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| RESEARCH ARTICLE

Prevalence of Anxiety and Depression in Kidney Failure Patients Undergoing Hemodialysis

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| ABSTRACT
The current research aims to identify the prevalence rates of anxiety and depression among a sample of renal failure patients undergoing hemodialysis and the role of some variables in varying degrees of anxiety and depression in patients. A total of 85 (42 males - 43 females) patients with CKD and on hemodialysis at Atiya Al-Kaseh Hospital in Kufra–Libya, were included in the study. The researchers used the hospital anxiety and depression scale to estimate the level of anxiety and depression. The results of the study revealed a high level of anxiety and depression among patients. Where the percentage of anxiety was (67.81%) and the percentage of depression was (74.07%); differences were found in the level of anxiety in favor of females, and differences were found in the level of anxiety and depression according to age, education level, and the date of injury.

| KEYWORDS

Anxiety; Depression; Kidney Failure Patients; Hemodialysis

| ARTICLE INFORMATION

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1. Introduction

Chronic diseases are among the main challenges facing health care systems in societies at all levels of progress, and they have attracted great global attention in the past years because they lead to health, social and economic complications and risks that have come to impede national development plans and negatively affect the quality of life in society, as well as the high financial costs incurred by health care systems due to these diseases (Abu Hammour and Darwish, 2018)

Kidney failure is a chronic disease that is associated with many challenges and risks, both for the individual and for society, and it is a complex condition in which the kidneys are unable to function properly as a result of structural or functional damage that leads to the accumulation of fluids and wastes in the blood (Thomas et al., 2008). At present, this disease represents a major economic burden on health care systems around the world (Ojo., 2014).

Kidney failure is associated with many health, psychological and social problems for patients as well as for their families. The continuation of the disease and its progressive nature affects the patient and hinders him from performing his usual role as it should, and thus is reflected in the emotional and cognitive state and his psychological and social compatibility, and this was confirmed by the study of (Pepsiko, Gerogianni, and Babatsikou, 2014) Where it concluded that kidney failure disease is associated with long-term effects on the quality of physical, social and psychological life of patients, their ability to work, their role in the family, with friends, in the community, in their social relations and their general health.

In addition, the dialysis process and subsequent procedures such as: control of diet and fluid intake, chronic pain, and discomfort associated with procedures that occur on the day of hemodialysis (intravenous needle insertion, central venous catheter implantation, sounds from the dialysis machine, the change of staff during the dialysis process), the frequent stay in the hospital, as well as the frequent injuries during the patient's weak condition after the dialysis process, is associated with many psychological

disorders such as anxiety and depression, and this was confirmed by many studies such as: (Al-Nashri & Almutary., 2021; Marthoenis et al., 2021; Ottaviani et al., 2016).

The prevalence of anxiety and depression in renal failure patients undergoing dialysis varies according to the different assessment methods used to estimate anxiety and depression and the nature of the samples, but despite this, most estimates indicate that the levels of anxiety and depression in dialysis patients are high compared to its prevalence in the general community as well as compared to chronic diseases. Other; where the percentage reached very high levels in some studies (88.8%) as in the study (Shafipour et al., 2015) and (55.8%) as in the study (Yaseen & Ali., 2021). The results of the study conducted by (Palmer et al., 2013), which dealt with a meta-analysis of (216) studies that included (55982) patients with chronic kidney disease or kidney disease in its last stages, indicated that the prevalence rates of depressive symptoms amounted to 26.5% among patients with chronic kidney disease when assessed by screening questionnaires, and 21.4% when assessed by clinical interviews. It has also been estimated that the prevalence of depression in chronic kidney disease patients is three to four times higher than in the general population and two to three times higher than in other chronic diseases, including diabetes, coronary artery disease, and COPD (Waraich et al., 2004; Katon 2011; Pratt & Brody, 2014).

With regard to anxiety, its levels were higher compared to depression, but with a large variation in the prevalence rates. In a study conducted by Shafipour et al. (2015) in Iran, the prevalence rate of anxiety was (92.5%). In Saudi Arabia and Morocco, the percentage was, respectively, (50% and 25%) (El-Filali et al., 2017; AL-Nashri & Almutary, 2021), and in the western countries, the estimates were also different and ranged between (53% to 25%) (Feroze et al., 2012; Kessler et al., 2013).

Anxiety and depression are associated with many ill effects in dialysis patients. Patients diagnosed with depression have been found to have worse clinical conditions, such as: higher rates of hospitalization and hospitalization, higher rates of dialysis withdrawal and mortality, and increased use of the health care system (Farrokhi et al. 2012). With regard to anxiety, the results of studies indicated that anxiety negatively affects the quality of life in patients with chronic kidney disease compared to patients without kidney disease. Anxiety (Lee et al., 2013; Kang et al., 2015; Rebollo Rubio et al., 2017) is also associated with some poor outcomes such as: mortality and increased hospital admissions (Schouten et al., 2019; Loosman et al., 2015) and based on these estimates and the great interest in evaluating anxiety and depression among patients with renal failure undergoing dialysis, the idea of this study was to identify the prevalence rates of anxiety and depression among dialysis patients in the city of Kufra, especially in light of the conditions experienced by the Libyan society in the past ten years.

1.1 The Problem of the Study:

In light of the previous presentation, it becomes clear the importance of studying anxiety and depression, especially in light of the different nature and systems of medical care in Libyan society compared to Western societies, which adds more importance to identifying the extent to which the data of these studies match and the possibility of generalizing their results to the Libyan society, which achieves well-being and a good life for patients. who are treated with dialysis.

1.2 The Problem of the Study can be formulated through the following questions:

1- What is the level of anxiety and depression among kidney failure patients undergoing dialysis?

2- Are there statistically significant differences at the significance level (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis, according to gender?

3- Are there statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis according to marital status?

4- Are there statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis according to age?

5- Are there statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among kidney failure patients undergoing dialysis according to the level of education?

6- Are there statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among kidney failure patients undergoing dialysis, according to the level of the injury history?

1.3 The Importance of the Study:

The importance of the current study is determined by the following points:

1- The importance of the study comes from the importance of the topic where studies concerned with evaluating the level of disease prevalence are considered an entry point for many decisions and interventions that are used with these patients.

2- The importance of the study comes from the importance of the sample used in it, who are dialysis patients; As these patients suffer from many problems that are related to the progressive nature of the disease they suffer from and the physical symptoms that accompany the disease and accompany the treatment process; This requires the patient to adapt to a wide range of restrictions such as: control of diet and fluid intake, chronic pain, and discomfort associated with the procedures that occur on the day of dialysis and frequent hospital stays, so studying the level of anxiety and depression can draw attention to the important role that can That these factors play in influencing patients and the symptoms they suffer and therefore take them into account when providing treatment to them.

3- The results of the study can be useful in providing scientific evidence explaining the importance of evaluating anxiety and depression within the procedures or protocols used in the treatment of dialysis patients, and thus preparing treatment programs aimed at dealing with cases that suffer from a high level of anxiety and depression.

1.4 Objective of the study:

1- Identifying the level of anxiety and depression among kidney failure patients undergoing dialysis.

2- Identifying the differences in the level of anxiety and depression among kidney failure patients undergoing dialysis according to gender.

3- Identifying the differences in the level of anxiety and depression among kidney failure patients undergoing dialysis according to social status.

4- Recognizing the differences in the level of anxiety and depression among patients with renal failure undergoing dialysis according to age.

5- Identifying the differences in the level of anxiety and depression among kidney failure patients undergoing dialysis according to the level of education.

6- Identifying the differences in the level of anxiety and depression among kidney failure patients undergoing dialysis according to the level of history of the injury.

1.5 Limitations of the Study:

Study limitations include:

Objective limits: The research was limited to studying the level of anxiety and depression among a sample of renal failure patients undergoing hemodialysis.

Human limits: The human limits of the study included a number of (85) patients with renal failure undergoing dialysis at (Atiya Al-Kaseh) hospital, including (42) males and (43) females, with an average age of (45.94) and a standard deviation of (13.4).

Spatial boundaries: The study tools were applied at (Atiya Al-Kaseh) Hospital in Kufra, Libya.

Time limits: The tools of the current study were applied during the period from 7/2021 to 11/2021.

2. Literature Review

2.1 Definition of Anxiety

The concept of anxiety is one of the concepts that there is a lot of confusion about its definition because it takes many meanings and is called many behaviors; according to the "Tapier" medical encyclopedia, anxiety is defined as: a vague, unpleasant feeling of discomfort and dread accompanied by involuntary responses (Venes D, 2017).

The two researchers adopt the definition presented by (Abdul-Khaleq, Al-Sabwa, and Al-Anazi, 1995), where anxiety is defined as: an unpleasant emotion and a distressing feeling of expected threat or persistent worry, discomfort or stability, and a subjective experience characterized by feelings of doubt, helplessness, and fear of unjustified anticipated evil, and often this fear is related to the future and the unknown with a response to a situation that does not involve a real danger, or a response to ordinary life situations as if it were an urgent necessity or an emergency. Anxiety is usually accompanied by physical and psychological symptoms such as a feeling of tension and distress and a feeling of fear and dread (20).

2.2 Depression:

Depression is a common mental disorder, with more than 300 million people worldwide of all ages and categories suffering from depression. According to the World Health Organization, depression is the leading cause of disability worldwide and is the main contributor to the overall global burden of disease. Depression has a severe negative impact on a person's life, and on a person's performance in the family, at work, or at school. Severe cases of depression, even among children, may lead to suicide (Al-Ouishiz, 64, 2019).

The researchers adopt the definition of depression presented by the World Health Organization, which refers to it as: a common psychological disorder that involves persistent sadness or loss of interest or pleasure accompanied by many symptoms such as: disturbed sleep or appetite, feelings of guilt, or low self-worth, feeling tired, and poor concentration, difficulty making decisions, agitation, moving slowly, hopelessness, suicidal thoughts or actions and significant difficulty performing daily functions (at home, school or work). Periods of depression can be long-lasting, or they can come and go for different periods of time. (World Health Organization,2016,7)

2.3 Symptoms and classifications of depression:

Like depression, like many psychological and emotional disorders, it manifests itself in a group of symptoms that include aspects of behavior, thinking, and feelings. The American Psychiatric Association reviews in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) nine basic symptoms characteristic of depression, which are: (Depressed mood, Decreased interest, and enjoyment in activities, Decreased or significant increase in weight and appetite, Insomnia or excessive sleep Irritability or psychomotor delay tiredness or loss of energy Feelings of worthlessness or excessive or inappropriate guilt Decreased ability to think, focus, or Hesitation (recurring thoughts about death). (American psychiatric association, 2013, 155).

According to the same evidence, depression is classified into the following categories:

1- Major depressive disorder.
2- Chronic depressive disorder.
3- Annoying disturbance before menstruation.
4- Disruptive mood swings.
5- Depressive disorder caused by a substance or drug abuse.
6- Depressive disorder due to a medical condition.
7- Depressive disorder unspecified (A PA, 2013, 155-188)

2.4 Factors causing depression and anxiety in patients with kidney disease.

The causes of anxiety and depression in kidney patients vary, and many studies have been conducted that dealt with the relationship between depression and some variables that are associated with increased rates in dialysis patients, and these variables include: the increased burden of self-care associated with the disease, including frequent visits to clinics and hospitals, and restrictions In the diet, home monitoring of glucose, blood pressure and weight, as well as the burden of going to dialysis centers three times a week or performing daily home dialysis in the case of peritoneal dialysis. Such challenges can greatly affect patients, especially adults who have recently started dialysis. (Katon et al., 2003; Chilcot et al., 2011; Seidel et al., 2014; Song et al., 2016). Functional impairment (Seidel et al., 2014) and physical symptoms of chronic disease can also contribute. In the development of depression (Katon et al., 2003) and for patients with CKD, co-morbid conditions such as infections, vascular damage, headache, and fatigue after dialysis can limit patients' daily activities and hinder them from performing routine tasks, which generally affects the condition mood of the patient.

In the case of the causes of anxiety in kidney patients, it is not much different from it in depression, especially in the presence of patients synchronization between anxiety and depression, and this was confirmed by the study by Teller (2013), which indicated that 90% of anxiety patients suffer from depression. In addition, there are recent trends linking neuropsychiatric disorders such as anxiety and depression in kidney patients with the pathophysiology of the disease, which leads to brain damage that affects psychological and cognitive functions, and these supposed mechanisms include the presence of secondary inflammatory processes resulting from uremia) Oxidative stress from increased cytokine production, brain microvascular damage, and the effect of the renin-angiotensin system (Simoes et al., 2019), patients also face a variety of challenges, including the need to deal with stressors ranging from adherence to complex drug regimens, dietary/fluid restrictions, management of disease-related complications, and adaptation to lifelong dialysis regimen. Poor management of these medical stressors, exacerbated by psychosocial problems associated with chronic illnesses such as financial insecurity and poor social support, increases the patient's risk of developing anxiety disorders or symptoms (Huang et al., 2021).

2.5 4- Chronic kidney failure:

The human body is considered a bio-chemical factory in which several biological processes occur that result in substances that are suitable for the body and other substances that are not valid and even toxic if they accumulate in the body. The breakdown of proteins such as urea, which is excreted through the urine. Kidney failure is also a functional defect as a result of the kidney's inability to perform the basic vital functions, which leads to the secretion of metabolites at fluid levels or the maintenance of a percentage of electrical electrolytes within the urinary system, which in turn leads to a blood poisoning called urea. It is the main reason for decreased urine in patients, and the greater the volume of fluid in the patient's body, the greater the proportion of potassium in the blood, which in turn leads to weakness in the heart muscle. (Abu Raya, 2002)

McFarlane et al. (2013) confirmed that laboratory studies indicated that total or partial failure of kidney function in humans occurs due to damage to more than (75%) of the general nephrons in the kidney as a result of the accumulation of toxins and waste and genetic diseases often lead A prominent role in the occurrence of kidney failure, such as: high blood pressure, diabetes and chronic diseases.

2.6 Hemodialysis: Hemodialysis

It is called hemodialysis or hemodialysis or purification through blood, and this process is done when the doctor decides that the condition of the kidney failure patient has become permanent kidney failure and that he must do hemodialysis, by which the patient washes 3 times a week, and each session takes 3-4 hours During the hemodialysis process, two needles are placed in an arterial link located in hand, then the needles are connected to the tube that carries the blood to the device, and the blood is withdrawn with one of the two needles and entered into a filter for purification and then returned to the body through the other needle. (Thursday, 2013, 48)

The process of dialysis is defined as the process of purifying the body of fluids and toxins resulting from metabolic processes due to the inability of the kidneys to perform their functions normally. (Smeltzer & Bare, 2000:1112)

2.7 Previous studies:

Several studies have been conducted that dealt with anxiety and depression as indicators of mental health in renal failure patients undergoing hemodialysis, and the following presentation addresses the most important of these studies in light of their relationship to the current research:

Cukor et al. (2008) conducted a study that aimed to identify the prevalence rates of anxiety and depression in a sample of 70 patients receiving dialysis treatment, and the hospital anxiety and depression scale was used as well as the structured clinical interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM- IV) for the diagnosis of anxiety and depression The results indicated that 45.7% of the subjects met the criteria for an anxiety disorder and 40% met the criteria for a mood disorder.

The study of Molahadi et al. (2010) aimed to compare dialysis patients with kidney transplant patients in anxiety and depression. The study sample consisted of (293) patients, including (147) dialysis patients and (146) patients who underwent kidney transplantation. Tehran Hospital and the results indicated that 63.9% of dialysis patients suffer from anxiety, 60.5% suffer from depression, and 51.7% suffer from stress. As for kidney transplant cases, it was found that 48.6% of them suffer from anxiety, and 39% of them suffer from depression. 38.4% of them suffer from stress, and the results indicated that there are differences in the prevalence of anxiety, depression, and stress between dialysis patients and kidney transplant patients in favor of dialysis patients.

A study conducted by Muhammad (2010) aimed to identify the nature of anxiety and depression in a sample of (215) patients with kidney failure, including (124) males (91) females, who were applied to the Taylor Anxiety Scale and the modified Beck Depression Scale, anxiety and depression were low, and there were no differences in anxiety and depression according to the gender variable, and there was no significant relationship between anxiety and depression and educational level, and there were no differences in anxiety according to the age variable, while there were significant differences in depression according to the age variable.

In Iraq, Hamdy et al. (2013) conducted a study with the aim of identifying the prevalence rates of depression and its relationship to social and demographic characteristics in a sample of 75 Iraqi patients with renal failure. The Arabic version of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), was used. To diagnose depression, the Beck Depression Scale was also used to assess the severity of depressive symptoms. The results of the study indicated that the prevalence of severe, moderate, and mild depression was 25%, 50%, and 25%, respectively. Female gender, unemployment, and marital status had statistically significant associations with depressive symptoms.

Li et al. (2016) were interested in identifying the nature of the relationship between quality of life, anxiety, depression, performance, and physical activity in a sample of (72) patients with chronic kidney disease undergoing dialysis and comparing them to a sample of (36) normal subjects of the same age. The quality of life was assessed using the measure of the quality of life for kidney patients (the short image), and the results of the study indicated that the rates of quality of life were lower in all dimensions compared to normal, and a negative relationship was found between the different dimensions of quality of life, anxiety, and depression ($P < 0.05$) and the quality of life was more Reduction in patients with anxiety and depression.

Ottaviani et al. (2016) conducted a study that aimed to investigate the prevalence rates of depression and anxiety in a sample of 205 patients undergoing renal replacement therapy. Quality of life was measured with a general health scale, and anxiety and depression were estimated using the Beck Depression and Anxiety List. The results indicated that the percentage of symptoms of depression and anxiety was 41.7% and 32.3% for dialysis patients and 13.3% and 20.3% for patients with kidney transplants. Consecutively, the results also indicated that the quality of life rates was significantly lower in all dimensions in patients with

symptoms of anxiety and depression compared to patients without anxiety and depression, and anxiety was negatively and moderately associated with pain, social interaction, and energy/fatigue.

The study of Ravaghi et al. (2017) aimed to identify the prevalence of depression and the degree of its impact on quality of life in a sample of 294 patients with renal failure undergoing hemodialysis. The study indicated that the prevalence of depression was 27.9%, and it was significantly higher in women, the elderly, those with low educational levels, and unemployed patients ($P < 0.05$). The mean quality of life was also low and statistically significant in patients who got high scores in depression, depression was negatively associated with all dimensions of quality of life, and the maximum correlation was with the somatic aspect.

Hawamdeh et al. (2017) study aimed to identify the prevalence of depression among chronic kidney patients and their caregivers. The sample consisted of 226 patients undergoing dialysis and 105 of their caregivers. The Hamilton Scale was used for evaluation. The results indicated that depression rates among patients as well as caregivers patronage were high; The ratio reached among patients (70%) and among those who cared for them (53%), and depression was positively associated with the social, economic, and marital status of patients. It has also been noted that the socioeconomic status of caregivers is associated with depression.

In Jeddah, Saudi Arabia, El- Filali et al. (2017) conducted a study with the aim of identifying the prevalence rates of depression, anxiety disorders, suicidal ideation, and quality of life and their relationship to some variables among a sample of 103 renal failure patients undergoing dialysis at Al-Farabi Hospital in (Jeddah). The brief psychiatric interview was used to assess anxiety and depression, and the short form of the European five-dimensional quality of life (EQ-5D) scale was used to assess the quality of life, and the results indicated that 34% of the respondents met the criteria for a major depressive episode, while anxiety disorder was observed in 25.2%. Of them, rates of suicidal thoughts were 16.5%, and 1.9% planned suicide. Multivariate analysis showed that depression was associated with three factors: marital status, pain, and anxiety disorder. An association was also found between anxiety disorder and age, and suicidal ideation was associated with marital status and anxiety disorders.

Awwa et al. (2018) also conducted a study with the aim of identifying the prevalence of depression among Jordanian dialysis patients and the factors that may affect it. The sample consisted of 49 patients from Jordan University Hospital, and the patient's health quality scale was used to assess symptoms of depression. The results indicated that 29% suffer from depression. Depression is highly prevalent and undiagnosed among dialysis patients in Jordan, which is ironic in stopping the negative patient from being diagnosed and treated. Hence, we recommend a policy of routine assessment for depression accompanied by an educational program to emphasize the importance of treatment in improving the quality of life and the overall outcome of dialysis treatment.

The study of Semaan et al. (2018) aimed to identify the prevalence rates of anxiety and depression and their related factors among patients receiving dialysis in Lebanon. The study sample consisted of (83) patients. Anxiety and depression were assessed using the hospital anxiety and depression scale. The results indicated that (40.8%) of the sample suffered from depression and (39.6%) suffered from anxiety, 20 patients (24.1%) had symptoms of anxiety and depression and illiterate patients had significantly higher depression scores than those with higher levels of education ($P = 0.021$). Patients who lived with their families had higher anxiety scores than those who lived alone ($P = 0.014$).

The study of Girogianni et al. (2019) also aimed to assess anxiety and depression in dialysis patients and their caregivers. The study sample consisted of 414 pairs of patients and caregivers from 24 dialysis centers in Greece, and the hospital anxiety and depression scale was used to assess the level of anxiety and depression; the results of the study indicated that 17.1% ($n = 71$) of patients had high levels of anxiety and 12.3% ($n = 51$) had high levels of depression. In addition, 27.8% ($n = 115$) of caregivers had high levels of anxiety and 11.4% ($n = 47$) had high levels of depression. Higher levels of anxiety and depression in patients were associated with higher levels of anxiety and depression in their caregivers.

Khan et al. (2019) were interested in identifying the prevalence rates of depression across successive time periods (three times) in a sample of 213 renal failure patients undergoing hemodialysis in Malaysia, and the hospital anxiety and depression scale was used to assess the level of depression among the participants in the study. The results of the study indicated that depression rates across the three evaluation stages were 71.3, 78.2 and 84.9%, respectively, and the results of the regression analysis showed that the treatment provided to patients in non-governmental organizations has a statistically significant association with the prevalence of depression in the final evaluation.

And in a study conducted by Muhammad (2019) aimed to study the relationship between general anxiety, pessimism, and kidney failure on the one hand and to study its relationship to certain variables such as: gender, educational level, number of dialysis times, and duration of disease among 128 Lebanese patients who suffer from chronic kidney failure and undergo dialysis treatment. The most important results of his study were: high rates of general anxiety and pessimism among patients with chronic kidney failure, also there were no differences between males and females in the variable general anxiety and pessimism, and there were no differences in the rates of general anxiety and pessimism among patients according to the variables of educational level and the number of times of washing Kidney disease and duration of disease.

Musleh, Mosleh, & Alenezi (2020) conducted a study that aimed to identify the prevalence rates of anxiety and depression and some of the factors associated with them among a sample of 122 patients with chronic kidney disease who were undergoing dialysis at King Fahd Hospital in Madinah, and the data were collected using a scale questionnaire. Anxiety and depression in the hospital, the results indicated that the prevalence of depression and anxiety among the sample members was 24.6% and 19.7%, respectively, and anxiety symptoms were more prevalent among females compared to males (P = 0.04), and advanced age was also statistically significantly associated with the level of depression with depression. (P = 0.003) There was also no significant relationship between depression, anxiety, education level, functional status, duration of illness, and duration of dialysis.

Marthoenis et al. (2021) A study aimed at identifying the prevalence rates of anxiety and depression and the role of disease acceptance in affecting quality in a sample of 213 patients undergoing dialysis in three public hospitals in Aceh, Indonesia. Depression, anxiety, and quality of life were assessed using the Hospital Anxiety and Depression Scale and the Short Form WHO quality of life; results indicated that the prevalence rates of depression and anxiety were 46% and 30.5%, respectively. Depression was positively associated with anxiety and the duration of dialysis. Anxiety and depression were also negatively associated with quality of life, and general quality of life was associated with age, body mass index, and disease acceptance.

The Al-Nashri, & Almutary (2021) study aimed to evaluate the effect of anxiety and depression on quality of life in a sample of 114 renal failure patients undergoing dialysis. The data were collected using the quality of life scale for kidney patients and the hospital anxiety and depression scale. The results of the study indicated that the average degree of anxiety among the sample members was 7.7 ± 5.3, while the average degree of depression was 7.01 ± 4.2. Depending on the cutoff score, 50% of the participants had anxiety, and 44.7% had depression. It also found a negative and statistically significant correlation between anxiety and quality of life and between depression and quality of life. Physical quality of life and disease burden were the most influential variables for anxiety and depression.

Yaseen et al. (2021) conducted a study to explore the prevalence rates of anxiety and depression among a sample of 156 patients with renal failure who attended dialysis units at the International Institute of Care and Karachi Institute of Nephrology in Pakistan. The hospital anxiety and depression scale was used to estimate the level of anxiety and depression. The results indicated that the prevalence rates of anxiety among the sample members amounted to 50.6% (14.74% have moderate anxiety and 35.9% have pathological anxiety), while the percentage of depression is 55.8% (26.3% have moderate depression and 29.5% have pathological depression). The results also indicated that there were differences between males and females in the level of anxiety in favor of females at the level of significance (P < 0.004), and there were also differences in anxiety in favor of married couples at the level (P < 0.032).

In a post review of (61) studies that dealt with the prevalence rates of anxiety symptoms and disorders among patients with renal failure, Huang et al. (2021) concluded that the overall prevalence of anxiety disorders (9 studies, number = 1071) among chronic kidney patients across studies was 19%, while The prevalence of elevated anxiety symptoms (52 studies, n=10.739) was 43%. Across the continents, the prevalence of elevated anxiety symptoms was higher in Europe and Asia among pre-dialysis patients, and it was also found that common risk factors associated with elevated anxiety symptoms included: concurrent depression, decreased parathyroid hormone levels, increased comorbidities, increased hospitalization time, and decreased levels of parathyroid hormone. Quality of life, lower activity levels.

2.8 Commentary on previous studies

Through the previous presentation of studies that dealt with anxiety and depression in patients with ironing failure undergoing washing, some important points can be identified as follows:

1- Most of the studies used the Hospital Anxiety and Depression Scale and the Beck Depression Scale to assess anxiety and depression in patients with renal failure.

2- Estimates of anxiety and depression in patients with renal failure are similar across cultures

3- General estimates of the level of anxiety and depression in patients with kidney failure are characterized by high.

4- There is a synchronization between anxiety and depression in patients with ironing failure subject to washing.

5- Some studies indicated that there are differences in the level of anxiety and depression among kidney failure patients undergoing dialysis according to gender, age, marital status, and education level.

2.9 Hypotheses of the Study:

1- The level of anxiety and depression among kidney failure patients undergoing dialysis is characterized by high.

2- There are statistically significant differences at the significance level (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis, according to gender.

3- There are statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis according to marital status.

4- There are statistically significant differences at the significance level (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis according to age.

5- There are statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among kidney failure patients undergoing dialysis, according to the level of education.

6- There are statistically significant differences at the level of significance (0.01) in the level of anxiety and depression among patients with renal failure undergoing dialysis, according to the date of injury.

3. Research Methodology and Procedures:

3.1 Research Methodology:

As a result of the nature of the objectives that this research seeks to achieve and through the hypotheses that it is trying to verify, the researcher used the descriptive, correlative and comparative approach as the appropriate approach to the nature, objectives, and hypotheses of the research.

3.2 The research sample:

1- Survey sample

The exploratory sample was conducted with the aim of identifying the psychometric characteristics of the hospital anxiety and depression scale. This sample consisted of (45) patients with renal failure, of whom (20) males and (25) females, with an average age of (45.11) and a standard deviation (of 6.58), were selected from patients who attended treatment in a hospital. Attia sweeper in the city of Kufra.

2- base sample

The main research sample, on which statistical analyzes were conducted, consisted of (85) patients with renal failure who were subjected to dialysis at (Atiya Al-Kaseh Hospital in Kufra). They were randomly selected from the lists of patients registered for dialysis in the hospital, including (42) males and (43) females, with a mean age (of 43.20) and a standard deviation (of 8.6); the following table shows the characteristics of this sample.

Table No. (1) Characteristics of the study sample

Variables	Categories	Frequency	Percentage
History of hemodialysis	less than 5 years	43	50.6
	6 to 10	23	27.1
	More than 10 years	19	22.4
	Total	**85**	**100.0**
Education Level	Reads And Writes	42	49.4
	Average	12	14.1
	Higher Education	31	36.5
	Total	**85**	**100.0**
Age	From 20 to 30 years old	19	22.4
	from 31 to 40	27	31.8
	41 to 50	16	18.8
	more than 50	23	27.1
	Total	**85**	**100.0**
Social status	Married	50	58.8
	Single	35	41.2
	Total	**85**	**100.0**
Sex	Male	42	49.4
	Female	43	50.6
	Total	**85**	**100.0**

3.3 Study tools:

1- Hospital anxiety and depression scale.

This scale was prepared by Zigmond & Snaith, 1983 to estimate the severity of anxiety and depressive symptoms in general (non-psychiatric) hospitals or outpatient clinics. etc.) in order to avoid over-diagnosing anxiety and depression among patients who suffer from physical conditions, considering that these symptoms are common to them as a result of the diseases they suffer from. 7) paragraphs. The paragraphs of the scale are answered on a continuum consisting of (4) points, ranging from (0) to (3); Where a score (0) indicates the absence of symptoms, while a score (3) indicates severe symptoms, and a high score on the anxiety and depression dimensions indicates the presence of anxiety and depression, and the total score ranges between (0) and 42, while the score on the depression scale is no Between (0), (21), as well as the score for the anxiety scale, and this scale has been translated into many languages and many studies have been conducted on it to verify its psychometric properties, and its results have always shown sufficient sensitivity and reliability in distinguishing between anxiety and depression, (Soderman, et al,2002) and in a post-review of (747) studies that dealt with the psychometric properties of the hospital anxiety and depression scale, the results of the analysis indicated that the scale has a good factorial structure and a high ability to distinguish between categories of patients, and the stability coefficients were high, the alpha coefficient values ranged between 0.68 to 0.93 for anxiety symptoms and .67 to .90 for depressive symptoms.

3.4 Translate the scale and prepare it for the current study.

The two researchers followed the following steps in preparing and translating the scale:

- The two researchers contacted the scale producer in order to obtain the original copy of the scale and take approval for the translation.

- After the researchers obtained the scale, they translated it into the Arabic language. During translation, the researchers took into account the conditions for drafting items for psychological tests, and this version was presented to a specialist in the Arabic language to be reviewed linguistically and grammatically.

- One of the English language specialists re-translated the scale from Arabic to English again.

- The back-translated version of the scale was compared and matched with the items in the original scale, and the required changes were made, taking into account the different cultural contexts and civilizational backgrounds of both Arabs and foreigners.

- After making the necessary modifications to the Arabic image, this image was presented to a sample of individuals; They were asked to read each phrase and state what the phrase meant as they understood it. They were also asked to point out the words that they thought were ambiguous, difficult, or incomprehensible.

- The results of this application showed that all the items of the scale are clear and understandable, and no comments or requests for clarification were issued for any of the items of the scale.

3.5 Validity and reliability of the scale in the current study:

3.5.1 The veracity of the arbitrators:

The scale was presented to a group of arbitrators from professors of psychology in Libyan universities and some Arab universities to assess the validity of the paragraphs and their relevance to the dimension to which they belong. The following table shows the frequencies and percentages of agreement about the validity of the scale items.

Table (2) Frequencies and percentages of agreement about the validity of the scale items

Anxiety Scale			Depression Scale		
Item	**Frequency**	**Percentage**	**Item**	**Frequency**	**Percentage**
1	10	100%	2	10	100%
3	10	100%	4	10	100%
5	10	100%	6	9	90%
7	9	90%	8	9	90%
9	9	90%	10	9	90%
11	9	90%	12	10	100%
13	10	100%	14	10	100%

From the previous table, it is clear that the percentages of agreement about the validity of the items ranged between (90) and (100), which indicates a good validity coefficient of the scale.

3.5.2 The validity of the link to the test:

To estimate the correlation validity coefficients of the test, the correlation coefficients were calculated between the scores of the exploratory sample members on the hospital anxiety and depression scale and their scores on the anxiety scale and depression scale derived from the list of pathological symptoms (Al-Buhairi, 2005). The following table shows the values of the correlation coefficients and their statistical significance for the hospital anxiety and depression scale and the spoken scale.

Table No. (3) Correlation validity coefficients at the test for the hospital anxiety and depression scale

Variables	Anxiety Scale (List of pathological symptoms)	Depression scale (list of symptoms)
	0.76	Hospital Anxiety and Depression Scale (After Anxiety)
0.78	0.73	Hospital Anxiety and Depression Scale (After Depression)

It is clear from the previous table that the correlation coefficients between the hospital anxiety and depression scale and the anxiety and depression scale derived from the list of pathological symptoms were significant at the level (0.01), which indicates good validity coefficients for the scale.

3.6 Scale stability:

To verify the scale's stability in the current study, the internal consistency with Cronbach's alpha equation was used on the same honesty sample, and the following table shows the alpha coefficient values for each of the scale's sub-domains.

Table (4) values of Cronbach's alpha coefficient for hospital anxiety and depression scale

Hospital Anxiety and Depression Scale	number of Items	Alpha coefficient values
0.90	7	anxiety scale
0.92	7	depression scale

It can be seen from the previous table that all the values of the stability coefficients were significant and satisfactory, which indicates good stability coefficients for the scale.

3.7 Research Procedures and Ethics:

The tools of the current study were applied during the period from 7/2021 to 11/2021 at Attia Al-Kaseh Hospital in the city of Kufra, and the application was made individually before performing the washing process, and the application by the participants was made voluntarily to ensure the seriousness of the response, after providing an explanation of the purpose of the process application.

3.8 Statistical methods used in data analysis:

The statistical package for the social sciences (SPSS) was used to analyze the data for the research, and the following statistical methods were used: (means and standard deviations - Pearson's correlation coefficient - t-test for differences between means - analysis of variance).

4. Results and discussion:

1- **Results of the first hypothesis: This hypothesis states: "The level of anxiety and depression in patients with renal failure undergoing dialysis is characterized by high."**

To validate this hypothesis, the sample was divided according to the rating levels on the Hospital Anxiety and Depression Scale; Where scores from (zero to 7) indicate a normal level of symptoms of anxiety and depression, and a score from (8 to 10) indicates a moderate level of symptoms of anxiety and depression, and a score from (11 to 42) indicates high levels of symptoms of anxiety and depression, and the following table shows the frequencies The percentages of males and females and the total sample.

Table (5) Frequencies and percentages of anxiety and depression rates in the study sample of kidney failure patients undergoing dialysis

Variables	Degree	Male		Female		Total	
		Frequency	percentage	Frequency	percentage	Frequency	percentage
Depression	0 to 7	4	9.5	5	11.6	9	10.6
	8 from 10	16	38.1	8	18.6	24	28.2
	more than 10	22	52.4	30	69.8	52	61.2
Anxiety	0 to 7	3	7.1	2	4.7	5	5.9
	8 from 10	6	14.3	2	4.7	8	9.4
	more than 10	33	78.6	39	90.7	72	84.7

It is evident from the previous table that the prevalence rates of depression and anxiety among dialysis patients with respect to scores above (10) which indicate high levels of depression and anxiety, ranged between (52.4 to 69.8) and (78.6 to 90.7), respectively, and these results indicate To achieve the first hypothesis of the study; Where these rates are considered high compared to the prevalence rates in the general community and this result is consistent with the results of studies that dealt with the prevalence rates of anxiety and depression in dialysis patients, such as the studies of: (Al-Nashri, & Almutary, 2021; Molahadi et al. 2010; Marthoenis et al. Nabolsi, Wardam, & Al-Halabi, 2015; Ottaviani et al. 2016) and the high level of anxiety and depression in dialysis patients can be explained in the light of many factors, including: medical factors, social factors, and environmental factors. A wide range of restrictions such as: control of diet and fluid intake, chronic pain, and discomfort associated with procedures that occur on the day of dialysis (needle insertion into the venous artery, central venous catheter implantation, sounds from the dialysis machine, change of staff during the dialysis process) Repeated hospital stays, as well as repeated infections during the patient's poor condition after hemodialysis. Problems with daily functioning and fear of the future undoubtedly affect the appearance of symptoms of depression and anxiety. In addition, the long-term process of washing leads to a negative self-image, causing many negative feelings such as: despair, anger, dissatisfaction, and disappointment. They limit the patient's social and recreational activities and lead to isolation, and these factors can explain the increased rates of anxiety and depression in iron-dialysis patients.

2- The results of the second hypothesis: This hypothesis states: "There are statistically significant differences in the degree of anxiety and depression among patients with renal failure undergoing dialysis, according to gender."

To verify the validity of this hypothesis, the arithmetic means, standard deviations, and the value of the t-test for differences between the means was calculated. The following table shows the result of this procedure.

Table No. (6) The value of the t-test and its statistical significance for the differences in anxiety and depression according to gender

Variables	Gender	Number	mean	standard deviation	value (T)	degrees of freedom	level of significance
Depression	Male	42	11.93	4.051	-0.909	83	0.366
	Female	43	12.77	4.439			
Anxiety	Male	42	13.0000	3.50609	-5.453	83	0.000
	Female	43	17.3488	3.83520			

The previous table shows that there are statistically significant differences between males and females with renal failure patients in anxiety, and these differences were in the direction of a higher level of anxiety in females compared to males, and there were no gender differences in the level of depression, and the results of previous studies in this context indicate the existence of a discrepancy About the differences in the level of anxiety and depression among dialysis patients, while the study of Abd al-Rahman (2015) indicated that there are differences in the level of anxiety among dialysis patients in favor of females, and this was also confirmed by the study (Theofilou. 2011), which focused on identifying the impact of some social and demographic variables on The level of anxiety and depression among dialysis patients, as indicated by the study (Hou et al. 2014) that the degrees of anxiety among female dialysis patients are higher than that of males, as indicated by the results of the Al-Ghafili study (2020), which indicated higher levels of depression among dialysis patients; kidneys of females compared to males, and in the same direction, was also the study of Al-Nashri (Al-Nashri & Almutary 2021), which indicated that there are differences in anxiety and depression among dialysis patients. In favor of females, other studies indicated that there were no differences in anxiety and depression

among dialysis patients according to gender, such as: Muhammad's (2019) and (Zavvare, 2014 & Ravary) study. In general, this difference can be explained in light of the different measurement tools used in the studies as well as the nature of the samples and the level of severity of symptoms of the disease, and the results of this hypothesis in the current study can be explained that women, by virtue of their physiological composition, are exposed to changes that can, in turn, contribute to an increase in the level of anxiety and depression.

3. The results of the third hypothesis: This hypothesis states: "There are statistically significant differences in the degree of anxiety and depression among patients with renal failure undergoing dialysis according to marital status."
To verify the validity of this hypothesis, the arithmetic means, standard deviations, and the value of the t-test for differences between the means was calculated. The following table shows the result of this procedure.

Table (7) The value of the t-test and its statistical significance for the differences in the degree of anxiety and depression according to social status

Variables	Gender	Number	mean	standard deviation	value (T)	degrees of freedom	level of significance
Depression	Married	50	12.68	4.264	0.847	83	0.399
	Single	35	11.89	4.241			
Anxiety	Married	50	13.5000	3.60979	-1.657	83	0.101
	Single	35	14.8000	3.48779			

It is evident from the previous table that there are statistically significant differences between married and unmarried patients with renal failure in the level of anxiety, and these differences were in the direction of a higher degree of anxiety among the unmarried compared to the married, and there were no differences in depression according to the marital status in the level of depression. Concerned with previous studies that dealt with the level of anxiety and depression in patients with renal failure undergoing dialysis, such as the study (Abdul Rahman, 2015 Al-Nashri, & Almutary, 2021;), whose results indicated that there are differences in the level of anxiety and depression in favor of the unmarried, and the differences can be explained in the level of anxiety by attributing it to the great role that the patient can meet from the life partner and the support, emotional participation and affection that he provides to him that helps the patient to adapt to his illness and adapt to its variables. The issue of marriage, the nature of the pathological symptoms they suffer from, and their fears of the consequences, therefore, all of this can explain the differences in the level of anxiety between married and unmarried.

4. The results of the fourth hypothesis: This hypothesis states: "There are statistically significant differences in the level of anxiety and depression among patients with renal failure undergoing dialysis according to age."
To verify the validity of this hypothesis, a one-way analysis of variance was used to identify the differences in the degree of anxiety and depression in the research sample according to age, and the following table shows the result of this procedure.

Table No. (8) The value of the (F) test and its statistical significance for the differences in the degree of anxiety and depression according to age

Variables	Source of variance	Sum of squares	Degrees of freedom	Mean of squares	Value (f)	Significance level
Depression	**Between Groups**	207.165	3	77.541	4.331	0.01
	Within Groups	1291.588	81	17.587		
	Total	1498.753	84			
Anxiety	**Between Groups**	51.311	3	17.104	1.338	0.26
	Within Groups	1035.583	81	12.785		
	Total	1086.894	84			

** (20-30) 2 (31-40) 3 (41-50) 4 (51 and over)

It is clear from the previous table that there are statistically significant differences at the level of significance (0.01) in depression in the research sample according to age, while there were no differences in the level of anxiety for dimensional comparisons Table No. ( ) and Table No. ( ) show the result of this procedure.

Table (9) arithmetic means and standard deviations for the different age groups

Groups	Number	Mean	Standard Deviation
from 20-30	19	10.4737	5.18940
from 31-40	27	12.7778	3.75534
41 to 50	16	11.6250	3.63089
51 and above	23	14.7391	3.31960

Table No. (10) of the (LSD) test result for dimensional comparisons to identify the direction of differences between groups in depression according to age

	Comparisons	mean difference	standard error	level of significance
1.00	2.00	-2.30409	1.19575	0.057
	3.00	-1.15132	1.35493	0.398
	4.00	-4.26545-*	1.23795	0.001
2.00	1.00	2.30409	1.19575	0.057
	3.00	1.15278	1.25983	0.363
	4.00	-1.96135	1.13308	0.087
3.00	1.00	1.15132	1.35493	0.398
	2.00	-1.15278	1.25983	0.363
	4.00	-3.11413-*	1.29995	0.019
4.00	1.00	4.26545*	1.23795	0.001
	2.00	1.96135	1.13308	0.087
	3.00	3.11413*	1.29995	0.019

** (20-30) 2 (31-40) 3 (41-50) 4 (51 and over)

It is clear from the previous table that there are statistically significant differences at the level of significance (0.05) between groups, and these differences were in the direction of a higher level of depression in the age group greater than 51 years. Renal, as in the study (Al-Nashri, & Almutary, 2021; Bornivelli et al., 2012; Theofilou, 2011); The results of these studies indicated that there is a relationship between age and depressive symptoms in dialysis patients and that age predicts a statistically significant manner, the level of depression in these patients. Pain and suffering, In addition, the progressive nature of CKD can be associated with feelings of distress and distress due to the prolonged duration of the disease, as well as the physical effects of the dialysis process of tissue damage, swelling, and length of dialysis period, unlike young people, the degree of symptoms and the duration of dialysis is less compared to adults Age, which results in a lower level of depression for them compared to the elderly.

5. **The results of the fifth hypothesis: This hypothesis states: "There are statistically significant differences in the level of anxiety and depression among patients with renal failure undergoing dialysis according to the level of education."**
To verify the validity of this hypothesis, a one-way analysis of variance was used to identify the differences in the degree of anxiety and depression in the research sample according to the level of education. The following table shows the result of this procedure.

Table No. (11) The value of the F-test and its statistical significance for the differences in the degree of anxiety and depression according to the level of education

Variables	Source of variance	Sum of squares	Degrees of freedom	Mean of squares	Value (f)	Significance level

Depression	**Between Groups**	225.163	2	112.581	7.155	0.001
	Within Groups	1290.249	82	15.735		
	Total	1515.412	84			
Anxiety	**Between Groups**	43.065	2	21.533	1.692	0.191
	Within Groups	1043.829	82	12.730		
	Total	1086.894	84			

It is clear from the previous table that there are statistically significant differences at the level of significance (0.01) in depression in the research sample according to the level of education, while there were no differences in the level of anxiety. LSD)) for dimensional comparisons Table No. (10) and Table No. (11) show the result of this procedure.

Table (12) Arithmetic averages and standard deviations of the educational groups' scores on the depression scale

Variables	**Groups**	**Number**	**Mean**	**Standard Deviation**
Depression	Reads and writes	42	13.95	4.018
	Middle Certification	12	11.67	3.892
	bachelors degree	31	10.45	3.923

Table No. (13) of the (LSD) test result for dimensional comparisons to identify the direction of differences between groups in depression according to age

	Comparisons		**Mean Difference**	**Standard Error**	**Level of Significance**
Depression	1	2	2.286	1.298	0.082
		3	3.501*	0.939	0.000
	2	1	-2.286	1.298	0.082
		3	1.215	1.349	0.370
	3	1	-3.501-*	0.939	0.000
		2	-1.215	1.349	0.370

1- Reads and writes 2- Intermediate qualification 3- University qualification

It is clear from Table No. (12) and Table No. (13) that the differences in the level of depression according to the level of education were in the direction of a higher level of depression for the group (reads and writes) compared to other educational groups, and that the least group in the level of depression was the educational category (university education). The results of previous studies vary in this field, although some studies indicated that there were no differences in the level of anxiety and depression among patients with kidney failure undergoing dialysis according to the level of education, such as the study (Mosleh & Alenezi., 2020). Some other studies indicated that there are differences in the level of anxiety and depression. The level of education, such as the study (Lin et al., 2016; Theofilure., 2011) and the result in the current research can be explained by returning to the fact that the level of education is reflected in increasing awareness of the disease and the factors affecting it and thus affect adherence to treatment and reduces risk factors that can exacerbate symptoms It affects the physical and psychological aspects.

6. The results of the sixth hypothesis: This hypothesis states: "There are statistically significant differences in the level of anxiety and depression among patients with renal failure undergoing dialysis according to the history of the disease.

To verify the validity of this hypothesis, a one-way analysis of variance was used to identify the differences in the degree of anxiety and depression in the research sample according to the history of the disease. The following table shows the result of this procedure.

Table No. (14) The value of the F-test and its statistical significance for the differences in the degree of anxiety and depression according to the history of the disease

Variables	Source of variance	Sum of squares	Degrees of freedom	Mean of squares	Value (f)	Significance level
Depression	**Between Groups**	161.171	2	80.586	3.301	0.042
	Within Groups	2001.934	82	24.414		
	Total	2163.106	84			
Anxiety	**Between Groups**	122.593	2	61.296	3.617	0.031
	Within Groups	1389.713	82	16.948		
	Total	1512.306	84			

It is clear from the previous table that there are statistically significant differences at the level of significance (0.05) in anxiety and depression in the research sample according to the date of the start of dialysis. Calculating the arithmetic means and standard deviations for each disease category and performing a dimensional analysis using the LSD test for dimensional comparisons. Table No. (13) and Table No. (14) show the result of this procedure.

Table (15) Arithmetic averages and standard deviations of the scores for the categories, history of illness on the depression scale

Groups		Number	Mean	Standard Deviation
Depression	1.00	**43**	13.0465	4.39130
	2.00	**23**	12.6957	4.07247
	3.00	**19**	16.2105	6.77888
	Total	**85**	13.6588	5.07457
Anxiety	1.00	**43**	14.2791	3.50731
	2.00	**23**	14.9565	3.61158
	3.00	**19**	17.3158	5.70626
	Total	**85**	15.1412	4.24307

- (less than 5 years) 2- (from 6 to 10) 3- (more than 10 years)

Table No. (16) of the (LSD) test result for dimensional comparisons to identify the direction of differences between groups in depression according to age

Comparisons			Mean Difference	Standard Error	Level of Significance
Depression	1.00	2.00	0.35086	1.27641	0.784
		3.00	-3.16401-*	1.36114	0.023
	2.00	1.00	-0.35086	1.27641	0.784
		3.00	-3.51487-*	1.53180	0.024
	3.00	1.00	3.16401*	1.36114	0.023
		2.00	3.51487*	1.53180	0.024
Anxiety	1.00	2.00	-0.67745	1.06348	0.526
		3.00	-3.03672-*	1.13407	0.009
	2.00	1.00	0.67745	1.06348	0.526
		3.00	-2.35927	1.27626	0.068
	3.00	1.00	3.03672*	1.13407	0.009
		2.00	2.35927	1.27626	0.068

1- (less than five years) 2- (from 6 to 10) 3- (more than 10 years)

It is clear from Table No. (15) and Table No. (16) that there are statistically significant differences at the level of significance (0.05) in anxiety and depression among the research sample according to the date of the beginning of the washing, and these differences were in the direction of higher average anxiety and depression among the groups treated with washing for more than ten years. The results of some studies in this context, such as the study (Cukor et al., 2008), indicate that depression and anxiety appear in different cycles in dialysis patients. Patients who remained depressed after 16 months of follow-up showed lower levels of quality of life and higher levels of depression. Furthermore, the prevalence of depression-related anxiety was higher after 16 months of follow-up. However, there are some studies in which there were no differences in the level of anxiety and depression according to the history of the disease, such as (Cwiek et al., 2017; Mosleh & Alenezi., 2020). At age, it is associated with an increase in symptoms, an increase in the level of pain and suffering, and social withdrawal and limitation in activities. In addition, the progressive nature of kidney failure can be associated with feelings of distress and distress due to the length of the disease, as well as the physical effects of the washing process of tissue damage, swelling and prolonged washing period, the increase in its duration, and the presence of problems in the blood vessels, all of this is reflected in the increase in the level of anxiety and depression the longer the washing period.

5. Recommendations of the Study:

In light of the findings, we recommend the following:

1- In light of what the results of the study indicated about the high level of anxiety and depression among kidney failure patients undergoing dialysis, we recommend that attention should be given to preparing psychological treatment programs to be provided along with drug treatments for kidney failure patients undergoing dialysis.

2- The necessity of paying attention to making a diagnosis of anxiety and depression in patients with kidney failure who are undergoing dialysis when providing medical care to them.

3- Focusing greatly on the elderly patients and giving them priority in the intervention programs, whether medical or psychological, in light of what the results of the study indicated that advancing age is associated with high levels of anxiety and depression.

4- Conducting more research on evaluating the effectiveness of psychological interventions in improving the quality of life and the level of anxiety and depression in these patients.

5- Conducting studies dealing with the role of some psychological variables such as body image, self-esteem, religiosity, and self-efficacy in influencing the quality of life, anxiety, and depression in patients with renal failure undergoing dialysis.

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