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The Relationship between Self Efficacy and Anxiety in Chronic Kidney Failure Patients Undergoing Hemodialysis at Prof. Dr. H. Aloei Saboe Hospital

Vangly Runtuwene[1]*, Fadli Syamsuddin[2], Nikmawati Puluhulawa[3]
[1,2,3]Program Studi Ilmu Keperawatan Jurusan Keperawatan, Fakultas Ilmu Kesehatan Universitas Muhammadiyah Gorontalo
*Email: vanglyr@gmail.com

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ABSTRACT

Patients with chronic kidney disease undergoing hemodialysis commonly experience anxiety due to the long-term treatment process and uncertainty regarding their health conditions. One important factor influencing anxiety levels is self-efficacy, which refers to an individual's confidence in their ability to manage difficult situations. High self-efficacy is believed to reduce anxiety and improve patients' ability to undergo treatment effectively.
Objective: To determine the relationship between self-efficacy and anxiety among patients with chronic kidney disease undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital.
Methods: This study used a quantitative approach with a cross-sectional design. The sample consisted of 58 respondents selected using purposive sampling techniques. Data were collected using the Chronic Kidney Disease Self-Efficacy (CKD-SE) questionnaire and the Hamilton Anxiety Rating Scale (HARS). Data analysis was performed using univariate and bivariate analyses with correlation tests.
Results: The findings showed that most patients with high self-efficacy experienced low levels of anxiety, whereas patients with low self-efficacy tended to experience moderate to severe anxiety. Statistical test results showed a p-value of 0.000 ($p < 0.05$), indicating a significant relationship between self-efficacy and anxiety.
Conclusion: There was a significant relationship between self-efficacy and anxiety among patients with chronic kidney disease undergoing hemodialysis. Improving self-efficacy is important in helping reduce patient anxiety.
Suggestion: This study is expected to serve as a basis for nursing interventions aimed at improving self-efficacy among patients with chronic kidney disease, as well as providing appropriate education and psychological support during hemodialysis treatment.

INTRODUCTION

Chronic kidney failure is a condition of decreased kidney function in maintaining balance in the body. Decreased kidney ability results in a disturbance of fluid balance in the body, resulting in the accumulation of metabolic residues, especially urea (causing uremia), fluid balance disorders, fluid and electrolyte accumulation in the body. Kidney damage occurs in nephrons including the glomerulus and renal tubules, damaged nephrons cannot return to normal function so kidney replacement therapy such as hemodialysis is needed (Komariyah & Nur Aini, 2024).

According to the World Health Organization (WHO) & Global Burden of Disease (GBD) project, chronic kidney failure contributes to the burden of disease in the world with about 850 thousand deaths each year and 15 million disability-reduced quality of life. WHO also explained that patients suffering from chronic kidney failure

have increased by 50% from the previous year, globally the incidence of chronic kidney failure is more than 500 million people and those who have to live a life dependent on dialysis (hemodialysis) is 1.5 million people (Saadah & Hartanti, 2021).

Based on the Ministry of Health of the Republic of Indonesia, the number of chronic kidney failure sufferers increases with age, increasing sharply in the age group of 35-44 years (0.33%), followed by the age of 45-54 years (0.56%), and the age of 55-64 years (0.72%), the highest from women (0.35%), rural communities (0.38%), farmers (0.46%), fishermen (0.41%), drivers, domestic helpers (0.37%) and the province with the highest province is North Kalimantan at 0.64% followed by North Maluku, Aceh, Gorontalo and North Sulawesi were each at 0.4. Meanwhile, East Nusa Tenggara, South Sulawesi, Lampung, West Java, Central Java, in Yogyakarta, and East Java each had 0.3. In North Sumatra in 2018, the prevalence of chronic kidney failure (stage 5 chronic kidney disease) reached 0.33% of the population > 15 years old (Fadhillah Harahap et al., 2023).

In Gorontalo Province, chronic kidney disease is still lower than the national prevalence rate. Gorontalo Province itself, patients with chronic kidney failure have increased from 2019-2021 where in 2019 there were 147 patients, in 2020 as many as 158 patients, and in 2021 as many as 167 patients, then in 2022 in the period from January to June there were 103 patients suffering from chronic kidney failure (Djaini, 2023)

Data obtained by researchers at the hospital. Prof. Dr. H. Aloei Saboe, in the last two years, namely in 2023, the number of kidney failure patients undergoing hemodialysis is 327 patients and in 2024 from January-August the number of patients undergoing hemodialysis is 185 patients. Of the total data of patients undergoing hemodialysis therapy, currently only 141 patients routinely undergo hemodialysis therapy with 67 men and 74 women.

Patients undergoing hemodialysis often experience significant physical and psychological challenges including anxiety. Anxiety is an unpleasant emotional response to various kinds of stressors, both obvious and unidentifiable, characterized by feelings of worry, fear, and a feeling of being threatened. Hemodialysis can cause anxiety. Patients who have undergone hemodialysis for a long time still experience anxiety. This is because individuals with long-term hemodialysis often feel worried about their unpredictable pain conditions and disruptions in their lives (Ningsih et al., 2024).

In the study (Saadah & Hartanti, 2021) it was explained that patients with chronic kidney failure experienced anxiety due to fear and worry about side effects when undergoing hemodialysis. Chronic kidney failure patients undergoing hemodialysis, both new and long-term patients, tend to experience anxiety, unmanaged anxiety can worsen the patient's condition, hinder adherence to therapy, and decrease quality of life.

One of the important factors that can affect a patient's anxiety level is *self-efficacy.* Self-efficacy *theory* focuses on the patient's confidence in his or her ability to manage difficult situations, which can later improve adherence in self-care, and self-confidence. Patients with high *self-efficacy* make it possible to face life stressors with confidence and engage in the behaviors necessary to maintain or restore health. This self-efficacy assessment becomes a bridge between actual self-care knowledge and behavior (Faridha, 2022)

Believing in one's own abilities in kidney failure patients undergoing hemodialysis is very important to increase self-efficacy to reduce anxiety levels. When patients are left to be insecure in undergoing hemodialysis therapy, there will be a buildup of toxins and metabolic residues in the body which will result in a decrease in health conditions, so there needs to be encouragement and support. Family support can improve *the self-efficacy* of chronic kidney failure patients. Patients with strong family support tend to be more confident in managing their condition and dealing with anxiety associated with long-term care (Isnaini et al., 2021).

According to (Karimah & Hartanti, 2021) it is stated that *self-efficacy* is one of the factors that affect the quality of life. In a study (Asra et al., 2023) showing an evaluation of patient adherence to hemodialysis therapy, *self efficacy*, and quality of life, it was found that patients with higher *self efficacy* were more adherent to therapy and had a better quality of life, as well as lower levels of anxiety.

RESEARCH METHODS

Research Methods

This study used a quantitative method with a cross-sectional approach, namely a research method conducted by collecting data at a specific point in time to analyze the relationship between the independent variable (*self-efficacy*) and the dependent variable (anxiety) among patients with chronic kidney disease undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital.

Place and Time of Study

This research was conducted in the Hemodialysis Unit of Prof. Dr. H. Aloei Saboe Hospital, Gorontalo City. The study was planned to be carried out in January 2025.

Population and Sample

The population in this study consisted of all chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital, totaling 141 patients. The researchers used the Slovin formula with a 10% margin of error, resulting in a sample size of 58 respondents.

Data Analysis

Univariate Analysis

Univariate analysis was conducted to describe the characteristics of each research variable. This analysis was used to describe the independent variable, namely *self-efficacy*, and the dependent variable, namely anxiety among chronic kidney disease patients.

Bivariate Analysis

Bivariate analysis was used to determine the relationship between research variables. This study employed a correlation test to analyze the relationship between *self-efficacy* and anxiety among chronic kidney disease patients. If the *p-value* < 0.05, it indicates a significant relationship between *self-efficacy* and anxiety among chronic kidney disease patients.

RESULTS

Respondent Characteristics

Table 1. Frequency Distribution of Respondent Characteristics

No	Respondent Characteristics	Classification	Frequency	Percentage
1	Age	20–40 years	10	17.2%
		41–60 years	39	67.2%
		61–80 years	9	15.5%
2	Gender	Male	38	65.5%
		Female	20	34.5%
3	Education	Elementary School	5	8.6%
		Junior High School	15	25.9%
		Senior High School	12	20.7%
		Diploma	4	6.9%
		Bachelor's Degree	22	37.9%
4	Duration of Hemodialysis	2 weeks – 3 months	15	25.9%
		4–6 months	14	24.1%
		7 months – 1 year	29	50.0%
	Total		**58**	**100%**

Source: Primary Data, 2025

Based on the table above, the majority of chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital were aged 41–60 years, totaling 39 respondents (67.2%), followed by those aged 20–40 years with 10 respondents (17.2%), and those aged 61–80 years with 9 respondents (15.5%).

Based on gender, the majority of respondents were male, totaling 38 respondents (65.5%), while female respondents totaled 20 respondents (34.5%).

Based on educational level, the majority of respondents had a Bachelor's degree, totaling 22 respondents (37.9%), followed by Junior High School graduates with 15 respondents (25.9%), Senior High School graduates with 12 respondents (20.7%), Elementary School graduates with 5 respondents (8.6%), and Diploma graduates with 4 respondents (6.9%).

Based on the duration of undergoing hemodialysis, the majority of respondents had undergone hemodialysis for 7 months–1 year, totaling 29 respondents (50.0%), while 15 respondents (25.9%) had undergone hemodialysis for 2 weeks–3 months, and 14 respondents (24.1%) for 4–6 months.

Univariate Analysis

Distribution of Respondents Based on Self-Efficacy

Table 2. Frequency Distribution of Respondents Based on Self-Efficacy

No	Criteria	Frequency	Percentage
1	Low	21	36.2%
2	High	37	63.8%
	Total	**58**	**100%**

Source: Primary Data, 2025

Based on the table above, among 58 chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital, 21 respondents (36.2%) had low self-efficacy, while 37 respondents (63.8%) had high self-efficacy.

Distribution of Respondents Based on Anxiety

Table 3. Frequency Distribution of Respondents Based on Anxiety Levels

No	Criteria	Frequency	Percentage
1	No Anxiety	37	63.8%
2	Mild Anxiety	4	6.9%
3	Moderate Anxiety	2	3.4%
4	Severe Anxiety	13	22.4%
5	Panic Anxiety	2	3.4%
	Total	**58**	**100%**

Source: Primary Data, 2025

Based on the results of the data analysis, respondents' anxiety levels varied across several categories. Out of 58 respondents, 37 respondents (63.8%) experienced no anxiety, indicating that most individuals were in a stable emotional condition. A total of 4 respondents (6.9%) experienced mild anxiety, which generally reflects manageable emotional tension. Furthermore, 2 respondents (3.4%) experienced moderate anxiety, indicating the need for greater attention to prevent worsening anxiety levels. Severe anxiety was experienced by 13 respondents (22.4%), while panic anxiety was experienced by 2 respondents (3.4%).

Bivariate Analysis

Data Normality Test

Before conducting the analysis, a normality test was performed to determine the appropriate statistical test to be used. The normality test was conducted using the Shapiro-Wilk test because the sample size (N = 58) was less than 100.

Table 4. Results of the Normality Test for Self-Efficacy and Anxiety Data

Variable	N	Sig.
Self-Efficacy	58	0.063
Anxiety	58	0.063

Normally distributed if p > 0.05

The results of the Shapiro-Wilk test showed that the significance value for self-efficacy and anxiety was p = 0.063 (p > 0.05), indicating that the data were normally distributed.

Relationship Between Self-Efficacy and Anxiety Among Chronic Kidney Disease Patients Undergoing Hemodialysis at Prof. Dr. H. Aloei Saboe Hospital

Table 5. Relationship Between Self-Efficacy and Anxiety Levels

Anxiety Level	Low Self-Efficacy	%	High Self-Efficacy	%	Total	%
No Anxiety	5	8.6%	32	55.2%	37	63.8%
Mild Anxiety	2	3.4%	2	3.4%	4	6.9%
Moderate Anxiety	2	3.4%	0	0.0%	2	3.4%
Severe Anxiety	10	17.2%	3	5.2%	13	22.4%
Panic Anxiety	2	3.4%	0	0.0%	2	3.4%
Total	21	36.2%	37	63.8%	58	100%

Spearman Rho Test: p = 0.000, r = -0.639

Source: Primary Data, 2025

Based on the table above, the majority of respondents who experienced no anxiety had high self-efficacy, totaling 32 respondents (55.2%), while 5 respondents (8.6%) had low self-efficacy.

Among respondents with mild anxiety, 2 respondents (3.4%) had low self-efficacy and 2 respondents (3.4%) had high self-efficacy. Respondents with moderate anxiety consisted of 2 respondents (3.4%) with low self-efficacy and none with high self-efficacy.

In the severe anxiety category, 10 respondents (17.2%) had low self-efficacy, while 3 respondents (5.2%) had high self-efficacy. Meanwhile, in the panic anxiety category, 2 respondents (3.4%) had low self-efficacy and none had high self-efficacy.

The results of the Spearman Rho test showed a p-value of 0.000, which is smaller than $\alpha = 0.05$. Therefore, it can be concluded that there is a significant relationship between self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital.

The correlation coefficient value was negative ($r = -0.639$), indicating a strong negative relationship between the two variables. This means that the higher the patient's self-efficacy, the lower the level of anxiety experienced. Conversely, the higher the level of anxiety experienced by patients, the lower their self-efficacy.

DISCUSSION

Distribution of Respondents Based on Self-Efficacy

The results showed that 21 respondents (36.2%) had low self-efficacy, while 37 respondents (63.8%) had high self-efficacy. The majority of patients demonstrated high self-efficacy, indicating that most patients were able to control themselves in facing hemodialysis treatment and manage their health condition effectively. However, there were still 36.2% of patients with low self-efficacy, which could potentially affect their psychological well-being and treatment adherence.

This study is in line with research conducted by Sulistiyawati (2022), which found that out of 33 respondents, more than half (69.6%) had high self-efficacy. The study explained that respondents with high self-efficacy tended to have a better quality of life. They believed and were confident that they could continue living normally without feeling ashamed or inferior despite undergoing hemodialysis treatment. On the other hand, respondents with low self-efficacy often experienced feelings of hopelessness, low self-confidence, and difficulty accepting their condition, which affected their adaptation to hemodialysis therapy.

The findings of Welly & Rahmi (2021) also showed that more than half of respondents (69.6%) had high self-efficacy. Similarly, research conducted by Asnaniar (2020) found that patients with high self-efficacy tended to have a better quality of life, with statistical results showing a significant relationship between self-efficacy and quality of life ($\rho = 0.000$; $\rho < 0.05$).

Distribution of Respondents Based on Self-Efficacy

Based on the research findings, it was found that there were several questionnaire items on self-efficacy that received low scores, indicating that respondents lacked confidence regarding those statements. One of the statements with the lowest score was item number 16, namely "I can understand laboratory data relevant to my condition." Many patients gave low scores to this statement. Researchers assume that most patients experience difficulties in understanding medical information related to their kidney condition.

Self-efficacy is an individual's belief in their ability to organize and carry out actions needed to achieve certain goals in life (Anggreani et al., 2020). Individuals with high self-efficacy generally possess stronger confidence in dealing with problems and challenges. High self-efficacy also tends to produce positive behaviors because individuals believe they are capable of carrying out actions, enduring difficulties, and overcoming failures during a process (Ezalina et al., 2023).

Self-efficacy is an important psychological factor in managing chronic illnesses, including chronic kidney disease requiring hemodialysis. Patients with strong self-efficacy are more capable of undergoing hemodialysis therapy consistently and confidently believing in the positive outcomes of the treatment process.

This study is supported by research conducted by Nurhayati and Utami (2022), which found that self-efficacy is related to the quality of life of chronic kidney failure patients. Patients with high self-efficacy tend to experience lower stress levels because they have better coping strategies in facing treatment-related challenges. In contrast, patients with low self-efficacy are more likely to experience anxiety due to doubts regarding their ability to cope with long-term therapy.

The results of this study showed that most respondents had high self-efficacy. High self-efficacy demonstrates that patients possess confidence in managing their illness, maintaining treatment adherence, and continuing daily life despite suffering from chronic kidney disease.

According to Bandura, self-efficacy is an individual's belief in their ability to perform actions necessary to achieve certain goals. Self-efficacy develops through four main sources, namely mastery experience, vicarious experience, verbal persuasion, and physiological or emotional conditions (Fadila & Khoirunnisa, 2021).

According to Arriyani & Yunis (2023), self-efficacy is also associated with coping mechanisms among chronic disease patients. Individuals with high self-efficacy tend to use adaptive coping strategies and solve problems more effectively. Conversely, low self-efficacy often causes individuals to feel helpless, easily stressed, and vulnerable to psychological distress. In the context of chronic kidney disease patients undergoing hemodialysis, self-efficacy plays an important role in treatment adherence, dietary management, understanding health

information, and stress management.

Patients with high self-efficacy tend to be more confident in decision-making, able to follow medical recommendations, and better prepared to face health-related challenges. Sitepu (2024) explained that chronic kidney disease patients with high self-efficacy generally have a better quality of life and better treatment adherence. On the other hand, patients with low self-efficacy often feel incapable of dealing with challenges, resulting in poor adherence to treatment and increased psychological stress.

Based on the research findings and supporting theories, researchers conclude that most respondents had high self-efficacy (63.8%), reflecting good self-confidence and adaptation to chronic hemodialysis therapy. Nevertheless, 36.2% of patients still had low self-efficacy, which may negatively affect their psychological condition. High self-efficacy has been proven to improve treatment adherence and reduce anxiety levels. Therefore, self-efficacy is an important factor that needs to be enhanced in patients with chronic kidney failure.

Distribution of Respondents Based on Anxiety

The results of this study showed that anxiety levels among chronic kidney disease patients undergoing hemodialysis varied considerably. Out of 58 respondents, the majority, namely 37 respondents (63.8%), did not experience anxiety. This finding indicates that most patients were in relatively stable emotional conditions. This may be influenced by adaptation to routine hemodialysis procedures, family support, and acceptance of their health condition.

A total of 4 respondents (6.9%) experienced mild anxiety, while 2 respondents (3.4%) experienced moderate anxiety. These conditions may still be manageable through non-pharmacological interventions such as counseling, relaxation techniques, and social support. However, 13 respondents (22.4%) experienced severe anxiety, which could significantly affect treatment adherence and quality of life. In addition, 2 respondents (3.4%) experienced panic anxiety, indicating serious psychological distress requiring special attention.

Researchers assume that respondents who did not experience anxiety had adapted well to their condition and were more compliant with hemodialysis schedules. Patients who had undergone hemodialysis for a long period tended to be emotionally more stable compared to newly diagnosed patients.

Patients with chronic kidney disease often experience anxiety because of fear and concerns related to the side effects of hemodialysis therapy. Patients may also feel worried about their inability to perform normal activities, dependence on dialysis machines, and the lifelong nature of the treatment.

According to Kusnanto & Herawati (2019), physical and psychological changes experienced by chronic kidney disease patients undergoing hemodialysis often lead to feelings of loss, fear, uncertainty, and emotional burden. Long-term hemodialysis therapy can significantly affect patients' mental well-being and quality of life.

This study is in line with research conducted by Ramadhani et al. (2022), which stated that hemodialysis patients are vulnerable to anxiety due to long-term treatment processes, dependence on dialysis machines, and uncertainty regarding the future. Putri & Anwar (2021) also reported that anxiety in chronic kidney disease patients is related to lifestyle changes, reduced physical activities, and concerns regarding social and economic conditions.

According to the Hamilton Anxiety Rating Scale (HARS) questionnaire, the item regarding feelings of anxiety received high scores from respondents. Researchers believe that the continuous hemodialysis process and uncertainty regarding health conditions contribute to emotional distress among patients. Many patients also found it difficult to openly express their feelings, leading to symptoms such as restlessness, irritability, and fear.

Anxiety is a feeling of worry or fear that persists continuously without severely disrupting reality testing or personality integrity (Rikayoni, 2018). Anxiety may appear subjectively as emotional tension, worry, and uncertainty regarding future events (Candrawati & Sukraandini, 2022).

Based on the findings, most patients experienced mild to moderate anxiety, while only a small proportion experienced no anxiety at all. This indicates that although patients routinely undergo hemodialysis, concerns, fear, and psychological pressure still remain. Khalqiqi et al. (2022) explained that anxiety is an emotional response to threatening situations and may range from mild to severe levels.

Femi Baransano & Tambunan (2023) stated that hemodialysis patients frequently experience anxiety due to chronic illness conditions and ongoing treatment burdens. If not properly managed, anxiety can reduce quality of life. Factors contributing to anxiety include complications of chronic kidney disease, limitations in daily activities, economic burdens, and social problems.

Based on the explanation above, researchers conclude that anxiety is an important psychological factor that must receive serious attention in chronic kidney disease patients undergoing hemodialysis.

Relationship Between Self-Efficacy and Anxiety Among Chronic Kidney Disease Patients Undergoing Hemodialysis

Based on the results of the Spearman Rho statistical test, there was a significant relationship between self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital. The Spearman Rho test showed a p-value of 0.000, which is smaller than $\alpha = 0.05$, indicating a statistically significant relationship between self-efficacy and anxiety. The correlation coefficient value was $r = -0.639$, indicating a strong negative correlation between the two variables.

This means that the higher the self-efficacy possessed by patients, the lower their anxiety levels. Conversely, patients with low self-efficacy tended to experience higher anxiety levels.

This study is consistent with research conducted by Ainun & Gustiani (2024), which obtained a p-value of 0.001 (<0.05), indicating a significant relationship between self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis.

Self-efficacy plays an important role in increasing patients' confidence that hemodialysis therapy can help maintain their lives (Rohmaniah & Sunarno, 2022). Research conducted by Sari (2024) also found a significant relationship between self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis, with a p-value of 0.003 ($p < 0.05$).

Individuals with high self-efficacy tend to believe in their ability to overcome challenges, solve problems, and control stressful situations. In contrast, individuals with low self-efficacy are more likely to feel helpless and anxious. Self-efficacy influences the way individuals cope with problems and adapt psychologically to chronic illnesses.

Patients with high self-efficacy tend to adapt better to their health conditions and maintain a more positive attitude toward treatment. This was evident in the study findings, where most respondents who did not experience anxiety had high self-efficacy. On the other hand, respondents experiencing severe anxiety generally had low self-efficacy.

During the research process, respondents with high self-efficacy appeared calmer, more relaxed, and more comfortable while completing the questionnaires. From interviews, they explained that at the beginning of undergoing hemodialysis, they had experienced anxiety due to lack of understanding about the therapy process and fear of chronic kidney disease. However, over time, increased knowledge and treatment experience helped them accept their condition and manage their anxiety better.

Conversely, respondents experiencing anxiety, ranging from mild to severe, generally had low self-efficacy. Patients with low self-efficacy often appeared restless, worried, and reported difficulty sleeping. Nevertheless, some anxious respondents still demonstrated high self-efficacy because they were able to control themselves, maintain hope, and receive positive support from family and their social environment.

Chronic kidney disease causes both physical and psychological burdens. In this context, self-efficacy becomes an important factor that helps patients feel calmer and stronger in facing long-term treatment. Patients with high self-efficacy are usually more active in seeking information about their disease, adhering to treatment recommendations, maintaining dietary restrictions, and attending hemodialysis sessions regularly.

This study also supports findings from Almutari (2021), which stated that self-efficacy is important in improving the quality of life of chronic kidney disease patients. Patients with high self-efficacy are better able to manage symptoms and psychological stress compared to patients with low self-efficacy.

In addition, self-efficacy is closely related to emotional regulation. Patients with high self-efficacy are generally more capable of controlling emotions and managing stressful medical procedures such as hemodialysis. This helps reduce excessive anxiety and supports psychological adaptation.

The relationship between self-efficacy and anxiety can also be explained using the Health Belief Model (HBM). According to this model, individuals are more likely to engage in positive health behaviors if they believe they are capable of performing those behaviors successfully. Chronic kidney disease patients who believe they can manage treatment effectively tend to feel more in control, calmer, and less anxious.

Therefore, interventions aimed at increasing self-efficacy are essential. Such interventions may include health education, cognitive-behavioral therapy, coping skills training, and strong social support. Nurses and healthcare providers play an important role in motivating patients, providing education, and strengthening patients' confidence in undergoing long-term therapy.

In conclusion, self-efficacy has a significant and strong relationship with anxiety levels among chronic kidney disease patients undergoing hemodialysis. Improving self-efficacy not only strengthens patients' psychological resilience but also reduces anxiety, improves quality of life, and enhances treatment adherence.

CONCLUSION

1. Anxiety levels among chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital varied. Out of 58 respondents, 37 respondents experienced no anxiety, 4 respondents experienced mild anxiety, 2 respondents experienced moderate anxiety, 13 respondents experienced severe anxiety, and 2 respondents experienced panic anxiety.
2. The majority of chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital had high self-efficacy, totaling 37 respondents, while 21 respondents had low self-efficacy.
3. There was a significant relationship between self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis at Prof. Dr. H. Aloei Saboe Hospital, with a p-value of 0.000 ($p < 0.05$).

SUGGESTIONS

The results of this study are expected to serve as information for hospitals in providing educational programs related to self-efficacy among chronic kidney disease patients undergoing hemodialysis in order to reduce

anxiety levels.

This research is expected to increase public awareness, especially among patients' families, regarding the importance of self-efficacy in reducing anxiety among patients by providing support within the family and social environment.

This study is expected to serve as a reference for future researchers examining self-efficacy and anxiety among chronic kidney disease patients undergoing hemodialysis.

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