



Original Research

Correlation of Family Support with Quality of Life of Patient Chronic Renal Failure Undergo Hemodialysis

Rika Isdiarti and Iwan Ardian

Faculty of Nursing, Universitas Islam Sultan Agung Semarang, Semarang, Indonesia

ABSTRACT

Introduction: Patients who experience the chronic renal failure with hemodialysis and undergo such therapy for a long time has an impact on patients life, like economic problem, financial, difficulty to work, decreasing sexual motivation, fear and depression facing death, also a big changes of life style, could influencing the spirit of someone life. Quality of life of patient chronic renal failure which experience hemodialysis enough draw attention to health professional, because problem of the quality of life become of vital importance in treatment service which totally to patient, on the chance of patient can experience hemodialysis and can live on although constructively machine of dialisa. Family support in patients with chronic renal failure undergoing hemodialysis consists of instrumental support, informational support, emotional support, hope support and self-esteem support. This support is provided throughout the patient's life. The purpose of this research to identify correlation between family support with quality of life of patient chronic renal failure with undergo hemodialysis.

Methods: This research was a correlational study. The population was all chronic renal failure patients at one of general hospital in Demak, Central Java, Indonesia, from October to November 2019 as many as 60 patients. This study used total sampling which mean all 60 respondents joined in the study. The instrument is a quality of life questionnaire according to WHOQOL. Data was analyzed with bivariate analysis by using Somer's test with level of significance <0.05.

Results: The results showed most of the respondent have family support enough counted 37 respondent (61.7%). Most quality of life of respondent is enough counted 31 respondent (51.7%). Statistical tests performed using Somer's test show the results of a p-value of 0,000 or significance value of 0,000 <0.05.

Conclusion: There is a correlation between family support with quality of life of patients chronic renal failure with hemodialysis. This research can be used as motivation for HD patients and families in improving the quality of life of patients by providing support to improve the patient's life spirit.

ARTICLE HISTORY

Received: Feb 27, 2020

Accepted: April 1, 2020

KEYWORDS

family support; quality of life; chronic renal failure; hemodialysis

CONTACT

Iwan Ardian

✉ iwanardian@unissula.ac.id

📍 Faculty of Nursing, Universitas Islam Sultan Agung Semarang, Semarang, Indonesia.

Cite this as: Isdiarti, R., & Ardian, I. (2020). Correlation of Family Support with Quality of Life of Patient Chronic Renal Failure Undergo Hemodialysis. *Jurnal Ners, Special Issues*, 569-573.
doi:<http://dx.doi.org/10.20473/jn.v15i2.22127>

INTRODUCTION

Chronic Renal Failure has been suffered by many people in several parts of the world, in the United States in 2010 an estimated 20 million people aged ≥ 20 years suffered from chronic renal failure. This

condition is not much different from in the Asian continent, chronic renal failure is recorded to continue to increase in the number of sufferers in several countries. In Malaysia in 2000 it was estimated that 300 people per 1 million population suffered from chronic renal failure (0.03%). This

figure jumped in 2006 to 600 people per 1 million population (0.06%). Like Malaysia, in Taiwan chronic renal failure occupies the highest number of sufferers in Asia, where in 2000 the sufferers reached 1400 people per 1 million population (0.14%) and increased in 2016 to 2200 people per 1 million population (0.22 %) (Cruz, 2013).

WHO estimates that there will be an increase in chronic renal failure sufferers between 1995-2025 by 41.4%. In 2011 in Indonesia there were 15,353 patients undergoing hemodialysis and in 2012 an increase of 4,268 people so that overall there were 19,621 patients newly undergoing hemodialysis until the end of 2016 in 244 hemodialysis units in Indonesia (Mulia et al., 2018).

Based on data from the Ministry of Health Republic of Indonesia, in 2015, the 10 most causes of death are non-communicable diseases as follows stroke (4.87%), intracranial hemorrhage (3.71%), septicemia (3.18%), chronic renal failure (3.16%), heart (2.67%), diabetes mellitus (2.16%), intrauterine hypoxia (1.95%), inflammation of the nervous system (1.86%), heart failure (1.77%) and hypertension (1,62%) (Malik & Mazahir, 2015). Data from the Central Java Health Office (2015) shows that the highest incidence of renal failure in Central Java is Surakarta City with 1497 cases (25.22%) and the second is Sukoharjo Regency with 742 cases (12.50%).

Patients who undergo hemodialysis for a long period of time have to face various problems, such as financial problems, difficulty in working, decreased sexual drive, depression and fear of facing death, as well as lifestyle that must change, more or less affect one's zest for life. Hemodialysis measures indirectly affect the quality of life of a patient which includes physical health, psychological, spiritual conditions, socioeconomic status and family dynamics (Indonesia et al., 2010).

The quality of life of patients undergoing hemodialysis attracts enough attention for health professionals, because the problem of quality of life becomes very important in the provision of comprehensive nursing services for patients, with the hope that patients can undergo hemodialysis and be able to survive even with the help of dialysis machines. According to Supriyadi (2015), in his research stated that after undergoing hemodialysis there are changes in the psychological dimensions, social dimensions and environmental dimensions of a person that is having positive feelings, being able to think, remember and concentrate and feel more comfortable with interacting.

Research to determine the level of quality of life of patients with chronic diseases lately more and more conducted. One research on the quality of life of chronic renal failure patients undergoing hemodialysis in Bandung showed that of 91 hemodialysis patients, 52 patients (57.2%) perceived quality of life at a low level and 39 other patients (42.9%) in high level (Wijaya et al., 2005).

Family support is very influential on the quality of life of family members. Family support for patients with chronic renal failure undergoing hemodialysis consists of instrumental support, informational support, emotional support, hope support and self-esteem support. Family support can affect health (through healthy behaviors), psychological and physiological, where family support can be provided through emotional support, information or giving advice. Family support is provided throughout the patient's life. If this kind of support is not available, then the success of healing (rehabilitation) is greatly reduced. Family support obtained by patients with chronic renal failure undergoing hemodialysis therapy concerns support in financial matters, reducing the level of depression and fear of death and frequent limitation of fluid intake

An initial study was done on 6 (six) patients in the Hemodialysis Unit of Demak General Hospital. The results of interviews and filling in the checklist of study aid sheets obtained data that from the six patients with chronic renal failure found, showed a decrease in quality of life related to changes in health, physical, psychological, economic and social status (Rahayu et al., 2012). Decreased quality of life in patients who are undergoing hemodialysis can be seen from various statements of the patient when interviewing and telling the life that has been lived. Almost all of them experience physical weakness that is disturbance of daily activities, shortness of breath, dry skin, dizziness, pale, lack of sleep and restrictions on intake of nutrients and fluids that must be obeyed. It also creates psychological burdens such as sadness, fear of death, anxiety, despair, disappointment and even inferiority. The sufferer states that life is no longer useful, always troublesome for the family.

Based on interviews, there were 3 (three) patients who came alone on the grounds that there were busy family members, and lacked support from the family, so when the hemodialysis schedule had to be done they came alone. While others always get assistance from family members during hemodialysis.

Hemodialysis that must be lived for 4-5 hours is always monitored to anticipate the emergence of complications in patients during and after hemodialysis. Thus, assistance by family members during hemodialysis is very important for patients and is also a tangible form of family support. While the availability of family support is not well known to families and patients to work on it, so patients are still feeling sad, inferior and anxious during therapy even though the family is there when the therapy is undertaken.

MATERIALS AND METHODS

Knowing the relationship of family support with the quality of life of renal failure patients at Sunan Kalijaga General Hospital, Demak Regency, Central Java, Indonesia. The population is the whole object under study (Notoatmodjo, 2010). Population is the entire source of data needed in a study. In this study

the population was all chronic renal failure patients at Sunan Kalijaga Demak General Hospital from October to November 2019 totaling 60 respondents. The sample is a portion of the population that represents a population. The samples in this study were all renal failure patients at Sunan Kalijaga Demak General Hospital as many as 60 respondents.

RESULTS

Based on table 1 it can be seen that the mean age of respondents is 65.02 years, the youngest age is 51 years and the oldest is 74 years with a standard deviation of 4.7. In addition, most respondents are male as many as 40 respondents (46.7%), passed only elementary level of education (40.0%), and most respondents work as farmer (36.7%) as well. Majority of respondents showed family support in moderate level (61.7%) and the quality of life as well (51.7%).

Based on table 2 it can be seen that respondents with less family support have less quality of life as many as 2 (40.0%) respondents, have enough quality of life as many as 1 (20.0%) respondents and have good quality of life as many as 2 (40.0%) respondents. Respondents with sufficient family support have less quality of life as many as 3 (8.1%) respondents, have enough quality of life as many as 27 (73.0%) respondents and have good quality of life as many as 7 (18.9%) respondents. Respondents with good family support have less quality of life as many as 3 (5.6%) respondents, have enough quality of life as many as 1 (16.7%) respondents and have good quality of life as many as 14 (77.8%) respondents.

The results of statistical tests conducted using the Chi Square Test show the results of the p-value of 0,000 that means there was a correlation between family support and the quality of life of patient chronic renal failure with hemodialysis. In addition, Somer's results show 0.410 which shows the close relationship between variables is in the moderate level of correlation.

DISCUSSION

Family support is very important to improve the quality of life of patients undergoing hemodialysis therapy. Family support is associated with the characteristics of age at most people at age 61-70 years as many as 54 respondents (90%). The existence of family support has an important role in one's life as motivation, including which can affect one's satisfaction in living everyday life, including satisfaction with their health status.

The results showed that the majority of respondents had sufficient family support of 37 respondents (61.7%). The existence of low family support can add to the problem for patients and families, because sick patients really need moral and spiritual support to speed up the healing process. Patients with chronic renal failure who undergo hemodialysis therapy which requires a long time and

cost if there is no support from within themselves and their families can reduce the quality of life.

The study also showed that most of the quality of life of respondents was sufficient as many as 31 respondents (51.7%). Most of the quality of life in the category that is not good in patients with renal failure undergoing hemodialysis therapy causes decreased work productivity, decreased function of the organs experiencing negative mood changes, this can cause a decrease in quality of life

Research results show that there is a relationship between family support and the quality of life of hemodialysis patients at Sunan Kalijaga Demak General Hospital with a value of $\alpha = 0.05$. Family support is any form of positive behavior and attitude given by the family to one of the sick family members, namely a family member who is experiencing health problems (Friedman, 2015). This can be seen in the number of family members who come to wait for patients who are undergoing hemodialysis. Every patient undergoing hemodialysis must be delivered by the family. Observations and interviews with the patient's family can be known to every patient who is undergoing hemodialysis is always delivered by at least 2 families. Not infrequently until all family members come to wait outside the hemodialysis room. This shows that family support is very good in helping cure hemodialysis patients.

The role of the family is very important in the stages of health care, starting from the stage of health improvement, prevention, treatment to rehabilitation. Social support is needed by every individual in each life cycle. Social support will be increasingly needed when someone is experiencing pain problems, this is where the role of family members to undergo difficult times quickly. In this case the form of family emotional support seems very dominant in helping to improve the quality of life of patients with hemodialysis. The family is a service unit because family health problems are interrelated and also affect each other in the surrounding families or the surrounding community or in a broad context affecting the country (Yosephin, 2012).

Results of the study illustrate that most respondents have adequate family support of 48 respondents (80.0%). This shows that the family helps members in terms of providing facilities when patients need the need for hemodialysis therapy, plays an active role in each patient's therapy and care, finances hemodialysis therapy and treatment, finds the advice and equipment needed by the patient. The family pays good attention to hemodialysis patients who often worry about their unpredictable pain and disruption in their lives. The researcher's observations show that when a patient is undergoing hemodialysis there must be one of the family members who is beside the patient who accompanied by inviting conversation, giving what the patient asked for and helping the patient's needs while undergoing hemodialysis.

Table 1. Distribution of variables (n=60)

Variables	n	%	Mean	Standard of Deviation (SD)	Min-Max
Age	60	100	65.02	4.7	51-74
Sex					
Male	40	66.7			
Female	20	33.3			
Education					
No school	23	38.3			
Elementary school	24	40.0			
Middle School	2	3.3			
High School	11	18.3			
Occupation					
Farmer	22	36.7			
Private	20	33.3			
Housewife	9	15.0			
Civil servants	1	1.7			
No occupation	8	13.2			
Family support					
Less	5	8.3			
Moderate	37	61.7			
Good	18	30.0			
Quality of life					
Less	6	10.0			
Moderate	31	51.7			
Good	23	38.3			

Table 2. Correlation of variables (n=60)

Variables	Quality of life							Chi square test	Somers's test	
	Less	%	Moderate	%	Good	%	Total			
Family Support	Less	2	40.0	1	20.0	2	40.0	5	p= 0.000	0.410
	Moderate	3	8.1	27	73.0	7	18.9	37		
	Good	1	5.6	3	16.7	14	77.8	18		
	Total	6	10.0	31	51.7	23	38.3	60		

Quality of life is an individual's perception of his position in life, in the cultural context and value system in which the individual lives, and the relationship to goals, expectations, standards and desires (Indanah et al., 2018). This is a concept that is combined with various ways for a person to get physical health, psychological condition, independent level, social relations, and relationships with the surrounding environment. Quality of life in this study is the perception of patients with hemodialysis about its position in everyday life.

Patients who undergo hemodialysis for a long period of time have to face various problems, such as financial problems, difficulty in working, decreased sexual drive, depression and fear of facing death, as well as lifestyle that must change, more or less affect one's zest for life. Patients with hemodialysis have decreased enthusiasm for life because of changes that must be faced and will affect the quality of life of patients. Hemodialysis measures indirectly affect the quality of life of a patient which includes physical health, psychological condition, spiritual condition, socioeconomic status and family dynamics (Zurmeli et al., 2015).

The results of interviews with the patient's watchdog family found that of the 60 respondents studied, 12 respondents had good support for hemodialysis patients. In this case the good support given by family members in meeting all patients' needs can be seen by providing funding, driving to the hospital, encouraging life, and meeting all the needs of patients during illness. While families with insufficient support are as many as 48 respondents, they say they are getting bored having to always come and queue for hemodialysis, in addition to the need for funds that are not small to come to do hemodialysis is also a problem in itself.

The results of this study are in line with (Warhamna & Husna, 2016) research showing that there is a significant correlation between social support and the quality of life of patients in both the guaranteed and non-guaranteed groups. This shows the role of financing does not affect the quality of life of hemodialysis patients. This is understandable because according to the observations of researchers all respondents who did hemodialysis use a health BPJS for which all hemodialysis costs are fully borne by the health BPJS.

CONCLUSION

Most respondents have sufficient family support, while most of the quality of life of respondents is moderate. There is a correlation between family support with quality of life of patients chronic renal failure with hemodialysis. This research can be used as motivation for HD patients and families in improving the quality of life of patients by providing support to improve the patient's life spirit.

CONFLICT OF INTEREST

In this study there were no conflicts of interest with the participants involved in the research activity process.

ACKNOWLEDGEMENT

This research can be carried out with the support of several parties, for that the researcher would like to thank the Unissula Rector, Deans of the Faculty of Nursing and the entire academic community of the Faculty of Nursing at Sultan Agung Islamic University in Semarang. Thank you for the support of both moral and material until this research can be completed. Hopefully this article can provide benefits to the community.

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