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Relationship Between Family Support and Psychological Response to Chronic Kidney Failure Patients

Windu Santoso[1*)]; Sri Sudarsih[2]

[1,2]Departemen of Nursing STIKes Bina Sehat PPNI Mojokerto

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**) corresponding author*

Departemen of Nursing STIKes Bina Sehat PPNI Mojokerto
Jln. Raya Jabon KM. 6 Mojokerto, Indonesia

Email: windusantoso36@gmail.com

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A B S T R A C T

Chronic renal failure patients undergoing hemodialysis may exhibit a variety of psychological responses. One of the factors that influence it is family support. This study aimed to determine the relationship between family support and the psychological response of chronic renal failure patients undergoing hemodialysis. The research design used correlation analysis with a cross-sectional approach. Samples were chronic renal failure patients undergoing hemodialysis (n = 183) with consecutive sampling. The data collection used a family support questionnaire and a psychological response questionnaire. Data analysis used the Spearman rank test. The results showed that dominant family support was quite high (72.1%). A small proportion of respondents had a psychological response to acceptance (38.8%). There is no relationship between family support and psychological response (p = 0.26> 0.05). Family support does not affect the psychological response, but considering that hemodialysis therapy is very long, family support must still be given optimally.

INTRODUCTION

Chronic kidney failure is considered a public health problem worldwide and around 50 million people suffer from chronic kidney disease worldwide (Khan & Ahmad, 2020). Most chronic renal failure patients require treatment such as hemodialysis, peritoneal dialysis, and kidney transplant (Smyth, 2012). A diagnosis of kidney failure is associated with a variety of factors that decrease the well-being of those affected. Individuals can no longer enjoy activities and other things like before they were diagnosed with chronic renal failure (Li et al., 2016). During treatment, there are many problems faced by patients on dialysis. So that after being diagnosed with chronic renal failure,

patients have to start a life filled with various changes that are not only difficult for those affected, but also for their family members (Ara et al., 2015). Patients undergoing hemodialysis experience different physical and mental or psychological problems (Abdel-kader, Unruh, & Weisbord, 2009). Psychological responses can be in the form of rejection, anger, bargaining, depression, and acceptance (Siddiqui, 2020). Dialysis is a huge burden for patients and their families because it requires time, energy, and support (Gilbertson et al., 2019). It is important to know that Support, especially family support, really needs to be included in the treatment planning process because it can improve the physical and mental well-being of dialysis patients (Theses & Rodriguez, 2020).

Incidence and prevalence are increasing rapidly around the world which varies in different regions due to environmental, ethnic, social, economic, and rural-urban differences. The prevalence of chronic kidney failure (CRF) in European countries varies from 3.31% to 17.3% (Sugisawa et al., 2018). The number of people on dialysis therapy exceeds 2 • 5 million and is projected to double to 5 • 4 million by 2030 (Liyanage et al., 2015). The results of the 2018 Riskesdas showed chronic kidney disease reached 3.8%, this increased by around 1.8% from 2013 (Kemenkes RI, 2019).

Integrated management of chronic kidney disease (CKD) changes a person's life significantly because patients have to undergo dialysis, be given medication, and a limited diet and fluids. Therefore, it is the duty of nurses and the team handling patients to provide appropriate interventions in terms of motivating patients so that they can increase their

self-confidence. Motivation and support from the closest person and family can be used to change patient behavior as recommended in the integrated management of CKD patients (Chironda, 2018).

The support that patients feel from loved ones is believed to be beneficial for improving patient health (Shafi et al., 2010). This family support affects the patient's positive psychological response and will lead to positive behavior for the patient. This family support can be used to develop intervention programs in the form of family support for patients undergoing hemodialysis (Lee, Jo, Kang, & Young, 2019)

METHOD

Research participants

This research used a correlation analytic design with a cross-sectional approach. The sample in this research were patients with chronic renal failure who underwent hemodialysis using a consecutive sampling technique with a total of 183 patients as respondents.The study was conducted at the Mojokerto hospital

Research procedure

The data collection process in this study was carried out after the researcher obtained permission from the research site. Data collection was carried out for 1 month. Respondents were determined based on the criteria determined by the researcher. Researchers accompany respondents when filling in research instruments by interviewing respondents who are willing to be researched according to the questionnaire used.

Instrument

The instrument in this study used a psychological response questionnaire to measure resistance, anger, bargaining, depression, and acceptance and used a family support questionnaire.

Data analysis

The data analysis process used SPSS version 23 of 2016. Bivariate analysis was used to determine the relationship between family support and psychological responses in chronic stool failure patients undergoing hemodialysis.Data analysis used the Spearman Rank test.

RESULTS

A. General Data

Tabel 1 Distribution of respondents based on characteristics (N=183)

Characteristics	Frequency	Percentage (%)
Age		
17 - 25 year	4	2.2
26 - 35 year	13	7.1
36 - 45 year	46	25.1
46 - 55 year	57	31.1
56- 65 year	52	28.4
>65 year	11	6.0
Gender		
Male	94	51.4
Female	89	48.6
Profession		
Civil servants	13	7.1
Student	1	0.5
Entrepreneur	67	36.6
Does not work	102	55.7
Marital status		
Married	154	84.2
Single	14	7.7
Widow	8	4.4
Widower	7	3.8
Complications		
Diabetes mellitus	35	19.1
Hypertension	81	44.3
glumerulonephritis	54	29.5
Hypotension	4	2.2
Sepsis	9	4.9
Haemodyalisis Duration		
<12 month	85	46.4
12-37 month	66	36.1
38-62 month	18	9.8
>62 month	14	7.7
Total	183	100

Based on the table 1, most respondents are in the age range 46-65 years, namely 31.1%, 51.4% male respondents, more than 50% of respondents do not work, namely as much as 55.7%, the majority of the respondents' marital status is married, namely 84.2%, based on the highest disease complications, namely hypertension as much as 44.3% and most of the respondents underwent hemodialysis <12 months, namely as many as 46.4%.

B. Special Data

Tabel 2.
Distribution of Respondents Based on Family Support for Patients who undergo Hemodialysis (N=183)

Family Support	Frequency	Percentage (%)
High	132	72.1
Moderate	51	27.9
Low	0	0
Total	183	100

Based on the table above, it can be said that the majority of respondents get dominant family support, which is 72.1%.

Table 3.
Distribution of Respondents Based on Psychological Responses of Patients Undergoing Haemodialysis (N=183)

Psychological Response	Frequency	Percentage (%)
Denial	23	12,6
Angry	19	10.4
Bergaining	17	9.1
Depression	53	29.0
Recieve	71	38.8
Total	183	100

Based on the table above, it was found that a small proportion of respondents had an acceptance response, namely 38.8%

Tabel 4.
Hubungan Dukungan keluarga dengan Respon Psikologis

Variabel	Respon Psikologis									
Family support	Denial		Angry		Bergaining		Depression		Recieve	
	f	%	f	%	f	%	f	%	f	%
High	17	9.3	15	8.2	8	4.9	36	19.7	56	30.6
Moderate	6	3.3	4	2.2	9	4.4	17	9.3	15	8.2
Low	0	0	0	0	0	0	0	0	0	0
Total	23	12.6	19	10.4	17	9.3	53	29.0	71	38.8

In this research, it was found that respondents who had high family support had a psychological response to receive 30.6%. Furthermore, based on the Spearman Rank test, the value of p = 0.26 > 0.05 was obtained, it can be concluded that Ho is accepted, meaning that there is no relationship between family support and response. Psychological patients undergoing hemodialysis.

DISCUSSION

1. Family support

The results showed that the majority of family support for chronic renal failure patients undergoing hemodialysis was high. Patients suffering from chronic kidney disease face problems in various aspects of their life, such as physical, social and mental problems such as stress, anxiety, depression (Theofilou, 2012). Most patients with chronic renal failure are highly dependent on health services for hemodialysis therapy. Patients must adapt to conditions that experience major changes in daily habits, not only limiting food and fluid intake that must be enforced but also restrictions in various activities.

Management of the disease requires many changes in the patient's life (Victoria, Evangelos, & Sofia, 2015). Patients undergoing hemodialysis cause several problems, including physiological, cultural, and religious problems, so that to overcome this problem can be done through comprehensive support for patients (Sugisawa et al., 2018). Patients need support from family, friends, and support groups (Nikkhah, 2020).

Support from family members and health workers in the hospital is beneficial for patients who face various problems in undergoing routine dialysis therapy (Ara et al., 2015). Family support is very important in overcoming psychological problems in the adaptation process caused by hemodialysis therapy (Nery & Rosendo, 2016).

When a patient is diagnosed with kidney failure, he must undergo regular life-long hemodialysis therapy one to three times a week depending on the patient's kidney condition. The patient experiences not only physical suffering but also mental suffering. One side of the patient must depend for life on the dialysis machine and on the other hand the patient must continue to carry out roles and activities in his life. Sometimes patients feel they cannot be independent. In this condition, the patient really needs support, especially support from the family who is the closest person to the patient. Family support given to patients will make them feel comfortable, feel valuable and feel loved by their family members so that it will provide enthusiasm and patients will be able to adapt to their circumstances.

Regarding patient characteristics, data analysis revealed that married participants and those with more than two children experienced higher social support from their closest people and family (Theodoritsi et al., 2016). In this research most respondents (84.6%) with a married status so that they will get support from family members who love them.

2. Psychological response

Kidney disease can cause physical and psychological health complications (Naylor & Ross, 2016). Patients experience several changes in their daily lives and challenges in their lifestyle, which create a lot of needs in patients due to having to undergo hemodialysis therapy (Bayoumi & Alwakeel, 2016). The majority of patients describe the emotional burden of their illness. Feelings of helplessness, loss of control, anger mixed with frustration and difficulties (Sein, Id, & Baharani, 2020). Dialysis therapy and kidney disease affect the physical and psychosocial conditions of patients (Roxo & Barata, 2015), which causes them to experience depression (Colet, 2020). Knowing that there is an incurable disease the patient will experience a series of feelings that lead to conflict. Common feelings are rejection, anger, bargaining, depression, isolation, and acceptance. It is important to understand that each person experiences these changes individually, at their intervals and sequences (Marlow et al., 2015).

The results showed that a small proportion of respondents (12.6%) were at the denial stage. Rejection is a form of temporary self-defense from things that will make a person uncomfortable. At this stage, the individual will either consciously or unconsciously reject all facts, information, and realities related to the current situation. Individuals will deny and assume that what happened is not a reality. Denial is followed by physical or behavioral reactions. Rejection experienced by individuals is a natural defense mechanism so it naturally occurs. The statement that often appears at this stage is "I could not be sick" (Kübler-Ross, 2009). Respondents in this study initially felt that they did not believe that they had to undergo hemodialysis, because they felt that there were no complications

beforehand, they only knew that their bilirubin had risen and they had to undergo hemodialysis. When diagnosed with renal failure and had to undergo hemodialysis they tried to go to another hospital to see if it was true that they had kidney failure and had to undergo hemodialysis. The first time they found out they had to undergo hemodialysis, they tried to keep the pain a secret from other people.

The results showed that a small proportion of respondents (10.4%) were in the angry stage. In the Kubler-Ross theory, this response is usually experienced and expressed by patients when they accept the reality of their terminal illness. This may lead to the fault of a health worker who is unable to treat his illness, inadequate family member's support, or a lack of spiritual strength in the face of a diagnosis and thus feels injustice to him. Anger as a natural response can help health care providers and people alike loved to tolerate (Siddiqui, 2020). The anger stage is the stage for the individual to develop negative emotions related to the condition of loss, such as anger, hatred, and disappointment. The negative emotions that are felt are directed at either himself or others and this is a normal emotional condition when the patient knows that he has to suffer from kidney failure and his life is dependent on hemodialysis therapy.

The results showed that a small proportion of respondents (9.1%) were at the bargaining stage. At this stage, the bargaining stage itself is a stage where individuals can instill confidence in the condition of the loss, this is done to negotiate with certain parties such as God for the loss that has occurred. In this phase, individuals will develop irrational thoughts such as turning the clock and presupposing a condition to entertain themselves. The statement that often appears at this stage is "what if I don't get sick?" or "I will behave well when this disease disappears from my body" (Kübler-Ross, 2009).

In this study, most of the respondents had assumed they wanted to recover from their illness. Sometimes they say that if I get better, I will always take care of my health, I will manage a healthy diet and drink healthy drinks instead of drinking instant drinks and lots of preservatives that make me sick like this. Some say that if they would follow the doctor's advice they would not get sick like this. Some have to take hypertension medication they don't take it according to the doctor's rules, the doctor initially recommended taking the medicine 2x1 a day but they took the medicine 2x2 a day because by taking medicine like that they felt that their condition was getting better. They do not know the side effects of taking drugs that are not as recommended so they know they suddenly have to hemodialysis because of their own mistakes.

The results showed that a small proportion of respondents (29.0%) were at the stage of depression. Depression is a major mental health problem for patients with chronic renal failure. The prevalence of depression among patients suffering from chronic renal failure is estimated to be between 20% and 30% (Goh & Griv, 2018). Depression is the reaction of a patient who has given up without trying; The depressed patient no longer tries to survive and misses the opportunity to live life as well as possible. Research (Mosleh & Alenezi, 2020) shows that depression is highly dependent on patient sociodemographic data such as age, gender, and level of education. In advanced adults and accompanied by chronic disease is an independent risk factor for depression (Uan, 2010), depression in middle and older adulthood (Davison et al., 2019). In this study, respondents with an age range of 36 - 45 years were more likely to experience depression. Male respondents in this study experienced more depression. This is in line with the results of research (Hou, Li, & Yang, 2014) which showed that male patients were more likely to show symptoms of depression.

The results were obtained from 183 respondents who had a psychological response at the receiving stage as many as 78 respondents (38.8%). Acceptance is the beginning of an individual's journey in dealing with a condition of loss. The form of acceptance varies from person to person in each condition. Some individuals tend to judge acceptance with the statement "there is no other choice, I can't continue to fight this", but there are also individuals who judge acceptance as a realistic attitude towards the conditions experienced, this causes the individual to rise from a state of adversity and start living with good as starting treatment optimistically. Also, individuals begin to face reality rather than just giving up on conditions of adversity or

hopelessness (Kübler-Ross, 2009). The esponse shown by the patient in this study was influenced by several factors including age and length of undergoing hemodialysis. The accepting stage was mostly owned by respondents who were in the age range 45 - 65 years, namely as much as 82.5%. Of the 71 respondents who had a response to receiving only 5 people had undergone hemodialysis for less than 12 months. This shows that the longer a person undergoes hemodialysis therapy, the person will be at the receiving stage.

3. Relationship of family support with psychological responses.

The results showed that most respondents (30.6%) received high family support and had a psychological response to receiving them. Family support can positively influence illness through various components such as improving patient coping mechanisms, minimizing stress, offering assistance for practical problems (access to health services) and improving functionality and psychosocial problems (Ahrari & Moshki, 2014). Patients suffering from the disease for less than 6 years feel more support from other people, family and friends. The longer undergoing hemodialysis therapy, the impact of the disease is getting heavier, both physical and psychological impacts (Theodoritsi et al., 2016). A higher mortality rate can be seen in hemodialysis patients who do not receive family support (Combe, 2011). The psychosocial well-being of patients undergoing hemodialysis depends on family support(Yuan & Xiao, 2015). Family function affects the endurance and mental well-being of hemodialysis patients (Kukihara et al., 2020). Difficulty for someone to accept the disease depends on the external and internal conditions of the individual. Externals can be obtained from family support (Birmelé et al., 2012).

The existence of family support makes the patient able to accept his condition because family is one of the encouragement for the patient so that he can accept his condition. In addition, patients begin to be able to face reality, not just giving up on conditions of adversity or hopelessness. Families are able to help patients adapt to the environment in which they undergo hemodialysis therapy and help adapt to the disease. The family provides information support about the disease by providing further explanations according to the information the family has obtained from the doctor or nurse about the disease and therapy that the patient must undergo so that patients get clearer information and can be used as material for discussion with their families. This causes individuals to rise from adversity, be able to adapt and be able to start a happier life.

In this study it was proven that there was no relationship between family support and the psychological response of patients undergoing hemodialysis. This is because apart from family support, there are other factors that influence the patient's psychological response, such as age, gender, marital status and length of time undergoing hemodialysis.

Family is one of the resources needed in the care of patients undergoing hemodialysis and has a fundamental role in helping to manage patients' illnesses and in improving the mental well-being of their patients (Rabiei & Candidate, 2015). Family support as a psychological tool is very important in the process of adapting to stress, which is a psychological problem caused by hemodialysis therapy (Nery &Rosendo, 2016). Although the results of this study indicate that there is no relationship between family support and the patient's psychological response, family support is very important for patients because family support really helps patients adapt to psychological responses to the acceptance stage.

CONCLUSIONS AND RECOMMENDATION

This reaserch proves that there is no relationship between family support and the psychological response of patients with chronic renal failure who undergo hemodialysis therapy, but considering that hemodialysis therapy is very long, family support must still be given optimally.

The results of this research can be used as a basis for further research on the factors that affect the psychological response of chronic kidney failure patients undergoing hemodialysis.

It is hoped that further investigators will be able to investigate other factors that influence the psychological response of patients with chronic kidney failure undergoing hemodialysis

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