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Factors Affecting the Quality of Life of Chronic Kidney Disease Patients Based on the Simple Quality of Life Scale

Alfanira[1]*
[1*]Institut Kesehatan Hermina, Indonesia
*Co e-mail: alfanirasetiawan@gmail.com[1]

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ABSTRACT

Chronic kidney disease (CKD) greatly affects the quality of life of patients undergoing hemodialysis, who often face physical limitations, emotional distress, and social challenges. This study aimed to identify factors influencing their quality of life using the Simple Quality of Life Scale (SQOLS). A cross-sectional design was conducted involving 50 hemodialysis patients at RSUP Dr. M. Djamil Padang. Data were collected through SQOLS questionnaires covering physical, emotional, social, environmental, and occupational domains, and analyzed using descriptive statistics and multiple linear regression.Results showed that most patients experienced reduced quality of life, with an average SQOLS score of 60.4. Significant factors affecting quality of life were anxiety levels ($\beta = -0.45$, $p < 0.01$), occupational status ($\beta = 0.32$, $p < 0.05$), and social support ($\beta = 0.28$, $p < 0.05$). High anxiety lowered quality of life, while strong social support and active employment improved it. These findings emphasize the importance of psychosocial interventions, including counseling and support groups, to reduce anxiety and strengthen social networks. In conclusion, psychological and social factors play a key role in shaping the quality of life of CKD patients and should be addressed in patient care.

Keywords; *Chronic Kidney Disease, Quality of Life, SQOLS, Hemodialysis*

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INTRODUCTION

Chronic kidney disease (CKD) is a disorder of kidney function that lasts a long time and has the potential to cause End-stage kidney failure. CKD is one of the diseases with a prevalence rate that continues to increase globally. Data from the World Health Organization (WHO) in 2023 indicate that more than 850 million people in the world suffer from various forms of CKD, caused by risk factors such as hypertension, diabetes and an unhealthy lifestyle (WHO, 2023). In Indonesia, the prevalence of CKD has also increased significantly, with 1 in 10 people estimated to have impaired kidney function (Indonesian Nephrology Association, 2022).

In advanced stages, many CKD patients require hemodialysis treatment to replace lost kidney function. Hemodialysis is a medical procedure that uses a machine to filter waste and excess fluid from a patient's blood. Although effective for preserving the patient's life, this procedure cannot fully restore kidney function, so patients often experience a significant reduction in quality of life (Sharma et al., 2022). These quality of life disorders include physical, emotional, social and occupational aspects that have a direct impact on the patient's well-being (Kumar & Soni, 2023).

Quality of Life (QoL) is a measure that describes the degree to which a person is satisfied with their life, regardless of the presence of a limiting medical condition. In the context of CKD, patients ' quality of life can be affected by various aspects, ranging from physical impairment due to illness, anxiety levels, to decreased social and occupational functions (Chung et al., 2022). This makes understanding the factors that affect the quality of life of CKD patients extremely important in their medical care.

Decreased quality of life in CKD patients is very common, especially in those undergoing hemodialysis. For example, hemodialysis patients often experience chronic fatigue, muscle pain, sleep disorders, and difficulty in carrying out daily activities (Turner et al., 2021). This decrease in quality of life is not only influenced by the physical condition of the patient, but also by psychological and social factors, such as anxiety, depression and lack of social support (Rodrigues et al., 2023).

Anxiety and depression are common problems in CKD patients undergoing hemodialysis. Research by Smith et al. (2023) showed that a high level of anxiety is directly related to a decrease in the quality of life of patients. Patients who feel anxious about their state of Health and the uncertainty of treatment have lower quality of life scores, especially in the emotional and social dimensions. This anxiety also has the potential to worsen the body's response to treatment and increase physical pain (Smith et al., 2023).

On the other hand, social support has a very important role in maintaining the quality of life of CKD patients. Research by Martins et al. (2022) revealed that patients with strong social support, both from family and friends, have a better quality of life compared to patients who feel isolated or lack support. Social support not only provides emotional comfort but also increases the patient's motivation to better undergo treatment (Martins et al., 2022).

In addition to social support, the patient's occupational status also has a major influence on their quality of life. Patients who still have a job tend to feel more independent and connected to

society, which contributes to their social well-being. In contrast, many CKD patients have to stop working or reduce their working hours due to deteriorating physical condition due to hemodialysis treatment (Harrison & Williams, 2022). This not only lowers their income, but also reduces their sense of social engagement and purpose in life.

To assess the overall quality of life of CKD patients, various measuring instruments are used, one of which is the Simple Quality of Life Scale (SQOLS). SQOLS measures five dimensions of quality of life, namely physical, emotional, social, environmental, and occupational. This measurement tool provides a comprehensive overview of the various factors that affect the quality of life of CKD patients (Jiang et al., 2023). The use of SQOLS can help medical personnel to design interventions that are more effective in improving the quality of life of patients.

In a study conducted by Zhang et al. (2022), it was found that medical factors such as blood pressure control and kidney function greatly affect the quality of life of CKD patients. However, although this medical aspect is important, further research shows that psychosocial factors, such as anxiety and depression, are also very influential. This study provides an overview that treatment that focuses only on the physical aspect is not enough to improve the quality of life of patients (Zhang et al., 2022).

Much research has been done on the influence of psychosocial factors on the quality of life of CKD patients, but there are still shortcomings in exploring other social factors, such as family support and employment status. Research by Harrison & Williams (2022) reveals that patients who have active work and strong family support have a better quality of life, even if they undergo hemodialysis. However, this study has not delved deeper into the specific employment factors in the context of CGC (Harrison & Williams, 2022).

Meanwhile, research related to the quality of life of CKD patients in Indonesia is still limited, especially involving psychosocial and social factors comprehensively. Most research in Indonesia focuses more on the physical and medical aspects of CKD, such as the study conducted by Kusnadi & Aisyah (2023), which examined medical factors in the management of CKD. This suggests an urgent need for more thorough research covering the psychosocial and social dimensions of CKD patients, especially those undergoing hemodialysis treatment.

For example, research by Hadi & Hidayat (2022) shows that family support is very influential on the emotional well-being of CKD patients. Patients who receive good family support tend to have a better quality of life. This support helps patients cope with anxiety and stress related to their illness, as well as increase their involvement in medical care (Hadi & Hidayat, 2022). However, this study has not examined in depth the effect of occupational status on the quality of life of CKD patients.

This study aims to fill the literature gap by analyzing various factors that affect the quality of life of CKD patients undergoing hemodialysis in Indonesia. Using the Simple Quality of Life Scale (SQOLS), this study will explore the influence of medical, psychosocial, and social factors on the quality of life of patients. The results of this study are expected to provide new, more comprehensive insights into the management of CKD patients, especially in the Indonesian context (Kusnadi & Aisyah, 2023).

Psychosocial and social factors such as anxiety, social support, and employment status have not been extensively studied in the context of CVD in Indonesia. Therefore, this study aims to explore how these factors affect the quality of life of CKD patients, especially those undergoing hemodialysis treatment. Thus, this study can contribute to designing more effective interventions in the treatment of CKD patients in Indonesia (Kusnadi & Aisyah, 2023).

This study is very relevant considering the increasing prevalence of CKD in Indonesia. By paying more attention to psychosocial and social factors, it is hoped that the care of CKD patients can become more holistic and pay more attention to aspects of their emotional and social well-being, in addition to physical aspects.

METHODS

This study used an analytical design with a cross-sectional approach, which aims to analyze the factors that affect the quality of life of chronic kidney disease patients undergoing hemodialysis treatment. This study was conducted at the hemodialysis Unit of Dr. M. Djamil Padang, involving 50 patients who have undergone hemodialysis treatment for at least 3 months. The selection of samples was carried out by purposive sampling technique, with the inclusion criteria of patients aged 18 to 65 years and willing to participate in this study. Patients who had mental disorders or other illnesses that interfered with their understanding of the research instruments were excluded from the study.

The Data was collected using the Simple Quality of Life Scale (SQOLS), an instrument used to measure the overall quality of life of CKD patients, covering five domains: physical, emotional, social, environmental, and occupational. SQOLS have been shown to be valid and reliable in assessing quality of life in patients with a variety of medical conditions, including chronic kidney disease. This questionnaire consists of 20 questions designed to assess aspects of the patient's life related to physical fatigue, emotional well-being, social support, quality of life environment, and the impact of their work or social activities due to the disease.

After the data were collected, the analysis was conducted using descriptive statistics to describe the characteristics of the sample of respondents, such as age, sex, employment status, duration of hemodialysis, and the average score in each SQOLS domain. In addition, multiple linear regression analysis was used to identify factors that significantly affected the patient's quality of life, by including independent variables such as anxiety, social support, and occupational status, as well as control variables such as the duration of hemodialysis treatment and the patient's age. Statistical tests performed with a value of $p < 0.05$ is considered as the limit of significance in this study.

RESULTS

This study was conducted to identify factors that affect the quality of life of chronic kidney disease (CKD) patients undergoing hemodialysis treatment at Dr. M. Djamil Padang. A total of 50 patients who met the inclusion criteria were included in the study. Here are the results obtained based on the analysis of the data that has been done.

1. Characteristics Of Respondents

The following table shows the demographic and clinical characteristics of the 50 respondents involved in the study:

Table 1. Characteristics of Respondents

Characteristics	Frequency (n)	Percentage (%)
Gender		
Men	28	56%
Female	22	44%
Age (years)		
< 45	18	36%
≥ 45	32	64%
Employment Status		
Works	26	52%
Does Not Work	24	48%
Duration Of Hemodialysis		
< 1 year	12	24%
1-3 years	18	36%
- 3 years	20	40%

of the 50 respondents involved in the study, the majority were men (56%) and over 45 years old (64%). This suggests that older age groups may be more susceptible to CKD and require hemodialysis treatment. A total of 52% of respondents are still actively working, while another 48% are not working, which could reflect the impact of medical conditions on patients ' ability to work. The duration of hemodialysis treatment varies, with the majority of patients having undergone treatment for more than one year, ie 40% of respondents with a duration of ≥ 3 years.

2. The Distribution of Patient Quality of Life Scores Based on Five Domains Measured by the Simple Quality of Life Scale (SQOLS)

Univariate analysis was used to describe the distribution of patient quality of life scores based on five domains measured by the Simple Quality of Life Scale (SQOLS). The score of each domain is calculated based on the average of respondents in each category. Here are the results of univariate analysis for each domain:

Table 2.The Distribution of Patient Quality of Life Scores Based on Five Domains Measured by the SQOLS

Domain	Average score (SD)	Minimum Score	Maximum Score
Physical	62.4 (±12.5)	40	85
Emotional	58.7 (±14.3)	35	80

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Domain	Average score (SD)	Minimum Score	Maximum Score
Social	65.1 (±10.9)	45	90
Environment	70.3 (±9.8)	50	95
Jobs	54.2 (±13.2)	30	80

The results of the univariate analysis, the environmental domain showed the highest average score (70.3 ⑧ 9.8), which indicated that patients felt relatively satisfied with their living environment. On the other hand, the Occupational domain showed the lowest average score (54.2 ° 13.2), reflecting that work became one of the areas most affected by the quality of life of patients, most likely due to incapacity for work or limitation of work activity due to hemodialysis treatment. Other domains, such as physical, emotional, and Social, had varying average scores, suggesting impaired quality of life in these aspects.

3. The Relationship Between Demographic and Clinical Factors with the Quality of Life of CKD Patients

Bivariate analysis was performed to identify the relationship between demographic and clinical factors with the quality of life of CKD patients. T-test and multiple linear regression analysis were used to determine variables that are significantly related to the patient's quality of life. The following table shows the results of a bivariate analysis between occupational status, anxiety and social support on the quality of life of patients.

Table 3. The Relationship Between Demographic and Clinical Factors with the Quality of Life of CKD Patients

Variable	P value (significant factor)	Regression Coefficient (β)	95% CI (Confidence Interval)
Emergency	p < 0,01	-0.45	(-0.62) – (-0.28)
Social Support	p < 0,05	0.32	(0.05) – (0.55)
Employment Status	p = 0,08	0.18	(-0.05) – (0.41)

The results of the bivariate analysis showed that anxiety had a very significant influence on the quality of life of patients with a value of $p < 0.01$ and a negative regression coefficient ($\beta = -0.45$), which showed that the higher the anxiety of patients, the lower their quality of life. Social support also has a positive effect on quality of life, with a p value < 0.05 and a positive regression coefficient ($\beta = 0.32$), which means that better social support will improve the patient's quality of life. Although occupational status had a positive influence on quality of life (③=0.18), these results were not statistically significant ($p = 0.08$), which suggests that although employment may affect quality of life, the effect was not as strong as anxiety or social support in this group of patients.

DISCUSSION

1. The Distribution of Patient Quality of Life Scores Based on Five Domains Measured by the Simple Quality of Life Scale (SQOLS)

This study revealed the characteristics of respondents who showed that most patients with chronic kidney disease (CKD) who underwent hemodialysis were male (56%) and over 45 years old (64%). This is consistent with the results of previous studies showing that CKD is more experienced by men, especially at an advanced age. Research by Kusnadi and Aisyah (2023) revealed that the prevalence of CKD in Indonesia increases with age, with the age group over 45 years being the most vulnerable group to this disease. In addition, risk factors such as hypertension and diabetes mellitus, which are more common in old age, also contribute to the development of CKD.

Most of the patients in the study also had varying employment status, with 52% still actively working. This suggests that although CKD patients face great physical and emotional challenges, some of them still try to keep their jobs. Research by Hadi & Hidayat (2022) shows that patients who can maintain a job tend to have a better quality of life because they feel more independent and connected to society. However, patients who have to stop working or reduce their working hours often have a reduced quality of life, both economically and socially.

The duration of hemodialysis is also an interesting factor in the characteristics of respondents. As many as 40% of the patients in the study had undergone hemodialysis for more than 3 years. Research by Zhang et al. (2022) showed that the long duration of hemodialysis treatment can lead to chronic fatigue, sleep disturbances, and other deterioration in physical conditions that have an effect on the quality of life of patients. The longer patients undergo treatment, the greater the impact on their quality of life, which includes physical, emotional and social aspects.

In terms of quality of life, the results of the univariate analysis showed that the physical domain had an average score of 62.4 (±12.5), which indicates a significant impairment in the physical aspect in hemodialysis patients. This decrease in physical quality of life is closely related to clinical symptoms that often occur in CKD patients, such as fatigue, muscle pain, and sleep disturbances, which can worsen the patient's physical condition (Sharma et al., 2022). This is in accordance with the theory proposed by Harsono (2021), which explains that physical disorders in hemodialysis patients are directly related to decreased kidney function and the prolonged dialysis process.

In the emotional domain, the results of the study showed an average score of 58.7 (±14.3), which indicates a fairly significant presence of anxiety and depression in patients with CKD. Research by Rahmawati and Setiawati (2023) shows that anxiety and depression are very common conditions in hemodialysis patients, as they face uncertainty regarding the prognosis of the disease and dependence on dialysis treatment. These psychological factors such as stress and anxiety play a major role in reducing the patient's overall quality of life. The theory of Fadila et al. (2022) supported this finding, stating that the emotional state of CKD patients is affected by stress related to treatment uncertainty and feelings of anxiety about their future.

The social Domain showed an average score of 65.1 (±10.9), illustrating that most patients felt quite satisfied with the social support they received. This is in accordance with research by Yuliawati and Pratama (2022), which shows that social support has a significant impact on the quality of life of CKD patients. Patients who have a good social network, such as family or friends who provide emotional support, tend to feel better psychologically and socially. This support helps them deal with stress and reduces the feeling of loneliness that often appears in patients suffering from chronic diseases. However, there is still room for improvement, as not all patients feel that their social support is sufficient enough.

The highest scores were found in the environmental domain, with an average of 70.3 (±9.8). This shows that most patients feel quite satisfied with their living environment and the health facilities they receive. Research by Fitriani et al. (2022) also showed that the quality of the environment, including the comfort of living quarters and the accessibility of health facilities, plays a major role in improving the quality of life of patients with chronic diseases. Patients who are comfortable with home conditions and have easy access to health facilities usually have a better quality of life. However, although most patients find their environment supportive, some other external factors, such as the location of the hospital or the cost of treatment, can affect patients ' perceptions of their environment.

However, work became the domain that was the lowest in the quality of life of patients, with an average score of 54.2 (±13.2). This suggests that the time-consuming treatment of hemodialysis and limiting the physical activity of patients had a major impact on their ability to work. Research by Hadi & Hidayat (2022) also found that many patients are forced to reduce their working hours or stop working altogether due to their deteriorating physical condition due to dialysis treatment. This impact is not only limited to the economic aspect but also to the social quality of the patient, since work is often a source of identity and purpose in life. Inability to work can lead to a feeling of powerlessness and decreased self-esteem.

This decrease in quality of life in the Occupational domain is also relevant to the existing findings in the study by Kusnadi and Aisyah (2023), which shows that medical factors, such as frequency of treatment and physical limitations due to hemodialysis, greatly affect the ability of patients to remain active at work. Work not only provides income, but also gives a sense of independence and social contribution. Therefore, interventions that support CKD patients to maintain their jobs or adapt to these changes are essential to improve their quality of life.

In addition, these findings support the theory proposed by Harsono (2021), which states that work has an important role in improving the quality of life of patients with chronic diseases. For many patients, work is not only a source of income, but also serves as part of their social identity. Loss or impairment of the ability to work often leads to a decrease in the quality of life in various aspects, including emotional and social well-being. Therefore, it is important to create a supportive work environment for CKD patients, which allows them to remain productive despite medical treatment.

The results of this univariate analysis also show the importance of a comprehensive approach in the treatment of CKD patients, which not only focuses on the medical aspect, but also takes into account the psychosocial and social conditions of patients. For example, in the emotional domain, psychological interventions that reduce anxiety and depression can help improve the quality of life of patients. Stronger social support and better access to healthcare facilities can also help patients feel better and more connected to their communities. In addition, interventions that allow patients to keep working, albeit with adjustments, can improve their overall quality of life.

Overall, the findings from this study provide a clearer picture of the factors that affect the quality of life of CKD patients undergoing hemodialysis. Strong social support, management of anxiety, and efforts to maintain employment are key factors to consider in the care of CKD patients. Therefore, researchers suggest that medical personnel, especially in Indonesia, consider psychosocial and social factors in the care of CKD patients to improve their quality of life more holistically.

2. The Relationship Between Demographic and Clinical Factors with the Quality of Life Of CKD Patients

Bivariate analysis was used to explore the relationship between certain factors and the quality of life of chronic kidney disease (CKD) patients undergoing hemodialysis treatment. The results of the analysis showed that anxiety, social support, and occupational status had a significant relationship with the quality of life of patients. This discussion will examine the influence of these factors in more detail based on the results of bivariate tests that have been conducted.

First, anxiety was found to have a very significant effect on the quality of life of CKD patients, with a p value of < 0.01 and a negative regression coefficient of ($\beta = -0.45$). The reduced quality of life in patients with higher anxiety suggests that anxiety plays an important role in reducing the patient's well-being. This is in line with a study by Rahmawati and Setiawati (2023), which found that anxiety is directly related to a decrease in the quality of life of CKD patients, both in physical and emotional aspects. Patients who experience anxiety tend to focus more on the uncertainty of treatment and their future, which can worsen their condition.

Based on the theory of Health Psychology, anxiety is an emotional response to a perceived threat, which can affect the way a person manages stress and undergoes treatment. Research by Fadila et al. (2022) explained that high anxiety can worsen patients ' physical symptoms, such as fatigue and sleep disturbances, as well as affect their overall emotional well-being. In the context of CKD, anxiety is also related to a sense of dependence on dialysis care and uncertainty regarding the prognosis of the disease (Fadila et al., 2022).

In addition, anxiety also affects the patient's treatment decisions. According to Harsono (2021), patients who experience high anxiety often show low adherence to medication and medical care, which in turn can worsen their quality of life. Decreased adherence to treatment leads to suboptimal management of the disease, which ultimately worsens the patient's medical condition.

The results of the bivariate analysis showed that social support also had a significant influence on the quality of life of CKD patients with a value of $p < 0.05$ and a positive regression coefficient ($\beta = 0.32$). Patients with higher social support tend to have a better quality of life, both in physical and emotional aspects. Social support here includes support from family, friends, and the community. Research by Yuliawati and Pratama (2022) supports these findings by showing that social support plays a major role in reducing stress and anxiety, as well as increasing patient motivation to undergo medical treatment.

Social theory from Cobb (1976) posits that social support helps individuals in managing stress and improving their psychological well-being. In the context of CKD patients, social support can provide a sense of security and reduce feelings of loneliness, which often occur in patients facing chronic illness. This support is not only emotional but also practical, such as assisting patients in undergoing medical procedures or overcoming the daily challenges resulting from dialysis treatment (Cobb, 1976).

Social support also plays a role in improving the quality of life of CKD patients by improving their social aspects. Patients who have good social relationships with their family or friends tend to be more connected to the outside world and feel less isolated. This is especially important because patients who feel isolated tend to experience more severe depression, which will decrease their quality of life (Martins et al., 2022).

However, although social support plays an important role, not all patients feel that they are getting enough support. This is related to the findings of a study by Fitriani et al. (2022), which showed that patients who live far from family or do not have a strong social network tend to experience a poorer quality of life. Therefore, it is important for medical personnel to consider social aspects in the care of CKD patients and encourage patients to build or strengthen their social support networks.

Furthermore, bivariate analysis also showed a relationship between occupational status and quality of life of CKD patients, although this relationship was not statistically significant ($p = 0.08$). Although this p-value indicates that occupational status did not have a strong enough influence in this study, the positive regression coefficient ($\beta = 0.18$) indicated that working patients tended to have a better quality of life compared to those who did not work. The decrease in quality of life in non-working patients is most likely to do with feelings of helplessness and stress related to the loss of their social and economic role.

Research by Hadi & Hidayat (2022) also found that patients who still have a job tend to feel more productive and connected to society, which contributes to their well-being. Work gives CKD patients a sense of identity and purpose in life, which is critical to their psychological well-being. On the contrary, patients who are unable to work or are forced to reduce their working hours often feel a decrease in the quality of life in social and emotional aspects (Hadi & Hidayat, 2022).

However, although work has a positive impact on quality of life, the study also shows that CKD patients face great challenges in maintaining their jobs, especially because of the time required for dialysis treatment. Hemodialysis, which takes 3-5 hours per session, several times a week, can

disrupt the patient's work activity. Research by Kusnadi & Aisyah (2023) reveals that many patients are forced to stop working or reduce their working hours due to difficulties in undergoing dialysis procedures, which affects their income and reduces overall quality of life.

The Occupational factor is also related to the economic aspect of the patient. In Indonesian society, work is often the main source of income, and job loss can cause significant economic problems for CKD patients. Research by Zhang et al. (2022) showed that inability to work can increase the stress of patients, as they feel dependent on the help of others to meet their financial needs. This can worsen the patient's quality of life in social and emotional aspects.

Work also gives CKD patients a sense of control over their lives, which is important in the management of chronic disease. According to the theory of self-determination by Deci and Ryan (2000), individuals who feel in control of their lives tend to be happier and better able to cope with life's challenges. Patients who have an active job tend to feel more involved in social life and more independent, which can improve their overall quality of life (Deci & Ryan, 2000).

Although occupational status has an influence on quality of life, it is important to remember that other factors, such as anxiety and social support, have a greater influence in the care of CKD patients. The results of this study suggest that, although work can improve quality of life, more profound psychosocial factors, such as anxiety and social support, have a more significant impact on patients ' quality of life (Rahmawati & Setiawati, 2023; Yuliawati & Pratama, 2022).

Overall, the results of this bivariate analysis showed that anxiety and social support were the most significant factors in affecting the quality of life of CKD patients undergoing hemodialysis. Meanwhile, although job status had a positive impact, the effect was not as strong as anxiety and social support. Therefore, interventions that are more focused on managing anxiety, improving social support, and providing solutions for patients who face challenges in maintaining their jobs are essential to improving the quality of life of CKD patients.

CONCLUSIONS

Based on the results of univariate analysis, it was found that the quality of life of patients with chronic kidney disease (CKD) who underwent hemodialysis treatment at Dr. M. Djamil Padang was influenced by several factors, with the environmental domain showing the highest average score (70.3 ° 9.8) and the Occupational domain showing the lowest score (54.2 ° 13.2). This indicates that although patients feel relatively satisfied with the living environment and health facilities they receive, they face great difficulties in maintaining employment and social activities. In the physical and emotional aspects, the patients had significant impairments, with physical and emotional domain scores of 62.4 ° 12.5 and 58.7 ° 14.3, respectively, reflecting a decrease in physical and emotional well-being due to intensive dialysis treatment.

The bivariate analysis showed that anxiety had a significant influence on the quality of life of patients, with a p value < 0.01 and a negative regression coefficient (⑧=-0.45). This suggests that higher anxiety is associated with a decrease in the quality of life of patients in various domains. In addition, social support was also found to have a positive effect on quality of life, with a p value of

< 0.05 and a positive regression coefficient (β = 0.32), meaning that patients who received better social support tended to have a higher quality of life. Meanwhile, the occupational status did not show a statistically significant effect (p = 0.08), although the regression coefficient was positive (β = 0.18), indicating that working patients had a slightly better quality of life than those who did not work.

Overall, the results of this study indicate that psychosocial factors such as anxiety and social support have a significant impact on the quality of life of CKD patients undergoing hemodialysis, both in physical, emotional, and social aspects. Although job status has a positive impact, its influence is not as great as anxiety and social support. Therefore, in designing interventions to improve the quality of life of CKD patients, special attention needs to be paid to managing anxiety and improving social support, in addition to providing support in maintaining employment for patients who are still working.

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