

The Relationship Between Family Support And Self-Efficacy with Compliance of Chronic Kidney Failure Patients in Undergoing Hemodialysis Therapy in the Hemodialysis Room at RSUD Dr. Chasbullah Abdulmajid Bekasi City

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ABSTRACT: Chronic kidney failure (GGK) is a gradual and permanent decline in renal function, often unaware until later. WHO (2018) recorded a global GGK prevalence of 10% of the population, with around 1.5 million people undergoing hemodialysis (HD). In Indonesia, the highest incidence of GGK is in West Java (131,846), followed by Central Java (113,045) and North Sumatra (45,792 people) (Kemenkes, 2019). Hemodialysis, an essential therapy for discharging fluids and body wastes, often causes discomfort and non-compliance with patients. Family support and self-efficacy are important factors in increasing patients' adherence to hemodialysis therapy, as they increase patients' motivation and self-confidence in controlling their disease. Objective: This research aims to find out the relationship between family support and self-efficacy and compliance of GGK patients in undergoing hemodialysis in the hemodialysis room of dr. Chasbullah Abdulmajid Bekasi City. Method: The design in this study is cross-sectional. The study was conducted at the Dr. Chasbullah Abdulmajid Bekasi City, in April – May 2024. The sample numbered 76 respondents according to the study sample criteria. The sampling technique used is purposive sampling. Instruments used in this study include family support instruments, self-efficacy instruments (CKD-SE), and hemodialysis instruments (ESRD-AQ). Analysis of the data was conducted in a univariate and bivariate manner using the Chi-square Test. Test results: Based on the statistical tests conducted, the relationship of family support and self-efficacy with compliance with hemodialysis (P-value = 0.000). Conclusion: Analysis test results show that there is a relationship between family support and self-efficacy and compliance with hemodialysis

KEYWORDS: Family support, self-efficacy, compliance undergoing hemodialysis

I. INTRODUCTION

The kidney is an organ of the human body that plays an important role in excretion and secretion. Kidney failure is divided into two types, acute kidney failure and chronic kidney failure (Diyono & Mulyani, 2019). Both acute and chronic renal failure are serious conditions that require special attention (Anies, 2018). According to the World Health Organization (WHO) in 2018, the global prevalence of CKD reached 10% of the population, with approximately 1.5 million patients undergoing hemodialysis (HD) worldwide. This is expected to increase by 8% every year (Marni, 2023). National data shows the number of patients with CKD is 713,783. In Indonesia, West Java has the highest number of cases with 131,846 people, followed by Central Java with 113,045 people, and North Sumatra with 45,792 people. Of the total, male patients totaled 355,726, while female patients totaled 358,057 (Kemenkes, 2019).

In some people, chronic renal failure can almost completely stop kidney function and become a life-threatening condition. Apart from transplantation, the only treatment that can be done is the hemodialysis procedure to help patients survive (Anies, 2018). According to Harmilah (2020) hemodialysis or dialysis is a therapy used to remove fluids and waste products from the body using a machine with a semipermeable filter membrane (artificial kidney). Hemodialysis therapy requires a treatment time of 12-15 hours each week, causing discomfort and a feeling of being shackled to the patient. This condition often results in patients refusing and being non-compliant in undergoing hemodialysis therapy rules, even though compliance is very important to pay attention to (Siregar, 2020).

When patients are not compliant in undergoing hemodialysis rules and therapy, there will be a buildup of toxins and metabolic waste in the body that can worsen their health condition. Therefore, encouragement and support are needed, both from oneself

The Relationship Between Family Support And Self-Efficacy with Compliance of Chronic Kidney Failure Patients in Undergoing Hemodialysis Therapy in the Hemodialysis Room at RSUD Dr. Chasbullah Abdulmadjid Bekasi City

(motivation and self- belief) and from people around, especially family. Family support is the most important factor in helping individuals overcome problems. Support can increase self-confidence and motivation to deal with problems that may arise (Sary & Ghina, 2020). In addition to family support, internal support is also very important for people with chronic kidney failure who undergo hemodialysis. Self-efficacy is a belief that affects the way a person thinks, motivates himself and makes decisions to achieve certain goals. Chronic renal failure patients' belief in the success of disease management affects their behavior in controlling their disease (Hanafi, Maghfiroh, & Rokhman, 2020).

In Sary & Ghina's research (2020) states that there is a correlation between family support and self-efficacy, the p -value = 0.002, which means that there is a significant correlation between family support and self-efficacy, the correlation analysis between family support and hemodialysis compliance obtained a p -value = 0.000. Meanwhile, the results of research by Novitasari & Wakhid (2018) state that most family support is in the good category, 32 people (45.7%), the self- efficacy of GSK patients is mostly moderate, 37 people (52.9%). Concluding that there is a relationship between family support and self-efficacy of chronic renal failure patients undergoing hemodialysis at Semarang Regency Hospital with a p -value of $0.000 < 0.05$. Patients with CKD are advised to get support from their family so that the patient's self-efficacy increases.

The results of Nirhartman's research (2023) also state that there is a relationship between self-efficacy and family support for adherence to chronic renal failure patients undergoing hemodialysis, with a p value = 0.004 and $p < 0.05$. However, there are still some patients in the less compliant category undergoing hemodialysis. The phenomenon and results of previous studies show that there is a relationship between self-efficacy and family support for adherence. However, there is also no relationship between self-efficacy and family support for adherence. Researchers identified problems faced by patients and their families, such as patients' pessimism about their recovery and the view that hemodialysis only prolongs life without curing.

II. METHOD AND MATERIAL

The research design used was quantitative research with a cross-sectional design. This research was conducted at Dr. Chasbullah Abdulmadjid Regional General Hospital, Bekasi City in April - May 2024. The population in this study were all chronic renal failure patients who performed hemodialysis at RSUD dr. Chasbullah Abdulmadjid. The sample size used in this study was calculated using the formula S. Lameshow known population and obtained a sample size of 76 respondents using the simple random sampling method. The independent variables in this study were family support and self-efficacy, while the dependent variable was compliance with hemodialysis.

The type of data obtained in this study uses two types of data, namely primary data taken directly from respondents, while secondary data is obtained indirectly. The data collection technique in this study was through distributing questionnaires given to patients who entered the researcher's criteria. The instruments used in this study, namely the family support questionnaire sourced from (Rosyidah, 2017), the self- efficacy questionnaire (CKD-SE) sourced from (Lenggogeni, 2021), and the hemodialysis compliance questionnaire (ESRD-AQ) which has been modified by Kim (2010) in Kusniawati (2018). The analytical test used in this study, namely the Chi-Square Test with the SPSS 26.0 application. The family support questionnaire obtained a Cronback Alpha value of 0.935, the results of the self- efficacy questionnaire (CKD-SE) obtained a Cronback Alpha value of 0.845, and the results of the hemodialysis compliance questionnaire (ESRD-AQ) Cronback Alpha of 0.762.

III. RESULT

Table 1. Table 1 Distribution of Respondents Based on Age, Gender, Education, Occupation, and Duration of HD Chronic Renal Failure Patients at RSUD dr. Chasbullah Abdulmadjid Bekasi City in 2024

Respondent characteristics	Frequency	%
Gender		
Male	42	55.3
Female	34	44.7
Age		
< 46 tahun	41	53.9
≥ 46 tahun	35	46.1
Employment		
Not working	41	53.9
Working	35	46.1
Education		

The Relationship Between Family Support And Self-Efficacy with Compliance of Chronic Kidney Failure Patients in Undergoing Hemodialysis Therapy in the Hemodialysis Room at RSUD Dr. Chasbullah Abdulmadjid Bekasi City

Primary Education	11	14.5
Secondary Education	44	57.9
Length of time on HD		
< 13 months	37	48.7
≥ 13 months	39	51.3

Table 1 above shows that the majority of respondents are male as many as 42 people (55.3%) with the majority of productive age < 46 years as many as 41 people (53.9%). Chronic renal failure patients at Dr. Chasbullah Abdulmadjid Hospital have a majority of secondary education as many as 44 people (57.9%), with the majority of respondents not working as many as 41 people (53.9%). Most of them have undergone hemodialysis for ≥ 13 months as many as 39 people (51.3%).

Table 2. Distribution of Respondents Based on Hemodialysis Compliance for Chronic Kidney Failure Patients at Dr. Chasbullah Abdulmadjid Hospital, Bekasi City, 2024

Variable	Frequency	%
Compliance Hemodialysis		
Compliance	67	82.3
Not Compliance	9	11.8
Family support		
Good	63	82.9
Enough	7	9.2
Less	6	7.9
Self-efficacy		
High	64	84.2
Low	12	15.8

Table 2 above shows that 67 respondents (88.2%) complied with hemodialysis therapy, more than respondents who did not comply with hemodialysis therapy as many as 9 people (11.8%). Respondents who had good family support were 63 people (82.9%), more than respondents with less family support as many as 6 people (7.9%). Respondents who had high self-efficacy were 64 people (84.2%), more than respondents who had low self-efficacy as many as 12 people (15.8%)

Table 3. Relationship between Family Support and Compliance with Undergoing Hemodialysis in Chronic Kidney Failure Patients at RSUD dr. Chasbullah Abdulmadjid Bekasi City

Variable	Compliance Hemodialysis				Total		P value
	Compliance		Not Compliance		N	%	
	N	%	N	%			
Family support							
Good	60	78,9	3	3,9	63	82,9	0,000
Enough	6	7,9	1	1,3	7	9,2	
Less	1	1,3	5	6,6	6	7,6	
Total	67	88,2	9	11,8	76	100	

Table 3 above the results of the Chi Square statistical test with Pearson Chi Square found that the p value = 0.000 < α (0.05), which indicates that there is a significant relationship between family support and compliance with hemodialysis therapy in patients with chronic renal failure at Dr. Chasbullah Abdulmadjid Hospital, Bekasi City

Table 4. Relationship between Family Support and Compliance with Undergoing Hemodialysis in Chronic Kidney Failure Patients at Dr. Chasbullah Abdulmadjid Hospital Bekasi City

Variable	Compliance		Total	P
	Hemodialysis			value
	Compliance	Not Compliance		

The Relationship Between Family Support And Self-Efficacy with Compliance of Chronic Kidney Failure Patients in Undergoing Hemodialysis Therapy in the Hemodialysis Room at RSUD Dr. Chasbullah Abdulmadjid Bekasi City

	N	%	N	%	N	%	
Self-efficacy							
High	63	82,9	1	1,3	64	84,2	0,000
Low	4	5,3	8	10,5	12	15,8	
Total	67	88,2	9	11,8	76	100	

Based on table 4 above, the results of the Chi Square statistical test with Pearson Chi Square showed that the p value = 0.000 < 0.05, so it can be concluded that there is a significant relationship between self- efficacy and compliance with undergoing hemodialysis in patients with chronic renal failure at Dr. Chasbullah Abdulmadjid Hospital, Bekasi City

IV. DISCUSSION

The results of the Chi Square statistical test with Pearson Chi Square found that the p value = 0.000 < α (0.05), which indicates that there is a significant relationship between family support and compliance with hemodialysis therapy in patients with chronic renal failure at Dr. Chasbullah Abdulmadjid Hospital, Bekasi City. The results of this study are in line with the research of Novitasari & Wakhid (2018) found that the results of the p-value = (0.000) < (0.05), namely there is a significant relationship between family support and self-efficacy of chronic renal failure patients undergoing hemodialysis at Semarang Regency Hospital. Another study that is also in line with the results of this study, namely the research of Sary & Ghina, (2020) on the correlation between family support, self-efficacy and hemodialysis compliance in CKD patients in 2020, found that the p value was 0.002, which means that there is a correlation between family support and self-efficacy in patients with chronic renal failure.

This is supported by research by Nirhartman, (2023) found that the p value of 0.004 < 0.05, which means that there is a significant relationship between self-efficacy and family support for the compliance of patients with chronic renal failure in undergoing hemodialysis at Kraton Hospital, Pekalongan Regency. This is in line with similar research conducted by Marlinda, et al (2020) there is a relationship between family support to increase the motivation of breast cancer patients to undergo chemotherapy (p value = 0.000; OR = 8.758).

Family support is needed for people with chronic illnesses to overcome the psychological problems experienced during illness. In addition, the conditions that accompany clients with chronic diseases require high maintenance costs, impact on individuals and extended families, interfere with activities and work, become dependent on others and require rehabilitation programs. When a patient is diagnosed with chronic renal failure, the patient will experience a real sense of loss, and if the family support he receives is lacking, this will complicate the patient's self-acceptance. Lack of family support causes patients to feel unnoticed, disappointed, hopeless, anxious and even depressed. If these symptoms are not treated immediately, it will worsen his condition and affect his level of self-acceptance (Rosyidah, 2017). This study concludes that family support not only improves adherence to hemodialysis therapy, but also has a positive impact on patients' self-efficacy and psychological well-being.

The results of the Chi Square statistical test with Pearson Chi Square showed that the p value = 0.000 < 0.05, so it can be concluded that there is a significant relationship between self-efficacy and compliance with undergoing hemodialysis in patients with chronic renal failure at Dr. Chasbullah Abdulmadjid Hospital, Bekasi City. The Odd Ratio result is 126,000 which means that respondents with high self-efficacy have 126,000 times better chances of undergoing hemodialysis therapy compliance compared to respondents who have low self-efficacy.

In line with the results of previous similar research conducted by Astari, (2022) shows that there is a relationship between self-efficacy and the nutritional status of patients with kidney failure undergoing hemodialysis at the Sultan Imanuddin Pangkalan Bun Hospital with a p value of 0.003 < 0.05. Supported by similar research by Nurhayati & Tri utami, (2022) there is a significant relationship between self-efficacy and the quality of life of chronic renal failure patients undergoing hemodialysis (p value = 0.001). Self-efficacy is one way to increase confidence in undergoing a long-term treatment process. When patients are diagnosed with chronic diseases such as chronic renal failure and must undergo hemodialysis, they will automatically try to prevent the disease from getting worse. In this case, self-efficacy plays an important role in patient decision-making (Utami, 2017). Patients who have confidence in their ability to perform self-care will be more likely to carry out these tasks. Therefore, individuals with high self-efficacy will be better able to manage their illness (Astari, 2022).

Strong self-efficacy can enhance one's success and well-being in many ways. A person with high self-efficacy is able to complete difficult tasks, cultivate deep interests, and adjust to the face of problems. Thus, patients with high self-efficacy tend to be more capable of having aspects that can improve their health conditions (Hasanah, 2017). From some of the research results above, the authors can conclude that in addition to good family support, self-efficacy is also very important for patients with chronic renal failure because it can take good actions to comply with undergoing hemodialysis in health services.

The Relationship Between Family Support And Self-Efficacy with Compliance of Chronic Kidney Failure Patients in Undergoing Hemodialysis Therapy in the Hemodialysis Room at RSUD Dr. Chasbullah Abdulmadjid Bekasi City

V. CONCLUSIONS

Based on the results of the study, it can be concluded that there is a significant relationship between family support and compliance with undergoing hemodialysis in patients with chronic kidney failure. Good family support has a greater chance of adherence to undergo hemodialysis compared to respondents who have less family support. This can occur because family support affects the patient's belief that he is quite capable of carrying out his duties, in this case the ability to solve problems, thus encouraging patients to solve their problems as well as possible. Family support has a positive impact on psychological health, physical well-being and quality of life.

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CONFLICT OF INTEREST

The author declared that don't have conflict of interest

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