

DETERMINANT FACTORS OF QUALITY OF LIFE IN CHRONIC KIDNEY FAILURE PATIENTS UNDERGOING HEMODIALYSIS AT SANJIWANI REGIONAL HOSPITAL, GIANJAR AND KLUNGKUNG REGIONAL HOSPITAL

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Abstract

Background: Chronic kidney disease significantly affects the personal abilities and quality of life of patients. Patients with chronic kidney failure undergoing hemodialysis are found to have a tendency to experience a decline in quality of life. The purpose of this study was to determine the determinants of the quality of life of chronic kidney failure patients in the hospital. **Research Methods:** This study is an analytical study with a cross-sectional approach. The sample of the study was 207 patients. The sampling technique used systematic random sampling. Data were collected using a questionnaire then subjected to bivariate and multivariate analysis. **Research Results:** The results of the bivariate analysis showed that in the physical and mental domains (age, occupation, blood pressure), the domain of kidney disease burden (age, blood pressure), the domain of disease effects (age, blood pressure, duration of hemodialysis) ($p < 0.05$). The results of the multivariate analysis showed that the physical and mental domains with the results (age $p < 0.001$; AOR: 1.035; 95% CI: 0.50-0.263), (occupation $p < 0.022$; AOR: 0.480; 95% CI: 0.257-0.898), (hemoglobin level $p < 0.045$; AOR: 0.485; 95% CI: 0.239-0.983), (duration of hemodialysis $p < 0.033$; AOR: 2.101; 95% CI: 1.061-4.160). Kidney disease burden domain (age $p < 0.001$; AOR: 0.033; 95% CI: 0.004-0.255), (pressure blood $p < 0.001$; AOR: 0.251; 95% CI: 0.115-0.550). Disease effect domain (age $p < 0.001$; AOR: 11.307; 95% CI: 0.020-0.393), (blood pressure $p < 0.023$; AOR: 2.607; 95% CI: 1.006-4.071), (hemodialysis duration $p < 0.048$; AOR: 0.494; 95% CI: 0.168-878). **Conclusion:** The determinant factors in the physical and mental domains are age, occupation, hemoglobin level, and blood pressure. In the kidney disease burden domain, they are age and blood pressure. In the disease effect domain, they are age, blood pressure, and hemodialysis duration.

Keywords : *Quality of Life of Chronic Kidney Failure Patients, Hemodialysis, Sanjiwani Regional Hospital, Gianjar and Klungkung Regional Hospital*

INTRODUCTION

Chronic diseases such as kidney failure are a global health problem that is increasing year by year, with sufferers ranging in age from young to old. Chronic kidney failure significantly impacts the personal abilities and quality of life of sufferers. Patients with chronic kidney failure undergoing hemodialysis tend to experience a decline in quality of life. This decline in quality of life in patients with chronic kidney failure who must undergo hemodialysis, both in physical and mental aspects, the burden of kidney disease, and the effects of the disease, is likely to occur because they are unable to accept their condition and the consequences they must face due to the disease. It is important for a patient with chronic kidney failure to maintain quality of life in all aspects to continue living well (Cahyono, 2023). *World Health Organization* In 2021, the World Health Organization (WHO) defined quality of life as an individual's perception of their position in life, seen in the context of the culture and value system in which they live, and in relation to their goals, expectations, standards, and other concerns. Chronic kidney disease patients undergoing hemodialysis have a reduced quality of life compared to the general population and experience impairment in most areas.

quality of life domains in four domains, namely physical, psychological, social and environmental compared to patients who underwent kidney transplantation (Ruhmadi & Budi, 2021). Chronic Kidney Failure (CKF) is a progressive and irreversible disorder of kidney function, where the body is unable to maintain metabolism, fails to maintain fluid and electrolyte balance resulting in increased urea (Rammang, 2023). Chronic kidney failure is a chronic condition that results in the loss of kidney function that requires complex medical and nursing management. This disease is experienced by 10% of the population worldwide and is expected to increase to 30% by 2050 (Mohamed & Hafez, 2019; Wijaya & Padila, 2019). Chronic kidney failure is the 20th most common chronic disease with the highest mortality rate in the world. According to the World Health Organization (WHO) in 2017, there were 697.5 million patients with Chronic Kidney Failure worldwide. Based on the National Chronic Kidney Disease Fact Sheet, (2017) in the United States, there are 30 million adults (15%) with Chronic Kidney Failure. In 2018, the Global Burden of Disease estimated that 5-10 million deaths per year were caused by kidney disease (Luyckx et al., 2018). According to the 2020 Basic Health Research Data (Riskesdas), the prevalence of chronic kidney disease in Indonesia was 0.38%, or 713,783 people (Riskesdas, 2020). The incidence of chronic kidney disease in Bali Province, based on the prevalence of chronic kidney disease, was 0.44%, or 12,092 people out of a population of 4,225,384 (Ministry of Health, 2018).

Chronic Kidney Failure can be managed with hemodialysis therapy. This therapy is a process to help remove metabolic waste from the body. According to the World Health Organization (WHO) in 2017, the incidence of kidney failure worldwide exceeded 500 million people, and more than 1.5 million people depended on dialysis (hemodialysis). According to the Indonesian Renal Registry (IRR) report, the number of active CKD patients in 2019 was 185,901 (Indrawati et al., 2020). According to the Indonesian Ministry of Health's Data Center, out of 249 reporting renal units, 30,554 patients were actively undergoing dialysis (Kemenkes RI, 2018). Data obtained from Sanjiwani Hospital, Gianyar, showed 130 patients in 2023, and from Klungkung Hospital, 2024, there were 200 active patients undergoing regular hemodialysis twice a week. Long-term care to improve the quality of life of patients on hemodialysis requires patient involvement in lifestyle modifications by improving self-care management and adherence to regular hemodialysis. Self-care management in patients with chronic kidney disease undergoing hemodialysis is a positive effort by patients to participate in their long-term health care to optimize health, prevent complications, control signs and symptoms, adhere to treatment, and minimize the effects of the disease on their lives, thus improving quality of life (Mustarim, 2019). This is in line with Dorothea Orem's Self-Care theory, which describes when nursing care is needed. Nursing care is needed when an individual is unable or experiences limitations in meeting the requirements for effective self-care. Nursing care is provided if the level of self-care ability is lower than the self-care needs or if self-care ability is balanced with needs, but a deficit relationship can occur later due to decreased ability, increased quality and quantity of needs, or both (Orem et al., 2001 in Rofi, 2021). Nurses must also assist in acquiring health management knowledge and skills. So that the goals or outcomes are achieved which show an increase in the quality of life (Malarvhizi et al., 2023). Research on the quality of life in patients with chronic kidney disease (CKD) shows a gap between studies. For example, research conducted by Rammang (2023) states that the quality of life of patients with chronic kidney disease is influenced by several factors: patient characteristics with indicators such as age, gender, and education, occupation, psychological status, duration of hemodialysis, hemoglobin levels, and family support.

However, research conducted by Siahaan (2019) states that of the four factors studied, three factors have no effect: age, gender, and education. Only one factor, duration of hemodialysis, has an effect. Furthermore, research by Masseng (2022) states that of the five factors studied, Research has shown that three factors are related to quality of life: age, education, and family support. Two factors, gender and occupation, are unrelated. However, Suparman's (2022) study found no relationship between gender and family support and the quality of life of hemodialysis patients. Similarly, Sembiring's (2024) study found no significant relationship between the duration of hemodialysis. His study also did not examine other factors such as demographics, blood pressure, hemoglobin levels, and family support. Saputra's (2019) study found that hemoglobin and blood pressure influence quality of life. Syifa's (2016) study found no significant relationship between hemoglobin levels and quality of life in patients with kidney failure undergoing hemodialysis. Sholimin's (2021) study found no relationship between blood pressure and quality of life in hemodialysis patients. From the results of the literature study above, it can be found that the quality of life of chronic kidney disease patients is influenced by several factors, namely patient characteristics with indicators of age, gender, education, occupation, length of hemodialysis, blood pressure, hemoglobin levels, and family support. By knowing the factors that influence the quality of life of patients with kidney failure, it will be easier for nurses, especially patients and their families, to

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improve optimal health. Judging from the novelty of the research, from previous studies that have been conducted, no study has examined all patient factors, namely age, gender, education, occupation, duration of hemodialysis, blood pressure, hemoglobin levels, and family support and determined the most dominant factors that influence the quality of life of patients. Therefore, it is necessary to re-examine all factors that influence the quality of life of patients with Chronic Kidney Failure from all factors starting from patient characteristics with indicators of age, gender and education, occupation, duration of hemodialysis, blood pressure, hemoglobin levels, and family support. Based on the many differences and inconsistencies of the above studies, the author is interested in further researching "Determinant Factors of Quality of Life of Chronic Kidney Failure Patients Undergoing Hemodialysis at Sanjiwani Gianyar Hospital and Klungkung Hospital". The purpose of this study is to determine the factors that influence the quality of life of patients with kidney failure undergoing hemodialysis in hospitals.

METHOD

The cross-sectional approach method is a study that designs data collection at one point in time, where the phenomenon being studied is during one data collection period (Polit & Beck, 2003 in Swarjana, 2015). The research design used in this study is descriptive analytic with a cross-sectional study approach. This study was conducted at Sanjiwani Gianyar Regional Hospital and Klungkung Regional Hospital. The sample size used in this study was simple or systematic random sampling (Swarjana, 2015). The total number of samples in this study was 180 respondents with an additional 15% for the attrition rate, with a total sample of 207 respondents. Bivariate analysis in this study was to analyze the relationship between variables, namely the independent variable and the dependent variable (quality of life) using the Chi-Square Test with the Fisher Exact Alternative Test. In this study, to conduct multivariate analysis, a logistic regression test was used. Logistic regression analysis is a regression that tests whether there is a probability that the dependent variable can be predicted by the independent variable. Logistic regression analysis does not require normal distribution in the independent variables (Ghozali, 2018).

RESULTS AND DISCUSSION

Table 1 Frequency Distribution of Respondent Characteristics

Category	Frequency (n)	Percentage (%)
Age (Years)		
15-64	175	84.5
≥65	32	15.5
Gender		
Man	123	59.4
Woman	84	40.6
Education		
Tall	14	6.8
Base	193	93.2
Work		
Work	80	36.6
Doesn't work	127	61.4
Duration of hemodialysis (Years)		
<5	66	31.9
≥5	141	68.1
Hemoglobin levels		
Anemia	151	72.9
No anemia	56	27.1

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Blood pressure		
Systole		
<140	153	73.9
≥140	54	26.1
Diastole		
<90	153	73.9
≥90	54	26.1
Family support		
Good	91	44.6
Bad	116	55.0

Source: Primary Data

Based on the results of Table 1, the results of this study were obtained for the most productive age group, with a range of 15-64 years, at 84.5%. This is in line with research by Dewi (2020), which states that with increasing age, kidney function decreases. After 40 years, kidney nephrons decrease, which affects the decline in the glomerular filtration rate. This decline in kidney function is a risk factor for chronic kidney failure. The highest gender is male, at 59.4%. This is in line with research by Dewi (2020), which states that men are at risk of developing CKD compared to women. This is because women have more estrogen. Estrogen can affect calcium levels in the body by inhibiting the formation of certain cytokines that inhibit osteoclasts from excessive bone resorption. Calcium has a protective effect by preventing the absorption of oxalate, which can form kidney stones, which is one of the causes of CKD. The highest educational attainment was primary school, at 93.2%. This aligns with Wahyudi's (2022) research, which states that most respondents had low levels of education because, at that time, not many people were able to pursue higher education, focusing more on work. The highest number of respondents were unemployed, at 61.4%. This aligns with Dewi's (2020) research, which states that most people at that age are considered unproductive for work. Other factors that can influence this are:

Complications of the patient's illness and decreased physical abilities due to the disease are among the reasons for decreased productivity at work. The longest duration of hemodialysis was found in patients undergoing therapy for more than five years (68.1%). This is in line with research by Dewi (2020), which states that the duration of hemodialysis influences knowledge, attitudes, and adherence to fluid restriction. The longer a patient undergoes hemodialysis therapy, the more knowledge they will gain and the more positive attitudes they will have towards improving their quality of life. The highest hemoglobin levels were those with anemia, at 72.9%. This is in line with research by Ramang (2023), which states that hemodialysis therapy causes physical and psychological conditions to decline significantly if hemoglobin levels also decrease. Generally, patients with kidney failure will experience difficulty sleeping, lack of appetite, weakness, and lack of energy, so anemia affects quality of life. For blood pressure, the highest number was among respondents who did not have hypertension, at 73.9%. This is in line with research by Muttaqin (2020), which states that if high blood pressure occurs in patients with chronic kidney failure, it can damage the blood in the kidneys, reducing their ability to function properly, thus affecting health status. For family support, the highest number was among respondents with poor family support, at 55.0%. This is in line with research by Astuti (2017), which states that family support is the attitude, actions, and acceptance of a family member who is sick or healthy. This support can also take the form of a presence that provides an emotional response and influences the behavior of the recipient of the support. Hemodialysis patients are often not accompanied by family or close friends during treatment because the patients feel quite capable of carrying out the treatment themselves when they do not experience any complaints.

Table 2. Frequency Distribution of Quality of Life

Quality of life	Frequency (n)	Percentage (%)
Physical and mental domains		
Good	92	44.4
Bad	115	55.6
Kidney disease burden domain		
Good	101	48.8
Bad	106	51.2
Disease effect domain		
Good	88	42.5
Bad	119	57.2

Source: Primary Data

Based on the results of Table 2, the study found that the quality of life of chronic kidney failure patients in the kidney disease burden domain was in the poor category, namely 51.2%. This is in line with research by Maksuk (2019), where the respondent's quality of life variable showed that more than half of respondents had a poor quality of life, as much as 53.4%. In the aspect of kidney disease burden, the lives of patients with chronic kidney failure are regulated and adapted to changes caused by the nature of the disease and its treatment methods. The results of the study found that the quality of life of chronic kidney failure patients in the disease effect domain was in the poor category, namely 57.2%. This is in line with research by Fitri (2024), where the respondent's quality of life variable showed that more than half of respondents had a poor quality of life, as much as 58.2%. In the aspect of disease effects, patients diagnosed with chronic kidney disease experience various clinical problems such as itchy skin, blood or protein in the urine, muscle cramps, loss of appetite, fluid buildup that causes swelling in the ankles, and hands, chest pain due to fluid buildup around the heart, experiencing respiratory problems or shortness of breath, experiencing sleep disorders or insomnia, and erectile dysfunction in men (Rahma et al., 2021).

Table 3. Bivariate Analysis of Determinant Factors of Quality of Life of Chronic Kidney Failure Patients with Hemodialysis in Hospital in the Physical and Mental Domains

Variables	Quality of Life Physical and Mental Domains			p-Value*
	Good n (%)	Badn (%)	Total n (%)	
Age				
15-64	91 (52.0)	84 (48.0)	175 (100)	<0.001*
≥65	1 (3.1)	31 (96.9)	32 (100)	
Gender				
Man	57 (46.3)	66 (53.7)	123 (100)	0.506
Woman	35 (41.7)	49 (58.3)	84 (100)	
Education				
Tall	8 (57.1)	6 (42.9)	14 (100)	0.322
Base	84 (43.5)	109 (56.5)	193 (100)	
Work				
Work	45 (56.2)	35 (43.8)	80 (100)	0.007*

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Doesn't work	47 (37.0)	80 (63.0)	127 (100)	
Duration of hemodialysis				
<5 years	23 (34.8)	43 (65.2)	66 (100)	0.057
≥5 years	69 (48.9)	72 (51.1)	141 (100)	
Hemoglobin levels				
Anemia	72 (47.7)	79 (52.3)	151 (100)	0.124
No anemia	20 (35.7)	36 (64.3)	56 (100)	
Blood pressure				
Systole				
<140 mmHg	79 (51.6)	74 (48.4)	153 (100)	<0.001*
≥140 mmHg	74 (24.1)	41 (75.9)	54 (100)	
Diastole				
<90 mmHg	79 (2.8)	74 (71.0)	153 (100)	<0.001*
≥90 mmHg	74 (0)	41 (26.0)	54 (100)	
Family support				
Good	35 (38.5)	56 (61.5)	114 (100)	0.159
Bad	57 (49.1)	59 (50.9)	93 (100)	

Source: Primary Data

Based on the results of Table 3, it was found that the quality of life of chronic kidney failure patients in the physical and mental domains was in the poor category, at 55.6%. This is in line with research by Prasanti (2018) which showed that more than half of respondents had quality of life variables. A 51.4% decrease in quality of life. Physical and mental aspects, dependence on drugs and medical assistance reflects the extent to which individuals tend to use drugs or other medical assistance in carrying out daily activities. Energy and fatigue reflect the level of an individual's ability to carry out daily activities. Pain and discomfort reflect the extent of anxiety an individual feels about things that cause them pain (Maria et al., 2022). The physical dimension refers to the physical changes in patients with chronic kidney disease, who easily feel tired. In addition to physical weakness, it can reduce motivation and cause symptoms of mobility, sleep disturbances, physical decline, and even depression, which affect the quality of life of patients with chronic kidney disease. Mentally, the mental-social dimension consists of personal relationships, sexual activity, and social relationships.

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Table 4. Bivariate Analysis of Determinant Factors of Quality of Life of Chronic Kidney Failure Patients with Hemodialysis in Hospitals in the Domain of Kidney Disease Burden

Variables	Quality of Life Domain Burden of Kidney Disease			p-Value*
	Good n (%)	Not good n (%)	Total n (%)	
Age				
15-64 years	100 (57.1)	75 (42.9)	175 (100)	<0.001*
≥65 years	1 (3.1)	31 (96.9)	32 (100)	
Gender				
Man	64 (52.0)	59 (48.0)	123 (100)	0.259
Woman	37 (44.0)	47 (56.0)	84 (100)	
Education				
Tall	9 (64.3)	5 (35.7)	14 (100)	0.230
Base	92 (47.7)	101 (52.3)	193 (100)	
Work				
Work	41 (51.2)	39 (48.8)	80 (100)	0.574
Doesn't work	60 (47.2)	67 (52.8)	127 (100)	
Duration of hemodialysis				
<5 years	27 (40.9)	39 (59.1)	66 (100)	0.121
≥5 years	74 (52.5)	67 (47.5)	141 (100)	
Hemoglobin levels				
Anemia	75 (49.7)	76 (50.3)	151 (100)	0.679
No anemia	26 (46.4)	30 (53.6)	56 (100)	
Blood pressure				
Systole				
<140 mmHg	90 (58.8)	63 (41.2)	153 (100)	<0.001*
≥140 mmHg	11 (20.4)	43 (79.6)	54 (100)	
Diastole				
<90 mmHg	90 (58.8)	63 (41.2)	153 (100)	<0.001*
≥90 mmHg	11 (20.4)	43 (79.6)	54 (1000)	
Family support				
Good	42 (46.2)	49 (53.8)	91 (100)	0.501
Bad	59 (50.9)	57 (49.1)	116 (100)	

Source: Primary Data

The study found that the quality of life of chronic kidney failure patients in the kidney disease burden domain was categorized as poor, at 51.2%. This is in line with research by Maksuk (2019), which found that more than half of respondents had a poor quality of life (53.4%). Regarding the kidney disease burden aspect, the lives of patients with chronic kidney failure are regulated and adapted to changes caused by the nature of the disease and its treatment methods. Furthermore, patients are dependent on dialysis equipment and medical personnel. Treatment also involves restrictions on eating and drinking, as well as physical activity. Mental and physical symptoms significantly impact the level of quality of life experienced by patients. At the same time, patients must experience the negative impacts of dialysis therapy, such as pain, sleep disturbances, depression,

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weakened blood pressure fluctuations, and abdominal pain, which reduce quality of life (Rattoe et al., 2020).

Table 5. Determinant Factors of Quality of Life in Chronic Kidney Failure Patients with Hemodialysis in Hospitals in the Disease Effect Domain

Quality of Life Domain Disease Effects				
Variables	Good n (%)	Not good n (%)	Total n (%)	p-Value*
Age				
15-64 years	86 (49.1)	89 (50.9)	175 (100)	<0.001*
≥65 years	2 (6.2)	30 (93.8)	32 (100)	
Gender				
Man	52 (42.3)	71 (57.7)	123 (100)	0.934
Woman	36 (42.9)	48 (57.1)	84 (100)	
Education				
Tall	8 (57.1)	6 (42.9)	14 (100)	0.250
Base	80 (41.5)	113 (58.5)	193 (100)	
Work				
Work	34 (42.5)	46 (57.5)	80 (100)	0.998
Doesn't work	54 (42.5)	73 (57.5)	127 (100)	
Duration of hemodialysis				
<5 years	18 (27.3)	48 (72.7)	66 (100)	0.002*
≥5 years	70 (49.6)	71 (50.4)	141 (100)	
Hemoglobin levels				
Anemia	62 (41.1)	89 (58.9)	151 (100)	0.488
No anemia	26 (46.4)	30 (53.6)	56 (100)	
Blood pressure				
Systole				
<140 mmHg	78 (51.0)	75 (49.0)	153 (100)	<0.001*
≥140 mmHg	10 (18.5)	44 (81.5)	54 (100)	
Diastole				
<90 mmHg	78 (51.0)	75 (49.0)	153 (100)	<0.001*
≥90 mmHg	10 (18.5)	44 (81.5)	54 (100)	
Family support				
Good	35 (38.5)	56 (61.5)	91 (100)	0.296
Bad	53 (45.7)	63 (54.3)	116 (100)	

Source: Primary Data

The study found that the quality of life of chronic kidney disease patients in the disease effects domain was categorized as poor, at 57.2%. This is in line with research by Fitri (2024) which showed that more than half of respondents had a poor quality of life (58.2%). In terms of disease effects, patients diagnosed with chronic kidney disease experience various clinical problems such as itchy skin, blood or protein in the urine,

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muscle cramps, loss of appetite, fluid buildup resulting in swelling in the ankles and hands, chest pain due to fluid buildup around the heart, respiratory problems or shortness of breath, sleep disorders or insomnia, and erectile dysfunction in men (Rahma et al., 2021).

Table 6. Multivariate Analysis of Determinant Factors of Quality of Life in Physical and Mental Domains

Variables	B	SE	OR	95% CI	p-Value
Age <15-64 years ≥65 years*	-3,357	1,031	0.035	0.05-0.263	0.001
Work work Doesn't work*	-0.733	0.319	0.480	0.257-0.898	0.022
Anemia hemoglobin levels not anemic*	-0.724	0.360	0.485	0.239-0.983	0.045
Duration of hemodialysis <5 years ≥5 years*	0.742	0.349	2,101	1,061- 4,160	0.033

Table 7. Multivariate Analysis of Determinant Factors of Quality of Life Domain of Kidney Disease Burden

Variables	B	SE	OR	95% CI	p-Value
Age <15-64 years ≥65 years*	-3,397	1,036	0.033	0.004-0.255	0.001
Blood pressure is not hypertension hypertension*	-1,382	0.400	0.251	0.115-0.550	0.001

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Table 8. Multivariate Analysis of Determinant Factors of Quality of Life Disease Effect Domain

Variables	B	SE	OR	95% CI	p-Value
Age	-				
<15-64 years	2,425	0.761	11,307	0.020-	0.001
≥65 years*				0.393	
Hypertension blood pressure	-				
no hypertension*	0.958	0.422	2,607	1,006-4,071	0.023
Duration of hemodialysis	-				
<5 years	0.705	0.357	0.494	0.168-878	0.048
≥5 years*					

The results of this study indicate that in the physical and mental domains, the factors that most strongly influence quality of life are age, occupation, hemoglobin levels, and duration of hemodialysis. Regarding age, increasing age leads to a decline in physical function and the risk of developing other comorbidities, which can lead to a decline in the patient's quality of life. Regarding occupation, working patients have daily routines such as going to work or gathering with colleagues, which keep them busy and socially active, thus improving their quality of life. Regarding hemoglobin levels, if hemoglobin levels decrease, patients will quickly experience complaints such as fatigue, which will affect their activities and quality of life. Regarding duration of hemodialysis, patients will have a better quality of life over time if they undergo hemodialysis continuously and regularly with treatment and care.

In terms of kidney disease burden, the factors that most strongly influence quality of life are age and blood pressure. As age increases, kidney function declines, impacting quality of life. In terms of blood pressure, in kidney failure, increased blood pressure leads to decreased vascularization in the brain, resulting in difficulty concentrating, irritability, and discomfort. This can also impact social interactions, with patients feeling less social due to the discomfort they experience. In the disease effects domain, the factors that most strongly influence quality of life are age, blood pressure, and duration of hemodialysis. Regarding age, the effects of kidney failure increase with age, leading to more complaints from patients. Regarding blood pressure, high blood pressure leads to complications and complaints arising from the effects of chronic kidney failure. Regarding duration of hemodialysis, regular dialysis therapy can minimize the effects experienced by patients.

CONCLUSION

Quality of life of chronic kidney failure patients at Sanjiwani Regional Hospital and RSUD Klungkung is still considered poor, with scores of 55.6% in the physical and mental domains, 51.2% in the kidney disease burden domain, and 57.2% in the disease effects domain. There is a significant relationship between age, occupation, and blood pressure in the physical and mental domains, age and blood pressure in the kidney disease burden domain, and age, blood pressure, and duration of hemodialysis in the disease effects domain on the quality of life of chronic kidney failure patients.

REFERENCES

- Adiningrum, N., Andayani, T. M., & Kristina, S. A. (2021). Analisis Faktor Klinik terhadap Kualitas Hidup Pasien Hemodialisis di RSUD dr. Loekmono Hadi Kudus. *Jurnal Farmasi Dan Ilmu Kefarmasian Indonesia*, 8(1), 29. <https://doi.org/10.20473/jfiki.v8i12021.29-37>
- Aini, L., Astuti, L., & Maharani, S. (2021). Faktor-Faktor Yang Berhubungan Dengan Kualitas Hidup

DETERMINANT FACTORS OF QUALITY OF LIFE IN CHRONIC KIDNEY FAILURE PATIENTS UNDERGOING HEMODIALYSIS AT SANJIWANI REGIONAL HOSPITAL, GIANJAR AND KLUNGKUNG REGIONAL HOSPITAL

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- Gagal ginjal Kronik (Ggk) Yang Menjalani Hemodialisa. *Jurnal Ilmu Kedokteran Dan Kesehatan*, 8(2), 111–119. <https://doi.org/10.33024/jikk.v8i2.4278>
- A Mayuda, S chasani, & F saktini. (2018). Hubungan Antara Lama Hemodialisis Dengan Kualitas Hidup Pasien Penyakit Ginjal Kronik (Studi Di RSUD dr. Kariadi Semarang). *Jurnal Kedokteran Diponegoro*, 6(2), 167–176.
- Amanda, T. (2022). Determinan Kualitas Hidup Pasien Gagal Ginjal Kronik Yang Menjalankan Hemodialisa. Kementrian Kesehatan Republik Indonesia.
- Budiono, N. D. P., & Rivai, A. (2021). Faktor-faktor yang mempengaruhi kualitas hidup lansia. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), 371–379. <https://doi.org/10.35816/jiskh.v10i2.621>
- Br Sembiring, F., Elvina Pakpahan, R., Suryani Tumanggor, L., & Karniat Gustin Laiya, E. (2024). Hubungan Lama Hemodialisa Dengan Kualitas Hidup Pasien Penyakit Ginjal Kronik Di Rumah Sakit Khusus Ginjal Rasyida. *Indonesian Trust Health Journal*, 7(1), 1–11.
- Defretes, M., Sri S, F. A., Wibowo, W., & Vinsur, E. Y. Y. (2023). Efikasi Diri Dengan Kualitas Hidup Pada Pasien Gagal Ginjal Kronis Yang Menjalani Hemodialisis. *Jurnal Riset Kesehatan Nasional*, 7(2), 163–166. <https://doi.org/10.37294/jrkn.v7i2.502>
- Devi, S. Hubungan Lama Hemodialisis Dengan Kualitas Hidup Pada Pasien Penyakit Ginjal Kronik Di Rumah Sakit Khusus Ginjal Rasyida. (2020). Universitas Muhammadiyah Sumatera Utara.
- Fathoni, Z. S. Al. (2022). Gambaran Kualitas Hidup Pada Pasien Penyakit Ginjal Kronik Yang Menjalani Hemodialisa. *Universitas Islam Sultan Agung*.
- Fitriani, D. N., Nopriyanto, D., & Aminuddin, M. (2021). Description Nursing Implementation Range of Motion (Rom) in Non-Hemoragik Stroke Patients With Physical Mobility Disorders. *Paper Knowledge . Toward a Media History of Documents*, 7(2), 107–115.
- Hudoyono, C. M., Perdana, M., Setiyarini, S. (2021). Uji Validitas dan Reliabilitas pada Instrumen *Kidney Disease Quality of Life-36 (KDQOL-36)* pada Pasien dengan Hemodialisis. Vol 5 (1) Maret 2021, Jurnal Keperawatan Klinis dan Komunitas.
- Kusumawati, A. H., Amalia, L., Gondodiputro, R. S., & Rahayu, C. (2017). Pengaruh Pemberian Obat Antihipertensi Terhadap Kualitas Hidup Pasien Hipertensi Dengan Gangguan Ginjal Kronik Di Instalasi Hemodialisa Rsup Dr. Hasan Sadikin Bandung. *Pharma Xplore : Jurnal Ilmiah Farmasi*, 1(2), 39–49. <https://doi.org/10.36805/farmasi.v1i2.114>
- Lisnawati, E., Sintowati, R., Lestari, N., & Nursanto, D. (2020). Hubungan Antara Kadar Hemoglobin, Indeks Massa Tubuh, Dan Tekanan Darah Terhadap Kualitas Hidup Pasien Gagal Ginjal Kronik. *Ums*, 775–787. <https://publikasiilmiah.ums.ac.id/xmlui/bitstream/handle/11617/12788/66.pdf?sequence=1&isAllowed=y>
- Margareth G., Dena S.G., Kathleen H., Nancy R. The Self- and Family Management Framework. Yale University School of Nursing, 2018.
- Margiyanti, I. Kebijakan Pendidikan Implementasi Program Wajib Belajar 12 Tahun. *Jurnal Pendidikan*, 2023.
- Maria.S, Yemina.L., Irene.I. Kualitas Hidup Pasien dengan Penyakit Ginjal Kronis dengan Terapi Hemodialisa
- Parwati, S., Subaktiyasa, G., Adiyasa, N., Rahayu, L. (2022). Hubungan Kadar Hemoglobin Dengan Kualitas Hidup Pasien Gagal Ginjal Kronik Di Prodia Indramayu. *Jurnal Laboratorium Medis*. 1(2)
- Pikri Ahmad Rizal. (2022). Hubungan Antara Dukungan Keluarga Dengan Perilaku Kebersihan Diri Pada Siswa Di Min 1 Demangan Kota Madiun. <http://arxiv.org/abs/1802.02572>
- Pretto, C. R., Winkelmann, E. R., Hildebrandt, L. M., Barbosa, D. A., Colet, C. de F., & Stumm, E. M. F. (2020). Quality of life of chronic kidney patients on hemodialysis and related factors. *Revista Latino-Americana de Enfermagem*, 28, 1–11. <https://doi.org/10.1590/1518-8345.3641.3327>
- Putri, E., Alini, & Indrawati. (2020). Hubungan dukungan keluarga dan kebutuhan spritual dengan tingkat kecemasan pasien gagal ginjal kronik dalam menjalani terapi hemodialisis di RSUD.Bangkinang. *Jurnal Ners*, 4(2), 47–55.
- Puspitasari, W. D., & Febrinita, F. (2021). Pengujian Validasi Isi (Content Validity) Angket *Journal Focus Action of Research Mathematic (Factor M)*, 4(1), 77–90. https://doi.org/10.30762/factor_m.v4i1.3254
- Risky, f. (2019). Kualitas Hidup Pasien Gagal Ginjal Kronis Yang Menjalani Hemodialisis Di Rsd Chasan Boesoirie Ternate. *Kieraha Medical Journal*, 1(2), 48–52. <https://doi.org/10.33387/kmj.v1i2.1726>
- Riyanto, R. F. (2020). Perbandingan Kualitas Hidup Pasien Gagal Ginjal Kronis Yang Menggunakan Single Use Dan Reuse Dialyzer Di Rsd Mardi Waluyo <http://repository.stikes-kartarsa.ac.id/82/%0Ahttp://repository.stikes-kartarsa.ac.id/82/1/SKRIPSI>
- Risqa Fitroha R.

DETERMINANT FACTORS OF QUALITY OF LIFE IN CHRONIC KIDNEY FAILURE PATIENTS UNDERGOING HEMODIALYSIS AT SANJIWANI REGIONAL HOSPITAL, GIANJAR AND KLUNGKUNG REGIONAL HOSPITAL

Ni Wayan Sri Wahyuni **et al**

- Sarastika, Y., Kisan, K., Mendrofa, O., & Siahaan, J. V. (2019). Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Pasien Gagal Ginjal Kronik (Ggk) Yang Menjalani Terapi Hemodialisa Di Rsu Royal Prima Medan. *Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 4(1), 53. <https://doi.org/10.34008/jurhesti.v4i1.93>
- Setiawan, P. E. P. (2020). Analisis Pengaruh Perubahan Harga Komoditas Kopi dan Perubahan Kurs Valuta Asing Terhadap Return Saham Perusahaan Kopi Yang Go Public pada tahun 2014-2019. *Jurnal Manajemen UNIKA Soegijapranata Semarang*, 20–26.
- Sholimin, M., Nekada, C. D. ., & Wiyani, C. (2021). Hubungan Tekanan Darah dan Nadi Terhadap Kualitas Hidup Pasien Hemodialisa di RSUD Panembahan Senopati Bantul. *Hospital Majapahit*, 13(1), 71–85.
- Tamba, I. Y., Ladjar, I. I., & Mulyani, S. (2016). Gambaran konsep diri pasien gagal ginjal kronik yang menjalani terapi hemodialisa. *Jurnal Keperawatan Stikes Suaka Insan*, 1, 7–12.
- Toulasik, N., Kusumaningrum, T., & Pradanie, R. (2019). Analisis Faktor yang berhubungan dengan Kualitas Hidup Wanita Penderita Kanker. In *Pedimaternel Nursing Journal* (Vol. 5, Issue 1). <https://doi.org/10.20473/pmnj.v5i1.12358>
- Widaningsih, Karyati.S.,Krisbiantoro. (2021). Hubungan Durasi Hemodialisa Dengan Tekanan Darah Pasien Gagal Ginjal Kronik Di Ruang Hemodialisis Rsi Pati. *Indonesia Jurnal Perawat* 5(1).
- Wiedyaningsih, Andayani, M.,Simorangkir, R.(2021). Faktor-Faktor Yang Berhubungan Dengan Kualitas Hidup Pasien Penyakit Ginjal Kronis Yang Menjalani Hemodialisis. *Indonesia Farmasi* 8(1).
- Yuwono, S. T., Aryani, G. S., Setyowatit, L., Huda, M. H., & Kurniawan, M. H. (2022). *Quality of Life Pasien Gagal Ginjal Kronis yang Melakukan Terapi Hemodialisis Rutin RS Hermina Yogyakarta Pendahuluan World Health Organization menyebutkan bahwa penyakit CKD menduduki peringkat ke patients with diabetic nephropathy : finding from the KNO*. 5(2), 28–33.