

Description Of The Anxiety Level Of Chronic Kidney Failure Patients Undergoing Hemodialysis At The Haji Adam Malik General Hospital Medan In 2021

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ABSTRACT

Chronic renal failure (CKD) is a disorder of kidney function in regulating fluid and electrolyte balance and loss of power in metabolic processes. Hemodialysis is a medical procedure performed for chronic kidney failure. Hemodialysis can have an impact on the patient's psychology, one of which is anxiety which will affect physical, social and spiritual health. Several factors that cause anxiety in patients undergoing hemodialysis include age, gender, education level, patient experience undergoing treatment, length of therapy. The purpose of this study was to describe the level of anxiety based on the characteristics of patients with chronic kidney failure undergoing hemodialysis at H. Adam Malik Hospital Medan in 2021. This study was a descriptive study. consecutive sampling which amounted to 74 respondents according to the inclusion criteria. Data analysis used univariate analysis. The research instrument uses a questionnaire Zung Self- Rating Anxiety Scale (ZSAS). The study showed that all chronic kidney failure patients undergoing hemodialysis were at a mild anxiety level of 75.7%, which was mostly experienced by the elderly group aged 46-65 years 69.6%, male 73.2%, secondary education 48,2%, undergoing hemodialysis >6 months 92.9%, private employee work 25.0%, and type of financing BPJS 100%. This study illustrates that the anxiety level of chronic kidney failure patients undergoing hemodialysis is influenced by characteristics such as age, gender, education, duration of hemodialysis, occupation and type of financing. It is recommended that hospitals provide services that can minimize the anxiety level of hemodialysis patients.

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1. Introduction

Chronic kidney failure is a disorder of kidney function in regulating fluid and electrolyte balance and loss of power in metabolic processes that can cause uremia due to the accumulation of substances that cannot be removed from the body by the kidneys which leads to progressive and reversible kidney tissue damage. Medical actions taken for patients who experience chronic kidney failure are hemodialysis or in the community call it dialysis (Kamil et al., 2018).

Hemodialysis aims to reduce levels of urea, creatinine and other toxic substances in the blood. Hemodialysis can cause discomfort and decrease the quality of life including physical, psychological, spiritual health, socioeconomic status and family dynamics. Impact Psychological effects of hemodialysis will affect physical, social and spiritual health. One of the psychological impacts caused is anxiety (Cleary, 2019). Anxiety in patients undergoing hemodialysis warns of external and internal threats and has life-saving qualities (Wakhid & Suwanti, 2019).

Anxiety or anxiety is an unpleasant emotional state characterized by fear and physical symptoms that are stressful and unwanted. These symptoms are a normal and appropriate

response to stress, but become pathological if they do not match the severity of the stress, continue after the stressor has disappeared, or occur in the absence of an external stressor (Yanti & Miswadi, 2018).

Rahman's research (2014) states that 90% of patients who will undergo medical treatment have the potential to experience anxiety (Abd.Rahman, Heldawati, 2014). In Indonesia, the prevalence of anxiety according to the results of the 2013 Basic Health Research (Riskesmas) shows that the prevalence of emotional mental disorders as indicated by symptoms of depression and anxiety for ages 15 years and over reaches around 14 million people or 6% of the total population of Indonesia (Depkes, 2010). 2014).

Anxiety that arises is a psychological response to stress that contains physiological and psychological components. Typical manifestations in patients who will undergo medical treatment depend on each individual and can include withdrawing, mute, swearing, complaining and crying (Yanti & Miswadi, 2018).

Chronic kidney disease contributes to the world's disease burden with a death rate of 850,000 people per year according to data World Health Organization (WHO). The incidence of CKD worldwide reaches 10% of the population, meanwhile, CKD patients undergoing hemodialysis are estimated at 1.5 million people worldwide. The incidence is estimated to increase by 8% every year. CKD is a chronic disease with the 20th highest mortality rate in the world (WHO, 2015).

Based on the Basic Health Research (Riskesmas) in 2018, the prevalence of CKD in Indonesia as many as 499,800 people (2%), the highest prevalence is in Maluku with 4351 people (0.47%) experiencing CKD (Riskesmas, 2018). Data according to PERNEFRI (Indonesian Nephrology Association) in 2016 there were 52,835 kidney failure patients actively undergoing dialysis and 1,096,022 hemodialysis procedures were carried out. The prevalence of patients undergoing hemodialysis procedures that have been carried out in North Sumatra is 67,855 procedures (Cleary, 2019).

According to a preliminary survey conducted by researchers in November 2020 at the Haji Adam Malik Hospital in Medan, the number of patients with chronic kidney failure undergoing hemodialysis was 438 people in 2019 and 280 people in 2020. Harsudianto (2018) stated, the majority of hemodialysis patients at Haji Adam Malik Hospital Medan were aged 46-55 as many as 22 people (48.9%), the majority of hemodialysis patients were entrepreneurial jobs as many as 19 people (42.2%), the majority of patient education hemodialysis for high school education as many as 25 people (57.8%) (Silaen, 2018).

The hemodialysis therapy process, which takes 5 hours, will generally cause physical stress to the patient after hemodialysis. Patient dependence on hemodialysis machines for life, role changes, job loss and income are stressors that can cause depression in hemodialysis patients with a prevalence of 15%-69% (Silaen, 2018). Anxiety occurs in 20%-30% of patients with chronic kidney failure who undergo regular hemodialysis. Fatimah's research (2015) shows that stressors that cause anxiety in CKD patients tend to persist, therefore an effective, efficient, and easy strategy is needed to be able to reduce anxiety so that patients are able to adapt to existing stressors. Several factors that cause anxiety in patients undergoing hemodialysis include age,

Based on the results of Arafah's research (2015) it was found that patients undergoing hemodialysis experienced mild anxiety as many as 6 people (9.7%), moderate anxiety as many as 32 people (51.6%), the rest was severe anxiety as many as 24 people (38.7%). In Insan Kamil's (2018) study, 65% of patients undergoing hemodialysis of the total respondents studied had undergone more than 12 months, even years. This shows that patients are used to and are more confident and brave in hemodialysis (Kamil et al., 2018).

Putri's research (2018), the characteristics of respondents on the type of financing obtained the results that almost all types of respondents' financing were borne by the government (BPJS) as many as (75.56%) or 34 respondents and a small part of the type of financing was borne by

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themselves (independently) by respondents as many as (24.44%) or 11 respondents. While the results of Doni Simatupang's research (2019) stated that the level of mild anxiety in hemodialysis patients based on age at Haji Adam Malik General Hospital Medan found that the majority of patients were in early old age (46-55 years) with the characteristics of respondents based on the age of the respondents indicating that patients undergoing therapy the majority of hemodialysis in the early elderly (46-55 years) as many as 13 (37.1%) respondents, based on gender, 21 (60%) respondents were male, based on education level, the majority had high school education as many as 24 (68.6%) of respondents, based on occupation, showed that the majority were self-employed as many as 20 (57.1%) respondents. The majority experienced a mild level of anxiety as many as 15 (42.9%) respondents.

2. Method

This research is a descriptive research. Sampling using consecutive sampling which amounted to 74 respondents according to the inclusion criteria. Data analysis used univariate analysis. The research instrument uses a questionnaire Zung Self-Rating Anxiety Scale (ZSAS).

3. Results and Discussion

3.1 Results

The results of this study were to describe the level of anxiety based on the characteristics of patients with chronic kidney failure undergoing hemodialysis at the Haji Adam Malik General Hospital Medan with a total of 74 respondents. Researchers made tables and explanations regarding the frequency distribution of characteristics based on age, gender, occupation, type of financing and duration of hemodialysis. The data obtained are based on primary sources processed from questionnaires for all respondents. After the data is processed, the results of the research are analyzed by means of univariate analysis and the results of the analysis are explained as follows:

a. Characteristics of Respondents

Characteristics of respondents in this study were grouped by age, gender, education, duration of hemodialysis, occupation and type of financing are described as follows:

Table 1
Frequency Distribution Of Respondents Based On The Characteristics Of Chronic Kidney Failure Patients Undergoing Hemodialysis At Haji Adam Malik Hospital Medan In 2021

Characteristics	<i>f</i>	%
Age		
Teenegers (12-25 years)	3	4.1
Adult (26-45 years)	21	28.4
Elderly (46-65 years)	44	59.5
Old Age (>65 years)	6	8.1
Amount	74	100.0
Gender		
Man	54	73.0
Women	20	27.0
Amount	74	100.0
Education		
Basic Education	26	35.1
Middle Education	38	51.4
Higher Education	10	13.5
Amount	74	100.0
Length of time undergoing hemodialysis		
<6 month	9	12.2
>6 month	65	87.8
Amount	74	100.0
Work		
Civil Servant	6	8.1
Businessman	11	14.9
Drivate Empleyees	20	27.0
Farmer	7	9.5

IRT	11	14.9
Does Not Work	19	25.7
Amount	74	100.0
Type Of Financing		
Independent	1	1.4
BPJS	73	98.6
Amount	74	100.0

Table 1. shows the respondents of research conducted at Haji Adam Malik General Hospital Medan in 2021, most of the elderly aged 46-65 years as many as 44 people (59.5%) and a small proportion of adolescents aged 12-25 years as many as 3 people (4.1%). The gender of the respondents was mostly male as many as 54 people (73.0%) and a small portion of the female sex as many as 20 people (27.0%). The occupations of most of the respondents are private employees as many as 20 people (27.0%) and a small portion of civil servants as many as 6 people (8.1%). The education of the respondents is mostly secondary education as many as 38 people (51.4%) and a small portion of higher education as many as 10 people (13.5%). The type of financing used by the majority of respondents used BPJS as many as 73 people (98.6%) and only 1 person used self-financing (1.4%).

b. *Anxiety Level*

The description of the anxiety level of patients with chronic kidney failure undergoing hemodialysis at Haji Adam Malik General Hospital Medan is presented in the following table:

TABLE 2
Frequency Distribution of Anxiety Levels in Patients with Chronic Kidney Failure in Undergoing Hemodialysis at Haji Adam Malik Hospital Medan in 2021

Anxiety	f	%
Light	56	75.7
Currently	15	20.2
Heavy	3	4.1
Panic	0	0
Amount	74	100

Table 2. shows the anxiety level of chronic kidney failure patients undergoing hemodialysis at Haji Adam Malik General Hospital Medan in 2021, most of them experienced mild anxiety as many as 56 people (75.7%) and a small portion experienced severe anxiety as many as 3 people (4.1%).

Table 3
Frequency Distribution of Anxiety Levels Based on Characteristics of Patients with Kidney Failure Chronicles in Undergoing Hemodialysis at Haji Adam Malik Hospital Medan in 2021

Characteristics	Kecemasan Ringan		Kecemasan Sedang		Kecemasan Berat		Panik	
	F	%	f	%	f	%	f	%
Age								
Teenegers (12-25 years)	2	3.6	0	0	1	33.3	0	0
Adult (26-45 years)	10	17.9	10	66.7	1	33.3	0	0
Elderly (46-65 years)	39	69.6	4	26.7	1	33.3	0	0
Old Age (>65 years)	5	8.9	1	6.7	0	0	0	0
Amount	56	100	15	100	3	100	0	0
Gender								
Man	44	73.2	11	73.3	2	66.7	0	0
Women	15	26.8	4	26.7	1	33.3	0	0
Amount	56	100	15	100	3	100	0	0
Education								
Basic Education	19	33.9	6	40.0	1	0	0	0
Middle Education	27	48.2	9	60.0	2	33.3	0	0
Higher Education	10	17.9	0	0	0	0	0	0
Amount	56	100	15	100	3	100	0	0
Length of time undergoing hemodialysis								
<6 month	4	7.1	3	20.0	2	33.3	0	0
>6 month	52	92.9	12	80.0	1	66.7	0	0

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Characteristics	Kecemasan Ringan		Kecemasan Sedang		Kecemasan Berat		Panik	
	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Amount	56	100	15	100	3	100	0	0
Work								
Civil Servant	6	10.7	0	0	0	0	0	0
Businessman	10	17.9	0	0	1	33.3	0	0
Drivate Employees	14	25.0	5	33.3	1	33.3	0	0
Farmer	5	8.9	2	13.3	0	0	0	0
IRT	9	16.1	2	13.3	0	0	0	0
Does Not Work	12	21.4	6	40.0	1	33.3	0	0
Amount	56	100	15	100	3	100	0	0
Type Of Financing								
Independent	0	0	0	0	1	33.3	0	0
BPJS	56	100.0	15	100.0	2	66.7	0	0
Amount	56	100	15	100	3	100	0	0

Table 3. shows that mild anxiety is more experienced by the elderly aged 46-65 years as many as 39 people (69.6%), male sex as many as 44 people (73.2%), secondary education as many as 27 people (48.2%), who underwent hemodialysis for more than 6 months as many as 52 people (92.9%), work private employees as many as 14 people (25.0%), the type of BPJS financing as many as 56 people (100%), and less experienced by teenagers as many as 2 people (3.6%), female sex as many as 15 people (26.8%), IRT jobs are 5 people (8.9%), higher education are 10 people (17.9%), 4 people have undergone hemodialysis for less than 6 months (7.1%).

3.2 Discussion

Anxiety is a common thing in human life, especially in people with chronic diseases. Clients who are treated for life-threatening illnesses will more often experience anxiety, depression or anger (Shubba, 2007 in Stuart, 2016). From the research results in table 5.2. anxiety level based on the questionnaire Zung Self-Rating Anxiety Scale (ZSAS) showed that respondents with chronic kidney failure who underwent hemodialysis at Haji Adam Malik General Hospital in Medan experienced the most mild anxiety in 56 people (75.7%).

A person suffers from an anxiety disorder when the person is unable to cope with the stressor which he is facing. The level of mild anxiety is more experienced by men as many as 44 people (73.2%). Researchers assume that men are physically and mentally stronger. Therefore, men are more relaxed in dealing with a problem, while women are more sensitive and difficult to deal with a stressor so that women are easier to feel anxious and afraid in various things, especially those related to their life. This is supported by research by Asri Lestari (2017) which concludes that mild levels of anxiety can be influenced by the sex factor of the respondents who are mostly male (57.6%) (Lestari, 2017).

Another factor that can affect the level of anxiety is age. Most of the research respondents belonged to the elderly age group (46-65 years) and experienced mild anxiety as many as 39 people (69.6%). In adulthood, a person already has both physical and mental maturity and deeper experience in solving problems so that they are able to suppress the anxiety they feel. Researchers assume that at old age a person can accept all his illnesses easily and at old age he tends to think that spiritually old age must be lived and faced. According to Isaac in Untari (2015) someone who has a younger age is easier to experience anxiety disorders than someone who is older.

Education which is more in the category of secondary education (51.4%) experienced mild anxiety as many as 27 respondents (48.2%). A person's level of education will affect the way of thinking, the higher the level of education, the easier it will be to think rationally and capture new information, including in analyzing new things (Stuart, 2016). According to researchers, the higher a person's education, the more someone will understand something. Notoadmodjo's theory (2012) a low level of education can affect high anxiety in chronic kidney failure patients undergoing hemodialysis, this may be due to lack of knowledge and absorption of information about the process of undergoing hemodialysis and the risks that will occur to him.

Patients who have higher education will have broader knowledge, have high self-confidence, experience and have thoughts on how to overcome a problem and easily understand what is recommended by health workers, will be able to reduce anxiety so that it can help these patients in

taking decisions. decision. This is in line with research conducted by Ikbal Dwi Cipta (2016) which showed that most patients with chronic kidney failure undergoing hemodialysis had high school education (38.9%). will be able to reduce anxiety so that it can help the patient in making decisions. This is in line with research conducted by Ikbal Dwi Cipta (2016) which showed that most patients with chronic kidney failure undergoing hemodialysis had high school education (38.9%). will be able to reduce anxiety so that it can help the patient in making decisions. This is in line with research conducted by Ikbal Dwi Cipta (2016) which showed that most patients with chronic kidney failure undergoing hemodialysis had high school education (38.9%).

The next factor that can affect the level of mild anxiety in patients with kidney failure Chronic patients undergoing hemodialysis are the length of time undergoing hemodialysis itself. According to Ullya (2016) patients who have been undergoing hemodialysis for a long time have reached the stage of accepted (accept). The longer the patient undergoes hemodialysis, the better the patient adaptation is because the patient has received health education or information related to chronic kidney failure and its treatment (Ullya, 2016). According to the researcher, the longer a person undergoes the hemodialysis process, the more accustomed to using all the tools and processes performed during hemodialysis, while someone who is undergoing hemodialysis for the first time feels that this is a problem that is threatening him and feels that what he is doing is very torturous. himself. In this study 52 respondents had undergone hemodialysis for more than 6 months (92.9%). This is in line with Insan Kamil's research (2018) which states that 65% of patients undergoing hemodialysis of the total number of respondents studied have undergone hemodialysis for more than 12 months, even for years. This shows that patients are used to and are more confident and brave in hemodialysis (Kamil et al, 2018).

Besides the factors above, work is also another factor that can affect mild anxiety level in the patient. Respondents at Haji Adam Malik General Hospital Medan who worked as private employees experienced mild anxiety as many as 14 people (25.0%). Work is always associated with a person's economic and social circumstances. Researchers assume that someone with a good economic and social status will have a low risk of anxiety compared to someone with a poor economic and social level, this is due to the many needs and medicines and health facilities that must be met while in a state of illness. Asri Lestari's research (2017) is in line with this study 2017). Ullya (2016) in his research stated that in terms of undergoing hemodialysis, a patient with insufficient funds was a factor in the emergence of anxiety. Hemodialysis patients with health insurance from the government will experience better stressors, so that related to financing the achievement of health services is not too much of a burden on the patient's mind (Ullya, 2016).

4. Conclusion

Based on the results of research and discussion, several conclusions can be drawn as follows The results showed that mild anxiety was more experienced by elderly patients aged 46-65 years as many as 39 people (69.6%) and 2 people (3.6%). already have both physical and mental maturity and experience in solving problems so that they are able to suppress the anxiety they feel. The results showed that mild anxiety was more experienced by male patients as many as 44 people (73.2%) and less experienced by female sex as many as 15 people (26.8%), because men are physically stronger and mentally. Therefore, men are more relaxed in dealing with a problem. The results showed that mild anxiety was more experienced by patients with secondary education as many as 27 people (48.2%) and less experienced by patients with higher education as many as 10 people (17.9%), the level of education of a person will affect the way of thinking, the higher the education. someone will understand someone more in understanding something. The results showed that 52 people (92.9%) experienced mild anxiety and less experienced patients undergoing hemodialysis for less than 6 months as many as 4 people (7.1%). The longer a person undergoes the hemodialysis process, the more accustomed to using all the tools and processes carried out during hemodialysis. The results showed that mild anxiety was more experienced by patients with private employee jobs as many as 14 people (25.0%) and less experienced by patients with IRT jobs as many as 5 people (8.9%). Someone with a good economic and social status will have a low risk of anxiety, due to the many needs and medicines and health facilities that must be met while in a state of illness. The results showed that 56 people experienced mild anxiety with BPJS financing types (100%). Because in terms of undergoing hemodialysis a patient's income is less a factor in the emergence of anxiety.

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