DESCRIPTION OF FAMILY SUPPORT FOR CHRONIC KIDNEY FAILURE PATIENTS AT HAJI ADAM MALIK GENERAL HOSPITAL MEDAN

Lindawati Farida Tampubolon¹⁾ , Friska Sembiring²⁾ , Julia Ringgas Fransiska Siregar³⁾
Nursing Study Program^{1,2,3)}
STIKes Santa Elisabeth Medan, Indonesia

ABSTRAK

Gagal Ginjal Kronik (GGK) merupakan masalah kesehatan yang sering dijumpai disetiap masyarakat dan menjadi perhatian dunia dan di Indonesia, salah satu yang menjadi presentasi dan jumlahnya terus mengalami peningkatannya dimana terapi ini dilakukan 2-3 kali dalam seminggu. Dukungan keluarga dapat memberikan dampak baik bagi kelangsungan hidup pasien dengan sikap keluarga menerima anggota keluarganya dalam keadaan apapun. Tujuan untuk mengetahui gambaran dukungan keluarga pada pasien gagal ginjal Di RSUP Haji Adam Malik Medan tahun 2023. Penelitian ini menggunakan rancangan deksriptif dengan populasi sebanyak 403 orang. Instrumen yang digunakan adalah kuesioner dukungan keluarga. Teknik pengambilan sample yang digunakan adalah porposive sampling, yang berjumlah 67 sampel. Hasil penelitian menunjukkan bahwa dukungan keluarga terhadap pasien gagal ginjal kronik menjalani hemodialisia di RSUP Haji Adam Malik Medan dikatakan baik sebanyak 57 responden (85,1%), mayoritas berjenis kelamin laki-laki 43 responden (64,2%) dengan lama hemodialisa rata-rata 45,47 bulan dengan sebagian besar responden memiliki pendidikan terakhir SMA yaitu sebanyak 27 responden (40,3%) mayoritas responden memiliki status pernikahan sudah menikah sebanyak 52 responden (77,6%). Kesimpulan dari penelitian ini adalah gambaran dukungan keluarga pada pasien gagal ginjal kronik yang menjalani hemodialisa di RSUP Haji Adam Malik Medan dikatakan dalam kategori baik sebanyak 57 responden (85,1%) dan disarankan agar kunjungan keluarga dapat selalu secara rutin untuk mengunjungi pasien yang menjalani terapi hemodialisa.

Keywords: Dukungan Keluarga; Gambaran; Gagal Ginjal Kronis

ABSTRACT

Chronic Kidney Failure (CKF) is a common health issue found in every community and has become a global concern, including in Indonesia. One aspect of this issue is the increasing number of cases requiring therapy 2-3 times a week. Family support can positively impact the survival of patients, with families accepting their members in any condition. The aim of this study is to understand the overview of family support for chronic kidney failure patients at Haji Adam Malik General Hospital, Medan, in 2023. This research uses a descriptive design with a population of 403 individuals. The instrument used is a family support questionnaire. The sampling technique used is purposive sampling, totaling 67 samples. The results showed that family support for chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, is considered good by 57 respondents (85.1%). The majority of respondents are male, with 43 respondents (64.2%), and the average duration of hemodialysis is 45.47 months. Most respondents have a high school education, with 27 respondents (40.3%), and the majority are married, with 52 respondents (77.6%). The conclusion of this study is that the overview of family support for chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, is considered good by 57 respondents (85.1%). It is recommended that family visits to patients undergoing hemodialysis therapy be conducted regularly.

Keywords: Family Support; Overview; Chronic Kidney Failure

Correspondence email: juliasiregar038@gmail.com

INTRODUCTION

Chronic Kidney Failure (CKF) is a health issue commonly encountered in every community and has attracted global attention, including in Indonesia. One aspect of this issue is the increasing prevalence and rising number of cases (Marianna & Astutik, 2018).

Chronic kidney failure is a non-communicable disease, but it frequently occurs and its incidence continues to rise. Some complications experienced by chronic kidney failure patients include hypertension, anemia, blood acidity levels exceeding normal limits (acidosis), and an increased amount of protein in a person's urine (albuminuria) (Fima L.F.G. Langi., 2019). Chronic kidney failure increases with age and is associated with a history of diabetes mellitus and hypertension. Approximately 1 in 10 people worldwide experience chronic kidney failure at some stage (Gliselda, 2021).

Perhimpunan Nefrologi Indonesia (PERNEFRI) indicates that 12.5%, or 25 million of the population of Indonesia, have experienced a decline in kidney function. CKF involves progressive and irreversible damage to the kidneys, which can result from various diseases (Saragih *et al.*, 2022). Based on data from the Ministry of Health of the Republic of Indonesia in 2019, the incidence of chronic kidney failure in Indonesia reached 0.38% of the total population, with a total of 2,303,354 cases, which increased to 2,372,697 cases in 2019 (Marwanti *et al.*, 2021).

Every year, the number of CKF patients in Indonesia increases, even causing deaths, which places it among the top 12 highest ranks (Marwanti *et al.*, 2021). CKF patients in North Sumatra have ranked third as the province with the highest number of chronic kidney failure patients, following West Java and East Java. In North Sumatra, CKF patients reach 0.33% (45,792) among those aged 15 years and older. Among them, the number of males is around 355,726, while females number around 358,057 (Riskesdas, 2019).

CKF patients will undergo a series of treatment procedures, medication administration, fluid restriction management, and dietary regulation that are crucial for the success of therapy and for preventing complications from occurring (Isnaini *et al.*, 2021). One of the treatments for CKF is renal replacement therapy or hemodialysis, which aims to remove waste products from the breakdown of nutrients and toxic substances by circulating blood through a dialyzer machine to prevent death or prolong the lives of chronic kidney failure patients. Hemodialysis does not cure the patient but helps sustain their life, providing the energy needed by the body that has been lost (Simandalahi *et al.*, 2019). Kidney failure patients have faced significant changes as they must adapt to hemodialysis therapy, the complications that arise, changes in their roles within the family, and adjustments to their lifestyle, all related to CKF and hemodialysis therapy.

Another factor that influences the life of chronic kidney failure patients undergoing hemodialysis is family support (Kusniawan, 2018). With encouragement and support from their loved ones, particularly their family, CKF patients can modify their behavior in adhering to the planned integrated management. Initial surveys conducted at Haji Adam Malik General Hospital in Medan indicate that the incidence of CKF totaled 403 patients within the span of 2022 (Medical Records of Haji Adam Malik General Hospital, Medan).

Based on the background description above, the researcher is interested in conducting a study titled Overview of Family Support for Chronic Kidney Failure Patients at Haji Adam Malik General Hospital Medan.

RESEARCH METHODS

This study employs a descriptive research design. Descriptive research design is used to observe and describe phenomena occurring within a specific population (Syapitri et al., 2021). This design is used to illustrate The family support for CKF patients at Haji Adam Malik General Hospital, Medan, in 2023.

The population in this study consists of patients experiencing chronic kidney failure at Haji Adam Malik General Hospital, Medan. In 2022, the number of CKF patients at Haji Adam Malik General Hospital, Medan, was 403 (Medical Records Data of Haji Adam Malik General Hospital, Medan, 2022).

The sampling technique used in this study is non-probability sampling, specifically purposive sampling. The inclusion criteria or this study are CKF patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, who have the ability to communicate well and fill out the questionnaire, with a hemodialysis frequency of 2-3 times a week. The exclusion criteria are patients aged 65 years and older.

The variable in this study is family support. The instrument used in this study is a family support questionnaire adopted from Rosyidah (2017) *Likert scale* was invented by Rensis Likert in 1932 to measure attitudes. The family support questionnaire consists of 20 questions using a *Likert scale*. The questionnaire is structured with four category options: always = 4, often = 3, sometimes = 2, never = 1. The total score of the family support questionnaire is 20, and it will be grouped into three categories: good, sufficient, and insufficient.

The researcher conducted the study in the hemodialysis room of Haji Adam Malik General Hospital, Medan. The research was carried out from March to April 2023. Data collection techniques in this research begin with distributing questionnaires to the subjects. Data collection for the family support variable used a questionnaire based on Friedman's theory with indicators: instrumental support, information, appreciation, and emotional support.

Validity and reliability tests were not conducted in this study because the questionnaire used was adopted from a previous researcher (Sriyati, 2019) with the same characteristics of respondents, who had already tested its validity and reliability. The researcher used a measuring tool in the form of a questionnaire consisting of 20 questions. Based on the calculations, the results of the 20 questions for family support were found to be valid for all 20 questions. The questions were declared valid because the calculated r (0.935) and reliable with a Cronbach's Alpha value (0.935). Therefore, the 20-question family support questionnaire is declared valid and reliable.

The data analysis in this study is univariate analysis. Univariate analysis describes or characterizes each research variable.

This study has also been ethically reviewed by the Health Research Ethics Commission of Santa Elisabeth Medan with the letter number: No: 049/KEPK-SE/PE-DT/III/2023.

RESULTS AND DISCUSSION

Result

The results of this study aim to understand the family support dynamics based on the characteristics of chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, with a total of 67 respondents. The researcher created tables and explanations regarding the frequency distribution of characteristics related to undergoing hemodialysis. The data were obtained from primary sources and processed from questionnaires filled out by all respondents.

Table 1. Characteristics of Chronic Kidney Failure Patients Respondents (n=67)

	Mean	SD	Minin	num-Maximum	95% CI			
Age	44,48	13,135	16-64		41,27-47,68			
Ge	Gender		F		%			
N	ſale		43	6	64,2			
Fe		24	3	35,8				
Edu	cation		F		%			
Elementar	y School		8		11,9			
Junior Hig	h School		8		11,9			
Senior Hig	h School		27		40,3			
College		24		35,8				
Donation	Mean	SD	Minimum-maximum		95% CI			
Duration HD	45,47]	43,183		0-156	34,75-55,89			
M	Marital Status			F	%			
	Married			52	77,6			
Sing	le/Unmarri	ed		12	17,9			
Wid	ow/Widow	rer		3	4,5			
Family Accompaniment				F	%			
Spouse				19	28,4			
Children				18	26,9			
]	Relatives			5	7,5			
	None			25	37,3			

Table 1 shows that out of 67 respondents, the average age of chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, is 44.48 years, with a standard deviation of 13.135. The youngest patient is 16 years old, and the oldest is 64 years old. The results of the 95% confidence interval analysis indicate that the average age of respondents falls within the range of 41.27-47.68 years. The characteristics based on gender show that out of 67 respondents, the majority are male, totaling 64.2%. The characteristics based on education indicate that out of 67 respondents, the majority have a high school education, totaling 40.3%, while the minority have elementary and middle school education, each comprising 11.9%.

The characteristics based on the duration of hemodialysis show that out of 67 respondents, the average duration of hemodialysis is 45.47 months, with a standard deviation of 43.183. The longest duration of hemodialysis is 156 months. The results of the 95% confidence interval analysis indicate that the average duration is within the range of 34.75-55.89 months.

The characteristics based on marital status show that out of 67 respondents, the majority are married, totaling 77.6%, and only 4.5% are widowed or divorced.

The characteristics based on family accompaniment show that out of 67 respondents, the majority are not accompanied during hemodialysis, totaling 37.3%. Meanwhile, 7.5% of respondents are accompanied by close relatives.

Table 2. Overview of Family Support for Chronic Kidney Failure Patients Undergoing Hemodialysis at Haji Adam Malik General Hospital Medan

Family Support	F	%
Good	57	85
Sufficient	7	10,4
Poor	4	4,5

Table 2 shows that out of 67 respondents, the majority of patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, have good family support, totaling 85%. Only 4.5% of respondents have less family support.

Table 3. Overview of Family Support Based on Gender of Chronic Kidney Failure Patients at Haii Adam Malik General Hospital Medan (n=67)

Truji riddin Wallik General 1105pital Wedali (ii 67)									
		Age							
		Male		Female	e	Total			
		F	%	F	%	F	%		
	Good	37	86,0	20	83,3	57	85,1		
Family Support	Sufficient	5	11,6	2	8,3	7	10,4		
	Poor	1	2,3	2	8,3	3	4,5		
Total		43	100	24	100	67	100		

Table 3 shows that the majority of respondents with good family support are male, totaling 37 people (86.0%), and female respondents total 20 people (83.3%). In contrast, there is 1 male respondent (2.3%) and 2 female respondents (8.3%) with less family support.

Table 4. Overview of Family Support Based on Marital Status of Chronic Kidney Failure Patients at Haji Adam Malik General Hospital Medan (n=67)

at Itaji Itaani Wank General Hoopital Weath (ii 67)										
Marital Status										
		Married		Single/Unm arried		Widow/ Widower		Total		
		F	%	F	%	F	%	F	%	
Family	Good	45	78,9	10	17,5	2	3,5	57	100	
Support	Sufficient	5	71,4	1	14,3	1	14,3	7	100	
	Poor	2	66,7	1	33,3	0	0,0	3	100	

Total	52	77,6	12	17,9	3	4,5	67	100

Table 4 shows that the majority of respondents with good family support are married, totaling 45 people (78.9%), while respondents with less family support and married status total 2 people (66.7%).

Discussion

According to researchers, these results were obtained because chronic kidney failure can occur at any age, in both males and females, depending on the cause. As age increases, kidney function can also decline, and physiological changes (hormonal) can occur, especially if the lifestyle during young adulthood is not healthy. This shows that at any age range can experience health problems so support from the family is needed for how to control and maintain a good lifestyle so as to avoid kidney failure.

According to researchers, these results were obtained because both males and females have the same risk of developing CKF, but males tend to have a higher risk due to lifestyle habits such as smoking and alcohol consumption. These habits can cause the kidneys to work harder, as the toxins from cigarette smoke can slow blood flow to the kidneys and worsen pre-existing kidney conditions.

According to researchers, these results were obtained because higher education significantly influences respondents' behavior in receiving information, acquiring knowledge, and addressing the problems they face. Although most respondents only have a high school education, both respondents and their families can demonstrate behaviors that positively impact their health and manage the challenges they encounter during the hemodialysis process. This includes making appropriate decisions and maintaining compliance with hemodialysis therapy.

The researchers indicate that the length of time patients undergo hemodialysis for chronic kidney failure greatly affects their physical and psychological condition. Initially, patients may feel fear when starting hemodialysis, which is a common emotional response. However, over time, patients can continue to follow hemodialysis therapy as they adapt to the environment, remain motivated, and receive health education about the importance of undergoing hemodialysis therapy.

According to the researcher's, these results were obtained because the marital status of chronic kidney failure patients can serve as a supportive aspect between spouses. Support from a partner can strengthen the respondent's foundation for daily life and hemodialysis.

The researcher's indicate that family support comes from spouses who fulfill their roles well. Therefore, the majority of male patients receive higher family support because their families not only accompany them during hemodialysis but also pay attention to their activities and needs in a comfortable home environment while providing love and care during their illness. While some families accompany patients throughout the hemodialysis therapy, others may only drop off the patient due to other commitments, making it difficult to accompany them during the entire therapy process.

Family support aims to provide impulses, intentions, and encouragement so that patients undergoing hemodialysis do not feel pessimistic and have confidence in their ability to face their

problems. Family support can help the sick family member reduce depression and stressors, bringing peace of mind due to the family's support.

This study aligns with Inayati's (2021) research, which found that better family support improves the quality of life for chronic kidney failure patients undergoing hemodialysis. Therefore, supportive actions from family are crucial for chronic kidney failure patients undergoing hemodialysis therapy. Supportive actions aim to provide motivation, encouragement, and assurance so that the patients do not feel hopeless and have confidence and self-assurance that they can overcome the problems they face.

The encouragement and support provided by family members can reduce anxiety levels and also influence the level of support received by the patient. This family support affects the patient's positive psychology and encourages positive behaviors that support intervention programs for hemodialysis patients (Isnaini *et al.*, 2021).

CONCLUSION

The study results indicate that 37 respondents (86.0%) receive good family support, with 20 female respondents (83.3%). Meanwhile, there is 1 male respondent (2.3%) and 2 female respondents (8.3%) who receive less family support. The study results show that the majority of respondents with good family support are married, totaling 45 respondents (78.9%). In contrast, respondents with less family support and married status total 2 respondents (66.7%). The study results indicate that family support for chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital, Medan, is considered good for 57 respondents (85.1%).

SUGGESTIONS

The results of this study are expected to encourage patients to continue undergoing hemodialysis therapy and to always adhere to the restrictions and recommendations given by nurses and doctors. Families are expected to always accompany patients during hemodialysis sessions and to continually provide strength and encouragement to overcome the fear of undergoing hemodialysis therapy. This study can also serve as a reference for future researchers investigating family support.

REFERENCES

- Agoes, A., Agoes, A., & Agoes, A. (2010). *Penyakit Diusia Tua* (F. D. & W. K. Nirmala (Ed.); 1st ed.). Penerbit Buku Kedokteran EGC.
- Aisara, S., Syaiful, A., & Yanni, M. (2015). Gambaran Klinis Penderita Penyakit Ginjal Kronik yang Menjalani Hemodialisis di RSUP Dr. M. Djamil Padang Sitifa. *Jurnal Kesehatan Andalas*. 2018, 7(1), 42–50. http://jurnal.fk.unand.ac.id
- Akalili, H., Andhini, D., & Ningsih, N. (2020). Gambaran dukungan keluarga terhadap perawatan paliatif pada pasien yang menjalani hemodialisis di rsmh palembang. *Jurnal Kesehatan Saelmakers PERDANA*, 3, 327–333. http://ojs.ukmc.ac.id/index.php/JOH%0A
- Ammirati, A. L. (2020). Chronic Kidney Disease. *REVIEW ARTICLE*, 66(Suppl 1). https://doi.org/http://dx.doi.org/10.1590/1806-9282.66.S1.3
- Ariyanto, A., Hadisaputro, S., Lestariningsih, L., & Adi, M. S. (2018). Beberapa Faktor Risiko Kejadian Penyakit Ginjal Kronik (PGK) Stadium V pada Kelompok Usia Kurang dari 50 Tahun (Studi di RSUD dr.H.Soewondo Kendal dan RSUD dr.Adhyatma, MPH Semarang). *Jurnal Epidemiologi Kesehatan Komunitas*, 3(1), 1. https://doi.org/10.14710/jekk.v3i1.3099

- Cahyani, A. A. E., Prasetya, D., Abadi, M. F., & Prihatiningsih, D. (2022). GAMBARAN DIAGNOSIS PASIEN PRA-HEMODIALISA DI RSUD WANGAYA TAHUN 2020-2021. *Jurnal Ilmiah Hospitality 661*, 11(1), 661–666.
- Chronic Kidney Disease (CKD) Management in Primary Care (4th ed.). (2020).
- Fima L.F.G. Langi., W. P. J. K. T. C. M. W. (2019). Kualitas Hidup Pasien Hemodialisis Di Unit Hemodialisis Rumah Sakit Umum Pusat. Dr. R.D. Kandau Manado. *Kesmas*, 8(7), 127–136. file:///C:/Users/USER/Downloads/26562-54407-1-SM.pdf
- Gliselda, V. K. (2021). Diagnosis dan Manajemen Penyakit Ginjal Kronis (PGK). *Jurnal Medika Hutama*, 2(04 Juli), 1136–1138.
- Handayani, & Siska, A. (2011). HUBUNGAN DUKUNGAN KELUARGA DENGAN KUALITAS HIDUP PASIEN PENYAKIT GINJAL KRONIK YANG MENJALANI TERAPI HEMODIALISA DI RSUP SANGLAH DENPASAR.
- Hasanuddin, F. (2022). Adekuasi Hemodialisa Pasien Gagal Ginjal Kronik (M. Nasrudin (Ed.); 1st ed.). NEM.
- Idzharrusman, M., & Budhiana, J. (2022). HUBUNGAN DUKUNGAN KELUARGA DENGAN KUALITAS HIDUP PASIEN GAGAL GINJAL KRONIK RSUD SEKARWANGI Muhammad. *Jurnal Keperawatan BSI, Vol. 10 No. 1 April* 2022, 10(1), 61–69.
- Inayati, A., Hasanah, U., & Maryuni, S. (2021). Dukungan Keluarga Dengan Kualitas Hidup Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisa Di Rsud Ahmad Yani Metro. *Jurnal Wacana Kesehatan*, 5(2), 588. https://doi.org/10.52822/jwk.v5i2.153
- Isnaini, N., Sukma, R., & Dwi, H. (2021). The Influence of Family Support on Self Efficacy of Chronic Kidney Disease. *Advances in Health Sciences Research*, 33(ICoSIHSN 2020), 484–487. http://creativecommons.org/licenses/by-nc/4.0/
- Joachim Jankowski, P., Jürgen Floege, M., Danilo Fliser, M., Michael Böhm, M., & Nikolaus Marx, M. (2021). Cardiovascular Disease in Chronic. *Circulation Is Published on Behalf of the American Heart Association, Inc.*, 1157–1172. https://doi.org/10.1161/CIRCULATIONAHA.120.050686
- Kusniawati. (2020). HUBUNGAN KEPATUHAN MENJALANI HEMODIALISIS DAN DUKUNGAN KELUARGA DENGAN KUALITAS HIDUP PASIEN GAGAL GINJAL KRONIK DI RUANG HEMODIALISA RUMAH SAKIT UMUM KABUPATEN TANGERANG. Suparyanto Dan Rosad (2015, 5(3), 248–253.
- Laporan Provinsi Sumatera Utara Riskesdas. (2018). Badan Penelitian Dan Pengembangan Kesehatan.
- Liyanage, T., Toyama, T., Hockham, C., Ninomiya, T., Perkovic, V., Woodward, M., Fukagawa, M., Matsushita, K., Praditpornsilpa, K., Hooi, L. S., Iseki, K., Lin, M. Y., Stirnadel-Farrant, H. A., Jha, V., & Jun, M. (2022). Prevalence of chronic kidney disease in Asia: A systematic review and analysis. *BMJ Global Health*, 7(1), 1–9. https://doi.org/10.1136/bmjgh-2021-007525
- Marianna, S., & Astutik, S. (2018). eISSN: 2622-0997. *Indonesian Journal of Nursing Sciences and Practice*, 41–52.
- Marwanti, Islamiati, S. A., & Zukhr, S. (2021). Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal. *Peran Mikronutrisi Sebagai Upaya Pencegahan Covid-19, 11 No 1*(Januari), 1–8.
- Morgan E. Grams, MD, P. (2020). Chronic Kidney Disease Diagnosis and Management. *JAMA*, 322(May 2019), 1294–1304. https://doi.org/10.1001/jama.2019.14745.Chronic
- Muhammad, A. (2012). Serba-Serbi Gagal Ginjal (M. Ulfah (Ed.); 1st ed.).
- Nababan, T. (2021). PENGARUH MUSIK INSTRUMENTAL TERHADAP KUALITAS HIDUP MENJALANI HEMODIALISA. *Jurnal Keperawatan Priority*, 4(1), 125–134.
- Notoadmojo, S. (2010). Metodologi Penelitian (1st ed.). Penerbit Rineka Cipta.
- Nursalam. (2013). Metodologi Penelitian Ilmu Keperawatan (A. Suslia (Ed.); 3rd ed.). Penerbit Salemba Medika.

- Purwati, S. (2018). Analisa Faktor Risiko Penyebab Kejadian Penyakit Gagal Ginjal Kronik (GGK) Di Ruang Hemodialisa RS Dr. Moewardi. (*Jkg*) *Jurnal Keperawatan Global*, 3(1), 15–27. https://doi.org/10.37341/jkg.v3i1.44
- Putri, E., Alini, & Indrawati. (2020). HUBUNGAN DUKUNGAN KELUARGA DAN KEBUTUHAN SPIRITUAL DENGAN TINGKAT KECEMASAN PASIEN GAGAL GINJAL KRONIK DALAM MENJALANI TERAPI HEMODIALISIS DI RSUD BANGKINANG. *Jurnal Ners*, 4(2), 47–55. http://journal.universitaspahlawan.ac.id/index.php/ners
- Rachmawati, N., Wahyuni, D., & Idriansari, A. (2019). Hubungan dukungan keluarga terhadap kepatuhan diet asupan cairan pada pasien gagal ginjal kronik yang menjalani hemodialisis 1. *Jurnal Keperawatan Sriwijaya*, 6(2355), 50–58.
- Rahmi, M., Anggriani, Y., & Sarnianto, P. (2021). ANALISIS FAKTOR RISIKO PADA PASIEN HEMODIALISIS DI RS-X Di JAKARTA. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 5(2), 1073–1083. https://doi.org/10.31004/prepotif.v5i2.2392
- ROSYIDAH, K. (2017). HUBUNGAN DUKUNGAN KELUARGA DENGAN TINGKAT PENERIMAAN DIRI PASIEN GAGAL GINJAL KRONIK DI UNIT HEMODIALISA RSUD Dr. SAYIDIMAN MAGETAN (Doctoral dissertation, STIKES Bhakti Husada Mulia)
- Salamung, N. (2021). KEPERAWATAN KELUARGA (FAMILY NURSING) (Risnawati (Ed.); 1st ed.).
- Saragih, N. P., Sianipar, T. I., Naibaho, R. W., & Halawa, S. D. (2022). Jurnal Penelitian Perawat Profesional. *Jurnal Penelitian Perawat Profesional*, 3(1), 153–158. http://jurnal.globalhealthsciencegroup.com/index.php/JPPP
- Simandalahi, T., Siska, S., & Pardede, R. (2019). Dukungan Keluarga Dan Lama Dialisis Sebagai Variabel Yang Berhubungan Dengan Kepatuhan Pembatasan Cairan Pasien Gagal Ginjal Kronik. NERS Jurnal Keperawatan, 15(1), 25. https://doi.org/10.25077/njk.15.1.25-35.2019
- Siregar, C. T. (2020). *Manajemen Komplikasi Pasien Hemodialisa* (reni A. Reriga (Ed.); 1st ed.). CV BUDI UTAMA. https://play.google.com/books/reader?id=MjT4DwAAQBAJ&pg=GBS.PR3&hl=id
- Sitanggang, A. E. (2020). HUBUNGAN DUKUNGAN KELUARGA PADA PASIEN GANGGUAN GAGAL GINJAL KRONIK DENGAN PELAKSANAAN HEMODIALISA DI RSUD DR. PIRNGADI KOTA MEDAN. *JURNAL STINDO PROFESIONAL*, VI(4), 67–86.
- Sulistini., R., Hana, D., & Azinora, V. A. (2019). Kualitas Hidup Pasien Yang Menjalani Hemodialisis Quality of Life Hemodialysis Patients. *In Proceeding Seminar Nasional Keperawatan, Vol. 4, No,* 186–192. http://www.conference.unsri.ac.id/index.php/SNK/article/view/1212/609
- Syafitri, Y., Duha, A., Meylani, Putri, A., Sephanie, B., Bako, M. K. A., & Nababan, T. (2022). PENGARUH PERILAKU CARING PERAWAT TERHADAP PENINGKATAN KUALITAS HIDUP PASIEN GAGAL GINJAL KRONIK DI RUANG HEMODIALISA RUMAH SAKIT ROYAL PRIMA MEDAN. *MALAHAYATI NURSING JOURNAL*, 4(2655–2728), 2399–2409. https://doi.org/https://doi.org/10.33024/mnj.v4i9.6935
- Syahputra, E., Laoli, E. K., Alyah, J., HSB, E. Y. B., Tumorang, E. Y. E. br., & Nababan, T. (2022). Jurnal Penelitian Perawat Profesional. *Jurnal Penelitian Perawat Profesional*, 4, 793–800.
- Syapitri, H., Amila, & Aritonang, J. (2021). Buku Ajar Metodologi Penelitian Kesehatan (A. H. Nadana (Ed.); 1st ed.).