

Psychoeducation On Quality of Life And Urem Levels Of Hemodialysis Creatinine Patients At Curup General Hospital Rejang Lebong Regency

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Abstract-Chronic kidney failure is a world health problem because it is difficult to cure; the cost of treatment and treatment is expensive. Patients with chronic renal failure undergoing hemodialysis are unable to maintain the balance of metabolism and electrolyte fluid, causing an increase in uremia in creatinine in the blood. Patients with chronic renal failure undergoing extended hemodialysis will affect the decline in quality of life. This study aims to determine the effect of psychoeducation on creatinine levels of urea in the blood and the quality of life of patients with chronic renal failure undergoing hemodialysis at Curup General Hospital.

Methods: This study uses a pre-experimental method with a research design using one group pretest-posttest design. Patients with chronic renal failure were given psychoeducation for six weeks and then measured the levels of urea and creatinine in the blood and measured the quality of life of patients with chronic renal failure undergoing hemodialysis at Curup General Hospital. The number of respondents in this study was 35 patients. The Wilcoxon non-parametric test analyzed data.

Results: After psychoeducation, there were significant differences in creatinine urea levels in the blood and changes in the quality of life of patients with chronic renal failure undergoing hemodialysis at the Curup General Hospital.

Conclusion: Psychoeducation affects the levels of urea and creatinine in the blood and changes in the quality of life of patients with chronic renal failure undergoing hemodialysis.

Keywords-Chronic Kidney Failure, Psychoeducation, Quality of Life, Urem Creatinine Level

I. INTRODUCTION

Psychological problems are particularly prominent in patients with chronic diseases, such as ESRD, in which the patient has to face illness and face death, and other complex problems. These conditions are often not recognized or treated effectively. As the level of depression and anxiety increases in this population, it is necessary to collaborate with interdisciplinary teams that can assist in solving psychological problems faced by patients, including nephrology experts, palliative care, and mental health workers. One in five patients with ESRD is diagnosed with depression, which is higher than renal transplant patients (1).

Psychological problems are very prominent in patients with chronic diseases, such as chronic renal failure; in this condition, the patient faces morbidity, mortality, and decisions in complex and significant treatment and care. Hemodialysis causes fundamental changes in blood pressure and quality of life in hemodialysis patients (1). Risk factors include female gender, lower socioeconomic status, age > 60 years, and less social support. Depression experienced is associated with worsening renal function, length of hospitalization, and fear of death (2). Patients with depression tend to be less adherent in the treatment process, especially dialysis, resulting in a lack of life satisfaction (3). Depression is a common complication in patients undergoes hemodialysis, with the estimated prevalence of 50%. Studies report that depression in patients undergoing hemodialysis is associated with low quality of life, decreased adherence to the dialysis prescription, comorbidity, and increased mortality (2).

Furthermore, cognitive and emotional aspects of depression can interfere with decision making in situations that are very important in care, such as when faced with dialysis or transplantation (3). Patients with chronic kidney disease (CKD) have an organized perception of their illness and treatment. These perceptions greatly influence a patient's strategy to manage his illness in self-management. In patients with chronic kidney disease, perceptions may vary, such as depression and death (4). Patients undergoing hemodialysis (MHD) treatment will experience a decrease in quality of life (QoL) and duration of nutritional levels, inflammation, hospitalization, and death when compared to the average population. Management of depression in hemodialysis patients is essential in order to alleviate mortality and improve the treatment's outcomes. Psychoeducation and cognitive behavioral therapy (CBT) are two treatment modalities that are commonly used to manage depression among hemodialysis patients. Psychoeducation has been supported as an effective treatment for depression in dialysis patients by several authors. Psychoeducation has been supported as an effective treatment for depression in dialysis patients by several authors (5).

Based on report data from the Regional General Hospital (RSUD) Curup about the prevalence of chronic renal failure that lives Facial hemodialysis 7.8%. Patients with renal failure undergoing hemodialysis in the intimate Curup Hospital 68 people.

II. METHODS

This research includes quantitative research where the research design used is a Pre Experimental design, with a pre-test and post-test design one group a research design that aims to test the causal relationship. The population in this study were 68 patients with chronic renal failure who were carrying out hemodialysis therapy in the hemodialysis room in RSUD Curup, Rejang Lebong Regency. After being determined based on the inclusion criteria, 35 respondents were determined. In these study patients with chronic renal failure get psychoeducation for six meetings. Sampling was done before and after psychoeducation, to see differences in blood creatinine urea levels, while to measure the quality of life (WHOQOL)-BREF. Data in the nonparametric analysis of Wilcoxon to see creatinine urea levels and quality of life before and after psychoeducation

III. RESULT

Table I. The Differences in urea levels before and after psychoeducation

Variable	Mean ± SD	Z	P value	
Urea Level				
- Before Psychoeducation		156,44 ± 40,37	5,582	0,001
- After Psychoeducation		143,49 ± 33,99		

Table I shows differences in urea levels before and after psychoeducation in renal failure patients who do hemodialysis with p-value 0.001, p-value <0.05, this indicates that there is an effect of psychoeducation on reducing urea levels of renal failure patients who do hemodialysis.

Table II. The Differences in creatinine levels before and after psychoeducation.

Variable	Mean ± SD	Z	P value	
Creatinine Level				
- Before Psychoeducation		4,12±1,536	5,582	0,001
- After Psychoeducation		3,59±1,360		

Table II shows differences in creatinine levels before and after psychoeducation in renal failure patients who do hemodialysis with p-value 0.001, p-value <0.05, this indicates that there is an effect of psychoeducation on decreasing creatinine levels in renal failure patients who do hemodialysis.

Table III. The difference in the quality of life before and after psychoeducation.

Variable	Mean ± SD	Z	P value	
The quality of life level				
- Before Psychoeducation		4,12±1,536	5,582	0,001
- After Psychoeducation		3,59±1,360		

Table III shows the difference in the quality of life before and after psychoeducation in renal failure patients who do hemodialysis with p-value 0.001, p-value <0.05, this shows that there is an effect of psychoeducation on improving the quality of life of kidney failure patients who do hemodialysis.

IV. DISCUSSION

The results showed that psychoeducation affects patients with kidney failure in reducing levels of urea and creatinine and can improve the quality of life of kidney failure patients who get hemodialysis. There is much literature that discusses psychological impacts and social impacts as well as the impact, deterioration of the quality of life (QOL), and social. This condition occurs with chronic kidney disease (CKD). Monitoring a patient's functional status and the subjective state of well being, together known as QoL measurements, is of particular importance in patients with ESRD because the physical debility experienced by patients with uremia can be insidious and has potentially grave consequences. Psychoeducation can be used as an effective psychotherapy for the management of depression in patients undergoing hemodialysis (5). Physician support for chronic patient self-management is one of the critical elements of the continuous care system. Psychoeducation as effective management for management. Patients who experience hemodialysis. Psychoeducation can increase costs and improve treatment outcomes better (6). This statement is by the results of research that shows that there is an effect of psychoeducation on the business of chronic renal failure patients who run hemodialysis to reduce levels of urea and creatinine. Chronic renal failure (CRF) is an irreversible and progressive renal failure where the body fails to maintain metabolic and electrolytic balance, uremia installation, metabolic acidosis, anemia, electrolyte imbalance, and endocrine disorders. Hemodialysis is a method used in chronic renal failure (CRF). However, this process can cause A detrimental measure of the quality of life of a patient and affect the physical and psychological of the individual the boredom of patients with chronic renal failure (CRF)(7). A multifaceted patient-centered educational intervention can increase the proportion of patients planning to initiate dialysis with self-care dialysis. Long-term follow-up will be required to determine whether this intervention will increase actual utilization of self-care dialysis and whether the patients who select self-care dialysis as a result of education can successfully perform the chosen modality. Further studies focusing on patient education in chronic kidney disease (CKD) are warranted (8). Psychoeducation is an excellent tool for the management of patients with

chronic renal failure (CKD) in improving the quality of life and can help in treatment according to the stage of the disease. This intervention can reduce morbidity and mortality in patients. Anemia helps osteodystrophy anemia, uremic malnutrition, hyperlipemia, and cardiovascular disease. This statement is by the results of research that shows that there is an effect of psychoeducation on the business of chronic renal failure patients who run hemodialysis to reduce levels of urea and creatinine. (9). Educate health promotion strategies that are effective in increasing self-esteem and the quality of life of patients undergoing hemodialysis (10). Patient education is associated with better patient outcomes and supported by international guidelines and organizations, but a range of barriers prevent widespread implementation of comprehensive education for people with progressive kidney disease (11).

Significant challenges for future behavioral medicine research and practice include establishing clearer, empirically supported guidelines for the psychological assessment and evaluation of ESRD patients. Differentiating mood disorder from physical sequelae of disease and developing strategies to more accurately evaluate patient regimen adherence are two critical goals for future assessment research. Equally urgent is the need for additional clinical intervention research. Increased attention to the design and evaluation of psychological intervention strategies in this population has the potential to contribute to enhanced patient adherence, improved emotional well-being, and, ultimately, prolonged patient survival. (12) Based on the results of research that has been carried out, psychoeducation is very necessary for patients with chronic renal failure who carry out hemodialysis as an effort for patients to reduce levels of urea and creatinine and increase efforts to improve the quality of life during hemodialysis.

V. CONCLUSION

There is an effect of psychoeducation on reducing urea and creatinine levels and improving quality of life in patients with chronic renal failure undergoing hemodialysis in the hemodialysis room of the Curup General Hospital in Rejang Lebong Regency.

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REFERENCES

- [1] Borji M, Tavan H, Azami M, Otaghi M. The effect of continuous care model on blood pressure and quality of life in patients on hemodialysis. *Biomed Pharmacol J*. 2016;9(2).
- [2] Al sarairoh FA, Aloush SM, Al Azzam M, Al Bashtawy M. The Effectiveness of Cognitive Behavioral Therapy versus Psychoeducation in the Management of Depression among Patients Undergoing Haemodialysis. *Issues Ment Health Nurs* [Internet]. 2018;(February):1–5. Available from: <https://doi.org/10.1080/01612840.2017.1406022>
- [3] Bates N. Depression and Anxiety in ESRD: A Practical Guide for Nephrologists. *ASN Kidney News*. 2017;1–2.
- [4] Clarke AL, Yates T, Smith AC, Chilcot J. Patient's perceptions of chronic kidney disease and their association with psychosocial and clinical outcomes: A narrative review. *Clin Kidney J*. 2016;9(3):494–502.
- [5] Weisbord SD, McGill JB, Kimmel PL. Psychosocial Factors in Patients With Chronic Kidney Disease. *Adv Chronic Kidney Dis*. 2007;14(4):316–8.
- [6] Coleman MT, Newton KS. Supporting self-management in patients with chronic illness. *Am Fam Physician* [Internet]. 2005;72(8):1503–10. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/16273817>
- [7] Gerogianni SK, Babatsikou FP. Psychological aspects in the treatment of chronic renal failure. *Soc Sci Med*. 2014;8(2):205–14.
- [8] Manns BJ, Taub K, VanderStraeten C, Jones H, Mills C, Visser M, et al. The impact of education on chronic kidney disease patients' plans to initiate dialysis with self-care dialysis: A randomized trial. *Kidney Int*. 2005;68(4):1777–83.
- [9] Thomas R, Kalso A, Sedor JR. Chronic Kidney Disease and Its Complications. *Prim Care - Clin Off Pract*. 2008;35(2):329–44.
- [10] Poorgholami F, Javadpour S, Saadatmand V, Jahromi MK. The effectiveness of Self-Care Education on the Enhancement of the Self-Esteem of Patients Undergoing Hemodialysis. *Glob J Health Sci* [Internet]. 2015;8(2):132–6. Available from: <http://www.ccsenet.org/journal/index.php/gjhs/article/view/46134>
- [11] Narva AS, Norton JM, Boulware LE. Educating patients about CKD: The path to self-management and patient-centered care. *Clin J Am Soc Nephrol*. 2016;11(4):694–703.
- [12] Christensen AJ, Ehlers SL. Psychological factors in end-stage renal disease: An emerging context for behavioral medicine research. *J Consult Clin Psychol*. 2002;70(3):712–24