

Knowledge Analysis And Family Support On Diet Compliance In Patients With Chronic Kidney Failure In The Hemodialysis Room, Mayapada Surabaya Hospital

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ABSTRACT

Long enough hemodialysis reduces the patient's enthusiasm for life so that it can affect adherence to the patient's dietary requirements. Diet non-compliance is a big problem, especially in hemodialysis patients. The impact of non-compliance can affect the quality of life of clients, and increasing healthcare costs can also affect compliance in undergoing hemodialysis therapy. therefore family support factors greatly affect the level of dietary adherence in patients. To determine the relationship between the level of knowledge analysis and family support with dietary adherence in chronic kidney failure patients undergoing hemodialysis at Mayapada Hospital in Surabaya. This type of research is a quantitative descriptive study with a cross-sectional approach. Sampling technique with purposive sampling. The measuring tool in this study used a questionnaire. The data test used is the Logistic Regression Test. The results of the logistic regression analysis of knowledge and family support with dietary adherence showed a p -value of 0.143 and 0.132 respectively, which means there was no relationship between knowledge and family support with dietary compliance in patients undergoing hemodialysis at Mayapada Hospital. The conclusion is no relationship between knowledge analysis and family support with dietary adherence of patients undergoing hemodialysis at Mayapada Hospital. Education and counseling by health workers on the importance of family support in the form of instrumental support, informational support, emotional support, and appraisal support are needed.

Keywords: Diet Compliance, Family Support, Knowledge,

INTRODUCTION

Chronic kidney disease is a failure of kidney function to maintain metabolism and fluid and electrolyte balance due to the progressive destruction of kidney structures with manifestations of accumulation of toxic uremic residues in the blood (Muttaqin & Kumala Sari, 2011). Patients with kidney failure generally require hemodialysis, as a result of the condition of the kidneys in patients unable to carry out their function of excreting waste products from the body's metabolism. Patients who have been diagnosed with kidney failure are forced to undergo routine hemodialysis throughout their lives (Smeltzer & Bare, 2013).

based on data Indonesian Renal Registry (IRR) In 2016, it was stated that there were 52,835 active patients with chronic kidney disease undergoing hemodialysis and 25,446 new patients undergoing hemodialysis therapy. The highest age undergoing hemodialysis was the age group of 45-54 years, namely 30.61% (Rikerdas, 2018).

Long enough hemodialysis often reduces the patient's enthusiasm for life so that it can affect compliance with the patient's dietary requirements (Ayu, 2018). Diet non-compliance

is a big problem, especially in hemodialysis patients. The impact of non-compliance can affect the quality of life of clients, and increasing healthcare costs can also affect compliance in undergoing hemodialysis therapy (Windarti, 2017). Intake of nutrients and fluids that are not controlled can be at risk of experiencing malnutrition and in more severe conditions can cause death (Widiyany, 2016).

Patients who routinely undergo hemodialysis will experience a lack of protein intake, low levels of albumin in the blood, and digestive tract disorders such as nausea, vomiting, and decreased appetite (Windarti, 2017). In addition to these problems, patients who routinely undergo hemodialysis will be disturbed in terms of fluid and salt retention, secondary hyperparathyroidism, chronic anemia, phosphate retention, hypertension, heart disease, and hyperlipidemia. The average weight gain of patients with chronic kidney disease on hemodialysis exceeds the ideal interdialysis weight gain of 1.5 kg so it can be said that the diet success rate of patients with chronic kidney failure undergoing hemodialysis is still lacking.

Dietary compliance in patients with kidney failure requires support from various parties, especially the family. Family support is a support system for its members and is always ready to provide help and assistance if needed. The phenomena that occur above are the reasons researchers are interested in researching "Analysis of Knowledge and family support on dietary compliance in chronic kidney failure patients in the Hemodialysis Room."

METHODS

This research uses the method of quantitative correlation with an approach cross-sectional. The independent variables studied were the level of knowledge and family support. The dependent variable studied was the dietary adherence of patients undergoing hemodialysis. The study population was patients undergoing hemodialysis at Mayapada Hospital in Surabaya. The sampling technique used was a purposive sampling technique with 83 respondents, inclusion criteria were used: Hemodialysis patients with compos mentis consciousness, Patients who are routinely hemodialyzed twice a week, Cooperative hemodialysis patients. The data collection process uses a wide questionnaire that has been tested for the validity of the reliability.

RESULTS

The results of this study were obtained from primary data of hemodialysis patient respondents conducted on December 25, 2022 to January 23, 2023 at the Mayapada Surabaya Hospital Hemodialysis Unit.

Table 1 Frequency Distribution of Respondent Characteristics of Chronic Kidney Failure Patients Undergoing Hemodialysis at Mayapada Hospital Surabaya (n=83)

Characteristics	Frequency	Percentage (%)
Age		
21-30 Years	7	15.2
31-40 Years	14	30.4
41-50 Years	12	26.1
51-60 Years	13	28.3
Gender		
Man	21	45.7
Woman	25	54.3
Education		
Elementary school	7	15.2
Junior High School	4	8.7
Senior High School	13	28.3
College	22	47.8
Work		
Government employees	2	4.3
Laborer	1	2.2
Housewife	8	17.4
Student	1	2.2
Nurse	4	8.7
Farmer	6	13.0
Private	22	47.8
Self-employed	2	4.3
Long Running HD		
<1 Year	15	32.6
>5 Years	8	17.4
1-5 Years	23	50.0

The results of this study were obtained from primary data on hemodialysis patient respondents who were carried out on December 25, 2022, to January 23, 2023, at the Hemodialysis Unit of Mayapada Hospital, Surabaya.

The results showed that the characteristics of the respondents were based on the age of almost half of the respondents aged 31-40 years, namely as many as 14 people (30.4%), more than half of the respondents were female, as many as 25 people (54.3%), based on the education level of the respondents, almost half of them are tertiary institutions, namely as many as 22 people (47.8%), based on work, almost half of the respondents work as a private sector, as many as 22 people (47.8%), and half of the respondents undergo HD for 1-5 years, namely as many as 23 people (50 %).

Table 2. Description of the level of knowledge and family support with dietary compliance in patients with chronic kidney failure undergoing hemodialysis at Mayapada Hospital in Surabaya (n=83)

Independent Variable	Amount	Percentage (%)
Knowledge		
Good	35	76.1
Enough	11	23.9
Less	0	
Family support		
Good	17	37.0
Enough	29	63.0
Less	0	0
variable depends		
Dietary Compliance		
Comply	33	71.7
Disobedient	13	28.3

Table 2 will show an overview of the knowledge of chronic kidney failure patients undergoing hemodialysis at Mayapada Hospital in Surabaya, almost all of them are good, namely 35 respondents (76.1%). In the description of family support for chronic kidney failure patients undergoing hemodialysis at Mayapada Hospital in Surabaya, more than half are in the sufficient category, namely 29 respondents (63%). In the description of dietary compliance in patients with chronic kidney failure undergoing hemodialysis at the Hospital. Mayapada Surabaya is more than half obedient, namely as many as 33 respondents (71.7%).

Table 3 Results of Analysis of Knowledge and Family Support for Diet Compliance in Patients Undergoing Hemodialysis at Mayapada Hospital in Surabaya

Variable	Correlation coefficient
Knowledge	0,143
Dietary Compliance	
Family support	0,132
Dietary adherence	

Table 3 shows the results of knowledge and family support for dietary compliance in patients undergoing hemodialysis at Mayapada Hospital in Surabaya using analysis. logistic regression the significance value of the knowledge variable was 0.143 and the family support variable was 0.132. This figure is greater than the alpha value ($\alpha > 0.05$) or it can be said that the knowledge and support of the patient's family does not significantly affect patient adherence to a kidney failure diet.

DISCUSSION

One of the factors that influence a person's level of knowledge is how he or she obtains information. According to Notoatmodjo (2014) states that sources of information will influence the increase in one's knowledge and most of human knowledge is obtained from sight and hearing. This source of information was obtained when the respondent was undergoing hemodialysis therapy so many respondents preferred to listen to education from health workers. The increase in respondents' knowledge will affect changes in respondents' attitudes and behavior in making decisions to carry out hemodialysis therapy and medical therapy, including the implementation of diet therapy that must be undertaken.

The family functions as a support system for its members. Family members also see that supportive people are always ready to provide help and assistance if needed. Family support is the attitude, action, and acceptance of the family towards sick sufferers. Family support is a form of attention, and encouragement that individuals get from other people through interpersonal relationships which include attention, emotion, and judgment. Family support is the supporting factor that most influence patient non-adherence in hemodialysis treatment. Patients unable to carry out hemodialysis therapy themselves require assistance from health services for hemodialysis therapy and control by a doctor. Without family support, it is certainly difficult to undergo a hemodialysis therapy program according to a predetermined schedule.

According to Friedman (2013), family support is a response shown by accepting the condition of family members from the aspect of informational support, appraisal support, instrumental support, and emotional support, so it can be interpreted that family shamanism is an attachment to interpersonal relationships which include attitudes, actions, and acceptance of family members, so that family members feel the attention of other family members. Based on Hendiani & Wahyuni (2012) health care provided based on the ability of the family will affect the health status of the family, which means that the family is the most important source of support in maintaining family health.

Adequate family support is due to the good relationship between family members, and awareness of the family caring for each other so that family functions can run as they should. Low family support occurs due to a lack of concern among family members and family limitations in meeting patient needs, inadequate knowledge, and economic conditions of family members to accelerate patient recovery. The awareness of family members to provide support is also because it is the nuclear family which is supposed to care about caring for and helping when a family member is sick.

The results showed that the majority of patients with renal failure diet adherence who underwent hemodialysis were more than half compliant, namely 33 respondents (71.7%). In line with what Geledis (2015) did, he also stated that out of 52 respondents, there were 44 people (84.6%) who adhered to the diet. This data is supported by the results of Desitasari's research (2014) that 27 respondents adhered (75.0%) to dieting.

Adherence to health programs is a behavior that can be observed and thus can be directly measured, compliance itself is a term used to describe obedience or surrender to predetermined goals. According to Niven (2002), compliance is the extent to which the patient's behavior complies with the provisions given by health professionals. The level of compliance is the attitude shown by people with CRF to comply with the diet that must be followed. Potter and Perry (2016) state that compliance is patient obedience in carrying out therapeutic measures. Patient compliance means that patients and their families must take the time to carry out the required treatment, including on a diet.

Factors that influence non-compliance can be classified into four parts, including an understanding of instructions, quality of interaction, social isolation from family, beliefs, attitudes, and personality. In general, according to Syamsiah (2011), dialysis patient non-adherence includes 4 (four) aspects, namely: non-adherence following the Hemodialysis program (0-32.3%), non-adherence to fluid restriction (3.4%-74%) and non-adherence following the diet program (1.2%-84%) (Caecilia, 2019). Most of the patients adhered to their diet because some of the respondents were old patients undergoing hemodialysis, so they already understood diet arrangements. In addition, the family as a support system is more adapted to the patient's condition

Based on the analysis results logistic regression value is obtained above variable $\alpha > (0.05)$, until H_0 is accepted and rejected so that the influence of knowledge and family

support on dietary adherence of patients undergoing hemodialysis at Mayapada Hospital in Surabaya.

The level of knowledge in this study is the patient's understanding of the rules in undergoing a hemodialysis therapy program, for example, related to the consumption of food, drugs, or rules in carrying out hemodialysis therapy. The higher the level of patient knowledge about hemodialysis, the higher the level of adherence to undergoing hemodialysis therapy programs. However, research conducted by Hartono (2013) states that the higher a person's knowledge, the more disobedient the patient is to their diet. Patients have the belief that what they eat will be thrown away during dialysis. In addition, some patients choose not to limit what they consume because they think they are enjoying the rest of their lives.

This study is in line with that conducted by Satyaningrum (2011) which stated that there was no significant relationship between family support and dietary compliance in chronic kidney failure patients with hemodialysis therapy. According to Setiadi (2017) that family support is highly dependent on the patient's recovery rate in carrying out the functions of each family member properly, the better the family support given to the patient, the family function will lead to patient welfare, setbacks in carrying out their activities and does not accelerate the patient's healing during rehabilitation. optimall(Sutrisno, Fawzi and Dwianggimawati, 2019).

Kidney failure patients with hemodialysis require a special diet, especially in limiting food, fluids, sodium, and potassium. in the daily diet (Almatsier, 2013). These restrictions are intended to adjust to the decreased excretory function of the kidneys so that they can help reduce the accumulation of metabolic products in the blood. A restrictive diet will change lifestyle and be felt by patients as a nuisance, and the recommended diet is not liked by most patients. The patient feels "punished" when he indulges in eating and drinking. Because if the patient complies with his wishes, there will be ascites, hypertension, edema, cramps, and others. This makes the patient feel very sick and unable to carry out daily activities.

In dealing with these conditions the role of medical workers, health workers, nutritionists, and families is very necessary. Education/counseling and counseling are needed by health workers, regarding the importance of family support in the form of instrumental support (help, energy, and time), informational support (advice, advice, and information), emotional support (attention, affection, and empathy) and assessment support (appreciate and feedback). This effort is made to meet individual needs in improving their health. Thus CRF patients undergoing hemodialysis can be more compliant with the therapy program, especially the diet they are currently undergoing.

Based on the above, the researchers assume that there is no relationship between knowledge and family support with diet adherence because there are many old patients undergoing hemodialysis therapy so they know when they have to comply with the diet and when they don't. Awareness of a family that cares for each other among family members so that family functions can run as they should. Based on interviews with several patients, most of the patients undergoing hemodialysis will choose to eat and drink freely ahead of their schedule to undergo hemodialysis with the belief that they will be wasted and attracted to fluids and toxic substances in their bodies after hemodialysis. There are even those who think they are enjoying all the food for the rest of their life depending on the dialysis machine so they choose not to comply with the recommended diet. Moderate and low family support occurs due to a lack of concern among family members and family limitations in meeting patient needs, inadequate knowledge, and economic conditions of family members to accelerate patient healing(Sutrisno Alfian, 2018)

CONCLUSION

The conclusion of this study showed that the relationship between knowledge and family support with dietary adherence of patients undergoing hemodialysis was obtained for each of the significance values of the knowledge variable of 0.143 and the family support variable of 0.132. This figure is greater than the alpha value ($\alpha > 0.05$) or it can be said that the knowledge and support of the patient's family does not significantly affect patient adherence to a kidney failure diet, so it can be concluded that there is no relationship between knowledge and dietary compliance in patients undergoing hemodialysis. at Mayapada Hospital in Surabaya. Education and counseling by health workers on the importance of family support in the form of instrumental support, informational support, emotional support, and appraisal support are needed.

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