity. Geriatric medications, especially polypharmacy, also increase the risk of frailty because they can cause side effects such as weakness, dizziness, decreased balance, and the risk of falls (Rifansha et al., 2023). In addition to being affected by hypertension, various studies show that frailty can also worsen the condition of the cardiovascular system, thus contributing to increased blood pressure. Elderly people who experience frailty generally have endothelial dysfunction, increased sympathetic nervous system activity, blood vessel stiffness, and chronic inflammation that disrupts blood pressure regulation and worsens hypertension. This condition indicates a two-way relationship between frailty and hypertension, where both worsen the health conditions of the elderly, increasing the risk of complications, decreased quality of life, disability, and even mortality (Sari et al., 2026).

Based on Table 4.2, it shows that the majority of elderly hypertension patient respondents in the work area of the Gayaman Mojokerto Health Center UPTD experienced frailty syndrome in the frail category as many as 53 respondents (64.6%). Frailty Syndrome is a geriatric syndrome characterized by decreased physiological reserves, making the elderly more vulnerable to stressors, decreased physical function, dependence, and complications of chronic diseases. Long-term hypertension can accelerate the onset of frailty by causing impaired blood vessel function, decreased muscle strength, and limited activity (Irfan & Rijal, 2026). Based on the research results, researchers believe that the high number of respondents experiencing frailty indicates that most elderly people with hypertension have experienced decreased physical function, requiring early screening and treatment to prevent more severe conditions.

Based on type sex respondents of various types sex Woman part big own scale fragility syndrome The frail category was 46 (66.7%). Elderly women are at higher risk of

frailty because after menopause, there is a decrease in the hormone estrogen, which causes a reduction in muscle mass, strength, and bone density (Antara et al., 2020) . Researchers believe that the predominance of women in the frail category is influenced by the biological aging process, which causes a more rapid decline in body function compared to men.

Based on age respondents , groups age 45-59 years part big own frailty syndrome scale frail category as many as 35 respondents (71.4%), As age increases, the function of body organs, muscle strength, and balance will decrease thereby increasing the risk of frailty in the elderly (Handoko, 2025) . Although included in the young elderly group, respondents aged 60–74 years have experienced frailty because most of them also suffer from hypertension which accelerates the decline in physical function.

Respondents with education Elementary School (SD) partly big own 31 respondents (68.9%) were in the frailty syndrome category . Education level influences a person's ability to understand health information and adopt healthy lifestyle behaviors (Handoko, 2025) . Researchers argue that low levels of education can cause older adults to lack an understanding of the importance of frailty prevention .

Respondents who work as farmer part big own The frailty syndrome scale included 13 respondents (61.9%). Long-term, heavy-duty work can cause physical fatigue and accelerate the decline of bodily functions in the elderly (Mufidah et al., 2020) . Researchers believe that years of heavy farming can impact physical condition, increasing the risk of frailty in older adults.

Based on the length of suffering hypertension , respondents who suffer from hypertension <5 years part big own The frailty syndrome scale included 41 respondents (65.1%) in the frailty category . Hypertension causes changes in the cardiovascular system that can reduce physical ability and increase the risk of frailty if not properly controlled (Zulfa, 2025) . Researchers argue that even if someone has had hypertension for less than five years, frailty can occur if blood pressure control is not optimal.

Based on consumption drug hypertension , respondents who consume drug hypertension in a way No regular part big own The frailty syndrome scale included 39 respondents (73.6%) in the frail category . Compliance with antihypertensive medication plays a crucial role in maintaining stable blood pressure and preventing complications that can worsen the physical condition of the elderly (Purnomo et al., 2025) . Researchers believe that non-compliance with medication leads to uncontrolled blood pressure, accelerating the onset of frailty .

Respondents who have activity physique Enough active part big own The frailty syndrome scale included 43 respondents (61.4%). Regular physical activity, according to ability, can help maintain muscle strength, balance, and bodily function in the elderly (Ali et al., 2025) . Researchers believe that respondents' physical activity likely consisted only of daily activities and not regular physical exercise, thus not being able to prevent frailty .

Based on smoking habits, respondents who do not have a smoking habit mostly have a frailty scale. 50 respondents (67.6%) had frail syndrome . Smoking is a risk factor that can accelerate the occurrence of frailty because exposure to toxic substances in cigarettes increases oxidative stress, chronic inflammation, decreases muscle mass and strength, and worsens cardiovascular function. However, in the elderly population, the incidence of frailty is not only influenced by smoking habits, but also by other factors such as advanced age, chronic diseases, nutritional status, physical activity, psychological conditions, and

decreased physiological function due to the aging process. Therefore, elderly people who do not smoke are still at risk of experiencing frailty if they have these predisposing factors. Research (Ali et al., 2025) shows that the incidence of frailty in the elderly is more influenced by a combination of age, comorbidities, nutritional status, and physical activity than by a single risk factor. Similarly, research (Dasopang et al., 2020) explains that the aging process and chronic diseases are the main determinants of frailty in the elderly, while lifestyle factors such as smoking play a role as factors that aggravate the condition. Researchers argue that this result occurs because most respondents do not smoke, so the number of frailties is more common in this group.

Based on support family, respondents who have support family Enough part big own frailty syndrome scale frail category as many as 44 respondents (62.9%). Family support helps the elderly undergo treatment, meet daily needs, and maintain physical condition, thereby reducing the risk of frailty. (Dasopang et al., 2020) Researchers argue that family support that is only in the sufficient category is not yet able to provide optimal assistance in maintaining the health of the elderly.

Respondents with status widow / widower part big own 29 respondents (64.4%) were in the frailty syndrome category. Losing a spouse can reduce emotional and social support, which can impact the physical and psychological health of the elderly, increasing the risk of *frailty*. (Dasopang et al., 2020). Researchers argue that elderly people who are widows/widowers tend to have lower social support and are therefore more susceptible to physical decline and *frailty*.

Quality of Life

Quality of life is a person's perception of their position in life according to their culture, value system, goals, expectations, standards, and concerns. Quality of life assessment generally uses the WHOQOL-BREF instrument, which consists of four main components: physical health (including activity capacity, energy, pain, rest, and mobility), psychological health (including positive feelings, self-esteem, self-image, and thinking ability), social relationships (including personal relationships, social support, and social life), and the environment (including security, housing conditions, access to health services, opportunities to obtain information, recreation, and financial conditions). A person is said to have a good quality of life if they obtain a total score that is in the high category according to the guidelines of the instrument used, which indicates adequate physical, psychological, social, and environmental conditions so that the individual is able to carry out activities optimally. Conversely, quality of life is said to be poor if the score is in the low category, which reflects the presence of limitations in physical function, psychological disorders, low social support, or an unsupportive environment that impacts the individual's well-being.

Table 4.3 shows that almost all elderly hypertensive patients in the Gayaman Mojokerto Community Health Center (UPTD) work area have a poor quality of life, as many as 75 respondents (91.5%). Quality of life is an individual's perception of their living conditions, which is influenced by physical health, psychological conditions, social relationships, and the environment. In elderly people with hypertension, quality of life tends to decline due to physiological changes in the aging process, activity limitations, and complications of chronic diseases (Rahmanda et al. al., 2025). Researchers believe that the high level of poor quality of life among respondents is caused by hypertension, which occurs

along with the aging process, which impacts the ability to carry out daily activities and reduces the well-being of the elderly.

Based on type gender, respondents of the same sex sex Woman almost all of it own quality life bad A total of 64 respondents (92.8%) reported a decline in quality of life. Elderly women are more susceptible to a decline in quality of life due to hormonal changes, decreased physical function, and a higher incidence of degenerative diseases than men (Jepisa & Wati, 2020). Researchers believe that women's quality of life is lower because, in addition to experiencing hypertension, they also experience decreased bodily function due to the aging process, which limits daily activities.

Based on age, group age 45-59 years almost all of it own quality life bad 47 respondents (95.9%) reported that increasing age leads to decreased organ function and physical abilities, as well as an increased risk of chronic diseases, which can reduce the quality of life of the elderly (Rahmi1, 2020). Researchers believe that despite being in the early stages of old age, the respondents already had hypertension, resulting in a significant decline in their quality of life.

Respondents with education Elementary School (SD) almost all of it own quality life bad 43 respondents (95.6%) reported having hypertension. Low levels of education can affect a person's ability to understand health information, seek treatment, and adopt healthy lifestyle behaviors, thus impacting quality of life (Sani, 2023). Researchers believe that low levels of education contribute to respondents' lack of understanding of the importance of hypertension management, resulting in a lower quality of life.

Respondents who work in the category work other almost all of it own quality life bad 39 respondents (88.6%) reported that occupational type is related to activity, economic conditions, and access to healthcare services, which can impact the quality of life of older adults (Bawu et al., 2025). Researchers believe that the respondents' occupations may no longer provide optimal income, which can impact the fulfillment of health needs and quality of life.

Respondents with status widow / widower almost all of it own quality life bad 42 respondents (93.3%) reported that losing a spouse can lead to reduced emotional and social support, impacting the physical and psychological health of older adults and reducing their quality of life (Bawu et al., 2025). Researchers believe that the absence of a spouse makes older adults more susceptible to loneliness and lack of support, leading to a lower quality of life.

Based on the length of suffering hypertension, respondents who suffer from hypertension <5 years almost all of it own quality life bad 57 respondents (90.5%) reported that hypertension can reduce quality of life through the appearance of symptoms, activity limitations, and concerns about complications (Bawu et al., 2025). Researchers believe that even if hypertension is not experienced for a long time, quality of life can still decline if blood pressure is not properly controlled.

Based on consumption drug hypertension, respondents who consume drug hypertension in a way No regular almost all of it own quality life bad 52 respondents (98.1%) reported adherence to antihypertensive medication, which helps control blood pressure and prevent complications, thus maintaining quality of life (Sani, 2023). Researchers believe that non-adherence to medication leads to unstable blood pressure, disrupting daily activities and worsening quality of life.

Respondents who have activity physique Enough active almost all of it own quality life bad 63 respondents (90.0%) reported that regular physical activity, according to ability, can improve fitness, maintain bodily function, and enhance the quality of life of the elderly (Sani, 2023) . Researchers believe that respondents' physical activity was not regularly performed as a form of exercise, thus not being able to optimally improve their quality of life.

Based on habit smoke , respondents who do not own habit smoke almost all of it own quality life bad A total of 69 respondents (93.2%) reported that quality of life is influenced by many factors, such as age, chronic illness, physical activity, nutritional status, and family support, and is not solely determined by smoking habits (Sani, 2023) . Researchers believe this result is due to the fact that most respondents do not smoke, resulting in a higher prevalence of poor quality of life in this group.

Based on support family , respondents who have support family Enough almost A total of 63 respondents (90.0%) had a poor quality of life. Family support plays a crucial role in improving medication adherence, providing motivation, assisting with daily activities, and improving the quality of life for elderly people with chronic illnesses (Rahmil, 2020) . Researchers believe that family support, which is only in the adequate category, is not sufficient to meet all the physical and psychological needs of the elderly, thus the respondents' quality of life remains relatively poor.

Analysis The Relationship Between Frailty Syndrome and Quality of Life in Elderly Hypertension Patients in the Work Area of the Gayaman Mojokerto Community Health Center UPTD

Based on Table 4.4, it is known that of the 82 respondents, all 7 respondents in the fit category had a good quality of life, and none had a poor quality of life. Meanwhile, in the pre-frail category , there were 22 respondents, all of whom had a poor quality of life, and none had a good quality of life. Similarly, in the frail category , all 53 respondents had a poor quality of life.

Where the quality of life is influenced by criteria in the form of physical health which includes fatigue, sleep discomfort and daily activities , in addition psychological health influences self-image and body appearance , negative and positive feelings , self-esteem and ways of thinking , and concentration. Social relationships also influence social support and sexual activity, in addition relationships with the environment greatly influence financial resources , safety, freedom, security. physical, social health care , opportunities to obtain new information , recreational opportunities and the physical environment (pollution, noise, traffic and climate).

Spearman 's data test results rho p value (0.000) means it is smaller than the alpha value (0.05). Thus, HO is rejected, which means there is a relationship between frailty and syndrome with quality of life in elderly hypertensive patients. Correlation value coefficient 0.574 which means the level of strong relationship with the direction of the relationship between the two variables is negatively correlated, meaning the higher the frailty syndrome , the higher the quality of life.

Frailty syndrome is a condition where the body's physiological reserves decrease, causing elderly people to experience a decline in physical, psychological, and social abilities. This condition makes elderly people more prone to fatigue, activity limitations, dependence

in daily activities, and an increased risk of complications from chronic diseases. In elderly people with hypertension, frailty is present. Syndrome can worsen functional abilities, thus impacting a decreased quality of life. The more severe the level of frailty a person experiences, the lower their quality of life due to declines in physical, psychological, social, and environmental aspects (Badriyah et al. et al. , 2024).

Researchers argue that the results of this study indicate frailty Frail syndrome is one of the factors that plays a role in reducing the quality of life of elderly people with hypertension. Elderly people in the fit category still have good physical abilities and independence, so their quality of life remains good. Conversely, elderly people in the pre-frail and especially frail categories experience decreased muscle strength, endurance, and the ability to perform daily activities, resulting in a poor quality of life. On average, elderly people with hypertension with high frail scores are mostly affected by unintentional weight loss and gain each year.

CONCLUSION

Based on the explanation of the discussion, it was found that the results of the data test from *Spearman rho p* value (0.000) means it is smaller than the alpha value (0.05). Thus, H_0 is rejected, which means there is a relationship between *frailty and* syndrome with quality of life in elderly hypertensive patients. *Correlation value coefficient* 0.574 which means the level of strong relationship with the direction of the relationship between the two variables is negatively correlated, meaning the higher *the frailty syndrome* , the higher the quality of life.

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