

Original Article

The Relationship between Family Support and Self-Efficacy in Chronic Kidney Failure Patients in the Hemodialysis Room

Fataya Syailla^{1*}, Johan Budhiana¹, Susilawati¹¹Department of Nursing, Sukabumi College of Health Sciences, Indonesia

Article Information

Received: 16 September 2023
 Revised: 21 January 2024
 Accepted: 24 January 2024
 Available online: 31 January 2024

Keywords

Family support; Self-Efficacy;
 Chronic Kidney Failure

Correspondence

Phone: (+62) 85703692996

E-mail:

fatayasyailla@gmail.com

Website

<https://journal.umtas.ac.id/index.php/healthcare/index>

Doi

<https://doi.org/10.35568/healthcare.v6i1.3708>

©The Author(s) 2024

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License

ABSTRACT

Kidney failure is a disorder of kidney function that requires management with hemodialysis therapy. When undergoing hemodialysis, high self-efficacy is required. One of the factors forming self-efficacy is family support. This study aims to determine the relationship between family support and self-efficacy in chronic kidney failure patients undergoing hemodialysis. The research design used correlational. The population is all patients undergoing hemodialysis at the Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City with a sample of 30 patients through total sampling. Data collection used a questionnaire. The data analysis used was Fisher's exact test. The research results showed that the majority of patients received family support and had high self-efficacy. There was a relationship between family support and self-efficacy in chronic kidney failure patients. Conclusion: There was a relationship between family support and self-efficacy in chronic kidney failure patients undergoing hemodialysis. It is hoped that hospitals can involve families in increasing self-efficacy through structured counseling.

INTRODUCTION

Chronic Kidney Diseases (CKD) is a disruption in kidney function in regulating fluid and electrolyte balance which can cause uremia due to the buildup of substances that are not excreted from the

body by the kidneys and will lead to progressive damage to kidney tissue. and reversible (Kamil, 2018; Simatupang, 2021).

Based on *World Health Organization* (WHO) in 2018, the incidence of CKD in

the world reached 10% of the population, meanwhile CKD patients undergoing hemodialysis are estimated to increase by 8% every year. CKD is a chronic disease with the 20th highest death rate in the world.

Based on Riskesdas data (2018), the prevalence of chronic kidney failure in Indonesia is around 0.38% in 2018 in West Java 0.4% with the prevalence in the 65-74 year group 0.84% higher than other age groups, as well as male sufferers. men are 0.45% higher than women.

One way to treat CKD is hemodialysis or dialysis. Hemodialysis (HD) is a dialysis therapy technique that is useful for transporting fluids and residual products from the body when the kidneys can no longer carry out this process which is needed to reduce albumin expenditure and reduce signs of uremia that occur in CKD patients (Pasaribu, 2020).

Chronic kidney disease patients undergoing hemodialysis will experience signs and impacts in all aspects of life, namely physical, psychological, social and environmental aspects. This will further worsen the quality of life and self-efficacy of CKD patients (Idzharrusman & Budhiana, 2022; Wulandari et al., 2021).

One of the factors that influences the quality of life of chronic kidney failure patients is self-efficacy. Self-efficacy can convey confidence that a person will be successful in carrying out self-care as long as they are optimal in carrying out activities that support health status, including treatment (Rohmaniah & Sunarno, 2022; Sucahya, 2017).

Self-efficacy in chronic kidney failure patients is very crucial, according to Wu et al (2007) in Novitasari & Wakhid (2018), the strongest predictor of self-efficacy is family support.

Family support means verbal and non-verbal support, which can be in the form of advice, direct assistance or behavior provided by people who are close to the subject in their social environment (Indriyanto, 2018).

Family support is very important in the treatment management of chronic kidney failure, where family members are involved in many aspects of health care activities that CKD patients expect.

The results of a preliminary study conducted by researchers using the Covid-19 health protocol system which was applied during interviews on March 28 2022 to five patients accompanied by family or not accompanied by family while undergoing hemodialysis treatment at the Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City, were obtained. that 2 patients said they had low self-efficacy by saying that they were not sure they were able to do a job even though they were sick and had sufficient family support where the family took them to the hospital and diligently accompanied the patient's hemodialysis.

Apart from that, three patients said that they had high self-efficacy, namely expressing that their desire to recover was very high, they were very confident that dialysis could improve the patient's health status and had good family support, namely getting attention when the patient was sick by taking them to the clinic and involved in family activities (Dewi et al., 2022; (Pradnyaswari & Rustika, 2020).

The aim of the research was to determine the relationship between family support and self-efficacy in chronic kidney failure patients in the Hemodialysis Room at Setukpa Bhayangkara Hospital, Sukabumi City.

METHOD

This type of research is quantitative research with a correlational method which aims to determine whether or not there is a relationship between two or several variables. Population is all chronic kidney failure patients undergoing hemodialysis at the

Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City, totaling 30 people. The sampling technique used total sampling so that the research sample was 30 people. The research was carried out on June 6-8 2022.

The family support instrument includes instrumental support, emotional support, informational support and assessment support which consists of 12 questions. The self-efficacy instrument consisting of magnitude, generality and strength aspects includes 10 questions. The analysis in this study was univariate and bivariate using Fisher's Exact Test because this study did not meet the requirements of using the chi square test.

RESULTS

Table 1
Description of Characteristics Based on Age

Respondent's Age (years)	Amount	Percentage (%)
>53	20	66.7
≤53	10	33.3
Amount	30	100

Source: Primary Data

Based on table 1, the majority of chronic kidney failure patients were aged > 53 years, namely 20 patients or 66.7% and a small proportion were aged ≤ 53 years, namely 10 patients or 33.3%.

Table 2
Description of Characteristics Based on Gender

Gender	Amount	Percentage (%)
Woman	22	73.3
Man	8	26.7
Amount	30	100

Source: Primary Data

Based on table 2, the majority of chronic kidney failure patients are female, namely 22 patients or 73.3% and a small percentage are male, namely 8 patients or 26.7%.

Table 3

Description of Characteristics Based on Marital Status

Married Status	Amount	Percentage (%)
Marry	27	90
Widow	3	10
Amount	30	100

Source: Primary Data

Based on table 3, the majority of patients with chronic kidney failure have a married status, namely 27 patients or 90% and a small percentage have a widowed marital status, namely 3 patients or 10%.

Table 4
Description of Characteristics Based on Education

Education	Amount	Percentage (%)
elementary school	8	26.6
Junior High School	11	36.7
Senior High School	11	36.7
Amount	30	100

Source: Primary Data

Based on table 4, the majority of chronic kidney failure patients have junior high school and high school education, namely 11 patients or 36.7% each and a small number have elementary school education, namely 8 patients or 26.7%.

Table 5
Description of Characteristics by Job

Work	Amount	Percentage (%)
Work	2	6.7
Doesn't work	28	93.3
Amount	30	100

Source: Primary Data

Based on table 5, the majority of chronic kidney failure patients do not work, namely 28 patients or 93.3% and a small percentage work, namely 2 patients or 6.7%.

Table 6
Description of Characteristics Based on Suffering History

History of Suffering (year)	Amount	Percentage (%)
≤1	3	10
>1	27	90
Amount	30	100

Source: Primary Data

Based on table 6, the majority of chronic kidney failure patients have a history of suffering > 1 year, namely 27 patients or 90% and a small percentage have a history of suffering ≤ 1 year, namely 3 patients or 10%.

Table 7

Description of Characteristics Based on Living Together

Living together	Amount	Percentage (%)
Family	30	100
Amount	30	100

Source: Primary Data

Based on table 7, it can be seen that all chronic kidney failure patients live with their families, namely 30 patients or 100%.

Table 8

Description of Characteristics Based on Frequency of Hemodialysis

Hemodialysis Frequency	Amount	Percentage (%)
2x/week	23	76.7
3x/week	7	23.3
Amount	30	100

Source: Primary Data

Based on table 8, the majority of chronic kidney failure patients have a hemodialysis frequency of 2x/week, namely 23 patients or 76.7% and a small percentage have a hemodialysis frequency of 3x/week, namely 7 patients or 23.3%.

Table 9

Overview of Family Support

Category	Amount	Percentage (%)
Support	19	63.3
Does not support	11	36.7
Amount	30	100

Source: Primary Data

Based on table 9, the majority of chronic kidney failure patients have family support, 19 patients or 63.3% and a small number do not support, 11 patients or 36.7%.

Table 10

Overview of Self-Efficacy

Category	Amount	Percentage (%)
Tall	20	66.7
Low	10	33.3
Amount	30	100

Source: Primary Data

Based on table 10, the majority of chronic kidney failure patients have high self-efficacy, namely 20 patients or 66.7% and a small percentage have low self-efficacy, namely 10 patients or 33.3%.

Table 11

The Relationship between Family Support and Self-Efficacy in Chronic Kidney Failure Patients

Support Family	Self-Efficacy		Amount
	Tall	Low	
Support	18 (94.7)	1 (5.3)	19 (100)
Does not support	2 (18.2)	9 (11)	11 (100)
Amount	20 (66.7)	10 (33.3)	30 (100)

Source: Primary Data

Based on Table 11, it can be seen that chronic kidney failure patients in the Hemodialysis Room at the Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City who have support from their families, most of them have high self-efficacy, 18 patients (94.7%) and a small number have low self-efficacy, 18. patients (5.3%). Meanwhile, most of the patients who did not have support from their families had low self-efficacy, as many as 9 patients (81.8%) and a small percentage had high self-efficacy, as many as 2 patients (18.2%).

Table 12

Results of Test Analysis of the Relationship between Family Support and Self-Efficacy in Chronic Kidney Failure Patients.

Independent Variable	Dependent Variable	p-value
Family support	Self-Efficacy	0,000

Source: Primary Data

Based on Table 4.12, it can be seen that the results of statistical tests using Fisher's Exact obtained a P value = 0.000, which means <0.05 . Based on the rejection of the hypothesis, H_0 is rejected which shows that there is a relationship between family support and self-efficacy in chronic kidney failure patients in the Hemodialysis Room at Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City.

DISCUSSION

1. Overview of Family Support

Based on Table 9, it shows that most of the family support received by chronic kidney disease patients was supportive, 19 patients (63.3%) and a small portion was not supportive, 11 patients (36.7%).

The research results showed that respondents received support from their families in the form of families who always expressed the impact of their illness, families who always reminded them of attitudes that made their illness worse, families who always tried to find out what treatment was needed. and medical equipment, and the family always loves and pays attention to the situation during illness. There are several factors that cause this, including marital status.

Marital status will be closely related to family responsibilities, which can then lead to unhealthy lifestyle choices such as selective food choices and working overtime, thereby increasing the risk of various diseases, including chronic kidney disease (Utami, 2015 in: Bosnian, 2018). Based on the research results, the majority of chronic kidney disease patients in the hemodialysis room at Bhayangkara Setukpa Lemdikpol Hospital, Sukabumi City, were married, namely 27 people (90%).

2. Overview of Self-Efficacy

Based on table 10, it can be seen that the majority of chronic kidney failure patients have high self-efficacy, 20 patients (66.7%) and a small percentage have low self-efficacy, 10 patients (33.3%).

The results of the study showed that the majority of respondents had high self-efficacy which was related to using the ability to control emotions when there was a problem while undergoing hemodialysis, being able to face the disease they were suffering from, feeling able to face problems during hemodialysis and finding a way to overcome them, and being able to be faced with a dilemma. then find the solution.

According to Alwisol in Wakhid (2021), self-efficacy is one's perception of how one can function in certain situations. Self-efficacy is related to the belief that oneself has the ability to carry out the expected actions. This is supported by several factors, one of which is the frequency of hemodialysis.

Based on Brunner and Suddarth (2017), hemodialysis in patients with chronic kidney disease is generally carried out 1, 2 or 3 times per week and is continuous for at least 3 months (Wiliyanarti & Muhith, 2019; Annisa, 2021). Hemodialysis is recommended twice a week. A hemodialysis session lasts approximately 4 to 5 hours. Patients who undergo hemodialysis twice a week have more experience and understand the process of hemodialysis therapy, so that patient self-efficacy can increase (Budhiana et al., 2022; Afandi et al., 2018).

Based on this research, the majority of respondents underwent hemodialysis twice a week, 27 people (76.7%).

3. The Relationship between Family Support and Self-Efficacy

Based on the results of statistical tests, Fisher's accurate bivariate analysis shows that there is a relationship between family support and self-efficacy in chronic kidney disease patients with $p\text{-value} = 0.000 < 0.05$. The research results reinforced by research by Novitasari and Wakhid (2018) which explains that there is a significant relationship between family support and self-efficacy in chronic kidney disease patients undergoing hemodialysis, with a $p\text{-value}$ of 0.000. Self-efficacy helps patients make serious efforts to complete the treatment process, increase compliance, and increase motivation by setting goals in the treatment process to achieve the expected results (Wati, 2018; Setiawan et al., 2021).

Hemodialysis patients' self-efficacy can be increased by establishing good social relationships with the community, especially with the family. Family support influences patient self-efficacy because it can provide a sense of security, comfort, self-esteem and confidence in facing problems which ultimately can increase patient self-efficacy.

Family support is closely related to increasing self-efficacy. In fact, self-efficacy is one way to increase self-confidence in undergoing a long-term treatment process, and self-efficacy plays a role in patient decision making (Effendi et al., 2021; Rahmawati, 2017; Siwi, 2021).

Based on the results of the interpretation in Table 11, it shows that most of the patients with chronic kidney failure who receive support from their families have high self-esteem. Meanwhile, patients who do not have family support mostly have low self-efficacy, meaning that if the respondent has supportive family support then the quality of the respondent's self-efficacy will be good or high, and if the respondent does not have supportive family support then the quality of the respondent's self-efficacy will be high, and

if the respondent does not have supportive family support, the quality of the respondent's self-efficacy will be high. the quality of his self-efficacy will be good or high. The quality of family support will be good. Respondents' self-efficacy will be low.

CONCLUSION AND RECOMMENDATION

In conclusion of study was :

1. Most of the patient's family support received family support as many as 19 people (63.3%).
2. the majority had high self-efficacy as many as 20 people (66.7%).
3. There is a relationship between family support and self-efficacy in chronic kidney failure patients in the Hemodialysis Room at Setukpa Bhayangkara Hospital, Sukabumi City with a $p\text{-value}$ of 0.000.

It is hoped that families will be involved in effective education so that they can prevent and treat chronic kidney failure through discharge planning, health promotion and counseling in the form of providing education when the family is waiting for the patient to undergo structured hemodialysis.

REFERENCES

- Afandi, AT, Hadi, E., Academician, K., Studi, P., Nursing, I., Jember, U., Kalimantan, J., 37 Tegal, N., & Jember, B. (2018). Effectiveness of Self Efficacy Towards Quality of Life for Clients With Chronic Disease Diagnosis. 23–30 <https://jurnal.stikesbaptis.ac.id/index.php/PSB/article/view/244>
- Annisa, L., & Maliya, A. (2021). The Relationship between Self-Efficacy and the Quality of Life of Hemodialysis Patients in the Hemodialysis Room at Sebelas Maret University Hospital, Surakarta (Doctoral dissertation,

- Muhammadiyah University of Surakarta).
<http://eprints.ums.ac.id/id/eprint/90748>
- Budhiana, J., Elengoe, A., & Said, MSM (2022). Determinants of Quality of Life in Patients With Chronic Kidney Disease: A Structural Equation Modeling Approach. https://medic.upm.edu.my/upload/document/2023010416272113_2021_1484.pdf
- Dewi, R., Letchmi Panduragan, S., Syazana Umar, N., Melinda, F., & Budhiana, J. (2022). The Effect of Religion, Self-Care, and Coping Mechanisms on Quality of Life in Diabetes Mellitus Patients. <http://localhost:8080/xmlui/handle/123456789/1362>
- Efendi, Z., Irwan, M., Zalni, RI, & Roni, Y. (2021). Factors Associated with Quality of Life in Patients with Chronic Kidney Failure Undergoing Hemodialysis. *Maharatu Health Journal*, 2(2), 12-26.
- Idzharrusman, M., & Budhiana, J. (2022). The Relationship between Family Support and the Quality of Life of Chronic Kidney Failure Patients Dirsud Sekarwangi Sukabumi Regency. *BSI Nursing Journal*, 10(1), 61-69. <http://ejurnal.ars.ac.id/index.php/kewarni/article/view/768>
- Indriyanto, W. (2018). The Relationship between Family Support and Compliance with Hypertension Elderly for Routine Control at the Elderly Posyandu in the Sugih Waras Community Health Center Work Area, Bojonegoro. Surabaya. Airlangga University. <http://repository.unair.ac.id/id/eprint/49538>
- Kamil, I. et al. (2018). Description of the Anxiety Level of Chronic Kidney Failure Patients Undergoing Hemodialysis at Ulin Regional Hospital, Banjarmasin. *Health Dynamics*. 2(9). PP: 366-377. *Health Dynamics*, 9(2), 366–377. <https://ojs.bisnisakesehatan.unism.ac.id/index.php/dksm/article/view/350>
- Indonesian Ministry of Health. (2018). 2018 Basic Health Research Results. Indonesian Ministry of Health, 53(9), 1689–1699.
- Novitasari, L., & Wakhid, A. (2018). The relationship between family support and self-efficacy of chronic kidney failure patients undergoing hemodialysis at the Semarang District Hospital. *Primary Scholars Journal of Nursing and Public Health*, 7(2), 154-165. DOI: <https://doi.org/10.31596/jcu.v7i2.260>
- Pasaribu, R, S. (2020). Clinical Signs & Symptoms of Chronic Kidney Failure Patients Undergoing Hemodialysis Therapy for Less Than 3 Months. Thesis, 1–84. <http://repository.usu.ac.id/handle/123456789/29037>
- Pradnyaswari, LB, & Rustika, IM (2020). The Role of Social Support and Self-Efficacy in Resilience in Chronic Kidney Failure Patients Undergoing Hemodialysis Therapy in Bali. *Udayana Psychology Journal*, 1, 67–76. <https://ojs.unud.ac.id/index.php/psikologi/article/download/57789/33725>
- Rahmawati, R. (2017). The Relationship between Self Efficacy and Stress Levels in Retired Elderly at Paguyuban Wredatama Undip Semarang <http://eprints.undip.ac.id/55995/>

- Rohmaniah, F., and Sunarno, R, D. (2022). Self-Efficacy to Improve the Quality of Life of Chronic Kidney Failure Patients Undergoing Hemodialysis. *Journal of Nursing and Midwifery Science*, 13(1), 164-175.
- Setiawan, H., Fitriani, D., Rahmawati, & Itania. (2021). The Effect of Giving Erythropoietin to Chronic Kidney Failure Patients Undergoing Hemodialysis at Balaraja Regional Hospital. *JOURNAL OF Medical Surgical Concerns*, 1(1), 14–29. <http://repository.uima.ac.id/xmlui/handle/123456789/6656>
- Simatupang, A, O, M. (2021). Literature Review: The Relationship between Family Support and Quality of Life in Chronic Kidney Failure Patients Undergoing Hemodialysis. Medan Ministry of Health Health Polytechnic Scientific Writing
- Simbolo, N, F. (2018). Family Support and Quality of Life for Hemodialysis Patients at RSUD Dr. Pirngadi Medan. Thesis <https://repositori.usu.ac.id/handle/123456789/8913>
- Siwi, USA (2021). Quality of Life in Chronic Kidney Failure Patients Undergoing Hemodialysis Therapy. *Muhammadiyah Bengkulu Nursing Journal*, 9(2), 1–9. <https://doi.org/10.36085/jkmb.v9i2.1711>
- Sucahya, H. (2017). The Relationship between Self-Efficacy in Self-Care and Quality of Life in Chronic Kidney Disease Patients Undergoing Hemodialysis at Panembahan Senopati Hospital, Bantul, Yogyakarta. Thesis
- Utami, N., Anisa, A., & Wati, NL (2017). Self-Efficacy in Chronic Kidney Failure Patients Undergoing Hemodialysis in the Hemodialysis Room at RSAU Dr. M. Salamun. *JKA Scientific Journal (Journal of Aeromedical Health)*, 3(1), 56-61. DOI:<https://doi.org/10.58550/jka.v3i1.75>
- Wulandari, NLIM, Sudaryati, NLG, & Widyantari, ASS (2021). Correlation between Calcium and Phosphorus Levels in Chronic Kidney Failure Patients with Hemodialysis at the Prodia Denpasar Clinic Laboratory. *Widya Biology Journal*, 12(01), 34-47. DOI: <https://doi.org/10.32795/widyabiologi.v12i01.1321>