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Original Research Paper

# Factors Affecting Quality of Life in Chronic Kidney Failure Patients Receiving Hemodialysis

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#### Abstract

The quality of life of chronic renal failure patients receiving hemodialysis may be impacted by the development of clinical symptoms. Family support, self-efficacy, and coping mechanism are a few things that have an impact on quality of life. The aim of the study was to ascertain how coping strategies, self-efficacy, and family support affected the quality of life. This kind of research uses a cross-sectional strategy and is correlational. The population consists of hemodialysis patients with chronic renal failure, and a complete sampling technique was used with a sample size of 71 individuals. This study used univariate analysis with frequency distribution and analysis of respondent attributes as data analysis methodologies. Path analysis is used in bivariate and multivariate analysis. The average family assistance, according to research findings, is \$55.00. Self-efficacy scores on average are 72.14, coping skills scores on average are 40.35, and quality of life scores on average are 62.76. The quality of life is influenced by family support (p = 0.013), self-efficacy (p = 0.002), and coping techniques (p = 0.000). The quality of life of people with chronic kidney failure is influenced by family support, self-efficacy, and coping mechanism. The hospital should be able to do more to enhance quality of life and health promotion.

Keywords: chronic kidney failure; quality of life

### 1. Introduction

As a problem that can result in mortality at any time, the chronic disease should not be disregarded. One of them is chronic kidney failure. Both as a primary source of worldwide morbidity and death and as a significant risk factor for cardiovascular disease, kidney disease has a significant impact on global health (Eriksen et al., 2014; Luyckx et al., 2018; Said & Hernandez, 2014). Bikbov et al. (2020) found that in 2017, chronic kidney disease (CKD) claimed the lives of 1.2 million people worldwide; between 1990 and 2017, the global all-age death rate from CKD grew by 41.5%; 697.5 million cases of all-stage CKD were reported in 2017, representing a 9.1% global prevalence; since 1990, the frequency of CKD across the board has increased by 29.3%; and CKD caused 35.8 million disease-adjusted life years (DALYs). Impaired kidney function was responsible for 1.4 million cardiovascular disease-related deaths and 25.3 million cardiovascular DALYs.

Through a study conducted on 6,908,440 CKD patients, it was found that 3.5% were in stage 1, 3.9% were in stage 2, 7.6% were in stage 3, 0.4% were in stage 4, and 0.1% were in stage 5 (Hill et al., 2016). One of the countries having a significant number of kidney failure sufferers is Indonesia. Using information gathered from the 11<sup>th</sup> Report of the Indonesian Renal Registry, it is known that the

number of active chronic kidney failure patients for the period 2007–2018 was 132,142 people, with the addition of new patients in 2018, as many as 66,433 people. The chronic kidney failure patients in West Java Province are a significant contributor to this and continue to increase every year. The number of active patients in 2016 was 14,869 people; in 2017 there were 21,051 people; and in 2018 there were 33,828 people (Indonesian Renal Registry, 2018).

Hemodialysis is one of the therapies that can be carried out by patients with chronic kidney failure to maintain their lives. Hemodialysis therapy has many benefits for patients with chronic kidney failure in maintaining their lives. However, besides that, some changes and impacts of hemodialysis will also occur in individuals (Jones et al., 2018; Khalil & Noble, 2018; Sitanggang et al., 2021; Um-e-Kalsoom et al., 2020). The appearance of many clinical symptoms with their physical, psychological, and social components may impact the quality of life of hemodialysis patients. The quality of life for those receiving hemodialysis may suffer if this isn't handled promptly and effectively (Siagian, 2020).

The definition of quality of life included the following: physical functioning, perceived health status, subjective health, perceived health, symptoms, needs satisfaction, individual cognition, functional impairment, psychiatric disorders, and substantial well-being (A. F. Dewi et al., 2022; R. Dewi et al., 2021, 2022). A person's quality of life may be influenced by a variety of circumstances, including family support. The family plays a significant influence in affecting a variety of personal circumstances, including psychological health, social conditions, and emotional circumstances. Support from family will make people feel comfortable and friendly, which can help with personalised care and result in a high quality of life (Idzharrusman & Budhiana, 2022; Iorga & Sztankovszky, 2015; Y. Lee & Kim, 2015).

Self-efficacy is another element that may have an impact on a person's quality of life. A person with high self-efficacy will perceive his or her treatment differently, and as a result, they may believe that the many treatments they are receiving are part of a process to improve their quality of life (Cramm et al., 2013; Mousa et al., 2018; Pakaya et al., 2021; Wakhid et al., 2018). Another element that might impact a person's quality of life is their coping mechanisms. Individuals' adaptive coping strategies will be helpful in inspiring them to address their difficulties. People's quality of life will increase when they can control and solve their current issues. Additionally, people will be more eager and motivated to improve their health if their coping mechanism is effective (Chayati & Destyanto, 2021; R. Dewi et al., 2021; Subramanian et al., 2017).

One of the hospitals in Sukabumi Regency that receives patients with chronic kidney failure is Sekarwangi Regional General Hospital (RSUD). Hemodialysis patients visit Sekarwangi Hospital on average more than 5,000 times per year, according to data on patient visits for the years 2015 to 2021. Based on a preliminary survey that was conducted using the interview approach by the Head of the Hemodialysis Room at RSUD Sekarwangi He disclosed that exhaustion, loss of appetite, shortness of breath, and weakness are among the most common complaints made by patients. Some patients have also claimed that the lack of an accompanying family, financial difficulties, and issues with unhealthful lifestyles are causes of non-adherence to hemodialysis. The nurses in the hemodialysis room at Sekarwangi Hospital give attention to enhancing patient motivation and psychological comfort in addition to providing physical care, which suggests that most patients have a positive attitude while receiving treatment and have adaptive coping mechanisms.

Numerous studies have been conducted on the relationship between coping skills, self-efficacy, and family support in terms of quality of life. The variables, however, were looked at independently in these investigations. Even though the three variables of family support, self-efficacy, and coping mechanisms are theoretically interrelated and influence each other when affecting a patient's quality of life, research involving the three simultaneously associated with quality of life in patients with chronic kidney failure is still uncommon. the third direct and indirect influence's measurement.

crucial to conduct study on the factors influencing quality of life. According to the background information provided, the researcher is motivated to study "Factors Affecting the Quality of Life of Chronic Kidney Failure Patients Undergoing Hemodialysis at Sekarwangi Hospital, Sukabumi Regency." The aim of this study was to ascertain how coping strategies, self-efficacy, and family support affected quality of life on Chronic Kidney Failure Patients Undergoing Hemodialysis.

# 2. Research Method

Correlational research is the method used in this field. Using the complete sampling method, the population and sample for this study included 71 patients with chronic kidney failure who received hemodialysis at Sekarwangi Hospital in the Sukabumi Regency. Strategies for gathering data via a questionnaire The research tools employed were the Hamby Coping Scale with 13 items, the Kidney Disease Quality of Life (KDQOL) with 24 items, the Chronic Kidney Disease-Self Efficacy (CKD-SE) with 25 items, and the Nursalam's Family Support with 16 items. This study used univariate analysis with frequency distribution and analysis of respondent attributes as data analysis methodologies. Path analysis is used in bivariate and multivariate analysis. The ethics committee of **STIKes** Sukabumi granted ethical approval for this study under number 04/IV/KEPK/STIKESMI/2022. Before administering the questionnaire, the researcher obtained informed consent, and participants were free to choose whether or not to take part in the study.

# 3. Result and Discussion

### 1.1. Results

#### 3.1.1 Describe the Characteristics of the Respondent

 Table 1. Characteristics of the Respondent

Characteristics of the Respondent	f	%
Age		
20-35 year	14	19.7
36-50 year	22	31.0
51-65 year	27	38.0
>65 year	8	113
Gender		
Male	30	42.3
Female	41	57.7
Education		
No School	5	7.0
Primary School	23	32.4
Junior High School	23	32.4
Senior High School	16	22.5
College	4	5.6
Job Status		
Employed	13	18.3
Unemployed	58	81.7
Marital Status		
Married	65	91.5
Single	6	8.5
Long Time Suffering		
<1 year	29	40.8
1-3 year	28	39.4

Characteristics of the Respondent	f	%
>3 year	14	19.7
Undergoing Hemodialysis		
1-3 month	22	31.0
>3 month	49	69.0
The Live One House		
Nuclear family	67	94.4
Sibling	2	2.8
Alone	2	2.8
Daily activities		
Light activity	49	69.0
Moderate activity	22	31.0
Hemodialysis cycle		
Once a week.	6	8.5
Twice a week.	65	91.5
The cost of the treatment		
BPJS	70	98.6
Other Insurance	1	1.4
Compliance with Hemodialysis		
Obey	70	98.6
Not obey	1	1.4

Table 1 indicates that 71 respondents participated in the study; 57.7% were women, and twenty-seven (38.0%) were between the ages of 51 and 65 years. The last educational experience of the respondents was elementary school and junior high school, respectively 23 respondents (32.4%). The majority of respondents (81.7%) were unemployed and 91.5% were married. Twenty-nine (40.8%) respondents reported having CKD for at least a year; 69.0% had received hemodialysis for more than three months. Sixty-seven (94.4%) of the respondents resided in the same home as their nuclear family. A majority of respondents (69%) had light activity. Sixty-five respondents (91.5%) have hemodialysis cycles twice a week; for 98.6% of respondents, the cost of their treatment is covered by BPJS, and 70 patients (98.6%) continued their hemodialysis treatments.

# 3.1.2 Univariate Analysis

#### Table 2. Univariate Analysis

	Minimum	34.00
Family support	Maximum	64.00
	Standard Deviation	6.48
	Mean	50.00
Self-Efficacy	Minimum	58.00
	Maximum	86.00
	Standard Deviation	7.21
	Mean	72.14
	Minimum	34.00
Coping Mechanism	Maximum	46.00
	Standard Deviation	2.67
	Mean	40.35
Quality of Life	Minimum	44.37
	Maximum	71.35
	Standard Deviation	8.36
	Mean	62.76

According to Table 2, the family support variable's mean value is 50.00 (6.48). The self-efficacy variable's mean is 72.14 (7.21). The mean value of the quality of life variable is 62.76 (8.36), while the mean value of the coping mechanism variable is 40.35 (2.67).

#### 3.1.3 Multivariate Analysis

Direct effects, indirect effects and total effects of independent variables on quality of life in chronic kidney failure patients shown in table 3. Based on table 3, it shows that family support has an indirect effect on quality of life through coping mechanism (b=0.131), through self efficacy (b=0.120), through self efficacy and coping mechanism (0.057). While self efficacy has an indirect effect on quality of life through coping mechanism (0.145)

 

 Table 3. Direct Effects, Indirect Effects and Total Effects of Independent Variables on Quality of Life in Chronic Kidney Failure Patients

Variable	Direct Effect	p-value	Indirect Effects	Total Effects
Family support	0.237	0.013	(0.389X0.309) + (0.339X0.387) + (0.389X0.376X0.387) = 0.307	0.544
Self-Efficacy	0.309	0.002	(0.376X0.387) = 0.145	0.454
Coping Mechanism	0.387	0.000	-	0.387

Figure 1 shows that family support has a direct effect on the quality of life (b=0.237, p=0.013), coping mechanism (b=0.339, p=0.000), self efficacy (r=0.389, p=0.000). Self efficacy also directly affects quality of life (b=0.309, p=0.000), coping mechanism (b=0.376, p=0.000). Coping mechanism directly affect quality of life (b=0.387, p=0.000).



#### Figure 1. Path Analysis

### **1.2. Discussion**

#### 1.2.1. The Effect of Family Support on Quality of Life

A kidney failure patient's quality of life is impacted by stressors, lifestyle modification, and treatment. These stressors might include powerlessness, the sensation that one has no control over the illness or how it is treated, routine therapy and limits that are very upsetting, as well as changes in body shape and sexuality. Roles are changing, productivity is declining, there are financial issues, and

there are many other things. In these circumstances, family health's responsibilities and functions should be strengthened, including motivating, energizing, and encouraging people, so that those who are ill don't feel hopeless and have faith in their ability to overcome their challenges (A. F. Dewi et al., 2022). Babaei & Abolhasani (2020) divided family support into three categories: therapeutic alliance support (intentions to reassure and comfort, boost self-esteem, lessen insensitivity, commitment to the patient, and visits); participatory information support (active participation in sharing meaningful information about the patient's prognosis with the family); and practical and instrumental support (searching for economic support resources, providing the patient with the necessary equipment, trying to do the right care, taking into account the family culture).

A person's spirit will rise when the family supports them adequately, which will improve their ability to carry out daily tasks. People also will experience tranquility and a lack of load from their illness or troubles. Another crucial factor is how family support can make people more resilient and open-minded in the face of adversity (Agustini et al., 2019). The individual's medication process involves the family's role significantly. When the family is supportive, it can shorten the medication process and aid in psychosocial and spiritual growth (Iorga & Sztankovszky, 2015; Slaven et al., 2021). Patients with CKD who have their families' support report having a favorable impact on their level of hope, and hope is a key factor in treatment compliance (Yucens et al., 2019).

Some previous studies have shown that family support affects the quality of life of hemodialysis patients (Alshraifeen et al., 2020; Axelsson et al., 2020; Inayati et al., 2021; Kusniawati, 2018). Family support has a significant impact on patient compliance with receiving hemodialysis therapy and offers patients the willpower to reduce their risk of stress and sadness, which in turn affects the quality of life of the patient (Axelsson et al., 2020; Manalu et al., 2021). Family support will also increase patients' comfort levels and motivation to maintain their general quality of life (Tombokan et al., 2019).

The researcher's presumptions state that family support is an outside element with the best relationship for people. Support from the family can affect a person's physical and psychological wellbeing. This support can lessen a person's dread of dying and assist people in managing changes to their lifestyles so they can retain a high quality of life. Additionally, the family support offered will also provide them inspiration when they grow weary of dealing with various health treatment procedures.

#### 1.2.2. Effect of Self-Efficacy on Quality of Life

Self-efficacy was defined as a number of psychological elements that enhance hemodialysis patients' adherence and treatment results (Ramezani et al., 2019). Several previous studies have found a relationship between self-efficacy and quality of life in hemodialysis patients, and that it significantly affects CKD and treatment outcomes (Lin et al., 2012; Mousa et al., 2018; Rayyani et al., 2014; Zyga et al., 2015). High levels of self-efficacy can alter a person's viewpoint by encouraging them to view difficulties from a positive angle, which in turn affects the behavior and activities that person takes (Kott, 2008). According to Wakhid et al. (2018), a person with high self-efficacy will also be more accepting of his disease and believe that he can recover from it. Individuals will be able to adapt to their circumstances—whether they be physical, psychological, social, or environmental—more readily as a result. Additionally, this will promote the development of motivation in people to better their health and, ultimately, their quality of life (Pongantung et al., 2020).

Patients with chronic kidney failure who have high levels of self-efficacy will benefit from an improved quality of life, especially when receiving hemodialysis (Pakaya et al., 2021). People with high self-efficacy will be pushed to maintain their composure and drive to solve the current issues. Self-efficacy promotes increased patients' compliance to carry out all treatment activities consistently, which helps to reduce potential issues in terms of physical, psychological, social, and environmental

elements (Martos-Méndez, 2015). As they require effective disease management from physical aspects such as hemodialysis, diet, fluid management, vascular access care, and rest; psychological aspects such as stress management, coping mechanisms, and spirituality; and social aspects such as relationships with family and community, it is hoped this will increase their confidence in carrying out treatment (Rohmaniah & Sunarno, 2022).

The researcher's presumptions state that increased self-efficacy is needed in order to achieve a preferable quality of life. People's capacity to engage in social interactions and physical activities will be impacted by their level of self-efficacy. Additionally, high self-efficacy can aid in self-development and has a good association with self-care behavior, which also has an impact and is advantageous for enhancing quality of life.

#### 1.2.3. Effect of Coping Mechanisms on Quality of Life

The coping mechanisms used by individuals can help individuals control their emotions and thoughts when facing a stressor (Algorani & Gupta, 2022). Individuals need coping mechanisms to overcome problems, adapt to circumstances and respond to threatening situations. Good coping mechanisms will also produce a good quality of life, and vice versa (Nurhikmah et al., 2018). Coping mechanisms are divided into two types, namely emotion-focused coping, which aims to control the individual's emotions when dealing with stress, and problem-focused coping, which aims to reduce stress (Soponaru et al., 2016). These two coping mechanisms are interrelated in dealing with stressful situations that occur in individuals (Giawa et al., 2019).

When individuals have good coping mechanisms, they tend to produce improvements in their better and healthier conditions. Conversely, if the individual has poor coping mechanisms, they will usually have anxiety about their condition. The anxiety felt by the individual will have an impact on psychosomatics, causing the condition to get worse. In this case, of course, a good mechanism needs to be owned by individuals to produce good expectations as well. According to Howard et al. (2021) expectation seems to function as a coping mechanism and is associated with greater psychological and spiritual well-being and the utilization of more effective coping strategies. Good expectations will increase the individual's ability to overcome challenges, demonstrate good abilities, and make positive life changes. Learning from the life experiences of others also allows patients to use positive coping strategies more frequently, depending on their circumstances, stage of illness, and associated stressors (Subramanian et al., 2017). This will certainly have an impact on their quality of life (Oktarina et al., 2021; Sulistyanto et al., 2022).

Coping mechanisms can certainly affect the quality of life of individuals, where coping mechanisms can help individuals control and solve problems they face either through emotion-focused coping or problem-focused coping. Emotion-focused coping is used by individuals to avoid problems with positive thinking, being careful, thorough, developing themselves and religiosity. While problem-focused coping is used by individuals by adjusting and involving effort (Giawa et al., 2019). To lessen the decline in the individual's quality of life, a good coping mechanism will not have such a negative influence or result in disease in the individual. On the other hand, tensions can act as a catalyst for success and even wellness. A body can get stronger to defend itself and resist stressors on a physical, mental, social, and spiritual level with the aid of effective coping (Krisdayanti & Hutasoit, 2019).

According to the researcher's presumptions, people who have strong coping mechanisms tend to have a high quality of life, where they can generally count on being in good health and adjust well to changes in their circumstances. These coping strategies can take a variety of forms, such as active coping, planning, drawing on spiritual resources, acceptance, and constructive reinterpretation. Patients with inadequate coping skills, on the other hand, frequently experience a lack of motivation to live their lives and may even isolate themselves from their surroundings. People may experience stress and higher levels of emotional suffering as a result of this circumstance.

# **1.2.4.** The Effect of Family Support on Quality of Life through Self-Efficacy and Coping Mechanisms

Social support, especially for those with chronic ailments, is crucial for helping people adjust to their conditions. People with chronic illnesses have a huge potential to benefit from social support from family in order to better manage their ailments (A. Lee et al., 2017). Improved patient self-efficacy, better self-management behavior, better patient-doctor communication, and better health outcomes have all been associated with good social support from family (Gilliss et al., 2019; A. Lee et al., 2017; Strom & Egede, 2012). According to Rosland et al. (2012) in general, family support can affect the outcome of chronic illness, where the nature of the family and the form of communication that exists can help individuals cope with themselves. Family support can take the form of advising patients to take their medications, choosing foods, limiting fluid intake, and walking beside them as they do steps that are unquestionably essential for people to retain a high quality of life over the long term (Novita, 2022).

Self-efficacy and family support are recognized to be related to one another. Self-efficacy can rise the more effective family support is given. On the other hand, lessening family support might impair a person's self-efficacy. This is in line with (Konradsen et al., 2018), who found that good family support significantly impacts a patient's recovery and increases self-efficacy and quality of life.

According to Fitri (2020), as a result of the family's support, the person will feel comforted, loved, cared for, and valued, which can boost the person's self-efficacy or self-reliance and help him feel more capable of completing tasks and achieving goals. An individual's level of self-efficacy may be impacted by the presence of a family. An individual's confidence in his or her ability will grow thanks to the family's support. When faced with challenging issues or circumstances, this can help people not give up so quickly and inspire them to exert more effort in order to get their desired outcomes.

Patients with chronic kidney failure who have high levels of self-efficacy will benefit from improved quality of life, especially when receiving hemodialysis treatment. People with high levels of self-efficacy can live healthier lives while receiving treatment for chronic conditions because they are more proactive in using their personal and social networks to prolong and improve their quality of life. When compared to people with lesser self-efficacy, those with higher levels will be more likely to engage in methods that will help them achieve the desired medical goal. Additionally, people will think that they have some control over their health, which will help them achieve a higher quality of life rating (Handayani et al., 2022).

Family support can impact a person's coping processes in addition to self-efficacy. According to Oktarina et al. (2021). Family support plays an important role in determining how the coping mechanism will be used by the individual. Family support can help individuals deal with problems, feel comfortable and motivate themselves to stay motivated. Family support can also be described as a source of coping that can assist individuals in meeting their needs, both emotional, instrumental, informational, and assessment or appreciation needs.

Strong familial relationships can be very beneficial to people when they are struggling. Individual coping techniques can become adaptive with the best possible family support. This is possible since the family is the person to whom the person is closest, and they cannot be divided. In order for people to know what is good and bad while making decisions and getting along with their environment, the family can serve as an educator. Support from family can also help people feel better, restore their confidence, and have faith in the healing process (Yusdiana & Sinaga, 2022).

People tend to improve their better and healthier conditions when they have effective coping mechanisms. A person with weak coping skills, on the other hand, will typically worry about their condition. Anxiety will affect psychosomatics and worsen the condition as a result of the individual's feelings of anxiety. Of course, in this situation, excellent expectations must also be produced by those who own good mechanisms. The ability to overcome obstacles, show aptitude, and make healthy life adjustments will rise with good expectations. The quality of their lives will unquestionably be impacted by this (Chabowski et al., 2018; Howard et al., 2021; Megari, 2013; Soponaru et al., 2016).

#### 1.2.5. Effect of Self Efficacy on Quality of Life through Coping Mechanisms

Self-efficacy is essential for helping people retain healthy habits and improve their ability to manage their diseases (Almutary & Tayyib, 2021). Individual self-efficacy can improve quality of life while through the healing (Mousa et al., 2018; Peters et al., 2019). People with high self-efficacy will follow all prescribed therapies religiously and obediently in order to help them overcome any potential physical, psychological, social, or environmental issues (Asnaniar et al., 2020).

The person's coping mechanisms can be impacted by self-efficacy (Bakan & Inci, 2021). Hadi Kurniyawan et al. (2022) found a strong and positive association (r = 0.673) between self-efficacy and coping strategy, demonstrating that the higher the patient's self-efficacy, the better their coping strategy will be. Patients with high self-efficacy will have effective coping skills to deal with psychological discomforts such as stress, depression, and anxiety (Hadi Kurniyawan et al., 2022).

People who have low self-efficacy frequently exhibit weaknesses when faced with a challenge, are under pressure, or run the danger of giving up on completing a task. On the other hand, individuals who have high self-efficacy will perceive their task as a challenge to complete and require strategic considerations, including consideration when failure occurs, which may be caused by inadequate efforts (Chayati & Destyanto, 2021). The task in question may be food or hydration restriction requirements for individuals with renal failure receiving hemodialysis treatment.

According to Albert Bandura, a person's self-efficacy will support the idea that he or she can make an attempt to affect a particular occurrence in his or her life (Bandura, 1997). Individuals tend to believe that their actions that can be achieved make a difference. Self-efficacious people are motivated, adept at setting personal goals, and able to apply coping skills to efficiently handle stress and issues (Bakan & Inci, 2021; Suwanti et al., 2019).

High self-efficacy people are more likely to be motivated to enhance their successful selfmanagement in terms of social, environmental, psychological, and physical management (Hafezieh et al., 2020; Lai et al., 2021). This skill can help the person adjust to their condition and give them the drive to heal or have a better quality of life. Additionally, when faced with a challenge, those with high self-efficacy are more likely to decide to do everything in their power to better themselves as opposed to withholding from others. People will understand that when they are thinking negatively, it tends to impair the entire therapeutic process (Nurhikmah et al., 2018). Patients who report high levels of self-efficacy in managing their chronic illnesses exhibit a perceived capacity to deal with obstacles brought on by their conditions as well as a sense of control over their life (Zhu et al., 2018).

Self-efficacy is predicated on the idea that people will judge their ability to take care of themselves in order to accomplish desired goals. According to Ebrahimi Belil et al. (2018) people with chronic disease used the four components of self-efficacy (cognitive, psycho-emotional, functional and social) in order to handle illness-related issues, learn enough about their conditions and treatments, manage their psycho-emotional processes, and create positive interpersonal connections. For a person to be able to improve the elements of their quality of life, their self-efficacy must be raised. The ability to care for oneself will improve with increased self-efficacy, which will also improve the quality of that person's life (Peters et al., 2019). Conversely, individuals may find it more

challenging to take care of themselves, which may result in a deterioration of their condition, the lower the self-efficacy that is owned (R. Dewi et al., 2022).

# 4. Conclusion

The results showed that there were direct and indirect effects of family support on the qualit of life of patients with chronic kidney failure. Self-efficacy has both a direct and an indirect effect on the quality of life of people with chronic kidney failure. Coping mechanisms also have a direct effect on the quality of life of people with chronic kidney failure. Interventions to improve family support, self-efficacy, and coping mechanisms should be done to improve the quality of life among chronic kidney failure patients. The hospital should be able to do more to enhance quality of life and health promotion.

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