FAMILY SUPPORT AND LIFEQUALITY OF KIDNEY FAILURE PATIENTS UNDERGOING HEMODIALYSIS IN HOSPITAL

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Article Information		Abstract
		Chronic Kidney Failure co, commonly known as CKD, is a condition in which the kidneys experience long-term damage. Patients with chronic kidney failure undergoing hemodialysis have a lower quality of life compared to the general population. Family support is one factor influencing patients' quality of life. The general objective of this study is to determine the relationship between family support and the quality of life of chronic kidney failure patients undergoing hemodialysis at RST Tk. II 04.05.01 dr. Soedjono Magelang. This study uses a correlational research design. The population in this study consists of chronic kidney failure patients undergoing hemodialysis at RST Tk. II dr. Soedjono Magelang, with an average of 72 patients over six months. *The sampling technique used was accidental sampling, with 46 respondents. Data collection was conducted using questionnaires. Bivariate analysis was performed using the Spearman Rank correlation test. The independent variable in this study is family support, measured using the Family Support Instrument. In contrast, the dependent variable is quality of life, measured using the World Health Organization Quality of Life (WHOQOL) instrument. The research was conducted from January to February 2025. The Spearman Rank statistical test results indicate a significant relationship between family support and quality of life in chronic kidney failure patients undergoing hemodialysis, with a p-value = 0.000. The correlation direction is positive, with a strong correlation strength (r = 0.628).In conclusion, the lower the family support, the worse the patient's quality of life, and conversely, the better the family support, the higher the patient's quality of life. It is recommended that families provide better emotional and practical support to chronic kidney failure patients to improve their quality of life during hemodialysis.*

I. INTRODUCTION

Chronic kidney failure (CKF), often referred to as chronic kidney disease (CKD), is a condition in which the kidneys sustain long-term damage and struggle to perform their essential functions. This disease also increases the risk of other health problems, such as heart disease and stroke (National Kidney Foundation, 2020).

The prevalence of CKD is significant, affecting approximately 10% of the global population. Millions of people die each year because they lack access to affordable treatment. More than 2 million people worldwide currently receive dialysis or

kidney transplantation to stay alive, yet this figure may represent only 10% of those who need treatment to survive (National Kidney Foundation, 2020). In Indonesia, the number of patients diagnosed with kidney failure in 2020 reached 61,786 cases, followed by 4,625 cases of acute kidney injury (Indonesian Renal Registry, 2020).

CKD management aims to minimize risks and prevent further kidney damage through hemodialysis (Putri et al., 2023). Hemodialysis is a primary therapy for kidney disease patients. This treatment is required for a long duration, often lifelong, and significantly impacts various aspects of patients' lives (Perwiraningtyas & Sutriningsih, 2021). Due to the prolonged nature of hemodialysis therapy, it affects the patient's quality of life. Studies indicate that hemodialysis patients experience a significant decline in quality of life compared to healthy individuals, particularly in physical, psychological, and social relationships (Yonata et al., 2022).

Chronic kidney failure patients undergoing hemodialysis generally have a lower quality of life than the general population, with impairments observed across most quality-of-life domains, reaching up to 73.3% in studies examining its effects (Galaresa, 2023). Hemodialysis patients require long-term treatment because CKD is a chronic, dangerous, and often asymptomatic disease in its early stages. Patients' lives are adjusted according to the changes brought about by the disease and its treatment methods. The duration of treatment is closely linked to quality of life, as longer dialysis sessions prolong survival while directly influencing patients' perceptions of their well-being. It is, therefore, essential to assess and evaluate the quality of life of CKD patients undergoing hemodialysis (Lolowang et al., 2021).

Identifying factors that affect the quality of life in hemodialysis patients is crucial, as addressing these factors can help improve patient outcomes (Yonata et al., 2022). One key factor influencing quality of life is family support. Family support is vital to the patient's physical and psychological well-being. A previous study by Syahputra (2022) found a statistically significant relationship between family support and quality of life in CKD patients, with a p-value < α (0.05 < 0.001). Family support can involve providing information about the disease and assisting with daily care. Strong family support positively impacts patient health, meaning that a well-supported patient is more likely to experience a better quality of life (Syahputra et al., 2022).

Hemodialysis is a kidney replacement therapy with complex complications. Female patients undergoing hemodialysis often experience a decline in quality of life, accompanied by psychological issues such as anxiety and depression due to treatment-related complications. Chronic illnesses generally cause physical fatigue, malaise, hormonal changes, and psychological or behavioral shifts, all of which can negatively impact the quality of life (Shah et al., 2022).

A preliminary field study conducted in the Rumkit Tk II 04.05.01 hemodialysis ward by Dr. Soedjono Magelang examined family support and quality of life among female hemodialysis patients. Using observations and short interviews, data were collected through random surveys with questionnaires. Findings revealed that 5 out of 8 patients (62.5%) experienced a decline in quality of life after being diagnosed with CKD and undergoing hemodialysis. Among those with poor quality of life, 3 patients also reported inadequate family support. This highlights the need for further research to examine the relationship between family support and the quality of life of CKD patients undergoing hemodialysis.

This study aims to analyze the impact of family support on the quality of life of CKD patients undergoing hemodialysis.

II. RESEARCH METHOD

The study employed a quantitative research approach. The research design used was descriptive-correlational with a cross-sectional approach. The variables in this study included family support as the independent variable and quality of life as the

dependent variable. This research was conducted at RST Tk. II Dr. Soedjono Magelang from January to February 2025.

The study population included chronic kidney disease (CKD) patients undergoing hemodialysis at RST Tk. II Dr. Soedjono Magelang, with an average of 72 patients over the past six months. The sampling technique used was non-probability sampling with an accidental sampling approach, meaning that any patient who happened to meet the researcher could be included in the sample. The final sample consisted of 46 respondents, including reserves for potential dropouts. The inclusion criteria for this study were CKD patients who had undergone hemodialysis at least once, female patients, and patients willing to participate voluntarily without coercion. The exclusion criteria were Patients who withdrew from the study and patients undergoing treatment in the ICU.

The family support instrument uses the Family Support Questionnaire, according to Dwipayani (2019), which has been validated and deemed reliable through face validity, with the questionnaire being assessed by two experts. The questionnaire consists of 20 statements using a Likert scale. Scoring and assessment for positive statements are assigned as follows: responses of "Always" (SL) receive 4 points, "Often" (SR) receive 3 points, "Sometimes" (KD) receive 2 points, and "Never" (TP) receive 1 point. The total score is calculated by summing the obtained scores, dividing by the maximum score, and multiplying by 100%. The categorization is as follows: a "Good" score ranges from 76-100%, a "Moderate" score from 56-75%, and a "Poor" score is below 56%.

The quality of life instrument for patients with chronic kidney disease consists of 26 questions. Quality of life assessment is conducted using the World Health Organization Quality of Life (WHOQOL) instrument, a valid questionnaire measuring quality of life. This instrument evaluates four aspects: physical health, psychological well-being, social relationships, and environment. The questionnaire has been validated and is commonly used for quality-of-life measurement (Bellasari, 2020). Respondents'

answers are totaled, and the interpretation of the score categories is as follows: a score of 0-20 is classified as "Very Poor," 21-40 as "Poor," 41-60 as "Moderate," 61-80 as "Good," and 81-100 as "Very Good." This analysis uses bivariate ordinal and ordinal calculation formulas with the Spearman-Rank correlation. This study has undergone an ethical review by the Health Research Ethics Commission of Muhammadiyah University of Kudus, with approval number 97/Z-7/KEPK/UMKU/XII/2024, dated December 18, 2024.

III. FINDING AND DISCUSSION

A. Respondent Characteristics

Table 1. Characteristics of Age, Education, and GPA Status in Chronic Kidney Disease Patients Undergoing Hemodialysis at RST Tk.II 04.05.01 dr. Soedjono Magelang

No	Variable	Category	f	%
1.	Age	Adult	20	43,5
		Pra-Elderly	23	50,0
		Elderly	3	3,0
2.	Education Level	Primary	12	26,1
		Junior High	10	21,7
		High School	18	39,1
		College	6	13,0
3.	Gravida	G1	7	15,2
		G2	23	50,0
		G3	4	8,7
		G4	7	15,2
		G5	2	4,3
		G6	2	4,3
		G7	1	2,2
4.	Parity	1 child	7	15,2
		2 children	25	54,3
		3 Children	6	13,0
		4 Children	8	17,4
5.	Abortus	0	37	80,4
		1	4	8,7
		2	4	8,7
		3	1	2,2

Based on the table above, the most common age characteristic falls within the pre-elderly (pra lansia) category, with 23 respondents (50.0%). Regarding education level, most respondents have a high school (SMA) education, accounting for 18 respondents (39.1%). Regarding GPA status, the gravida aspect is most commonly observed in respondents who have experienced two pregnancies, totaling 23

respondents (50.0%). In the parity aspect, the highest frequency is among those with two children, with 25 respondents (54.3%). Meanwhile, in the abortus aspect, the majority of respondents have never experienced an abortion, with 37 respondents (80.4%).

B. Characteristics of Family Support and Quality of Life in Chronic Kidney Disease Patients Undergoing Hemodialysis at RST TK II 04.05.01 Dr. Soedjono Magelang

Table 2. Characteristics of Family Support and Quality of Life in Chronic Kidney Disease Patients Undergoing Hemodialysis at RST TK II 04.05.01 Dr. Soedjono Magelang

No.	Variable	Category	f	%
1.	Family Support	Less	11	23,9
		Fair	18	39,1
		Good	17	37,0
2.	Life Quality	Poor	12	26,1
		Moderate	15	32,6
		Good	19	41,3

Based on the table above, the family support characteristic is predominantly in the moderate category, with 18 respondents (39.1%). Meanwhile, the quality of life characteristic is mainly in the good category, with 19 respondents (41.3%).

C. The Relationship Between Family Support and Quality of Life in Chronic Kidney Disease Patients Undergoing Hemodialysis at RST TK II 04.05.01 Dr. Soedjono Magelang

Table 3. Cross Tabulation of Family Support and Quality of Life in Chronic Kidney Disease Patients Undergoing Hemodialysis at RST TK II 04.05.01 Dr. Soedjono Magelang

Family Support	Life Quality							
	Poor		Moderate		Good		Total	
	N	%	N	%	N	%	N	%
Less	8	72,7	2	18,2	1	9,1	11	100
Fair	3	16,7	10	55,6	5	27,8	18	100
Good	1	5,9	3	17,6	13	76,5	17	100
Total	12	26,1	15	32,6	19	41,3	46	100
r	0,682				p-value		0,000	

Based on the table above, it is evident that among patients with low family support (11 respondents), the majority (8 respondents or 72.7%) had poor quality of life. Meanwhile, among those with moderate family support (18 respondents), more than half (10 respondents or 55.6%) had moderate quality of life. In contrast, patients with good family support (17 respondents) mostly (13 respondents or 76.5%) had good quality of life.

Statistical analysis using the Spearman-Rank test showed a significant relationship between family support and quality of life in chronic kidney disease patients undergoing hemodialysis, with a p-value of 0.000. This indicates a meaningful correlation with a strong positive correlation coefficient ($r = 0.628$). The results suggest that lower family support is associated with poorer quality of life, while higher family support leads to better quality of life. The strength of the correlation is categorized based on Sugiyono (2018) as follows: a correlation of 0.00–0.199 is considered very low, 0.200–0.399 is low, 0.400–0.599 is moderate, 0.600–0.799 is strong, and 0.800–1.000 is very strong.

This study aligns with research by Syahputra et al. (2022), which found that family support, including providing information about the illness and assistance in daily care, significantly improves patients' quality of life. Family support extends to practical help, such as financial assistance, transportation, and daily needs. Furthermore, emotional encouragement from family plays a crucial role in keeping patients motivated and hopeful, which is essential for those undergoing hemodialysis.

Family support is vital in helping patients cope with physical and psychological stressors. Chronic kidney disease patients on hemodialysis often experience a decline in

physical health, emotional instability, dependence on others, changes in social relationships, and decreased self-esteem and future expectations. A strong family support system provides emotional reassurance and practical assistance, ensuring patients receive the care and encouragement needed to maintain a better quality of life (Inayati et al., 2021).

Improving the quality of life of chronic kidney disease patients requires identifying the factors influencing their well-being. Yonata et al. (2022) emphasized that age, education level, comorbidities, and duration of hemodialysis significantly impact a patient's physical and mental health. The global increase in chronic kidney disease prevalence further highlights the need for comprehensive care, addressing medical and psychosocial needs (Aditama et al., 2023).

Patients undergoing hemodialysis frequently experience psychological and psychosocial changes, which can negatively affect their quality of life. Therefore, consistent and attentive family support, both emotionally and materially, is crucial in maintaining and improving patient well-being. Families that help continuously support patients feel stronger and more optimistic throughout their treatment. This reinforces the idea that more excellent family support leads to a better quality of life (Rahayu, 2022).

The decline in quality of life among hemodialysis patients requires intensive family involvement to help them cope with their condition. Family support includes informational, evaluative, instrumental, and emotional support, all of which help patients accept their illness, adhere to treatment schedules, follow dietary restrictions, and maintain a positive outlook. Such support encourages greater compliance with treatment regimens, leading to better mental and physical health outcomes (Dewi et al., 2022).

Family support plays a significant role in shaping a patient's quality of life, as it influences their perception of their capabilities, management of symptoms, and ability to navigate psychosocial challenges. Chronic kidney disease patients undergoing hemodialysis often face physical and emotional struggles that impact their well-being. Support from family members—including emotional reassurance, information sharing, and practical assistance—helps patients stay motivated, adhere to medical treatments, and maintain a healthier lifestyle. A comprehensive nursing approach should focus on medical treatment and empower families to actively participate in improving patient well-being (Manalu, 2020).

One limitation of this study is the inability to control for other factors that may influence family support and patient quality of life.

IV. CONCLUSION

There is a strong correlation between family support and the quality of life of chronic kidney disease patients undergoing hemodialysis. As a recommendation for the hospital where the study was conducted, it would be beneficial to develop a family support program to enhance the quality of life of these patients. This program could include counseling sessions or training for family members to help them better understand the patient's medical condition. Implementing such initiatives would reinforce the hospital's role as a holistic care provider supporting patients' overall well-being. This study can serve as a foundation for further research on various factors influencing the quality of life of chronic kidney disease patients, particularly the role of family support. In-depth research on the types of family support with the most significant impact could lead to the development of more effective intervention models. Additionally, similar studies could be conducted in other hospitals to determine whether these findings can be generalized to a broader population. It is recommended that families provide better emotional and practical support to chronic kidney disease patients undergoing hemodialysis to improve their quality of life throughout the treatment process.

V. ACKNOWLEDGMENT

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