

PATIENT'S COPING OF ANXIETY LEVEL OF DIALYSIS PATIENTS

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ABSTRACT

This study aims to determine the effect of coping with anxiety levels. The research method used is descriptive correlative using Cross-Sectional. The results showed moderate anxiety levels in the hemodialysis installation at Advent Bandung Hospital with 86 people (96.63%). In conclusion, coping mechanisms influence the patient's anxiety levels.

Keywords: Anxiety, Dialysis, Patient Coping

INTRODUCTION

Infectious diseases and diseases that are not a problem for every community both globally, nationally, regionally and locally. Every disease experienced by society will always cause anxiety for every sufferer. Excessive anxiety can have a negative impact on everyone who is experiencing it. In Indonesia there are seven non-communicable diseases that most people suffer from in 2018, including hypertension (34.1%), diabetes (8.5%), stroke (10.9%), joints (7.3%), chronic kidney failure (3.8%), asthma (2.4%), cancer (1.8%) (Kompas, 2020).

According to (Siloam Hospital, 2023) in Indonesia there are 5 types of diseases that cause the highest death rate in Indonesia, one of which is hypertension. Hypertension rose from 25.8% in 2013 to 34.1% in 2018. This disease kills around 8 million people every year. Diabetes mellitus, this disease increased from 6.9% to 8.5% per year in 2018. This disease shortens life expectancy by 5 to 10 years. In 2018, stroke increased from 7% to 10.9%.

Chronic kidney failure in 2013, prevalence data shows chronic kidney failure by 2% in that year but increased to 3.8% in 2018. Apart from an unhealthy lifestyle, chronic kidney failure is also caused by diabetes, high blood pressure and obesity. Cancer of this disease increased from 1.4% to 1.8% in 2018. Smoking is the main risk factor that causes 20% of deaths from cancer and 70% of deaths from lung cancer worldwide.

Chronic kidney disease is a condition in which the kidneys fail slowly over three months. Renal impairment or glomerular filtration rate <60 mL/min/1.73 for at least 3 months and is considered the end stage when the GFR reaches <15 mL/min/1.73 with or without dialysis (Idzharrusman & Budhiana, 2022).

One of the treatments for patients with kidney failure is to undergo a hemodialysis process. Hemodialysis is a therapy that functions as a kidney replacement. Therefore, good knowledge about hemodialysis is needed to prevent fatal events for health. As a result of this hemodialysis which can cause patients undergoing therapy to experience anxiety (Hizkia et al., 2022).

According to Hospitals (2023) Hemodialysis treatment takes about 4 hours per treatment session. And this process must be done regularly, at least two or three sessions a week. You can do this at a hospital or dialysis clinic.

According to Lolowang et al., (2020); Asih et al., (2022) Hemodialysis treatment can cause pain, sleep disturbances, depression, decreased or increased blood pressure and abdominal pain, all of which affect quality of life. In addition, patients must also limit their diet and fluids, which limits dependence on health services, family, changes in social life and decreased income, which affects the quality of life of patients to the reduction of the quality of life of those affected, both in terms of physical, psychological, social relations

Based on Manalu's research results (2020), it was found that most of the respondents or 107 people (84.3%) received good family support, and 20 respondents received sufficient family support. While 126 respondents (99.2%) had a good quality of life and 1 respondent (0.8%) had a bad quality of life. From the results of this study it can be concluded that family support is needed by patients who are being treated to maintain a good quality of life for hemodialysis patients.

Signs and symptoms of anxiety experienced by patients, namely, patients have no appetite, diarrhea / constipation, anxiety, sweating, shaking hands, headaches and difficulty sleeping, fatigue, difficulty thinking, forgetfulness, feeling worthless, feeling insecure, feeling inadequate happy, sad, often crying, difficulty enjoying daily activities, loss of interest, arousal, increased pulse and blood pressure, unable to take in outside information, focuses on what is of concern, fear of the unspecified/obvious, disrupted daily work , unable to carry out daily activities, hand-squeezing movements, excessive and rapid speech. People who live in an environment full of love, attention and motivation have a much better health condition than those who do not have that environment.

New patients who are treated at the Bandung Adventist Hospital, where patients are required to do dialysis, result in these patients who are new and are still being treated for several months experiencing anxiety where the anxiety that is felt comes from the patient's own thoughts, such as anxiety about how to pay for treatment. , expensive dialysis costs, worried that they would become a burden on the family, and worried about the small percentage of healing they would receive. When the patient experiences anxiety while undergoing treatment, the patient t They experience problems maintaining their weight, find it difficult to control weight gain, experience problems with blood pressure due to excessive anxiety, cramps, nausea and vomiting.

Coping mechanisms are one of the ways used to deal with stressors that result in excessive anxiety in a person. Whatever method is used, it can be in the form of trying to accept the situation that is being experienced, adjusting to circumstances and the environment, and responding to the situation at hand, efforts to overcome internal and external demands (Pratama et al., 2020). The coping used by a person in meeting their needs depends on how the patient handles the situation he is experiencing.

Based on the results of a study conducted by Pratama et al., (2020) it was found that the majority of respondents to chronic kidney failure patients undergoing hemodialysis therapy in the hemodialysis unit at Bandung City General Hospital in 2018 used adaptive coping mechanisms as many as 38 people (74.5%), this study used the total sampling is as many as 51 respondents of chronic kidney failure patients undergoing hemodialysis therapy.

The results of Amaludin et al., (2023) concluded that there was a relationship between coping mechanisms and the level of depression in patients who were advised for hemodialysis. Constant stress and poor coping skills contribute to the signs and symptoms of depression. Research by Siahaan et al., (2020) found that 57.1% of respondents had a bad coping score and 42.9% had a good coping score. The coping mechanism used by respondents is a problem-focused coping mechanism with a mean value of 5.02. So the focus of this study was to determine the effect of coping with anxiety levels in dialysis patients, in addition, similar studies had never been conducted at the research site.

RESEARCH METHODS

This type of research is descriptive correlative with a cross-sectional design. The location of this research was carried out at the Bandung Adventist Hospital Hemodialysis installation. This research starts from September 2022 to April 2023, with a total period of 7 months. The data collection period was carried out in the second week of February to the second week of March in 2023. The method of taking research samples was carried out by purposive sampling.

In this study, the number of research samples was 89 people from 110 populations. As many as 21 people were not willing to be the research sample for the reasons 1) they were not willing to fill out the form. 2) don't understand the charging process. 3) the patient does not have an accompanying family. The type of data used in this study is the primary data type. The questionnaire used to determine patient coping is The Ways of Coping, which consists of several questions with answers consisting of a Likert scale of 4 with a Likert scale: Strongly Disagree (STS) = 1, Disagree (TS) = 2, Agree (S) = 3, Strongly Agree (SS) = 4.

Questionnaire data collection technique uses a demographic questionnaire of respondents which includes name, age (age category according to the Ministry of Health), gender, education, operating status, type of operation. Meanwhile, to determine the level of anxiety of respondents using the HARS scale (Hamilton Anxiety Rating Scale). Data collection was carried out by giving an open questionnaire, namely The Ways of Coping, and the HARS (Hamilton Anxiety Rating Scale) consisting of several questions to measure the level of anxiety consisting of several questions consisting of 4 points; Not feeling (TM) = 4, Feeling a little (SD) = 3, Feeling enough (C) = 2, Feeling very much (S) = 1.

Data analysis in this study was carried out computerized using univariate and bivariate analysis using the Pearson Statistical Test. All data is processed using the SPSS application. Univariate analysis aims to explain or describe the characteristics of each research variable, while bivariate analysis is used to analyze the relationship between coping variables and anxiety variables.

Scores and items 1-40 with results if a smaller score is equal to 40 then there is no anxiety, a score of 40-80 means the level of anxiety is mild, a smaller score is equal to 80-120 then the level of anxiety is moderate, a score greater than 120 then the level the anxiety is heavy.

RESEARCH RESULT

Table. 1
Characteristics of Respondents Based on Respondent's Age

| No | Age | Frequency | Percent |
|-------|-------------------|-----------|-----------|
| Valid | | 2 | 02.02 |
| 1 | > 65 Years Old | 19 | 21.03 |
| 2 | >61 Years Old | 1 | 01.01 |
| 3 | 17 - 25 Years Old | 3 | 03.04 |
| 4 | 26 - 35 Years Old | 10 | 11.02 |
| 5 | 33-38 Years Old | 1 | 01.01 |
| 6 | 36 - 45 Years Old | 17 | 19.01 |
| 7 | 46 - 55 Years Old | 24 | 27.00.00 |
| 8 | 56 - 65 Years Old | 12 | 13.05 |
| Total | | 89 | 100.00.00 |

Based on the research results from table 1 shows that out of 89 respondents there were 24 respondents aged 46-55 years (27%), 19 respondents aged > 65 years (21.03%), 17 respondents aged 36-45 years (19%), and there are 2 (02.02%) valid data.

Characteristics of Respondents Based on Gender

Table. 2
Characteristics of Respondents Based on Gender

| | | Frequency | Percent |
|-------|-------|-----------|---------|
| Valid | | 1 | 1.1 |
| 1 | Men | 49 | 55.1 |
| 2 | Women | 39 | 43.8 |
| Total | | 89 | 100.0 |

Based on the research results from table 2 shows that out of 89 respondents there were 49 male respondents (55.1%), 39 female respondents (43.8%), and there was 1 (1.1%) valid data .

Characteristics of Respondents Based on Old Types of HD

Table. 3
Characteristics of Respondents Based on Old Types of HD

| | | Frequency | Percent |
|-------|-----------|-----------|---------|
| Valid | | 3 | 3.4 |
| 1 | <= 1 Year | 22 | 24.7 |
| 2 | >=5 Year | 27 | 30.3 |
| 3 | 2 Year | 17 | 19.1 |
| 4 | 3 Year | 12 | 13.5 |
| 5 | 4 Year | 8 | 9.0 |
| Total | | 89 | 100.0 |

Based on the research results from table 3 it shows that of the 89 respondents there were 27 respondents (30.3%) who had characteristics of HD \geq 5 years. Of the 22 respondents (24.7%) had the characteristics of HD \leq 1 year, and there were 3 (3.4%) valid data.

Descriptive Analysis

Table. 4
Descriptive Analysis Results

| | N | Min | Max | Mean | Std. Deviation |
|-----------------------------|----|-----|-----|-----------|----------------|
| Total Coping (X1) | 89 | 163 | 233 | 188.37.00 | 12.338 |
| total Anxiety (Y1) | 89 | 65 | 133 | 104.56.00 | 12.230 |
| Valid N (<i>listwise</i>) | 89 | | | | |

Based on table 4, the results of the calculation of descriptive statistics show that N or the respondent's value for each variable is 89. From 89 samples, the minimum value for X1 (Coping Mechanism) is 163 and the maximum value is 233 while the average value is 188.37. The standard deviation of the X1 variable is 12.338. Variable Y1 (Anxiety) shows a minimum value of 65 and a maximum value of 133 while the average value is 104.56. The standard deviation of the X1 variable is 12.230. From the results above it can be seen that if the standard deviation value is $<$ the mean value, it can be concluded that the more similar the values in the items or data are, the more accurate they are.

Anxiety Level Results

Table. 5
Anxiety Level

| | Frequency | Percent |
|--------------------|-----------|---------|
| Valid | | |
| 1 Not Worried | 0 | 0 |
| 2 Mild Anxiety | 3 | 3.37 |
| 3 Moderate Anxiety | 86 | 96.63 |
| 4 Severe Anxiety | 0 | 0 |
| Total | 89 | 100.0 |

According to table 5 it shows that 86 respondents or almost all (96.63%) of respondents have a moderate level of anxiety.

Pearson Correlations Statistical Test

Table. 6
Pearson Correlations Statistical Test

| | | Koping (X1) | Kecemasan (Y1) |
|--------------------|---------------------|-------------|----------------|
| Total Coping (X1) | Pearson Correlation | 1 | -.353** |
| | Sig. (2-tailed) | | <.001 |
| | N | 89 | 89 |
| Total Anxiety (Y1) | Pearson Correlation | -.353** | 1 |
| | Sig. (2-tailed) | <.001 | |
| | N | 89 | 89 |

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=89

Based on table 6, it was found that the statistical test results of the Pearson correlations obtained a significant number or probability number "r" (-0.353%), and a value of "p" = <0.001. This means that the relationship between coping mechanisms and anxiety is very strong. So if the coping mechanism has a higher value, then the patient's anxiety level will decrease. Correlation values can produce positive (+) and negative (-) numbers. If the resulting correlation number is positive, it means that each variable has a unidirectional relationship. Unidirectional means that if the X variable is large, the Y variable is getting bigger. If it produces a negative number it means the relationship is not unidirectional. Not unidirectional meaning that if the value of variable X is large, variable Y is getting smaller.

DISCUSSION

Univariate Analysis

Based on the results of the study it was found that out of 89 respondents, there were 24 (27.0%) respondents aged 46-55 years, 49 respondents (55.1%) were male, with a duration of HD more than 5 years. 27 respondents (30.3).

The results of this study are in line with the results of a study conducted by (Djaini, 2023) obtained data on some chronic kidney failure patients undergoing hemodialysis at Toto Kabila Hospital aged 46-55 years, namely 12 patients or 37.5%. Age is a factor that affects a person's mild anxiety level. According to Damanik (2020) it was found that the majority of the hemodialysis respondents were > 57 years old, 20 people (64.5%). The older a person is, the process of decreasing the ability to function of the body's organs (regenerative) will occur. This will affect decision making, especially in dealing with chronic kidney failure with hemodialysis therapy (Damanik, 2020).

According to Astutik (2021), he found that out of 34 respondents, 24 (66.7%) respondents were male, this is in line with the research conducted by the author. Meanwhile, according to Indriyati & Herawati (2022) it was found that from the bottom of the 49 respondents, 25 (51.0%) were found to be male. Depending on lifestyle, men have a higher risk of CKD. Smoking and drinking alcohol can stress the kidneys, forcing them to work hard (Iksan et al., 2023).

Based on the results of a study conducted by Djaini (2023) it was found that some chronic kidney failure patients undergoing hemodialysis at Toto Kabila Hospital had undergone hemodialysis for ≤ 2 years, namely 18 patients or 56.3%, while those undergoing hemodialysis < 2 years were 14 patients. or 43.8%. Patients who have recently undergone hemodialysis are still adjusting to hemodialysis therapy, while patients who have been undergoing hemodialysis for > 2 years are used to and adapt to the process of hemodialysis therapy so they can anticipate any problems that may arise.

Bivariate Analysis

Pearson correlations statistical test results obtained a significant number or probability number "r" (-0.353%), and the value of "p" = < 0.001 . Correlation can produce positive (+) and negative (-) numbers. If the resulting correlation number is positive, it means that each variable has a unidirectional relationship. So from the results of the above study, it was found that there was an increasingly non-unidirectional effect between patient coping on the anxiety level of dialysis patients at the Bandung Adventist Hospital hemodialysis installation. The greater the value of the effect of the coping mechanism, the lower the patient's anxiety level in the hemodialysis installation at Advent Bandung Hospital.

Mechanisms greatly influence patient compliance while undergoing the treatment process. Coping can help patients when carrying out treatment, educational programs and psychotherapy aimed at preventing and reducing disease, it is expected that the patient's anxiety level can be reduced (Fatikharizqi et al., 2022)

It is known that the average level of patient anxiety at the hemodialysis installation is at a moderate level with a presentation of 96.63%. With this it is found that H1 is accepted H0 is rejected. The results of the study according to the level of anxiety obtained results (8.3%) not anxious totaling 3 respondents, (41.7%) mild anxiety totaling 15 respondents, (38.9%) moderate anxiety totaling 14 respondents, and (11.1%) severe anxiety totaling 4 respondents. The results of the Spearman rank statistical test obtained a significant number or the number $p = 0.000 < \alpha (0.05)$, so that H1 is accepted.

According to Damanik's research (2020) the research results found that the majority of respondents undergoing hemodialysis experienced anxiety with a moderate level of anxiety, 19 people (61.3%), while the minority of hemodialysis respondents with a severe level of anxiety were 4 people (12.9%). Indriyati & Herawati (2022) Based on the results of the study, it was found that the significance value was 0.001, because the Sig.(2-tailed) value was < 0.05 and this proved that there was a relationship between coping mechanisms and the duration of hemodialysis on the anxiety level of patients undergoing hemodialysis.

CONCLUSION

Based on the results of research that has been conducted by researchers, it can be concluded namely the results of the anxiety level were moderate in the hemodialysis installation at Bandung Adventist Hospital with 86 people (96.63%). These results also show that coping mechanisms have an influence on the anxiety level of patients with chronic kidney failure at the hemodialysis installation at Advent Bandung Hospital.

SUGGESTION

For future researchers who want to do research and get better results, they can improve patient coping so that anxiety levels can be reduced, researchers can also add variables, increase the number of respondents, and can use other research methods or other factors that are considered to be a cause of anxiety in patient

BIBLIOGRAPHY

- Asih, E. Y., Yenny, & Aji, Y. G. (2022). Gambaran Kualitas Hidup Pasien dengan Penyakit Ginjal Kronik yang Menjalani Hemodialisis di Rsau Dr. Esnawan Antariksa. *Jkm : Jurnal Kesehatan Mahardika*, 9(2), 29-36. <https://doi.org/10.54867/jkm.v9i2.123>
- Amaludin, M., Arisandi, D., Nurpratiwi, Akbar, A., Alfikrie, A., Hidayat, U. R., & Hatmayakin, D. (2023). Tingkat Depresi, Ansietas dan Stres Pasien Gagal Ginjal Kronik (GGK) dengan Hemodialisa. *Husada Mahakam: Jurnal Kesehatan*, 13(1), 1-7. <https://husadamahakam.poltekkes-kaltim.ac.id/ojs/index.php/Home/article/view/374>
- Astutik, U. N. (2021). *Faktor-Faktor yang Berhubungan dengan Tingkat Kecemasan pada Pasien Hemodialisa di Rumah Sakit Umum Daerah Sekayu Tahun 2021*. STIK Bina Husada Palembang. <http://rama.binahusada.ac.id:81/id/eprint/532/>
- Damanik, H. (2020). Tingkat Kecemasan Pasien Gagal Ginjal Kronik dalam Menjalani Hemodialisa di Rumah Sakit Imelda Pekerja Indonesia. *Jurnal Ilmiah Keperawatan Imelda*, 6(1), 80-85. <https://doi.org/10.52943/jikeperawatan.v6i1.365>
- Djaini, G. U. (2023). Hubungan Mekanisme Koping dengan Resiliensipada Pasien Gagal Ginjal Kronik yang Menjalani Hemodialisa di Rsud Toto Kabila. *Jurnal Ilmu Kesehatan dan Gizi (JIG)*, 1(2), 127-135. <http://www.prin.or.id/index.php/jig/article/view/976/1051>
- Fatikharizqi, A. F., Hidayanto, T., Avicenna, A., Lestari, D. W., & Novara, T. (2022). Hubungan Mekanisme Koping dengan Kecemasan pada Pasien Cad di Poli Jantung Rsud Banyumas. *Mandala of Health*, 15(2), 102-111. <https://doi.org/10.20884/1.mandala.2022.15.2.6546>
- Hizkia, I., Sitindaon, S. R., & Butar-Butar, E. (2022). *Gambaran Tingkat Kecemasan Pasien Hemodialisa di Rumah Sakit Santa Elisabeth Medan Tahun 2022*. Stikes Santa Elisabeth Medan. <https://repository.stikeselisabethmedan.ac.id/wp-content/uploads/2023/03/Skripsi-Ervina.pdf>
- Hospitals, S. (2023). *Hemodialisis (Hd) - Pengertian, Cara Kerja, dan Manfaat*. <https://Www.Siloamhospitals.Com/Informasi-Siloam/Artikel/Apa-Itu-Hemodialisis>
- Idzharrusman, U., & Budhiana, J. (2022). Hubungan Dukungan Keluarga dengan Kualitas Hidup Pasien Gagal Ginjal Kronik RSUD Sekarwangi. *Jurnal Keperawatan BSI*, 61-69. <https://ejurnal.ars.ac.id/index.php/keperawatan/article/view/768>
- Iksan, R. R., Batubara, S. T., Indrayeni, R., Putri, R. B., & Permatasari, P. (2023). Kemampuan Koping dengan Tingkat Kecemasan Klien Gagal Ginjal Kronik yang Menjalani Hemodialisa. *Mahesa: Malahayati Health Student Journal*, 3(1), 142-152. <http://dx.doi.org/10.33024/mahesa.v3i1.9231>
- Indriyati, I., & Herawati, V. D. (2022). Mekanisme Koping dan Lama Hemodialisa terhadap Tingkat Kecemasan pada Pasien Gagal Ginjal Kronik yang Menjalani Hemodialisa. *E-Proceeding 2nd Senriabdi 2022*, 31-39. <https://jurnal.usahid solo.ac.id/index.php/SENRIABDI/article/view/1138>

- Kompas. (2020). *5 Penyakit Tidak Menular yang Paling Banyak Diderita Orang Indonesia*. Retrieved Des 5, 2022, From Shorturl.At/Jmuwz
- Kusyati, E. D. (2018). *Hubungan antara Mekanisme Koping Dengan Tingkat Kecemasan Pasien Gagal Ginjal Kronik yang Menjalani Hemodialisis di Rsud Wates*. Yogyakarta. <http://repository.unjaya.ac.id/21/>
- Manalu, N. V. (2020). Dukungan Kerluarga terhadap Kualitas Hidup Pasien Gagal Ginjal Kronik yang Menjalani Terapi di Rumah Sakit Advent Bandar Lampung. *Healthsains*, 1(3). <https://jurnal.healthsains.co.id/index.php/jhs/article/view/31>
- Pratama, A. S., Praghlapati, A., & Nurrohman, I. (2020). Mekanisme Koping pada Pasien Gagal Ginjal Kronis yang Mengalami Hemodialisis di Unit Hemodialisis Rusd Bandung. *Jurnal SMART Keperawatan*, 7(1). <http://dx.doi.org/10.34310/jskp.v7i1.318>
- Santina, R. O., Hayati, F., & Oktarina, R. (2021). Analisis Peran Orangtua dalam Mengatasi Perilaku Sibling Rivalry Anak Usia Dini. *Jurnal Ilmiah Mahasiswa Pendidikan*, 2(1). <https://jim.bbg.ac.id/pendidikan/article/view/319>
- Siahaan, M., Girsang, R., & Simaremare, A. P. (2020). Hubungan Mekanisme Kping dengan Kualitas Hidup Pasien Gagal Ginjal Kronik yang Menjalani Hemodialisis di Rumah Sakit Santa Elisabeth Medan. *Njm*. <https://jurnal.uhn.ac.id/index.php/medicine/article/view/241>
- Siloam Hospital. (2023). *5 Jenis Penyakit Penyebab Kematian Tertinggi di Indonesia*. Retrieved from Siloam Hospital: <https://www.siloamhospitals.com/informasi-siloam/artikel/waspada-5-jenis-penyakit-penyebab-kematian-tertinggi-di-indonesia>