3rd International Conference on Applied Sciences, Education and Technology
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Relationship Between Health Locus of Control and Quality of Life in Patients Undergoing Hemodialysis

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Abstract

Patients with chronic kidney disease who undergo hemodialysis require a long time even for the rest of their lives which can cause stress and loss of confidence in their health so that it has a serious impact on their beliefs. This study aims to determine the relationship between health locus of control and quality of life of CKD patients undergoing hemodialysis at RSIS Jemursari and health locus of control. This study used a correlation analytic design with a cross-sectional approach used. A total of 150 patients undergoing hemodialysis at RSIS Jemursari were the subjects of this study. The sample of this study consisted of 109 people who were selected by simple randomization. Data were collected through the Multidimentional Health Locus of Control Form A and WHOQOL-BREF questionnaires. The results were analyzed using the Spearman Rank test with a significance of <0.05. The results showed that almost half (49.5%) had high health locus of control and almost half (45.9%) had high quality of life. Based on the results of the spearmant rank analysis, $\rho = 0.000$, then H0 is rejected, which means that there is a relationship between health locus of control and quality of life in patients undergoing hemodialysis. The better the health control, the better the quality of life for people on dialysis. So, it is expected that patients gather information about their disease and learn how to maintain their health and take steps to improve their health so that they can live a better quality of life.

Keywords: Health locus of control, Quality of life, Hemodialysis

1. Introduction

Patients with chronic kidney disease (CKD) require treatment designed to support their lives, namely hemodialysis (HD) treatment or kidney transplantation (Pratama et al., 2020). In patients undergoing hemodialysis, it is important to have beliefs that are adopted for their recovery, namely health locus of control (Antari, 2020;Rosita, Tharida, & Putra, 2021) Patients undergoing hemodialysis at RSIS Jemursari are still lacking, they lose confidence in their health and cannot accept dependence on hemodialysis machines. Dialysis therapy takes a long time even throughout his life, this causes changes and imbalances in patients that can lead to loss of control over daily activities, loss of independence, and financial pressure (Wakhid, Linda Wijayanti, & Liyanovitasari, 2018). In addition to focusing on routine hemodialysis, chronic renal failure patients also have other issues such as fluid restriction, dietary

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management, and drug therapy. To support the therapeutic effects of hemodialysis and improve quality of life, patients need to make various lifestyle changes (Murali et al., 2019). This can affect the quality of life because the patient not only experiences health problems due to chronic kidney failure disease, but also therapy that lasts a lifetime

Based on data from the World Health Organization (WHO), in 2020 chronic kidney disease patients were 254,028 cases and the prevalence of those undergoing hemodialysis worldwide was 1.5 million people (WHO, 2020). According to the Ministry of Health, there are 1,417,104 cases of chronic kidney disease in Indonesia, and around 60% of people with chronic kidney disease must undergo hemodialysis therapy (Kemenkes RI, 2021). Data from the East Java IRR (Indonesian Renal Registry) in 2018 showed that there were 113,045 chronic kidney disease patients and patients undergoing hemodialysis could reach as many as 9,607 people (PERNEFRI, 2018). Several factors affect the quality of life of individuals with chronic kidney disease (CKD), including : gender, age, education, occupation, social support and motivation, duration of HD, health locus of control, and psychological well-being. (Silaen, Purba, & Hasibuan, 2023; Kuniyo, Haskas, & Zainal, 2018). If the patient cannot maintain health locus of control well, it will have an impact on his quality of life because it usually converts to unfavorable outcomes in the future (Putri, Wardhani, & Sari, 2023).

The main goal of hemodialysis is to maintain the patient's quality of life, so paramedics are very concerned about the quality of life of CKD patients (Mulia, Mulyani, Pratomo, & Chusna, 2018). Efforts to improve the quality of life of chronic kidney disease (CKD) patients undergoing hemodialysis certainly require self-confidence so that it has an impact on changes in health behavior and the achievement of patient compliance. This belief is known as health locus of control (HLC). If the HLC in patients is good, it can increase patient compliance in carrying out disease management and improve quality of life (Antari, 2020). Based on some of the descriptions above, the researcher is interested in conducting further research related to the relationship between health locus of control and psychological well-being with quality of life in patients with chronic renal failure undergoing hemodialysis at RSIS Jemursari.

2. Materials and methods

2.1 Materials

This study used an analytic design with a cross-sectional method, which is a type of research in which data collection is carried out on a large number of people at the same time.

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In this type, the independent and dependent variables are evaluated simultaneously so that there is no tracking (Nursalam, 2020). The purpose of this study was to determine whether there is a relationship between the quality of life of patients with chronic kidney disease undergoing hemodialysis at RSIS Jemursari and their health locus of control

2.2 Data collection procedures

This study involved all patients undergoing hemodialysis in the hemodialysis department of RSIS Jemursari, a total of 150 patients. This study collected 109 respondents. This study uses probability sampling with simple random sampling. Simple random sampling is a method where the mean is the same in each sample population. (Nursalam, 2020).

2.3 Data analysis

After the data is processed, the next step is to analyze the data using the Spearman Rank test with a significant level of $\alpha = 0.05$. The hypothesis is rejected if the statistical test results show that $p < \alpha$ (0.05), which indicates that there is a relationship between the independent and dependent variables.

3. Results and discussion

3.1 Results

Table 1. Frequency distribution of respondents undergoing hemodialysis based on health locus of control, psychological well-being, and quality of life at RSIS Jemursari

No	Criterion	Frequency (f)	Percentage (%)
1.	**Age (Year)**		
	17-25	1	0,9
	26-35	13	11,9
	36-45	28	25,7
	46-55	21	19,3
	56-65	29	26,6
	> 65	17	15,6
2.	**Gender**		
	Female	41	37,6
	Male	68	62,4
3.	**Education**		
	Base	25	22,9
	Intermediate	52	47,7
	On	32	29,4
4.	**Job status**		
	Not working/Housewife	31	28,4
	Civil servants/private	30	27,5
	employees	22	20,2
	Farmers/Laborers/Traders	26	23,9
	Self-employed		

5.	**Long time sick (Month)**		
	< 12	17	15,6
	12-24	31	28,4
	>24-48	33	30,3
	>48-96	21	19,3
	>96	7	6,4
6.	*Health Locus of Control*		
	Low	23	21,1
	Medium	32	29,4
	Tall	54	49,5
7.	*Quality of life*		
	Low	29	26,6
	Medium	30	27,5
	Tall	50	45,9
	Total	109	100,0

Table 1 shows that of the 109 respondents who underwent hemodialysis at RSIS Jemursari, almost half (26.6%), namely 29 respondents aged 56-65 years. Most (62.4%), namely 68 respondents are male. Almost half (47.7%), namely 52 patients with secondary education (SMA, SMK, equivalent). Almost half (28.4%), namely 31 patients, did not work / housewife. Almost half (30.3%), namely 33 respondents, have been undergoing hemodialysis for >24-48 months. Almost half (49.5%) experienced high health locus of control. And almost half (45.9%) experienced a high quality of life.

Table 2. Cross tabulation of the relationship between health locus of control and the quality of life of respondents undergoing hemodialysis at RSIS Jemursari.

No	*Health Locus of Control*	Quality of life						Total	
		Low		Medium		Tall			
		f	%	F	%	f	%	F	%
1.	Low	23	100,0%	0	0,0%	0	0,0%	23	100,0%
2.	Medium	6	18,8%	24	75,0%	2	6,3%	32	100,0%
3.	Tall	0	0,0%	6	11,1%	48	88,9%	50	100,0%
	Total	29	33,0%	30	27,5%	50	45,9%	109	100,0%
	Spearman Rank Statistical Test Results							$\rho = 0,000$	
								$r = 0, 906$	

Table 2 shows that of the 23 respondents who had low health locus of control, all (100%) experienced low quality of life. Of the 32 respondents who had moderate health locus of control, most (75.0%) experienced moderate quality of life. Of the 50 respondents who had a high health locus of control, almost all (88.9%) experienced a high quality of life.

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The statistical test results show that H0 is rejected, with a p value = 0.000 (p < 0.05). meaning that there is a relationship between health locus of control and the quality of life of chronic kidney disease patients undergoing hemodialysis at RSIS Jemursari. The correlation coefficient of 0.906 shows a positive correlation and the level of correlation strength is a very strong relationship.

3.2 Discussion

Based on table 1, Health locus of control in patients undergoing hemodialysis at RSIS Jemursari shows that almost half (49.5%) experience high health locus of control. Individuals with good internal health locus of control have higher life satisfaction and try to be grateful for their illness.

This study is also in line with (Putri et al., 2023) which states that more than half have a high health locus of control. Health locus of control is considered an important belief. Individuals who have an internal health locus of control tend to attribute results or outcomes to their efforts or they believe that events are under their control or control.

A small proportion (21.1%) of patients undergoing hemodialysis still had low health locus of control. The researcher assumed that they did not believe in their health beliefs, were more passive in maintaining their health, did less physical activity, and sought less information in maintaining their health because patients who did not have sufficient understanding and effective ways to manage their illness would feel confused and uncertain about the actions to be taken to improve their health.

This study is in line with (Rosita et al., 2021) have low health locus of control. They are lacking in maintaining self-care such as compliance with fluid intake restrictions, medication, and dietary regulations. In addition, patients are also not sure of the success of their own efforts, this can worsen their health locus of control, especially if they have external health locus of control, they tend to believe that their health outcomes are more influenced by external factors such as fate, luck than by their own actions.One factor, namely age, can affect health locus of control (Indriani, Damayanti, & Zakiah, 2023).

The results of the study are that most people aged 36-45 years have a high health locus of control. Researchers argue that 36-45 year olds have been able to determine their problems well so that they become quite stable and mature in their emotions. They tend to be better at managing stress, have a broader perspective and better coping skills. They tend to be more

capable and maintain healthy and satisfying relationships because they have better communication in conveying feelings and needs.

Research conducted by (Nurlatifah, 2018) found that age can affect health locus of control. older age has higher internal health locus of control beliefs, and this is related to maturity of thought and decision-making ability.

Based on Table 1, the quality of life of respondents with hemodialysis at RSIS Jemursari showed that almost half (45.9%) experienced a high quality of life. Patients with a high quality of life are able to control their circumstances. They make life meaningful and fulfilling despite facing significant health challenges. Therefore, patients' quality of life is improved if they can adjust to changes and difficulties.

This study is in line with (Siwi, 2021) which states that most patients' quality of life is good. High quality of life because patients take better care of their health by changing their patterns and lifestyles to be healthier by exercising lightly and maintaining the intake of food and drinks that enter, as well as doing light exercise such as walking around the complex or participating in gymnastics. besides that the patient also gets support from the family so that it strengthens the patient in living life and accepting his illness and surrendering so that it does not have too much impact on the physical and psychological which will affect the patient's quality of life.

The results showed that there were still (26.6%) who experienced low quality of life because they began to surrender to the condition of their disease. Researchers argue that patients with low quality of life do not know how to manage their emotions and do not understand their own condition, so they experience anxiety, which can reduce their quality of life.

The patient's poor quality of life is obtained because the patient's condition is very disturbed by the disease he is suffering from, which affects his daily and emotional activities, which has an impact on his quality of life being worse, patients are more likely to feel burdened by their illness and limit their activities (Siwi, 2021).

Educational factors can affect quality of life (Fadlillah S., 2019). Educational factors can affect quality of life (Fadlillah S., 2019). Based on educational background, it shows that of the 32 respondents with upper education, almost half still have a good quality of life. According to researchers, education affects quality of life because patients who have a good education tend to be more able to develop a positive and optimistic mindset towards their lives and

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understand the importance of following treatment regimens, special diets, and hemodialysis schedules, all of which are important for maintaining health and preventing complications.

This study is in line with (Yuni Asih, Yenny, & Trimawang Aji, 2022) that the patient's quality of life is influenced by the level of education, because the higher the level of education a person will tend to have positive behavior, so that they have their own way of seeking information related to the disease and its treatment which will improve the patient's quality of life.

Reviewed by the theory that explains that education is related to quality of life. It is possible that someone with higher education is able to seek and obtain information related to their disease, so that people who have higher education tend to have a better quality of life than people who have low education. (Fima L.F.G. Langi., 2019)

Based on table 2, it shows that health locus of control can affect quality of life (Aliha, 2015; Moshki, Tavakolizadeh, Shahroodi, Nabiansani, & Dehnoalian, 2021), because the patient's awareness shows that his health is in accordance with the definition of internal health locus of control which makes his body condition better, and has a good quality of life. Internal health locus of control believes that their actions have a direct impact on their health. This belief can help them be more involved in self-care, such as adhering to hemodialysis schedules, diet, and medication.

Reviewed with the theory explaining that health locus of control affects quality of life, especially internal health locus of control, which shows that patients have a much better quality of life if they believe that their health is the result of their behavior, not fate or others (Putri et al., 2023).

If patients with chronic kidney disease undergoing hemodialysis have high self-confidence, it will result in a high quality of life, which can be proven by doing something to solve the problem (Rohmaniah & Sunarno, 2022).

4. Conclusion

There is a relationship between health locus of control and psychological well-being with quality of life in hemodialysis patients at RSIS Jemursari

Acknowledgment

Conflict of interest

There is no conflict of interest for this manuscript

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