

Lama Hemodialisa Dengan Kejadian Pruritus Di Rumah Sakit Santa Elisabeth Medan Tahun 2024

Duration Of Hemodialysis With Incidence Of Pruritus In The Hospital Santa Elisabeth Medan In 2024

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Abstrak

Terapi hemodialisa yang harus dijalani pasien gagal ginjal kronik selama masa hidupnya. Lamanya terapi hemodialisa yang dijalani pasien memiliki waktu yang berbeda – beda pada setiap individu, proses hemodialisa menyebabkan komplikasi seperti pruritus. Pruritus terjadi pada pasien yang menjalani hemodialisa disebabkan karna saat proses dialisis terjadinya peningkatan suhu dan pelebaran pembuluh darah sehingga menyebabkan keringat dan gatal. Penelitian ini bertujuan untuk mengetahui hubungan lama hemodialisa dengan kejadian pruritus pada pasien gagal ginjal kronik yang menjalani hemodialisa di Rumah Sakit Santa Elisabeth Medan tahun 2024. Penelitian ini menggunakan metode penelitian Cross Sectional. Teknik pengambilan sampel menggunakan total sampling yaitu jumlah pasien yang menjalani hemodialisa sebanyak 65 responden. Pengumpulan data dilakukan dengan menggunakan kuesioner dan uji statistic yang digunakan adalah Uji Spearman rank. p-value= 0,001 ($p>0,05$) dan koefisien korelasi 0,493 yang memiliki arti bahwa ada hubungan Lama Hemodialisa dengan Kejadian Pruritus Pada Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisa Di Rumah Sakit Santa Elisabeth Medan Tahun 2024

Kata Kunci: Lama Hemodialisa; Kejadian Pruritus; Pruritus

Abstract

Hemodialysis therapy that patients with chronic kidney failure must undergo during their lifetime. The length of hemodialysis therapy that patients undergo has a different time – different for each individual, the hemodialysis process causes complications such as pruritus. Pruritus occurs in patients undergoing hemodialysis because during the dialysis process there is an increase in temperature and dilation of blood vessels, causing sweating and itching. This study aims to determine the long-term relationship between hemodialysis and the incidence of pruritus in chronic kidney failure patients undergoing hemodialysis. This study uses the Cross Sectional research method. The sampling technique uses total sampling, namely the number of patients undergoing hemodialysis as many as 65 respondents. Data collection was carried out using a questionnaire and the statistical test used was the Spearman rank test. p-value = 0.001 ($p>0.05$) and a correlation coefficient of 0.493 which means that there is a relationship between Long Duration of Hemodialysis and the Incidence of Pruritus in Chronic Kidney Failure Patients Undergoing Hemodialysis.

Keywords: Duration of Hemodialysis; Incidence of Pruritus; Pruritus

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INTRODUCTION

Gradually and irreversibly worsening kidney function is the definition of chronic renal failure. It causes the kidneys to malfunction to control metabolism and the balance of fluids and electrolytes in the blood (Hasanuddin, 2022). Patients who experience prolonged decline in kidney function require hemodialysis, which usually requires 3 to 6 hours per week with 2 to 3 dialysis times. Patients with kidney damage receive hemodialysis therapy with the aim of improving their quality of life and prolonging their life. However, hemodialysis therapy has the impact of complications on the integumentary system, namely pruritus (itching) which is the residue of metabolism in the skin (Perwiraningtyas and Sutriningsih, 2021).

According to data (WHO) in 2020 shows that in the world approximately 10% of the population experiencing chronic kidney failure is undergoing hemodialysis therapy and is expected to increase by 8% per year (Marni et al., 2023). Based on the National Chronic Kidney Disease Fact Sheet (2017), it shows that around 200 thousand people in the United States undergo hemodialysis therapy. Based on Riskesdas data (2020), the number of chronic kidney failure patients in the Republic of Indonesia is 713,783 people, currently actively undergoing hemodialysis therapy. North Sumatra Province is the 5th largest with 45,792 patients (Harefa et al., 2023). Data from Santa Elisabeth Hospital Medan showed that 163 patients with chronic renal failure received hemodialysis therapy in 2023, and in 2024 from January

to June there were 65 patients (Medical Records of RSE Medan, 2024).

Hemodialysis is a replacement therapy for kidneys that are no longer functioning or are damaged. Hemodialysis therapy serves to maintain damaged kidney function and prolong the patient's life. Therapy for patients with chronic renal failure takes a long time, but excessive hemodialysis therapy can cause complications such as headache, hypotension, cramps, chest pain, nausea and vomiting, back pain, and pruritus (Daugirdas et al., 2015). During the hemodialysis process, patients experience an increase in temperature and dilation of blood vessels in the kidneys because the dialyzer removes heat from the body and increases temperature, which causes sweating and itching (Perwiraningtyas and Sutriningsih, 2021). The results of research by Yunita and Fauzi, (2023) found that the majority of respondents experienced pruritus due to the effect on increasing Quick Of Blood (QB). Due to the patient's impossible condition, some patients cannot increase Quick Of Blood more than 200mL/min.

Duration of hemodialysis therapy has a strong relationship with increased severity of pruritus in a longer recovery time. Based on the results of Puspitasari's research, (2022) at the Sultan Agung Islamic Hospital Semarang in September 2022 patients who underwent hemodialysis therapy > 6 months had complaints, namely pruritus. Pruritus has increased significantly from the duration of dialysis therapy that patients undergo for years. Based on the results of research by Sembiring, Nasution and Ariani, (2020), other factors that cause uremic pruritus are gender, age, and

comorbidities experienced by patients with chronic kidney failure.

Based on the results of research by Novena and Ariani, (2021) management of pruritus depends on the underlying etiology. Non-pharmacological and pharmacological therapies. Non-pharmacological therapy focuses more on preventing precipitating factors, while pharmacological therapy involves the use of topical and oral medications. In daily practice, some examples of commonly used topical therapies are capsaicin, emollients, immunomodulators, corticosteroids, antihistamines, and topical anesthetics. For oral therapy, the main choice is antihistamine drugs, although there are several other alternatives, such as anticonvulsants, opioid modulators, and antidepressants. Based on the results of research by Ikhsan Hafidz, Dyah Setyorini, (2024) obtained that the use of skin moisturizers or lotions can increase integumentary moisture in patients experiencing pruritus at the Dr. RM Regional General Hospital. Djoelham Binjai. Giving coconut oil or Virgin Coconut Oil (VCO) to patients who experience pruritus has an effect because it increases the absorption of vitamins and fat minerals, such as magnesium and calcium. The content of coconut oil or Virgin Coconut Oil has the effect of digesting lipids and will have an impact on bacteria on the skin so as to reduce itching.

Based on initial survey data on July 24, 2024 in the hemodialysis room through interviews by asking question points related to duration, intensity, tendency, inability, distribution to 10 patients who were undergoing hemodialysis. When interviewing 10

patients, it was found that 7 patients experienced pruritus. Each patient has different pruritus complications. Of the 7 patients who experienced pruritus, 1 patient who had undergone two months of hemodialysis had just experienced pruritus, 2 patients experienced pruritus after undergoing hemodialysis for more than six months, 4 patients experienced pruritus after undergoing hemodialysis for one year. The average intensity felt by patients was on a severe scale. Patients who experience pruritus feel enough to scratch it then the itching will feel reduced in 4 patients, 2 patients do not feel a change if scratched then the patient takes Cetirizine according to the doctor's prescription, and 1 patient feels pruritus only during therapy. Patients often experience pruritus on the back, legs and upper arms. The impact of pruritus (itching) felt by the patient in the last 2 weeks is that the quality of sleep has decreased and the patient feels itchy when doing activities. Patients who experience itching on the body often respond by scratching the itchy area, two of them give body lotion when experiencing itching in the body area.

Based on these problems, the researcher is interested in conducting a study with the title Duration hemodialysis and the incidence of pruritus in chronic renal failure patients undergoing hemodialysis at Santa Elisabeth Hospital Medan 2024

RESEARCH METHODS

Researchers use cross-sectional non-experiments. The cross-sectional approach is research that is only once in a while for observation of independent and dependent data. Correlational research

analyzes the relationship between variables.

The population in this study were all patients undergoing hemodialysis at Santa Elisabeth Hospital Medan from January to July 2024 as many as 65 people (RSE, 2024). This research uses the Total Sampling technique. The total sampling technique is sampling where the number of samples is the same as the population. This means that the entire existing population will be used as a sample in the study. The sample in this study were 65 respondents.

The variables used in this study are the dependent variable, namely the incidence of pruritus and the independent variable, namely the duration of hemodialysis. Research instruments use by Demographic data in this demographic are the respondent's name, age, gender, ethnicity, and length of hemodialysis. And Pruritus Questionnaire are The researcher used the 5-D ItchScale questionnaire from Elman et all (2010). This scale contains several question points, namely the first related to the degree; second about the duration; third interference with activities due to itching; fourth about the distribution; and fifth related to the location of itching. This questionnaire has been tested for reliability and validation with a reliability coefficient of 0.97 and a CVI value of 0.90.

The study was conducted in the Hemodialysis Room of Santa Elisabeth Hospital Medan located at Jalan Haji Misbah No. 7 Medan. The study will be conducted in November 2024 at the Hemodialysis room of Santa Elisabeth Hospital Medan.

Validity and Reability Test There is no need to conduct reliability and validity

tests because it adopts research from Sembiring and Ginting (2022) , with valid values where the CVI value is 0.90 and Cronbach's alpa is 0.97, therefore the instrument can be used.

The univariate statistical method is the frequency distribution of characteristics whose results are presented in the form of a frequency distribution table. Bivariate analysis in this study is the relationship between duration of hemodialysis as an independent variable and the incidence of pruritus as a dependent variable.

The Spearman Rank (Rho) test was used in this study, namely the data studied were both ordinal data. Researchers want to see how strong and weak the relationship between variables is with the provisions of the rho table with a correlation of 95% (0.05).

This research has been declared ethically feasible by the Ethics Committee of Santa Elisabeth College of Health Sciences Medan with No. 222/KEPK-SE/PE-DT/XI/2024.

RESULTS AND DISCUSSION

Researchers conducted research on November 21, 2024 to November 28, 2024 at Santa Elisabeth Hospital. Researchers conducted research in the Hemodialysis Room and respondents in this study were patients who were undergoing hemodialysis at Santa Elisabeth Hospital Medan with a total of 65 respondents.

Table 1 Frequency Distribution of Respondents Based on Demographic Data at Santa Elisabeth Hospital Medan Year 2024 (n=65)

Characteristics	f	%
Age		
17-25 years old (Late Teens)	2	3,1
26-35 years old (Early Adulthood)	2	3,1
36-45 years old (Late Adult)	4	6,2
46-55 years (Early Elderly)	22	33,8
56-65 years (Late Elderly)	26	40,0
66-76 years (Seniors)	9	13,8
Total	65	100,0
Gender		
Male	38	58,5
Female	27	41,5
Total	65	100,0
Tribe		
Toba Batak	37	56,9
Simalungun Batak	4	6,2
Batak Karo	12	18,5
Pakpak Batak	1	1,5
Java	4	6,2
Minang	1	1,5
Nias	5	7,7
No Tribe	1	1,5
Total	65	100,0

Sumber : data primer (diolah tahun 2024)

Table 2. Frequency Distribution and Presentation of Respondents Based on Duration of Hemodialysis at Santa Elisabeth Hospital Medan in 2024 (n=65)

Table 3. Frequency and Percentage Distribution of Emotional Intelligence Nurses at Santa Elisabeth Hospital Medan in 2024

Duration of Hemodialysis	f	%
<12 months	26	40,0
12-24 months	15	23,1
>24 months	24	36,9
Total	65	100,0

Table 3 Frequency Distribution and Presentation of Respondents Based on Pruritus Occurrence at Santa Elisabeth Hospital Medan Year 2024 (n=65)

Incidence of Pruritus	f	%
None	13	20,0
Lightweight	19	29,2
Medium	14	21,5
Weight	19	29,2
Total	65	100,0

Table 4 Results of Frequency Distribution and Presentation of the Relationship between Hemodialysis Duration and Pruritus in Chronic Kidney Failure Patients Undergoing Hemodialysis at Santa Elisabeth Hospital Medan Year 2024 (n=65)

Genesis Pruritus	Duration of Hemodialysis			Total %	Coefisien Correlation	p-value
	<12 months	12-24 months	>24 months			
	%	%	%			
None	69.2	15.4	15,4	100	0,493	<0.001
Lightweight	47,4	47,4	5,3	100		
Medium	28,6	21,4	50,0	100		
Weight	21,1	5,3	73,7	100		

Table 4 results of frequency distribution and presentation of the Relationship between Hemodialysis Duration with Pruritus Events in 65 respondents obtained hemodialysis duration <12 months with no pruritus category as many as 9 people (62.2%), hemodialysis duration <12 months with mild pruritus events as many as 9 people (47.4%), hemodialysis duration <12 months with moderate pruritus events as many as 4 people (28.6%) and hemodialysis duration <12 months with severe pruritus events 4 people (21.1%). The length of hemodialysis 12-24 months with no pruritus was found to be 2 people (15.4%), at the length of hemodialysis 12-24 months with mild pruritus as many as 9 people (47.4%), the length of hemodialysis 12-24 months with moderate pruritus as many as 3 people (21.4%) and the length of hemodialysis 12-24 months with severe pruritus 1 person (5.3%). In the length of hemodialysis >24 months with no pruritus incidence obtained 2 people (15.4%), length of hemodialysis >24 months with mild pruritus 1 person (5.3%), length of hemodialysis >24 months with moderate pruritus as many as 7 people (50.0%), length of hemodialysis >24 months with severe pruritus as many as 14 people

(73.7%). So the majority of Hemodialysis Duration >24 months with severe pruritus was 14 people (73.7), then the minority of Hemodialysis Duration >24 months with mild pruritus was 1 person (5.3%) and Hemodialysis Duration 12-24 months with severe pruritus was 1 person (5.3%).

In the statistical test of the relationship between the length of hemodialysis and the incidence of pruritus in hemodialysis patients at Santa Elisabeth Medan Hospital in 2024 with the Spearman Rank test obtained a p-value <0.001 (p <0.05) meaning that Ha is accepted. There is a relationship between the length of hemodialysis with pruritus with a coefisien correlation finding of 0.493 which means that the length of hemodialysis with pruritus is moderate which has a unidirectional or positive pattern

1. Duration of Hemodialysis in Hemodialysis Patients at Santa Hospital Elisabeth Medan

The results of the study with a total of 65 respondents in the category of Duration of Hemodialysis the majority in the category <12 months which amounted to 26 people (40.0%) while the least amount with the length of hemodialysis in the category 12-

24 months as many as 15 people (23.1%). Researchers found that patients who underwent hemodialysis at Santa Elisabeth Medan Hospital in 2024 were in the old category obtained for 10 years and 2 months and in the new category obtained for 2 weeks.

Based on the results of research Aqilah Mutmainnah et al., (2024) shows chronic renal failure patients undergoing hemodialysis as many as 72 patients. The length of hemodialysis undergone by chronic renal failure patients is mostly in the >24 month category totaling 41 patients, in the 12-24 month category as many as 6 patients, and the <12 month category totaling 25 patients. The length of hemodialysis at RSUD Dr. Pirngadi Medan City obtained from the latest data is in the new category undergoing hemodialysis for 7 months, while in the longest category is for 13 years. The majority of patients were able to undergo hemodialysis for >24 months because they were given a lot of support and motivation from family and the environment in undergoing their treatment (Devi et al, 2024). Other causes that influence patients to be able to undergo hemodialysis therapy for a long time are that patients understand the importance of compliance to carry out hemodialysis and patients feel the benefits of hemodialysis therapy and patients are able to adapt to hemodialysis actions that have been carried out or patients feel comfortable after therapy is carried out (Sari, Az and Maulani, 2022) . .

According to the results of research Hana et al., (2019) in 107 patients, the majority of patients undergoing hemodialysis for <5 years as many as 83 people and the minority of patients

undergoing hemodialysis > 10 years as many as 2 people. Patients who undergo hemodialysis <5 years are patients who have just undergone hemodialysis in a matter of months or under 5 years. Researchers found that the number of patients with chronic kidney failure is increasing every time. In accordance with the results of the Ministry of Health in 2019, it was found that chronic kidney failure is increasing every year due to the increasing number of elderly people. From the data obtained by researchers, the majority of patients undergoing hemodialysis are in the early elderly or aged 46-55 years, totaling 38 people.

Based on the results of research Dian, Atmadja and Kosnayani, (2023) at UPTDK Regional General Hospital Dr. Soekardjo Kota Tasikmalaya in 2023 with a total of 69 respondents, it was found that patients who had undergone hemodialysis in the new category were 18 people while in the old category were 51 people. From the data obtained by researchers, the majority of patients were male as many as 36 people and the minority were female as many as 33 people. The male sex is at greater risk of developing chronic kidney failure due to a relationship with differences in reproductive hormones and lifestyles such as consuming alcohol and smoking. Chronic renal failure patients who have been undergoing hemodialysis for a long time or recently at UPTDK Regional General Hospital Dr. Soekardjo Tasikmalaya City have a relationship with the large number of patients who are male.

The researcher assumes that patients undergoing hemodialysis therapy are in a situation that is highly dependent on

dialysis machines and medical professionals to provide dialysis services for the rest of their lives. The length of hemodialysis therapy requires patients to adapt to certain restrictions such as dietary control, fluid intake, chronic pain and discomfort with arteriovenous fistula needle sticks on the day of dialysis. Patients who are able to undergo therapy for more than >24 months are patients who can adapt to the dialysis machine and can accept their condition. Hemodialysis therapy that is carried out for the rest of his life significantly changes the patient's life such as the occurrence of psychosocial disorders, including patients feeling depressed because they have to do dialysis therapy twice a week. Therefore, patients who are undergoing hemodialysis with a new duration or have been undergoing this therapy for a long time, they need to be given a lot of support and motivation from their family and environment in undergoing their treatment.

2. Incidence of Pruritus in Hemodialysis Patients at Santa Elisabeth Medan

The results of the study with a total of 65 respondents on the incidence of pruritus had four categories in the category of none which amounted to 13 people (20.0%), in the mild category amounted to 19 people (29.2%), in the moderate category amounted to 14 people (21.5%), and in the severe category 19 people (29.2%) while the least amount with the length of hemodialysis in the category 12-24 months as many as 15 people (23.1%). From the results of research conducted by researchers, it was found that patients who experienced

pruritus were mostly mild and severe with a total of 19 people in mild and 19 in severe. Researchers also found findings when conducting research related to seeing that many patients often scratch their bodies because of the itching felt by patients.

Based on the results of research Yunita and Fauzi, (2023) found that chronic renal failure patients almost all have dermatological disorders and changes in skin and nails obtained before or after hemodialysis. The incidence of pruritus can be known from the appearance of itching complaints and ureum levels > 50mg/dl then experiencing uremic syndrome and dry skin. Researchers also found that chronic renal failure respondents who underwent hemodialysis 1-8 times a meeting with quick of blood (QB) that had been instructed by the doctor and adjusted to the patient's condition and dosage had an effect on the severity of pruritus felt by patients from moderate to mild. And in severe pruritus after undergoing hemodialysis for 8 meetings with an increase in quick of blood (QB), the effect is obtained even though it is not significant.

Based on research Yovalwan and Arofiati, (2023) factors associated with the incidence of pruritus are gender, age, and length of hemodialysis. Gender is related to the high incidence of chronic renal failure due to unhealthy lifestyles, smoking and lack of habits to care for the skin so that the skin becomes dry and causes pruritus. In the age category, most patients with chronic renal failure who experience pruritus are aged 41-60 years due to the decreased ability of the body to process the body's metabolism which

causes a high incidence of pruritus at that age. The length of hemodialysis is one of the factors causing pruritus, this is influenced by further damage to kidney function. It is theoretically explained that uremic pruritus usually occurs in patients who undergo dialysis for a long period of time. The longer the dialysis treatment, the more severe the uremic pruritus. Therefore, patients with CKD are expected to follow and comply with the prescribed diet so that kidney function does not worsen and pruritus does not get worse.

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Researchers assume that chronic renal failure patients who undergo hemodialysis have dermatological disorders such as pruritus. According to researchers, pruritus occurs because patients undergoing hemodialysis experience an increase in ureum or

uremia syndrome, causing perpospatemia or the accumulation of metabolic waste in the blood, causing pruritus. Another cause of pruritus is an unhealthy lifestyle such as eating fast food and consuming foods that are high in protein. In addition, another cause of pruritus is at the age of 41-60 years due to the loss of water from the stratum corneum or the outermost layer of skin that functions as a protector and regulator of skin moisture, resulting in dry skin and more pruritus. Itching that patients usually feel is in the back area with the number of complaints of 42 people, on the scalp of 8 people, then in the upper extremity area totaling 19 people, in the buttocks area complaining of 26 people, and then the lower extremities as many as 13 people.

3. Relationship between Hemodialysis Duration and Pruritus Incidence in Patients Hemodialysis Patients at Santa Elisabeth Hospital Medan Year 2024

Based on the results of statistical tests using the Spearman Rank Test, the p-value is 0.001 ($p < 0.05$), which means that there is a significant relationship between the duration of hemodialysis and the incidence of pruritus in patients with chronic renal failure who undergo hemodialysis at Santa Elisabeth Hospital Medan in 2024. The data also showed a correlation value of 0.493, which means that the relationship between the length of hemodialysis and the incidence of pruritus is moderate. It can be concluded that H_0 is rejected and H_a is accepted.

Based on the results of research Perwiraningtyas and Sutriningsih, (2021) with the majority of the results are

research subjects who have been undergoing dialysis therapy for more than one year experiencing pruritus. The factor of hemodialysis therapy is one of the things that aggravates the occurrence of pruritus, causing itching in the back area, upper extremities, lower extremities, and the whole body to cause redness, red spots to leave scars. Hemodialysis therapy is a factor in pruritus because there is an exchange of temperature and heat dissipation through the dialyzer which causes body temperature to increase so that vasodilation responds with increased sweating and itching during hemodialysis.

Based on the results of research Fannisa L, (2023) found that patients who experience pruritus vary greatly. The cause of pruritus in chronic renal failure patients who undergo hemodialysis therapy for a long time is patients who are less compliant with food diets such as reducing foods that are low in phosphorus, sodium, and protein. Patients who are less compliant with the diet will experience disturbances in the body's metabolism and serum will increase so that uremia also increases and causes pruritus. Another cause of pruritus in patients who undergo hemodialysis for a long time is an allergic reaction that comes from the release of substances that cause histamine mast cell activity and dilation of blood vessels resulting in pruritus.

Based on the results of research Wahyuni, Lawati and Gusti, (2019) obtained a total of 83 respondents with the most gender male and in the age category the most is 44 - 62 years as many as 45 people. The average patient undergoing hemodialysis complains of pruritus. Pruritus is experienced about 6 months after the first hemodialysis and

will increase along with the length of time the patient undergoes hemodialysis. Another cause of pruritus is the presence of dry skin and sweat in patients.

Based on the results of research Puspitasari, (2022) with a sample size of 45 people obtained the majority of respondents long hemodialysis >24 months with severe pruritus, while the minority in the category of long hemodialysis <12 months with mild category pruritus is the same as long hemodialysis >24 months mild category and long hemodialysis >24 months with moderate category. Therefore it is found that the longer a person undergoes hemodialysis, the incidence of pruritus in patients with chronic renal failure will also increase. The distribution results obtained the longer a person undergoes hemodialysis therapy, the more risks will be experienced because of frequent exposure to dialysis machines and patients experience several complaints such as body aches, weakness and itching.

Researchers assume that the length of hemodialysis has a relationship with the incidence of pruritus. Patients who undergo hemodialysis <12 months with varying itch intensity are due to the inadequacy of the patient's body to receive hemodialysis therapy. Another cause of pruritus is the age of the patient because patients who have entered the age of 46-55 years (early elderly period) experience a decrease in skin function where the production of natural oils in the body decreases so that it is more susceptible to itching. Based on the results of the data obtained, the majority of patients undergoing hemodialysis >24 months experience severe pruritus because the longer the patient undergoes

hemodialysis therapy, the more complications from the therapy such as an imbalance in uremia levels in the body that cause pruritus. In addition, another cause of pruritus is the process of vasodilation during hemodialysis and an increase in body temperature during dialysis which causes sweating. This is because sweat contains salt and other substances that can cause pruritus. The length of hemodialysis that patients undergo is also closely related to age. Based on the results of the age division, the majority are 56-65 years old (Late Elderly) which affects the patient's skin moisture condition

CONCLUSION

Based on the research that has been carried out by the researcher, several conclusions can be drawn and suggestions based on the research results. In general, the following conclusions can be drawn: Length of Hemodialysis in Hemodialysis Patients at Santa Elisabeth Hospital Medan Year 2024, there were <12 months as many as 26 people (40.0%), 12-24 months as many as 15 people (23.1%), >24 months as many as 24 people (36.9%). The incidence of pruritus in hemodialysis patients at Santa Elisabeth Hospital Medan in 2024, there were no pruritus as many as 13 people (20.0%), mild pruritus as many as 19 people (29.2%), moderate pruritus as many as 14 people (21.5%), and severe pruritus as many as 19 people (29.2%). Based on the results of statistical tests using the Spearman Rank test, it was found that there was a relationship between the duration of hemodialysis and the incidence of pruritus in chronic renal failure patients undergoing hemodialysis

at Santa Elisabeth Hospital Medan in 2024, namely $p\text{-value} = 0.001$ ($p < 0.05$) which means that H_a is accepted or there is a significant relationship between the duration of hemodialysis and pruritus and the value of $r = 0,493$ which means that the correlation coefficient is moderate.

It is hoped that future researchers can conduct research related to non-pharmacological interventions to reduce pruritus in Hemodialysis patients.

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