ORIGINAL ARTICLE

MOTIVATION AND QUALITY OF LIFE AMONG PATIENTS WITH CHRONIC RENAL FAILURE UNDERGOING HEMODIALYSIS IN MEDAN, INDONESIA

Deddy Sepadha Putra Sagala[1]*, Jenny Marlindawani Purba[2], Nunung Febriyani Sitepu[3]

1 Master Student Faculty of Nursing, Universitas Sumatera Utara,
2 Lecturer of Faculty of Nursing, Universitas Sumatera Utara,
3 Prof. Maas Street, USU Campus, Medan, Indonesia,
* Correspondence: deddyspsagala@gmail.com

Abstract

The increasing number of patient with chronic renal failure can also increase the number of patients undergoing hemodialysis. Hemodialysis is usually experienced by the patients to maintain their life as well as to transform their lifestyle. Hence, patients need sufficient motivation that will affect the quality of life of patients undergoing hemodialysis. This study aimed to analyze the correlation between motivation with quality of life in patients undergoing hemodialysis. It was a correlational study using a cross-sectional approach. This study was conducted at a private hospital in Medan. The research sample was all patients with chronic renal failure undergoing hemodialysis at Imelda Pekerja Indonesia Hospital in the year 2018, with the total number of sample was 79. The data was collected through questionnaire administration. Spearman test was performed to examine the data. The result of the study showed that there was a positive correlation between motivation and quality of life among patients with chronic renal failure undergoing hemodialysis (r=0.813; p<0.05). The high motivation of patients influences their quality of life to undergo hemodialysis. This study can be used as a reference for nurses to provide health education to patients and their families. High motivation and how to improve the quality of life have required the course for the patients.

Keywords: Motivation, Quality of Life, Chronic Renal Failure

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1. Introduction

Chronic kidney failure (CKD) is a clinical syndrome caused by a progressive decline in kidney function resulting in a glomerular filtration rate of less than 50 ml/minute. Chronic kidney failure was an effect on decreasing the body's ability to maintain metabolism and fluid and electrolyte balance (1). Patients who have kidney function loss up to 90% have low capacity to maintain fluid and electrolyte (2).

Chronic kidney failure is a rapidly developing problem. It is estimated that around 11% or 19.2 million people in the United States experience chronic kidney failure (3).

Chronic kidney failure is a global threat to the population in general, especially in developing countries. According to WHO data in 2011, it is estimated globally that chronic kidney failure is the number 12 cause of death and the cause of the 17th disability (4). According to the 2012 Indonesia Renal Registry data that the number of patients in the hemodialysis unit in 2012 was around 19621 new patients and 9161 active patients (5). Hill et al., in their study, stated that the global prevalence of chronic kidney failure was 13.4%. Whereas according to the Global Burden of Disease, CKD was the 27th cause of death in the world in 1990 and increased to 18th in 2010.

Several problems has faced among patients who carry out hemodialysis including nausea, vomit, epigastric pain, headache, low blood pressure, muscle cramp, anxiety, boredom, as well as a financial problem which eventually will lower their quality of life (6). Changes in patients on hemodialysis will also affect their emotional reaction, which contributes to the way they overcome problems in their life through coping up their selves. A previous study found that the majority of the respondents had high motivation; with the total number of respondents were 42 (58.3%) (7). This was also in line with another study showed that the majority of 21 respondents had the high motivation (8). Based on a study conducted to 51 respondents undergoing hemodialysis, it was found that they had high external motivation. The respondents received external motivation from their family through compliments on their health progress and reminding the patients of the hemodialysis schedule. Motivation is any reason that drives or forces someone to act in a certain way to achieve a particular goal (9-10).

An initial survey at the hemodialysis unit of private Hospital that was conducted on 14 patients from 96 patients on hemodialysis found that they often felt dizzy when taking hemodialysis. Moreover, 12 patients reported to have nausea and breathing problem, 13 patients reported to have long-term pain after or before carrying out hemodialysis so that they found challenges in doing regular activities, and ten patients said that they occasionally had felt anxious about their condition. Commonly, to overcome these problems, nurses only report the issues to the doctor and distract patients' attention by communicating with them so that the problems can be temporarily solved.

2. Objectives

The study aimed to examine the relationship between motivation and quality of life in patients with chronic renal failure undergoing hemodialysis.

3. Method

This study applied quantitative research using correlational design with the cross-sectional approach. Seventy-nine samples were recruited by using the purposive sampling technique. The data were directly collected from the respondents by administering a questionnaire. The questionnaire consisted of motivation and quality of life. The data was analyzed using the spearman correlational analysis.

4. Results

4.1 Characteristics of patients with chronic renal failure undergoing hemodialysis

Table 1. The characteristics of patients with chronic renal failure undergoing hemodialysis (n=79)

Characteristics	f	%
Age (Year)		
26-44	9	11,4
45-59	48	60,8
60-74	22	27,8
Sex		
Male	25	31,6
Female	54	68,4
Education		
Primary	22	27,8
Junior High	18	22,8
Senior High	36	45,6
Undergraduate	3	3,8
Marital Status		
Married	59	74,7
Widow/ divorced	16	20,3
Single	4	5,1
Ethnic Group		
Bataknese	41	51,9
Javanese	32	40,5
Malay	6	7,6
Employment		
Employed	36	45,6
Unemployed	43	54,4
Family Income		
≤ 2.750.000 (IDR)	66	83,5
> 2.750.000 (IDR)	13	16,5
Health Insurance		
BPJS	76	96,2
Other Insurance	3	3,8
Period of Hemodialysis		
3-6 months	56	70,9
> 6-12 months	23	29,1
Duration of Hemodialysis		
Three times/ week	22	27,8
Two times/ week	55	69,7
One time/ week	2	2,5
Total	79	100

4.2 Motivation In Patients With Chronic Renal Failure Undergoing Hemodialysis

Table 2. Frequency of motivation in patients with chronic renal failure undergoing hemodialysis (n=79)

Motivation	f	%
High	32	40,5
Low	47	59,5
Total	79	100

Table 2 showed that more than half of the respondents have motivation with category low, 47 respondents (59.9%), and almost half of the respondents receive and have motivation with category high, i.e., 32 respondents (40.5%).

4.3 Quality of Life of Patients With Chronic Renal Failure Undergoing Hemodialysis

Table 3. Frequency of Quality of Life of Patients With Chronic Renal Failure Undergoing Hemodialysis (n=79)

Quality of life	f	%
Good	35	44,3
Bad	44	55,7
Total	79	100

Table 3 illustrates that more than half of the respondents have a terrible quality of life, i.e., 44 respondents (55.7%) and almost half of the respondents have a good quality of life, i.e., 35 respondents (44,3%).

4.4 Correlational Test Spearman Between Motivation And Quality Of Life Patients With Chronic Renal Failure Undergoing Hemodialysis

Table 4. The relationship between motivation and quality of life patients with chronic renal failure Undergoing Hemodialysis (n=79)

Variable	Quality of Life		*r*	*p*
	High (%)	Low (%)		
Motivation				
High	26 (81,3)	6 (18,8)	0,813	0.000
Low	9 (19,1)	38 (80,9)		

Table 4 shows that respondents who have high motivation also have a high quality of life as well. The results showed there was a significant correlation between motivation and quality of life (p<0.005: r=0.813).

5. Discussion

Based on the bivariate analysis, it was obtained that p-value = 0.000 which indicated that there was a significant correlation between motivation and quality of life in patients with chronic renal failure at Imelda Indonesia Hospital in Medan City. Besides, it was also found that the correlation coefficient was 0.813, indicating that there was a strong

and positive correlation between motivation and quality of life in patients with chronic renal failure. The quality of life of patients with chronic renal failure will increase as the increase of owned and accepted motivation. In contrast, the quality of life of patients will decrease if the motivation of the patients decreases.

The study was relevant previous study found that there was a correlation between motivation and quality of life among patients with chronic renal failure undergoing hemodialysis (11). Another study also showed a negative correlation between emotional support, instrumental support, and anxiety in patients undergoing hemodialysis (12). However, based on a study conducted by Garousi and Garrusi (2013), it was found a weak and negative correlation between family support and anxiety in diabetic patients in Iran (13).

From the point of view of nursing sciences, there are five essential ways that can be used to treat the identified disease, namely, try to be optimistic about the future, use social support, use spiritual sources, try to control situation or emotion and accept the real condition. These efforts can lead to effective coping strategy in patients so that it is expected that their quality of life will be better (14).

On the other hand, motivation can also be an essential factor in determining belief about individual health value. It can also determine the medication program that will be received. The patients with firm faith, hope, and desire tend to have strong motivation as well. Providing health education to patients with chronic renal failure who undergo hemodialysis is necessary so that they will continuously and regularly takes the therapy in accordance with the schedule (14). This research is in line with a previous study study showed that there is a relationship between motivation with physical health, psychological health, social relations, and the surrounding environment, which is part of the quality of life in patients undergoing hemodialysis (15). The nurses needed to support patients for improving further the QOL among patients with undergoing hemodialysis (16).

Based on the results of the study, it can be concluded that motivation is a factor affecting patient adherence in carrying out hemodialysis therapy. Therefore, the higher the motivation either received or owned by the patients, the better the physical health improvement will be which will also happen to patients' condition in terms of wellbeing, social and environment, as well as spiritual.

6. CONCLUSIONS

There was a positive correlation between owned and received motivation and quality of life in patients with chronic renal failure undergoing hemodialysis therapy ($r = 0.813$; $p<0.05$), indicating that the stronger the motivation that is own and received by patients, the better the quality of life will be and vice versa. It is hoped that further research can be done to explore the best ways or techniques so that motivation can be improved so that it will enhance the quality of life that is maximal from patients with chronic renal failure undergoing hemodialysis, so as to complement the results of existing research.

References

1. Rendy, M Clevo and Margareth TH. *Medical Surgery NursingInternal Disease.* Yogyakarta: NuhaMedika. 2012.
2. Parson, T.L., Toffelmire, E.B., Valack, C.E. Exercise Training During Hemodialysis Improves Dialysis Efficacy and Physical Performance. Arch Phys Med Rehabilitation. 2006;87: 680-687.
3. Black & Hawks. Medical-surgical nursing clinical management for positive outcomes.7th Ed. St.Louis: Missouri Elsevier Saunders. 2009.
4. Zachariah, L.M.S. & Gopalkrishnan, S. Impact of music therapy during hemodialysis on selected physiological parameters of patients undergoing Hemodialysis in selected Hospitals. Interventional Journal of Comprehensive Nursing. Volume I., 2014.
5. Indonesian Renal Registry (IRR). (2012). 5th Report of Indonesia Renal Registry (2012). Perhimpunan Nefrologi Indonesia (PERNEFRI).
6. Annas, Jasni. (2010). Factors that influence patient motivation fail chronic kidney to undergo hemodialysis in the Hospital Hemodialysis UnitDr still. CiptoMangunkusumo. The material was presented in PITNAS PPGI2010. [cited 05 March 2018]. Available from https://nefrologyners.wordpress.com/2010/10/23/pitnas-menuju-kemandirian-profesi-perawat/
7. Rahma Dani., Gamya Tri Utami., Bayhakki. The relationship between motivation, expectations, and support of health workers in compliance with CRF patients to undergo hemodialysis. 2015. [cited 2 mei 2018]. Available from;https://media.neliti.com/media/publications/184149
8. Ismail., Hasanuddin., & Bahar, B. The relationship of education, knowledge, and motivation with dietary compliance in patients with chronic renal failure at the Central General Hospital of dr. WahidinSudirohusodo Makassar. 2012. [Cited 22 March 2015] available from; http://library.stikesnh.ac.id/files/disk1/2/e library%stikes%20nani%hasanuddin-- ismailhasa-73-1-Artikel-8.pdf.
9. Saam, Z., & Wahyuni, S. *Nursing Psychology.* Jakarta: PT Raja Grafindo Persada. 2012.
10. Polit, D.F., & Beck, C.T. *Nursing Research: Generation And Assessing Evidence For Nursing Practice. (9 th. ed.)*. Philadelphia, F.A.: Lippincott Williams & Wilkins. 2012.
11. Dani, R., Utami, G.T., & Bayhakki. Relationship between motivation, expectation, and support of health workers to the compliance of patients with chronic kidney failure to undergo hemodialysis. JOM. 2015;2(2). [cited 20 June, 2018].
12. Sadeghi H., Saeedi M., Rahzani K., & Espandiary. The relationship between social support and death anxiety in hemodialysis patients. Iranian Journal of Psychiatric Nursing. 2015;2(8).
13. Garousi, S & Garrusi, B. Does perceived family support has a relation with depression and anxiety in an Iranian diabetic sample. International Journal of Caring Science September-December 2013 Vol 6 Issue 3. [cited 25 Juni 2018].
14. Smeltzer, S.C., & Bare, B.G. *Textbook For Medical-Surgical Nursing Brunner &Suddarth.* Jakarta: ECG. 2002;8.
15. Schatell, M.S., & Stec, P. How understanding motivation can improve dialysis practices. Nephrology News & Issue. 2008. [cited 19 August, 2018]. Available from; www.nephronline.com.

16. Ibrahim Kusman, Taboonpong, S., & Nilmanat. Coping and quality of life among Indonesians undergoing hemodialysis. Vol. 13(2). Thai Journal of Nursing Research. 2009;13(2) 109-117.