

Correlation Hemodialysis Intensity with Anxiety in Chronic Kidney Failure Patients

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ABSTRACT

This study looked at the link between hemodialysis intensity and anxiety in individuals with chronic renal failure who were receiving hemodialysis. A correlation analysis is the method of study. The population for this study consisted of 80 respondents, and 35 samples were taken using consecutive sampling methods. The Chi-Square test was used for data analysis in this study using SPSS for Windows version 25.0. The results of the research and data analysis can be used to draw the conclusion that there is a correlation between the intensity of hemodialysis and anxiety levels in patients with chronic renal failure undergoing hemodialysis, as determined by the Chi-Square test calculation of sig value of 0.020 0.05. The research was conducted on 35 respondents. It was determined that among patients with chronic renal failure receiving hemodialysis, there was a link between the intensity of hemodialysis and the degree of anxiety. The patient starts to adapt well and the degree of anxiety starts to reduce following continued therapy, which is expected to help the family support and encourage the patient.

Keyword: *Hemodialysis Intensity, Anxiety Level, Chronic Kidney Failure*

INTRODUCTION

The condition of the decline in kidney function occurs due to many factors, one of which is because years of kidney damage occur intensely. As a complex disease, chronic kidney failure requires integrated and serious management, so as to minimize complications and increase client life expectancy, one of them is hemodialysis therapy (Prabowo, E., & Eka, 2014). The process of hemodialysis takes 4-5 hours, generally will cause physical stress, patients will feel fatigued, headaches, and cold sweat out due to decreased blood pressure (Supriyadi, Wagiyo, & Widowati, 2011).

WHO data (World Health Organization) in 2015 the incidence of CRF in the world reached 10% of the population, while CRF patients who underwent hemodialysis were estimated to reach 1.5 million people worldwide. The incidence is estimated to increase by 8% annually. CRF occupies a chronic disease with the 20th highest mortality rate in the world. Indonesia's Renal Registry data in 2015, the number of patients with CRF who register to the hemodialysis unit continues to increase 10% annually. During 2015 there were 1,243 people who died due to hemodialysis therapy (Center for Data and Information of the Ministry of Health of the Republic of Indonesia, 2017).

The results of a preliminary study conducted by researchers on December 11, 2018, at Sakinah Mojokerto Hospital from secondary data observations of patients suffering from kidney failure within 10 months were 655 patients, while those undergoing

hemodialysis within the last 3 months (September-October-November) is 80 patients. From the results of a visit and a brief interview of 8 hemodialysis patients, it was difficult to start sleeping, often waking up at night and early in the morning, having difficulty defecating and sleeping soundly due to excessive anxiety due to hemodialysis therapy.

In patients undergoing hemodialysis, anxiety and anxiety are problems that often arise especially during the first dialysis. Many ordinary people who do not understand hemodialysis therapy, fear, and anxiety often haunt, especially in patients diagnosed with chronic kidney failure and who need treatment for hemodialysis. The influence caused by hemodialysis therapy is quite a lot, one of which is anxiety. Anxiety and anxiety cannot be easily eliminated or avoided by hemodialysis patients.

Based on the description above, the researcher was interested in examining further about the Relationship of Hemodialysis Intensity with the Level of Anxiety in Patients with Chronic Kidney Failure who Underwent Hemodialysis in RSI Sakinah Mojokerto. The purpose of this study was to analyze the relationship between Hemodialysis Intensity and the Level of Anxiety in Patients with Chronic Kidney Failure who Underwent Hemodialysis in RSI Sakinah Mojokerto.

METHOD

This study used a type of analytic correlation study with a cross-sectional approach. The population in this study was patients who underwent hemodialysis at RSI Sakinah Mojokerto. The sampling technique used the consecutive sampling technique to obtain a sample of 35 respondents. The independent variables were hemodialysis intensity and dependent variable anxiety level. Data collection on hemodialysis intensity with anxiety level using questionnaire sheets. The time of the study was carried out on February 26 - March 26, 2019. Processing data with editing, coding, scoring and tabulating. Data analysis using the Chi Squares statistical test with the help of SPSS for Windows version 25.0.

FINDING AND DISCUSSION

General data from the results of this study are data about the characteristics of respondents according to age, gender, education, and occupation. **Table 1 Respondents' Frequency Distribution Based on General Data of Chronic Kidney Failure Patients Undergoing Hemodialysis in Sakinah Mojokerto Hospital.**

Source: Primary Data, 2019

Gender		
Man	19	54,3
Famale	16	45,7
Education		
SD	7	20,0
SMP	13	37,1
SMA	10	28,6
Higher	5	14,3
Work		
Housewife	13	37,1
Self	2	5,7
Employed		
Private	15	42,9
PNS	5	14,3
Total	35	100

Table 1 shows that the characteristics of respondents based on the age of 35 respondents were as many as 36-45 years old, 46-55 years old, 56-65 years old as many as 10 respondents (28.6%). The results of the characteristics of respondents based on gender from 35 respondents were mostly male, namely 19 respondents (54.3%). Obtained the characteristics of respondents based on the work of 35 respondents most of the jobs were private as many as 15 respondents (42.9%). Obtained respondent characteristics based on the educational status of 35 respondents, mostly junior high school education as many as 13 respondents

(37.1%).

B. Special Data

These data illustrate specific data about the relationship between hemodialysis intensity and anxiety level in patients with chronic renal failure undergoing hemodialysis in Sakinah Mojokerto Hospital.

Table 2 Respondents' Frequency Distribution Based on Hemodialysis Intensity in Sakinah Hospital Mojokerto

No	Criteria	F	(%)
1.	A week 1-2 times	25	71,4
2.	A month 1-2 times	10	28,6
Total		35	100

Source: Primary Data, 2019

Based on table 2 shows that of the 35 respondents most of them underwent hemodialysis 1-2 times a week, as many as 25 respondents (71.4%).

Table 3 Respondent Frequency Distribution Based on Anxiety Level at Sakinah Mojokerto Hospital

No	Criteria	F	(%)
1.	There is no anxiety	1	2,9
2.	Mild anxiety	10	28,6
3.	Moderate anxiety	11	31,4
4.	Severe anxiety	13	37,1
Total		35	100

Source: Primary Data, 2019

Based on table 3 shows that of the 35 respondents most experienced severe anxiety levels of 13 respondents (37.1%).

Table 4 Cross Tabulation between Hemodialysis Intensity and Anxiety Level at Sakinah Hospital Mojokerto

Hemodialysis Intensity	Anxiety Level								Total	
	There is no anxiety		Mild anxiety		Moderate anxiety		Severe anxiety			
	F	%	F	%	F	%	F	%	F	%
A week 1-2 times	0	0	6	24	6	24	13	52	25	100
A month 1-2 times	1	10	4	40	5	50	0	0	10	100
Total	1	3	10	29	11	31	13	37	35	100

Source: Primary Data, 2019

Based on table 4 above shows that there are the relationship between hemodialysis intensity and the anxiety level of patients with chronic renal failure undergoing hemodialysis at Sakinah Mojokerto Hospital. That of the 35 respondents of the intensity of hemodialysis a week 1-2 times as many as 25 respondents (71.4%), the results of severe anxiety were 13 respondents (37.1%), moderate anxiety 6 respondents (17.1%), mild anxiety 6 respondents (17, 1%), whereas from 10 respondents (28.6%) whose 1-2 times hemodialysis intensity was obtained the results of most anxiety were 5 respondents (14.3%). Then the conclusion is that the more frequent the intensity of hemodialysis, the more patients experience anxiety.

With the results of Chi-Square test with SPSS, the value p value = 0.020 was obtained with the condition that the value of $\alpha = 0.05$, H_0 was rejected, H_1 was accepted, there was a relationship between hemodialysis intensity and anxiety level in patients with chronic renal failure undergoing hemodialysis at Sakinah Mojokerto Hospital.

DISCUSSION

Hemodialysis Intensity in Chronic Kidney Failure Patients Undergoing Hemodialysis in the Hemodialysis Room RSI Sakinah Mojokerto

The results showed in table 2 that of the 35 respondents doing hemodialysis 1-2 times a week as many as 25 respondents (71.4%), while the respondents who did hemodialysis action 1-2 times a month that is as many as 10 respondents (28.6%).

The frequency of patients undergoing hemodialysis measures varies depending on the amount of kidney function remaining. Based on the Dialysis Outcomes Quality Initiative (DOQI), dialysis is carried out 1-2 times a week in patients with GFR <15 ml/minute/ 1.73 m. The GFR value illustrates that the patient's kidney function is only less than 15%. In this stage, the patient has entered into stage 5 CRF. Dialysis is performed 1-2 times in Stage 4 patients with kidney disorders with LFG between 15-29 ml/minute/ 1.73 m2.

If hemodialysis is not adequate, the hemodialysis process will be disrupted causing symptoms. One hemodialysis session takes around 4-5 hours. As long as the kidneys are still not functioning and have not been replaced by new kidneys as long as hemodialysis is done. The frequency of HD action depends on the amount of kidney function remaining, 1-2 weeks can also be 1-2 months.

The Level of Anxiety in Chronic Kidney Failure Patients Undergoing Hemodialysis in the Hemodialysis Room RSI Sakinah Mojokerto

The results showed in table 3 that 35 respondents experienced severe anxiety as many as 13 respondents (37.1%), while 11 respondents (31.4%) experienced moderate anxiety, 10 respondents (28.6%) experienced mild anxiety, and there is no anxiety 1 respondent (2.9%).

Hemodialysis patients often feel worried about their unpredictable illness and disturbances in their lives. They usually experience anxiety problems, limitations in patterns or habits and threats of death (Wowiling, 2013).

The level of anxiety experienced by this patient occurs because the cycle or length of time the patient performs hemodialysis, the more frequent and long in the long term it will be worried about the condition of the pain that can not be predicted so that experience anxiety.

Relation of Hemodialysis Intensity Level of Anxiety in Chronic Kidney Failure Patients Undergoing Hemodialysis in Sakinah Mojokerto Hospital

The results of the research carried out in the remedial suction room in patients undergoing hemodialysis in the Sakinah Mojokerto Hospital used a chi-square test of significance level $\alpha = 0.05$. $p < 0.05$ with the results of the chi-squared test with a value of 0.020 smaller than p value obtained from the conclusion there is a relationship between the intensity of hemodialysis and the level of anxiety in renal failure patients undergoing hemodialysis at RSI Sakinah Mojokerto.

The level of anxiety is influenced by how the patient undergoes the intensity of hemodialysis. The patients undergoing the intensity of hemodialysis on average obtained were levels of severe anxiety because at the beginning of the period patients felt discouraged and could not recover at a time. Even though continuous therapy the patient began to adapt well to the initial and mild anxiety level.

It was found that respondents who experienced the intensity of hemodialysis 1-2 times a week and 1-2 times a month consisted of 25 respondents and 10 respondents, and

the number was 35 respondents. From these results, it can be seen that respondents who undergo hemodialysis intensity 1-2 times have a mild level of anxiety compared with respondents who undergo the intensity of hemodialysis a week 1-2 times experience severe anxiety. Because the more frequent the intensity of hemodialysis, the more patients experience anxiety.

CONCLUSION

Based on the research that has been done, researchers can conclude from the results of the data that have been obtained Hemodialysis intensity in patients with chronic renal failure undergoing hemodialysis in RSI Sakinah Mojokerto mostly 1-2 times a week. The level of anxiety in patients with chronic renal failure undergoing hemodialysis at RSI Sakinah Mojokerto most of the respondents experienced severe anxiety.

The results of the study showed that there was a relationship between the intensity of hemodialysis and chronic renal failure undergoing hemodialysis at Sakinah Mojokerto Hospital. 25 respondents (71.4%) performed hemodialysis 1-2 times a week in hemodialysis patients at RSI Sakinah Mojokerto 13 respondents (37.1%) experiencing severe anxiety. Hemodialysis at RSI Sakinah Mojokerto with the calculation of the Chi-square test Asymptotic Significance value is 0.020 <0.05, it can be concluded that there is a correlation between hemodialysis intensity and anxiety level in hemodialysis patients in Sakinah Mojokerto Hospital.

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