



Quality of life among women with chronic renal failure disease

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Abstract: Chronic kidney disease is one of the common chronic diseases that have led to many deaths globally. Where this study aimed to know the level of quality of life for female patients with chronic renal failure. The descriptive method was adopted. The sample consisted of 35 women with chronic kidney disease and undergoing renal dialysis in the University Hospital of Benflis Tohami in Batna and The health sector Suleiman Omairat in Barika. The sample age ranged from 20-60. The study tool was : The quality of life questionnaire (MOS SF-36). The study result is : There is a low level of quality of life for women with chronic kidney disease. Thus, Clinician psychologists, health psychologists, physicians and researchers may benefit from this study's results by understanding the impact of bad health conditions among chronic renal disease patient especially in light of these changes that occur in their life and work to improve their quality of life.

Keywords: *Physical Health; Psychological Health; Social Functioning*

1. INTRODUCTION

The current time is characterized by the aggravation all kinds of diseases and the multiplicity of their physical and psychological causes, as these diseases threaten the lives of individuals and societies with the physical, psychological, social and economic harm, it makes coexistence with them a great challenge.

Chronic kidney disease is one of these diseases prevalent in the world, according to the Global Burden of Disease, chronic kidney disease (CKD) is ranked among the top 20 causes of death, and is currently a significant public health concern (Ibrahim et al., 2022, p 1) . Locally, according to the Algerian Association of Kidney Diseases and Transplant president Ryan Taher revealed,

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Algeria counts more than 3 million people with renal failure, of whom 13,000 are following the dialysis process and annually, About 3000 new cases of chronic renal failure are recorded (Dawdi, 2022). Chronic renal failure is a progressive and irreversible destruction of renal function. It is due to kidney injury, which leads to a serious disorder in the composition of fluids inside the body, resulting in a permanent attachment to the dialysis machine (hemodialysis machine), which may last for years or last for life, at a rate of three days a week and for a period of not less than 3-4 hours. This is what causes a difficult psychological living for the person suffering from this disease. On the one side, hemodialysis (HD) is the common form of dialysis therapy for end stage renal disease (ESRD), and it is associated with a high burden of comorbidity and complications of ESRD due to the intrusiveness of treatment that is required: patients need to adapt themselves to eating and drinking restrictions, as well as fluid intake and chronic pain (Thenmozhi, 2018, p 221). Which has become a necessary method for his/her treatment, which makes his/her life associated with it, and on the other side, the treatment itself, which is physically accompanied by undesirable symptoms (such as nausea, convulsions, etc.). In addition to a difficult-to-respect diet (especially with regard to limited drinks), this may affect several aspects of a person's life, including the patient's quality of life, a concept that has emerged greatly in the health field, as it integrates objective aspects such as : conditions of working life and health, And subjective aspects such as : satisfaction, happiness.

Despite the difficulty of giving a clear concept to the quality of life because of it includes social, health, and psychological aspects, and because it is also of a subjective nature and differs from one person to another according to a set of considerations, including his responsibilities, the degree of disease, his experiences, his cultural background and his value system, many studies have linked positively between the quality of life and the health aspect of the individual. Therefore, the health-related quality of life is concerned with the physical health of the individual, his psychological state, his social relations, and his relations with his environment. This daily context may lead to psychological and social problems, as the use of dialysis machine as a result of chronic renal failure directly affects the patient's life, because it prevents many of the normal practices that he used to practice before the illness, rather it changes the roles and positions occupied by individuals in their families. Women roles who are most affected by the dialysis, especially in our local culture, which does not tolerate seeing a woman in illness bedridden. Where the use of the dialysis machine prevents her to practicing the different roles as in the past, whether as a wife who has rights and duties towards her husband or as a mother whose roles are multiple with her children inside or outside the home. The significance of this study is to

introduce a description to quality of life patients with chronic renal failure disease who suffered economical, social, psychological problems due to the disease. This description may suggest different interventions to specialists in different fields like ergonomics, health psychology... Hence this study aimed to determine the level of quality of life among the women with chronic renal failure and to show the extent of the physical, psychological and social suffering of these patients as a result of the disease and its consequences, through the following question :
What is the quality of life level among women patients with chronic renal failure?

2. Literature review

2. 1. Terms definition :

Quality of life :

Quality of life (QOL) is an overall assessment of a person's well-being, which may include physical, emotional, and social dimensions, as well as stress level, sexual function, and self-perceived health status (Thenmozhi, 2018, p 221).

Operationally, it is the degree obtained by women with chronic renal failure in the health-related quality of life scale (SF 36) with its eight dimensions (physical function - identifications related to physical problems - emotional problems - social relations - mental health - energy and vitality - pain and perception of difficult posture and aspects Social).

2. 2. Previous studies

The study of Rima Salim Al-Qarni in (2006) in the Eastern Province of Saudi Arabia, which aimed to assess the health-related quality of life among patients with renal failure undergoing hemodialysis. The opportunistic sample of this descriptive study consisted of 134 patients between the ages of 21 and 65 years for a period of not less than three months. The study tools were interview, review of medical records, health status assessment tool and health-related quality of life assessment tool. The study results is that 50.7% had low health-related quality of life scores.

Omran Lakhdar (2009) study in the Othmania Valley, which aimed to identify the quality of life among patients with diabetes. The opportunistic sample of this descriptive study consisted of 40 patients with type 1 and type 2 diabetes. The study tool was a general scale of SF36. The study result is a low level of quality of life among patients.

The study of Thenmozhi, P. (2017) in India. The objective of the study was to assess the quality of life (QOL) of patients undergoing hemodialysis (HD). The QOL of HD patients was found to be considerably impaired when compared to that of healthy individuals of the general population. The careful assessment of QOL helps to guide and achieve medical management to optimize their health

experience. The method : Cross-sectional research design was adopted with 130 samples who met the inclusion criteria to conduct the study in the dialysis unit, India. The instrument used for the study was to collect the data are demographic variable and kidney disease QOL - short form version 1.3 scale. The results are: The mean total score of QOL was 48.73 ± 22.65 , the highest score was for dialysis staff encouragement scale (84.04 ± 14.89) followed by social support scale (80.38 ± 20.38) and quality of social interaction (71.52 ± 18.74). However, role limitation caused by physical health problems, role limitation caused by emotional health, and burden of kidney disease scales yielded the lowest scores (22.12 ± 18.05 , 26.92 ± 24.15 , and 38.03 ± 12.81 , respectively).

2. 3. Psychological Issues in End Stage Renal Disease :

This disease has effects on psychological, social, and vocational aspects and even lifestyle change.

Psychological problems :

Psychological distress, depression, and anxiety negatively impact the quality of life (QoL) and well-being of patients. Depression has been well documented as a common extra-renal comorbidity in approximately 30–40% of ESRD patients and is associated with increased mortality risk. Body image damage as well physical, functional, metabolic, social and mental fragility can affect the quality of life (QoL) of patients. Hemodialysis therapy is a stressful process, and its burden affects the daily living of patients, as regular therapy in the hospital and recovering from therapy impacts physical functioning and leads to negative emotions related to the progression of the disease and the onset of depression and anxiety (Guerra et al., 2021, p. 1_2)

92% of HD patients may endure a high symptom burden and may experience troubling symptoms such as fatigue, decreased appetite, trouble concentrating, swelling in their feet and hands, and muscle cramps, and, all of which cause daily distress and negatively affects their quality of life (QOL) (Thenmozhi, 2018, p 221).

Life style problems :

Individuals with renal failure face profound changes in the activities of daily living. When kidney function is impaired or nonexistent, intake of foods and fluids must be carefully monitored. Such restrictions are necessary to minimize the amount of waste products and to avoid the presence of too much or too little fluid in the body. (Flavo, 2005, p. 381)

This interferes not only with daily work function, but also with family relationships, as the patient often lacks the energy to engage in previously enjoyed

social activities. A reduction in sexual activity is also common in ESRD. (Ayerá et al. 2007, p. 844)

Problems with sleep are very common in ESRD (up to 40%–80%) and range from insomnia and sleep apnea to restless leg syndrome. Indeed, poor sleep is itself a predictor of mortality and QOL (Thenmozhi, 2018, P 1).

Marital conflict can affect perceptions of illness and interfere with the ability of a patient to comply with the complex dialysis regimen. Chronic illness in a member of a dyad can radically change marital roles. Spouses can become caregivers and, regardless of role, can experience depression, hostility, or both. In addition, the spouse can be the object of the patient's negative emotions. Finally, sexual dysfunction can alter the dynamics of the relationship. (Kimmel, 2001, p 1606)

Social and vocational problems :

Even if individuals feel well enough to participate in social activities, many activities may be altered because of dietary and fluid restrictions. Individuals on dialysis may need a flexible work schedule to accommodate the dialysis schedule. Increasing social isolation can increase loss of self-esteem, feelings of depression, and hopelessness. (Flavo, 2005, p. 382)

3. Methods

This study used the descriptive method where the quality of life (SF 36) questionnaire was answered by the sample members during hemodialysis in dialysis units at the two hospitals. After data collection, it analysed statistically by SPSS.

3. 1 Participants

The opportunistic sample of this study consisted of 35 female patients with chronic renal failure in both the University Hospital Benflis Tohami in Batna and the health sector Suleiman Omairat in Barika, and the age range of the sample ranges from 20-60 years on the period 2011 and 2012. My research is about women with chronic renal failure disease and I had been difficulties to move to other places, that is why I could not increase the sample number.

3. 2 The study tool

Quality of Life Questionnaire (Mos SF- 36) emerged as a result of an observational study called Medical outcome study: MOS, then was developed by (Ware et al, 1993) a medical outcome study 36-Item short form (SF-36) and was reduced to 36 questions to assess general health (physical and mental health). (Fayer & Machin, 2007, p. 21)

The questionnaire in its current version consists of 36 questions combined in 8 dimensions: (physical function - role physical - role emotional - social functioning

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- mental health - energy and vitality - pain and awareness of the difficult situation and social aspects). It should be noted that the questionnaire used in this study did not include the last dimension : the development of perceived health in calculating quality of life, even in its French and English versions. It was used in the Algerian environment, after it was translated by Lakhdar Omran, in his thesis submitted for obtaining a master's degree in health psychology, The translation was presented to a group of professors, psychologists and doctors in the field, and after modifying the questionnaire according to their observations, the validity of the arbitrators was calculated using the Luchen equation, and the result was 91.52./The questionnaire is valid. The questionnaire was applied and re-applied, then the Karl Pearson correlation coefficient was calculated, its value was 0.75, it is significant at the value 0.05, so the questionnaire is reliable.

4. The study result

The question of the study : What is the quality of life level among women patients with chronic renal failure?

Table 1

A table (01) showing the dimensions mean and the total mean of the quality of life

Dimensions	Physical Functioning	Role Physical	Bodily Pain	General Health	Vitality	Social Functioning	Mental Health	Role Emotional
Dimensions mean	40.85	28.03	43.42	51	33.14	69.28	36.91	30
Total mean	41.58							

It is noted from the table that the average quality of life is 41.58, which is a low value, and the average dimensions of quality of life are as follows: physical functioning 40.85, role physical 28.03, bodily pain 43.42, general health 51, vitality 33.14, social functioning 69.28, mental health 36.91, role emotional 30 are low values, noting that the lowest values were for the physical restriction and mental health. As for perceived health, its value was medium, and the only value that was high was social functioning.

5. Discussion :

The mean of quality of life is a low value in this study that reflects the suffering of patients with chronic disease, and the results of this study supported by the study of Imran Lakhdar (2009): the incidence of diabetes and its relationship to decrease of the quality of life among patients. As the mean of quality of life for patients with diabetes was type 1: 33.78 and type 2: 35.90 is low

values, and the study of Rima Slim Al-Qarni (2006) that 50.7% of patients had low health-related quality of life.

The mean of various quality of life dimensions among patients with renal failure was low value, such as the physical functioning, and the role physical, which reflects the general physical weakness due to the chronic renal failure disease and the method of treatment using hemodialysis, taking into account the age. This confirmed by the cases during the application of the questionnaire. Most of the cases complained of severe physical weakness even at the slightest effort, which definitively prevents them from practicing their daily activities even if the disease duration did not exceed two months, which proves the rapid negative effect of the disease and the restrictions it constitutes in the patient's life in a short time from its appearance.

The mean of physical pain dimension was relatively low due to dialysis machine and its side effects such as painful cramps during dialysis, in addition to osteoporosis as we noticed crookedness in the fingers and the inability to move them due to pain in some advanced cases. All of these complications and barriers negatively affected mental health and the emotional role, and reflect the deep psychological and emotional suffering due to the patient's lifelong associated to the dialysis machine with a radical change of lifestyle such as following a strict diet regarding fluids and food. Sexual life disorder and loss of fertility (especially for married women, as it negatively affects the relationship with husband), as Paul L. Kimmel (2001) dyadic conflict has been associated with endocrinologic and immunologic responses in women, but not men subjects with renal disease. Strong negative emotion, such as perception of dyadic conflict, can be a particularly important stressor in women ESRD patients, activating physiologic and neuroendocrine pathways (Kimmel, 2001, p 1606). While the unmarried lose all hope of marriage) and psychomotor weakness, all of this contribute to strengthening the feeling of dependence and role loss.

Despite all these low values, the mean of general health dimension was medium, and this can explain by the positive expectations of patients due to the disease is being considered a fate and destiny and an affliction that must be patient upon. The only dimension that was not affected is the social relations, which is a good value, and this is what we saw in our dialogue with the cases. They unanimously agreed that their social relations were not affected, because they are considered an outlet for patients and a moral support to alleviate their psychological pain which proved by The study of Thenmozhi, P. (2017), despite the patients' fear of pity look from others, especially those outside the family.

6. CONCLUSION

In sum, it becomes clear the suffering that patients with renal failure suffered with the disease first and then with its repercussions that affect the various physical, psychological, social and economic aspects that need to be taken care of and attention by different parts of society especially specialists. "Where not surprisingly, quantitative and descriptive reviews of the literature have generally concluded that a successful renal transplant is associated with higher patient quality of life than any form of renal dialysis." (Christensen & Ehlers, 2002, p 718)

In addition, the most important commandments that this study is a reality microcosm of suffering for patients, especially in light of these changes that afflict our societies, this is at various levels, and this is what has proven by real life. To put programs and protocols to avoid disease complications like diabetes, blood pressure ...through health education for patients. The use of interdisciplinary and multidisciplinary approach consisting of dialysis technician, nurse, physician, nutritionist, physiotherapist, and health psychologist by designing structures exercise plan especially intradialytic exercise, dietetic strategies, yoga and meditation. Counselling for psycho emotional problem to focus on the physical and mental health problems to prevent further impairment of the health status and to improve the QOL among HD patients and cope successfully with the full range of challenges encountered with kidney disease.

7. Limitations of the study

Generalization of this study's findings are limited based on the use of a nonprobability opportunistic sample.

8. Bibliography List:

Ayers, S., Baun, A., McManus, C., Newman, S., Wallston, K., Weinman, J. & West, R. (2007). *Cambridge Handbook of Psychology Health and Medicine*. 2nd edition, Cambridge university press, New York, USA

Christensen, Alan J. & Ehlers, Shawna L. (2002). *Psychological Factors in End-Stage Renal Disease: An Emerging Context for Behavioral Medicine Research*. Journal of Consulting and Clinical Psychology. Vol. 70, No. 3, 712–724
<https://pubmed.ncbi.nlm.nih.gov/12090378/>

Dawdi, Elchrif (11/ 03/ 2022), *3 million Algerian with chronic renal failure*
<https://www.echoroukonline.com/3->

%D9%85%D9%84%D8%A7%D9%8A%D9%8A%D9%86-
%D8%AC%D8%B2%D8%A7%D8%A6%D8%B1%D9%8A-

- %D9%85%D8%B5%D8%A7%D8%A8-
%D8%A8%D9%82%D8%B5%D9%88%D8%B1-
%D9%83%D9%84%D9%88%D9%8A-%D8%AD%D8%A7%D8%AF
- Falvo, Dona (2005). *Medical and psychological aspects of chronic illness and disability*. 3rd edition, Jones and Bartlett publishers, Boston, USA
- Fayers, Peter M. & Machin, David (2007). *Quality of life, the assessment, analysis and interpretation of patient-reported outcomes*. 2nd edition, John Wiley & sons Ltd, England, UNK.
- Guerra, F., Di Giacomo, D., Ranieri, J., Tunno, M. & Piscitani, Luca & Ferri, Claudio (2021). *Chronic Kidney Disease and Its Relationship with Mental Health: Allostatic Load Perspective for Integrated Care*. Journal of Personalized Medicine, Vol. 11, <https://pubmed.ncbi.nlm.nih.gov/34945839/>
- Ibrahim, N., Chu, S., Sin Siau, C., Amit, N., Ismail, R. & Abdul Gafor, Abdul Halim (2021). *The effects of psychosocial and economic factors on the quality of life of patients with end-stage renal disease and their caregivers in Klang Valley, Malaysia: protocol for a mixed-methods study*. BMJ Open 2022;12:e059305. doi:10.1136/bmjopen-2021-059305
<https://bmjopen.bmj.com/content/bmjopen/12/6/e059305.full.pdf>
- Kimmel, Paul L. (2001). Psychosocial factors in dialysis patients. *Kidney International*, Vol. 59, pp. 1599–1613 [https://www.kidney-international.org/article/S0085-2538\(15\)47645-8/pdf](https://www.kidney-international.org/article/S0085-2538(15)47645-8/pdf)
- Thenmozhi, P. (2018). *Quality of Life of Patients Undergoing Hemodialysis*, Asian Journal Pharmaceutical and Clinical Research. Vol 11, Issue 4, 219-223 file:///C:/Users/HP/Downloads/AJPCR-QOLONHD.pdf

9. Appendices

The quality of life questionnaire (MOS SF 36)

SF-36 Questions

1. In general, would you say your health is:
2. Compared to one year ago, how would you rate your health in general now?
3. The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?
 - a. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports
 - b. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf
 - c. Lifting or carrying groceries
 - d. Climbing several flights of stairs
 - e. Climbing one flight of stairs
 - f. Bending, kneeling, or stooping
 - g. Walking more than a mile
 - h. Walking several blocks
 - i. Walking one block
 - j. Bathing or dressing yourself
4. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?
 - a. Cut down the amount of time you spent on work or other activities.
 - b. Accomplished less than you would like
 - c. Were limited in the kind of work or other activities
 - d. Had difficulty performing the work or other activities (for example, it took extra effort)
5. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?
 - a. Cut down the amount of time you spent on work or other activities
 - b. Accomplished less than you would like
 - c. Didn't do work or other activities as carefully as usual
6. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?
7. How much bodily pain have you had during the past 4 weeks?
8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?
9. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 week
 - a. Did you feel full of pep?
 - b. Have you been a very nervous person?
 - c. Have you felt so down in the dumps that nothing could cheer you up?

- d. Have you felt calm and peaceful?
 - e. Did you have a lot of energy?
 - f. Have you felt downhearted and blue?
 - g. Did you feel worn out?
 - h. Have you been a happy person?
 - i. Did you feel tired?
10. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?
11. How TRUE or FALSE is each of the following statements for you?
- a. I seem to get sick a little easier than other people
 - b. I am as healthy as anybody I know
 - c. I expect my health to get worse
 - d. My health is excellent

SF-36 Response Choices

- 1. Excellent, Very good, Good, Fair, Poor
- 2. Much better now than one year ago, Somewhat better now than one year ago, About the same as one year ago, Somewhat worse now than one year ago, Much worse now than one year ago
- 3. Yes, limited a lot; Yes, limited a little; No, not limited at all
- 4. & 5. Yes, No
- 6. Not at all, Slightly, Moderately, Quite a bit, Extremely
- 7. None, Very mild, Mild, Moderate, Severe, Very severe
- 8. Not at all, A little bit, Moderately, Quite a bit, Extremely
- 9. All of the time, Most of the time, A good bit of the time, Some of the time, A little of the time, None of the time
- 10. All of the time, Most of the time, Some of the time, A little of the time, None of the time
- 11. Definitely true, Mostly true, Don't know, Mostly false, Definitely false