The Relationship Between Hemodialysis Frequency and Self-Acceptance in Chronic Kidney Failure Patients at SMC Telogorejo Hospital

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ABSTRAK

Gagal Ginjal Kronik merupakan kondisi dimana organ tubuh ginjal mengalami gangguan kegagalan untuk menyaring limbah dan kelebihan cairan yang mana hemodialisis merupakan salah satu pengobatan gagal ginjal kronis yang umumnya dilakukan. Perubahan gaya hidup yang dialami oleh pasien meningkatkan tantangan psikologis yang berdampak pada tingkat penerimaan diri pasien. Tujuan dari penelitian ini adalah untuk meneliti apakah ada hubungan antara frekuensi hemodialisis terhadap penerimaan diri pada pasien gagal ginjal kronis yang menjalani hemodialisis di SMC RS Telogorejo. Populasi penelitian ini adalah pasien gagal ginjal kronis yang menjalani hemodialisis dengan sampel sebanyak 58 responden dengan teknik cross sectional. Intervensi dilakukan dengan memberikan kuisoner USAQ (Unconditional Self-Acceptance Questionnere). Berdasarkan hasil test USAQ tingkat penerimaan diri pada pasien gagal ginjal yang menjalani hemodialisis di SMC Telogorejo menunjukkan adanya tingkat penerimaan diri yang sedang dengan populasi sebanyak 52 orang atau sebesar 89,7%. sedangkan pasien dengan tingkat penerimaan diri rendah adalah sebanyak 8,6% atau setara dengan 5 pasien, hanya 1 pasien atau setara dengan 1,7% yang menunjukkan adanya tingkat penerimaan diri yang tinggi. Selain itu berdasarkan penelitian yang dilakukan, pasien dengan frekuensi hemodialisis 2x seminggu memiliki tingkat penerimaan diri lebih tinggi yakni 58% sedangkan rata-rata skor penerimaan diri pada pasien dengan frekuensi 1x hanya mencapai 40%. Hasil analisa bivariat menggunakan uji spearman menunjukan value 0,022 yang menunjukan adanya hubungan frekuensi hemodialisis terhadap tingkat penerimaan diri pada pasien gagal ginjal kronis. Penelitian selanjutnya dapat meneliti faktor-faktor terkait lain yang mempengaruhi tingkat penerimaan diri pada pasien gagal ginjal maupun hubungan tingkat kepatuhan pasien terhadap tingkat penerimaan diri tertentu pada pasien.

Kata Kunci : Frekuensi, Gagal ginjal, Hemodialisis, Penerimaan diri

ABSTRACT

Chronic kidney failure is characterized by the kidneys' inability to effectively filter waste and excess fluids from the body, often necessitating hemodialysis as a common treatment. Patients undergoing hemodialysis experience lifestyle changes that pose psychological challenges affecting their self-acceptance. This study aimed to investigate the relationship between hemodialysis frequency and self-acceptance among chronic kidney failure patients undergoing treatment at SMC Telogorejo Hospital. The study population consisted of chronic kidney failure patients undergoing hemodialysis, with a sample size of 58 respondents using a cross-sectional technique. The intervention involved administering the Unconditional Self-Acceptance Questionnaire (USAQ). Analysis of the USAQ results indicated that 89.7% of patients exhibited a moderate level of self-acceptance, while 8.6% showed low self-acceptance, and only 1.7% demonstrated high self-acceptance. Furthermore, patients undergoing hemodialysis twice a week showed higher levels of self-acceptance (58%) compared to those undergoing once- weekly sessions (40%). Bivariate analysis using the Spearman test revealed a significant correlation between hemodialysis frequency and self-acceptance (p = 0.022). Future research could explore additional factors influencing self-acceptance levels in chronic kidney failure patients, as well as the relationship between patient compliance and self-acceptance levels.

Keywords : frequency, hemodialysis, renal failure, self-acceptance

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INTRODUCTION

Chronic kidney failure is a serious medical condition and requires long-term treatment, including hemodialysis. Hemodialysis is a process used to remove waste and excess fluid from the blood when the kidneys are no longer able to do it effectively. Patients undergoing hemodialysis often face a variety of physical and emotional challenges that can affect their quality of life. One important aspect that needs to be considered is the patient's self-acceptance of their condition.

Self-acceptance is the ability of individuals to accept and appreciate themselves, including their shortcomings and limitations. For patients with chronic renal failure, self-acceptance can be a key factor in facing the challenges associated with hemodialysis treatment (Damanik, 2018). This study aims to explore the relationship between hemodialysis frequency and self-acceptance in chronic kidney failure patients at SMC Telogorejo Hospital.

Kidney failure globally according to World Kidney Day data in April 2024 is stated to affect more than 850 million people worldwide and result in more than 3.1 million per year (Fund, 2015). Currently, kidney failure is even ranked as the 8th leading cause of death and is projected to become the 5th leading cause of death in 2040 if there is no awareness of the importance of kidney health among the world's population. According to data from the CDC (Center For Disease Control and Prevention) in the United States, in 2023 more than 1 in 7 adults in America have chronic kidney failure and it is estimated that the number reaches 14% of the American adult population or equivalent to a total of 35.5 million adult patients who experience chronic kidney failure.

In addition, this disease is also dominated by the age group of 65 years and above with a percentage of 34%, the age group of 45-64 years with a population of 12% and the age group of 18-44 years with a percentage of 6%. As for the gender group, this disease is dominated by men as much as 14% and women as much as 12%. The percentage of race in each group is 20% dominated by blacks, 14% by Asians and 12% by whites (CDC, 2013). Data from the WHO (World Health Organization) in 2018 also confirms that chronic kidney failure is a disease experienced by at least 1 in 10 of the world's population and is estimated to reach 5 to 10 million patient deaths every year (Carvajal- Velez et al., 2023).

According to the Indonesian Ministry of Health, in 2024 it was found that 700 thousand people in Indonesia or equal to 4% of the Indonesian population experience chronic kidney failure. According to the Ministry of Health's Basic Health Research Data, this increase reached 2% in the period from 2013 to 2024 and the death rate due to chronic kidney failure increased from 11th in 2018 to 10th as a cause of death. The Director of Prevention and Control of Non-Communicable Diseases of the Indonesian Ministry of Health also stated that the death rate in chronic kidney failure patients in Indonesia reached 42 thousand people (Salsabila, 2024).

SMC Telogorejo Hospital as one of the hospitals in Central Java Province itself has experienced an increase in patients, both inpatients and outpatients. In 2022, it was reported that there were 1,443 patients with chronic kidney failure undergoing hemodialysis, 1,372 outpatients and 71 inpatients. The average number of patients in 2022 is 120 patients per month. Meanwhile, in

January-November 2023, the number of patients increased to 1,485 people with an average number of patients of 135 patients per month. This increase shows that there is a significant increase in chronic kidney failure patients (Riskesdas, 2018).

Previous research has shown that the frequency of hemodialysis can affect a patient's quality of life. A study by Smith et al. (2020) found that patients who underwent hemodialysis more often tended to have a higher level of self-acceptance. In addition, social support and education also play an important role in increasing patient self-acceptance. This study will expand these findings by focusing on patients at SMC Telogorejo Hospital (Malinda, 2022).

The main objective of this study is to determine the relationship between hemodialysis frequency and self-acceptance in patients with chronic kidney failure. In addition, this study also aims to explore other factors that may affect self-acceptance, such as educational background, age, gender, and duration of undergoing hemodialysis. By understanding this relationship, it is hoped that it can provide better recommendations for the treatment of chronic kidney failure patients.

METHOD

This study used a cross-sectional design to explore the relationship between hemodialysis frequency and self-acceptance in chronic kidney failure patients at SMC Telogorejo Hospital. By involving 58 respondents who were selected through the purposive sampling technique. The sample criteria in this study are divided into inclusion and exclusion criteria. Inclusion criteria include chronic kidney failure

patients undergoing hemodialysis, being able to read and write, and being willing to be a respondent. Meanwhile, the exclusion criteria include hemodialysis patients and patients in critical condition.

Data were collected using demographic questionnaires and the Unconditional Self-Acceptance Questionnaire (USAQ). The data collection procedure included interviews and filling out questionnaires by respondents, which were then analyzed using the SPSS 16 for Windows program.

RESULT

1. Respondent Characteristics

Table 1
Respondent Characteristics (n=58)

Respondent characteristics	f	%
Age		
26-35 y.o	5	8,6
36-45 y.o	7	12,1
46-55 y.o	16	27,6
>56 y.o	30	51,7
Gender		
Male	35	60,3
Female	53	39,7
Jobs		
Working	18	31,0
Not working	40	69,0
Education		
Elementary/Junior school	15	25,9
High school	31	53,4
Diploma/Bachelor	12	20,7
Haemodialysis History		
< 1 year	36	62,3
1-2 year	11	19,0
>2 year	11	19,0
Total	58	100,0

This study involved 58 respondents who underwent hemodialysis at SMC Telogorejo Hospital. The characteristics of respondents by gender showed that the majority of

respondents were male, namely 35 respondents (60.3%), with the dominance of the late elderly age group (over 56 years old) as many as 30 respondents (51.7%). Respondents' education was mostly at the secondary level, with 32 respondents (55.2%) having a high school education or equivalent.

Based on research conducted at SMC Telogorejo Hospital, it was found that 60.3% of the samples of chronic kidney failure patients undergoing hemodialysis were male, while 39.7% were female. This is in line with previous research that showed that men are more prone to chronic kidney failure due to hormonal differences, lifestyle, and habits such as alcohol consumption and smoking. Research by Togatorop & Arto (2022) also supports these findings, showing that men have a 1,783 times greater risk of developing chronic kidney failure than women. In addition, the study found that the level of self-acceptance in patients, both male and female, was at a moderate level, with no significant relationship between gender and self-acceptance rate. Similar research by Aisyah (2018) also shows consistent results regarding patient self-acceptance.

The study showed that the late elderly age group (over 56 years) had the highest risk of developing chronic kidney failure, reaching 51.7% of the total sample. The early elderly age group (46-55 years) had the second highest risk with 27.6%, while the early adult group (26-35 years) had the lowest risk with 8.6%. Declining kidney function with age, coupled with comorbidities such as hypertension and diabetes, accelerates kidney damage. The patient's self-acceptance rate did not show significant differences between age groups, with the average self-acceptance rate

being at a moderate level. Similar studies have also shown that there is no significant relationship between age and self-acceptance rates, although other factors such as comorbidities can affect patients' self-acceptance (Siburian, 2020).

Research at SMC Telogorejo Hospital showed that most hemodialysis patients were no longer working, with 69% of the total sample or 40 of 58 patients. Chronic kidney failure and the need to undergo hemodialysis routinely make many patients unable to continue their work. The self-acceptance rate of working and non-working patients is at a moderate level of 58%. This research is in line with the findings of Jamaludin (2020) which shows that most of the respondents do not work, especially because many respondents are the elderly who experience a decrease in productivity and physical conditions that do not allow them to work. The limited physical condition of people with chronic kidney failure also hinders their productivity and social activities, often causing them to stop working.

Research at SMC Telogorejo Hospital shows that most patients with chronic kidney failure have a secondary education (SMA) background of 53.4%, followed by basic education (SD/SMP) as much as 25.9%. Educational background affects the patient's ability to obtain information about a healthy lifestyle, which has an impact on risk and susceptibility to disease. Other research also supports these findings, suggesting that higher education helps patients better understand and manage themselves. The self-acceptance rate of patients with higher education is better

(61%) compared to primary and secondary education (57%). Aisyah's research (2018) also shows that patients with higher education have a higher level of self-acceptance compared to those with lower education.

Research at SMC Telogorejo Hospital shows that most new hemodialysis patients undergo therapy for less than a year, with a percentage of 62% or 36 patients. Patients who underwent hemodialysis for 1 to 2 years amounted to 22 patients or 38%. According to Bayhakki's (2017) research, patients who have only undergone hemodialysis for less than a year are more adaptive and compliant with the therapy program because they have reached the stage of acceptance and received adequate health education. However, the longer you undergo hemodialysis, the higher the risk of complications, which can hinder adherence to therapy. Patients' self-acceptance rates were also affected by the length of time on hemodialysis, with patients undergoing therapy for less than one year having a lower self-acceptance rate (57%), which increased to 58% in the second year, and reaching 60% in patients undergoing therapy for more than two years.

Research at SMC Telogorejo Hospital shows that most hemodialysis patients undergo therapy twice a week, with a percentage of 96.6% or 56 out of 58 patients. The frequency of hemodialysis varies depending on the degree of impairment of kidney function, with ideal therapy done up to three times a week. Patients with severely reduced kidney function require hemodialysis twice a week to survive. Patients with low residual kidney function should undergo hemodialysis three times a week. The high frequency of

hemodialysis indicates that this therapy is becoming a major need and part of the patient's weekly routine, which can increase their self-acceptance rate towards their health condition (Devi, 2022).

2. Frequency of Hemodialysis and Patient Self-Acceptance

Table 2

Frequency of Hemodialysis and Patient Self-Acceptance

Variable	f	%
Frequency of Hemodialysis		
Once a week	1	1,7
Twice a week	56	96,6
Three times a week	1	1,7
Self - Acceptance		
Low (< 56%)	5	8,6
Average (56-75%)	52	89,7
High (76-100%)	1	1,7
Total	58	100,0

The frequency distribution of variable characteristics showed that the majority of respondents underwent hemodialysis twice a week, namely 40 respondents (69%). The self-acceptance rate of respondents was measured using the Unconditional Self-Acceptance Questionnaire (USAQ), which showed that the majority of respondents had a moderate level of self-acceptance, namely 34 respondents (58.6%).

3. Relationship Between Hemodialysis Frequency and Self-Acceptance in Chronic Kidney Failure Patients

Table 3
Relationship Between Hemodialysis Frequency and Self-Acceptance in Chronic Kidney Failure Patients

Variable	r	P-value

Frequency and Self-Acceptance		0,299	0,022

The results of the correlation test between hemodialysis frequency and self-acceptance showed a significant positive correlation. Higher frequency of hemodialysis was associated with a higher rate of self-acceptance (r = 0.299, p < 0.05). In addition, it was found that the educational background and duration of undergoing hemodialysis also affected the patient's self-acceptance. Patients with higher educational backgrounds tend to have better levels of self-acceptance.

The results of this study show that the frequency of hemodialysis has a significant effect on the self-acceptance of patients with chronic kidney failure. These findings are in line with previous research suggesting that a higher frequency of medical treatments can improve patients' psychological adaptation and self-acceptance. Patients who undergo hemodialysis more often may feel more accustomed to and accept their condition, thus increasing self-acceptance.

In addition, demographic factors such as educational background and duration of undergoing hemodialysis were also found to have an effect on self-acceptance. Patients with higher educational backgrounds tend to have better levels of self-acceptance. This may be due to their ability to better understand their medical condition and access the resources necessary to manage the condition.

The duration of undergoing hemodialysis also affects self-acceptance, where patients who have undergone hemodialysis for a longer period of time tend to have a higher rate of self-acceptance. Longer experience in undergoing these treatments may help patients to be more receptive to their condition and develop effective coping strategies.

This research provides important insights for healthcare providers to improve patients' quality of life through more intensive care and psychological support. By understanding the factors that affect patient self-acceptance, healthcare providers can design more effective interventions to support patients in facing the challenges associated with hemodialysis treatment.

The study has several strengths, including the use of valid and reliable instruments to measure self-acceptance, as well as comprehensive data analysis. However, the study also had limitations, such as a relatively small sample size and a cross-sectional design that did not allow to determine causal relationships. In addition, the data collected came from only one hospital, so the results of this study may not be generalized to a wider population.

CONCLUSION

Based on the results of the study, it was found that there was a significant positive correlation between the frequency of hemodialysis and the level of self-acceptance (r = 0.299, p < 0.05). Patients with higher frequency of hemodialysis tend to have higher levels of self-acceptance. Other Factors Affecting Self-Acceptance are Educational Background and History of Undergoing Hemodialysis. Further research can further explore the relationship between educational background and hemodialysis history.

REFERENCES

Adiputra, I. M. S., Trisnadewi, N. W., Oktaviani, N. P. W., & Munthe, S. A. (2021). *Metodologi Penelitian Kesehatan*.

Amaludin, M., Arisandi, D., Akbar, A., Rusdian Hidayat, U., Alfikrie, F., Hatmayakin, D., YARSI Pontianak, Stik., & Panglima Aim No, J. (2023). *Tingkat depresi, ansietas dan stres pasien gagal ginjal kronik (GGK) dengan hemodialisa*. Husada Mahakam: Jurnal Kesehatan, 13(1), 1–07.

Bayhakki, B., & Hasneli, Y. (2017). *Hubungan Lama Menjalani Hemodialisis dengan Inter-Dialytic Weight Gain (IDWG) pada Pasien Hemodialisis*. Jurnal Keperawatan Padjadjaran, 5(3).

Brunner & Suddarth. (2013). *Buku Ajar Keperawatan Medikal Bedah Edisi 8 volume 2*. Jakarta: EGC

Carvajal-Velez, L., Ottman, K., Ahs, J. W., Li, G. N., Simmons, J., Chorpita, B.,Requejo, J. H., & Kohrt, B. A. (2023). *Translation and Adaptation of the Revised Children's Anxiety and Depression Scale: A Qualitative Study in Belize*. In Journal of Adolescent Health (Vol. 72, Issue 1, pp. S34–S39). https://doi.org/10.1016/j.jadohealth.2022.05.026

Damanik, C. (2018). *Self Management Behaviour Pada Pasien Yang Menjalani Hemodialisa*. Jurnal Medika: Karya Ilmiah Kesehatan, 3(2), 11-18.

Devi, S., & Rahman, S. (2022). *Hubungan Lama Menjalani Terapi Hemodialisis dengan Kualitas Hidup Pasien Penyakit Ginjal Kronik di Rumah Sakit Khusus Ginjal Rasyida*. Jurnal Ilmiah Kohesi, 6(1), 61-67.

Dinas Kesehatan Jawa Tengah.(2018).*Laporan Provinsi Jawa Tengah Riskesdas*.

https://dinkesjatengprov.go.id/v2018/storage/2019/12/cetak-laporan-riskesdas-jateng-2018-acc-pimred.pdf. diakses pada08 Maret 2021

Edukasi Pasien Cuci Darah di SMC RS Telogorejo: https://www.smc-hospital.com/edukasi-pasien-cuci-darah-di-smc-rs-telogorejo/

Fitri, R., Rafika, D. R., & Topan, F. (2018). *Hubungan Frekuensi Hemodialisis Dengan Tingkat Stress Pada Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisis*. Jurnal Keperawatan Silampari, 1, 139–153.

Fund, A. K. (2015). Kidney failure causes, tests,and preventions. http://www.kidneyfund.org/kidney-disease/kidney-failure/

Gamayanti, W. (2016). *Gambaran Penerimaan Diri (Self-Acceptance) pada Orang yang Mengalami Skizofrenia*. Psympathic : Jurnal Ilmiah Psikologi, 3(1), 139–152. https://doi.org/10.15575/psy.v3i1.1100

Ketua, T. I. M., Nuraini, U., Dewi, A., Ns, M. N., Hijriyati, Y., & Nidn, B. (2020). *Penerimaan keluarga pasien gagal ginjal kronis yang menjalani hemodialisa di rs omni pulomas jakarta timur*. Konferensi Nasieonal Dan Call Paper Stikes Telogorejo Semarang - Peningkatan Kualitas Hidup untuk Pasien Dengan Gangguan Neuromuskular: https://ojs.stikestelogorejo.ac.id/index.php/prosemnas/article/download/398/124

Kuwa, M. K. R., Wela, Y., & Sulastien, H. (2022). *Faktor – faktor yang Mempengaruhi Penerimaan Diri Pasien dengan Gagal Ginjal Kronik yang Menjalani Terapi Hemodialisis*. Jurnal Keperawatan Jiwa, 10(1), 193. https://doi.org/10.26714/jkj.10.1.2022.1 93-202

Lubis, R., & Thristy, I. (2023). *Perbandingan Kadar Asam Urat Dan Laju Filtrasi Glomerulus (Lfg) Pada Pasien Gagal Ginjal*

Kronik Sebelum Dan Sesudah Hemodialisa. Jurnal Ilmiah Kohesi, 7(1), 1–8. https://kohesi.sciencemakarioz.org/index .php/JIK/article/download/382/387

Oktaviana, N., Verawati, J., Putra, D., Helpin, H., & Onangego, O. (2019). Hubungan Frekuensi Hemodialisis Dengan *Tingkat Stres Pada Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisis Di Rumah Sakit Royal Prima Medan Tahun 2019*.Jurnal Ilmiah Pannmed (Pharmacist, Analyst, Nurse, Nutrition, Midwivery, Environment,Dentist), 13(3), 182–189. https://doi.org/10.36911/pannmed.v13i3. 588

Riskesdas.(2018). *Laporan Nasional RISKESDAS 2018.Kementerian Kesehatan RI Badan Penelitian dan Pengembangan Kesehatan*. Jakarta: Lembaga Penerbit Badan

Penelitian dan Pengembangan Kesehatan (LPB)
Salsabila, R. (2024). *Data Kemenkes: Lebih dari 700 Ribu Orang RI Menderita Ginjal Kronis. In CNBC Indonesia*. https://www.cnbcindonesia.com/lifestyle /20240116111340-33-506206/data-kemenkes-lebih-dari-700-ribu-orang-ri-menderita-ginjal-kronis

Sari, Lia Dewi Mustika (2016). *Hubungan Dukungan Keluarga Dengan Tingkat Penerimaan Diri Pada Pasien Gagal Ginjal Kronis Yang Menjalani Terapi Hemodialisis Di Rumah Sakit Tk. Ii Dr. Soepraoen Malang*. Sarjana thesis, Universitas Brawijaya.

Siburian, H. P., Pakpahan, J. E. S., Tinggi, S., Kesehatan, I., Tinggi, S., Kesehatan, I., Tengah, J., & Yogyakarta, D. I. (2020). *Dukungan Keluarga Dengan Tingkat Penerimaan Diri Saat Pasien Terapi Hemodialisa Di RSUD Dr . Pirngadi Medan*. Jurnal Keprawatan Flora, 1(1), 94–103.

Suciana, Fitri. (2020). *Korelasi dan Frekuensi Hemodialisa dengan kualitas hidup pada pasien Hemodialisa. Klaten: Motorik Jurnal Kesehatan*.

Sugiyono. (2019). *Metodelogi Penelitian Kuantitatif dan Kualitatif Dan R&D*. Bandung: Afabeta.

Suharyanto, T & Madjid, A. (2013). *Asuhan Keperawatan pada klien dengan Gangguan Sistem Perkemihan*. Jakarta: Rineka Cipta

Togatorop, Y. I., & Arto, N. S. (2022). *Gambaran Indeks Eritrosit pada Pasien Penyakit Ginjal Kronik yang Menjalani Hemodialisis di RSUP H. Adam Malik Medan*. Jurnal Kesehatan Andalas, 11(1),45. https://doi.org/10.25077/jka.v11i1.1899

Yudhawati, N. (2019). *Analisis Faktor Yang Berhubungan Dengan Penerimaan Diri Pasien Gagal Ginjal Kronis Yang Menjalani Hemodialisis Di Rumah Sakit Tk. II dr. Soepraoen Malang*.