



THE CORRELATION BETWEEN FAMILY SUPPORT AND SELF EFFICACY IN HEMODIALYSIS PATIENTS: AN INDONESIAN SAMPLE

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ABSTRACT

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Article Info:

Submitted: 10-09-2024

Revised: 30-10-2024

Accepted: 31-10-2024

<http://doi.org/10.19184/nlj.v9i2.52468>

Hemodialysis patients need social support, especially family support. The family support for patients would be have a positive impact on patients' self-efficacy. Nurses play an important role in collaboration with family in order increasing self-efficacy. However, little is known about family support and self-efficacy in Indonesian cases. This objectives was to determine the correlation between family support and self-efficacy in hemodialysis patients. Cross-sectional study was used. The family support instrument and, General Self-Efficacy Scale (GSS) questionnaires were administered in this study. The Kendall Tau test was used to determine the correlation between family support and self-efficacy. Two hundred and thirty-four respondents participated in this study. Most hemodialysis patient with high family support (88.0%) and moderate family support (12.0%), Respondent with low self-efficacy category was 3.4%, moderate self-efficacy category was 27.8%, and high self-efficacy category was 68.8%. There were significant and positive correlation between family support and self-efficacy in hemodialysis patients ($p=0.001$ $r=0.527$). Higher levels of family support in hemodialysis patients have a positive effect on self-efficacy. Collaborating with families to maintain and improve family support in hemodialysis patients is recommended in nursing interventions to be able to improve the self-efficacy of hemodialysis patients. Identifying the supporting factors that families have is recommended for further research.

Keywords:

Chronic kidney failure, Family support, Self-efficacy

BACKGROUND

Chronic kidney disease (CKD) was increased in the worldwide (Kovesdy, 2022; Li et al., 2023), including in Indonesia country (Hustrini et al., 2022). Studies have reported that CKD is one of the leading causes of mortality worldwide (Kovesdy, 2022, Castro, 2019; Bello et al., 2022; Tungsanga et al., 2024). CKD is associated with high morbidity and excess healthcare costs (Bello et al., 2022; Adejumo et al., 2020). CKD is managed via hemodialysis therapy (Castro, 2019; Elendu et al., 2023). Hemodialysis is the most common (89%) form of kidney replacement therapy in the world (Bello et al., 2022). Studies have reported that CKD and hemodialysis therapy are associated with a high prevalence psychological distress (Teles et al., 2018; Marthoenis et al., 2021; Bahall et al., 2023) and need a high family support to provide psychological resilience and mental health development (Wang et al., 2024). Family has a significant impact on individual mental health (An et al., 2024). Family support is very important to help carry out motivation, confidence, gain empathy and emotional support which plays an important role in supporting to solve problems related to the disease experienced by patients (Erickson et al., 2024) The family support provided by patients can have a positive impact on the emergence of self-efficacy in hemodialysis patients (Wang et al., 2024; Safi et al., 2024). Improve self-efficacy is needed for hemodialysis patients.

Self-efficacy are significant predictors of physical and mental quality of life, including for hemodialysis patients (Nguyen et al., 2022; Wantonoro et al., 2020; Chang & Kim, 2024). Self-efficacy is a person's belief that he has the ability to successfully take care of himself until he achieves the desired results, high self-efficacy, would be high confident in hemodialysis procedure. Self-efficacy is expected to optimize the client's life in preventing complications of chronic failure disease (Lin & Hwang, 2020).

Patients on hemodialysis face various problems; therefore, they need to control and manage their adherence to self-care. Self-efficacy has been identified as a psychological factor that improves adherence and treatment outcomes among hemodialysis patients (Qalawa et al., 2022; Almutary & Tayyib, 2021; Safi et al., 2024). Study reported that there was a significant relationship between sociodemographic characteristics and chronic disease self-efficacy among hemodialysis patients in terms of sex, age, marital status, work, and level of education (Qalawa et al., 2022; Almutary & Tayyib, 2021; Chen et al.,

2022). Indonesia is different from European countries in terms of the wide geographical dispersion of Indonesia's islands, the low concentration of healthcare services in urban areas, and the various cultures and beliefs related to the depression level and self-efficacy status of hemodialysis patients. Few studies in Indonesia have examined the correlation between family support and self-efficacy in hemodialysis patients. Therefore, the aim of this study was to investigate the correlation between family support and self-efficacy in hemodialysis patients in an Indonesian sample.

METHODS

This study is a quantitative study with a cross-sectional design. About 234 respondents who received hemodialysis in Hospital at Yogyakarta area, Indonesia. were participated in this study. The inclusion criteria in this study as follows: a) chronic kidney disease patients undergoing hemodialysis; b) aged >18 years; c) able to communication, reading, and writing; e) willing to participate as research respondents. Exclusion criteria; Patients who have severe hearing problem, severe pain was excluded. The data collection tool used is the demographic characteristics questionnaire, a family support instrument using a questionnaire from Liandi's (2011) research. This questionnaire consisted of 21 questions using a likert scale with four answer options "always", "often", "sometimes" and "never". The score results were divided into 3 categories, namely low family support (score 21-31), medium family support (score 23-53) and high family support (score 54-84).

The General Self-Efficacy Scale (GSES). The GSES is designed to measure an individual's self-efficacy in a broad context and consists of 10 items that refer to three aspects: magnitude, generality, and strength. This questionnaire uses a Likert scale with five response options: "strongly disagree," "disagree," "neutral," "agree," and "strongly agree." The analyzed scores result in three categories: low self-efficacy (score 10-23), moderate self-efficacy (score 24-37), and high self-efficacy (score 38-50). Validity: General Self Efficacy Scale (GSES) Indonesian version (Putra et al., 2019).

This study received approval from the Hospital Research Ethics Committee No.00093/KT.7.4/III/2024; 18/03/2024. The researcher explains the research procedures to the respondents, and if they agree, they advance to fill out the informed consent form and questionnaire.

The analysis was executed using Statistical

Product and Service Solution (SPSS) version 22 with the Kendall Tau correlation test in order to identify correlation family support and self-efficacy hemodialysis patients.

RESULTS

Characteristics respondent

This study involved two hundred and thirty-four hemodialysis patients, with the majority aged 56-65 years was 34.6%, Male respondent was 59%, high school education level was 40.2%, unemployed was 71.4%, married status was 89.3%, and undergoing hemodialysis more than one year was 69.2%. Family support in patients with low family support category 0%, moderate family support 12.0%, and high family support 88.0%. The self-efficacy low category was 3.4%, moderate self-efficacy category was 27.8%, and high self-efficacy category was 68.8%. (table 1)

Family support and self-efficacy of hemodialysis patients

The Kendall Tau statistical analysis revealed a significant negative correlation between family support and self-efficacy in hemodialysis patients ($p=0.001$ $r=0.527$). This result implies Higher levels of family support in hemodialysis patients have a positive effect on self-efficacy in this vulnerable population (Table 2).

DISCUSSION

Majority of respondents (34.6%) had an age range of 56-65 years old. Being older have a higher risk of chronic kidney disease (CKD) because of decline in kidney function (Merchant & Ling, 2023). The respondent 89% married status, married people tend to have higher self-efficacy than those who are unmarried, divorced, or abandoned by their spouses. There was significant relationship between patient self-efficacy and family resilience and social support including spouses received in chronic kidney patients undergoing hemodialysis (Safi et al., 2024). Integrating a couple to chronic disease management are potential strategy for both prevention and treatment. Study reported the severity of chronic illnesses had a significant effect on their spouse's future chronic illness therefore management strategies for chronic diseases that are centered on couples may be more effective (An et al., 2023). It is implying the important role of family support.

Hemodialysis limits a person's social functioning and decrease in quality of life, ensuring their

adherence to treatment to achieve healthy lifestyle behaviors is very important. Patients' quality of care could be influenced by individual factors such as self-efficacy and social factors such as family resilience and social support received (Cui et al., 2022). Self-efficacy is individual factors of hemodialysis patients. Identifying and planning to improve the patient's self-efficacy can lead to increasing quality of life, and improving better health behaviors (Sousa et al., 2019). Studies have shown that patients with high self-efficacy related with high quality and improves the patients' daily activities and their adherence to treatment (Safi et al., 2024; Zhang et al., 2022). Study shown the importance of considering the conjoint influence of family and social support in developing interventions to improve the psychological resilience of hemodialysis (Xu et al., 2024).

Family support play an important role in the management of many chronic diseases including hemodialysis patients, family support may be potential predictive factors of psychological resilience (Qiu et al., 2021). Family support is very important, so that patients have self-confidence and can be under self-management, which may lead to more self-efficacy (Wang et al., 2024). In addition, relationships between family members relationships between family members are significantly associated with emotional well-being and better quality of life for family and patients (Xu et al., 2024). Social support includes receiving formal and informal emotional, instrumental and informational help, and patients who get high scores in social support are more likely to cope better with psychological stressors (Xu et al., 2024; Safi et al., 2024). Nurses as profession have substantial impact on enhancing patients' self-confidence by empowering their families and caregivers in nursing interventions program.

CONCLUSION

Higher levels of family support in hemodialysis patients have a positive effect on self-efficacy. Collaborating with families to maintain and improve family support in hemodialysis patients is recommended in nursing interventions to be able to improve the self-efficacy of hemodialysis patients. Identifying the supporting factors that families have is recommended for further research.

ACKNOWLEDGMENTS

The authors would like to thank for the respondents and nurse who participated in this research

Table 1: Characteristics responden

Characteristics	f	%
Age		
) 18-25 Years	4	1,7
) 26-35 Years	16	6,8
) 36-45 Years	35	15,0
) 46-55 Years	62	26,5
) 56-65 Years	81	34,6
) >65 years	36	15,4
Gender		
) Male	138	59,0
) Female	96	41,0
Last Education		
) No School	11	4,7
) Elementary School	48	20,5
) Junior High School	37	15,8
) Senior High School	94	40,2
) College/University	44	18,8
Employment Status		
) Employed	67	28,6
) Unemployed	167	71,4
Marriage Status		
) Married	209	89,3
) Single	17	7,3
) Others (Divorced)	8	3,4
Duration of Haemodialysis		
) <1 Year	72	30,8
) >1 Year	162	69,2
Family Support Status Level		
) Low	0	0
) Medium	28	12,0
) High	206	88,0
Self-Efficacy Status Level		
) Low	8	3,4
) Medium	65	27,8
) High	161	68,8

Table 2. Correlations of family Support and self-efficacy hemodialysis patients

Variable	n	Correlation Coefficient	p
Family support Self-Efficacy	234	0,527	0,001

* Kendall Tau correlation tes

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