

Factors Affecting The Quality Of Life Of Patients With Chronic Renal Failure

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Chronic renal failure (chronic kidney disease) is a long-term condition in which the kidneys gradually lose their ability to filter waste products and excess fluids from the blood. It commonly develops due to diseases such as diabetes and hypertension, leading to the accumulation of toxins in the body. As the disease progresses, patients may experience fatigue, edema, anemia, and electrolyte imbalances. In advanced stages, renal replacement therapies such as hemodialysis or kidney transplantation become necessary. Early diagnosis and proper management are essential to slow disease progression and improve the patient's quality of life.

Purpose: To identify, using principal component analysis, the factors that most significantly affect the quality of life in patients with chronic renal failure.

Materials and Methods: A total of 50 patients with chronic renal failure aged 16 to 60 years were included in the study. Among them, 35 patients had end-stage renal disease and were receiving maintenance hemodialysis, while 15 patients were at conservatively manageable stages of the disease. In addition to standard clinical and instrumental examinations conducted in a specialized nephrology setting, quality of life was assessed using the EORTC QLQ-C30 questionnaire. Emotional and personality characteristics were evaluated using the Spielberger State-Trait Anxiety Inventory. Statistical analysis was performed using principal component analysis.

Results: Factor analysis of 36 clinical and psychological variables identified three main factors influencing quality of life: asthenic syndrome, cardiac remodeling, and anxiety. These factors demonstrated the strongest association with decreased quality of life among patients.

Conclusion: The quality of life in patients with chronic renal failure is significantly reduced under the influence of asthenic condition, cardiovascular changes, and psychological factors, particularly anxiety. Identification of these factors is essential for improving patient management and developing targeted therapeutic strategies.

Keywords: chronic renal failure, quality of life, factor analysis, hemodialysis, anxiety

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