

# Quality of Life of in Patients Undergoing Hemodialysis in Sanandaj, Iran

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## ABSTRACT

**Background:** Quality of life is one of the most important aspects of health in patients undergoing hemodialysis. The quality of life of patients undergoing hemodialysis can be affected by clinical changes caused by the disease and its complications. Therefore, getting information about this subject can be useful in identifying patients at risk. The aim of this study was to study the quality of life of patients undergoing hemodialysis.

**Methods:** In this descriptive study, patients undergoing hemodialysis in Towhid hospital of Sanandaj, Iran, were studied. Data were collected using convenience sampling and were analyzed using descriptive and inferential statistical tests.

**Results:** According to the obtained results, average score of quality of life in hemodialysis patients was 79%. There was a significant and positive relationship between health dimension and the dimensions of fatigue, emotional health, social functioning, general health, and social performance.

**Conclusion:** Considering the importance of the quality of life in these patients further researches are recommended to evaluate factors affecting quality of life and discovering solutions to improve it.

**KEY WORDS:** Hemodialysis, Quality of Life.

## 1. INTRODUCTION

Irreversible renal failure (End Stage Renal Disease) has been regarded as a chronic disease (Cynthia, 2003). The incidence of renal failure in the world and in Iran is high. Individuals with end-stage renal disease were initially treated by protective treatments, then they need hemodialysis or peritoneal dialysis and eventually a kidney transplant (Lopes, 2003). Despite the therapeutic effect of hemodialysis, the patients are faced with physical, psychological, and social stressors such as family problems, changes in performance and dependence to others (Evans, 1985). Living with dialysis faces a lot of obstacles and challenges (Rahimi, 2014).

Dialysis and other treatment methods alleviate disease symptoms and improve the lifestyle of patients. However, quality of life of patients is affected by the disease and the treatment side effects. Also many patients become disabled due to the disease (Brawnwald, 2001).

Studies show that anemia, fatigue, sleep disorders and low function of kidney are the most important factors in reducing the quality of life in patients undergoing hemodialysis (Bamgboye, 2003). Low quality of Life is an important factor for the incidence of cardiovascular disease and other important consequences such as hospitalization and death. Therefore, quality of life should be monitored constantly and its variations should be considered.

Decreased quality of life in hemodialysis patients may affect different aspects of their life (Kutner, 2004). Decreased quality of life from the physical perspective can change functional status of the patient (Thomas, 2003). So that, daily physical activity of the patients are disrupted and their ability to perform daily activities are decreased (Al-Arabi, 2006). The aim of caring for patients undergoing hemodialysis is to provide adequate dialysis, ensuring adequate nutrition, maintaining access to the vessels, correction of hormonal deficiencies, minimizing the days of hospitalizations, increasing longevity and quality of life (Kimmel, 2000).

Insomuch as the nurses spend a long time with hemodialysis patients, they have the best position to detect the invisible symptoms in these patients. These symptoms affect daily activities, interpersonal relationships and quality of life (Infudu, 1998). Considering the importance of quality of life in these patients, the present study aimed to evaluate the quality of life of patients undergoing hemodialysis.

## 2. MATERIALS AND METHODS

In this descriptive study, quality of life in patients undergoing hemodialysis referring to Towhid hospital was investigated. Sampling was carried out using convenience method, in accordance to the specifications of the subjects and their interest to participate in the study. After obtaining informed consent from the participants for participating in this study, their information were collected using a questionnaire. The World Health Organization Quality of Life Questionnaire was used for data collection (WHOQOL- BREF).

This questionnaire investigates the quality of life in five areas in relation to health: (a) physical health (physical), (b) emotional, (c) psychosocial, (d) economical, and (e) familial. This questionnaire consists of 19 questions about the quality of life in the mentioned areas. The questionnaire was completed by the investigator for patients with low education levels. Researcher monitored the process of completing the questionnaires. Data were entered into SPSS software and were analyzed using descriptive and inferential statistical indexes. Chi-square and t tests were also used.

### 3. RESULTS

In this study the mean score of quality of life was average (78%) in most of the participants and there was a significant correlation between quality of life and age of the participants ( $P < 0.03$ ). While, there was no statistically significant relationship between other demographic variables of patients and score of quality of life. The results of ANOVA test showed that there was a significant difference between occupation and quality of life in the patients ( $P < 0.02$ ), this relationship was associated with difference between two retired and self-employed groups. Moreover, there was a significant difference between education levels and quality of life of the patients ( $P < 0.02$ ). This difference was also observed among illiterate and secondary school patients and patients with the ability to read and write. There was a positive and significant correlation between physical health area and fatigue dimension ( $P < 0.02$ ), emotional health ( $P < 0.03$ ), social functioning ( $P < 0.01$ ) and general health ( $P < 0.01$ ), and the score of quality of life increased with increasing the average scores in the studied area.

### 4. DISCUSSION AND CONCLUSION

Results indicated that quality of life in most of the participants was in moderate level. In a similar study on the quality of life in patients undergoing dialysis, most of the patients had a relative good quality of life (Termorshuizen, 2003). Moreover, obtained results shown that there was a significant relationship between age variable and quality of life. Generally, the risk of diseases and incidence of disability increased with increasing age. On the other hand, the incidence of chronic renal failure and treatment modalities including hemodialysis leads to changes in lifestyle and health status of the individuals. These changes affect not only physical health but also other aspects of health (Rahimi, 2014). It can reduce quality of life of patients finally. There was no significant differences between quality of life and employment status and education level of the patients. In this study self-employed patients had higher quality of life than retired patients. This may be due to the difference in the level of income and more favorable economic situation in the self-employed patients as well as their presence in the community that can create a positive interactions. Moreover, employment by providing social capital have a positive effect on the quality of life (Kimmel, 2000).

There was a significant difference between quality of life and social functioning. Moreover, there was a significant correlation between health dimension and fatigue, emotional health, social functioning and general health dimensions. There are numerous factors during the dialysis process that have adverse effects on the quality of life in patients undergoing dialysis such as stressful environment during the hemodialysis process, difficulties in providing quality health services, costs of transportation, travel time, time spent in the dialysis unit, repeated weekly visits for dialysis, and physical activity during dialysis. Engaging patients in the treatment process for several hours make them unable to do anything. This phenomenon disrupts their emotional health and social functioning.

There was a significant and positive correlation between quality of life and mental health. Therefore, the nursing interventions can be useful to increase the patients' mental health. Nowadays, people are demanding improved quality of life. In this regard, governments around the world are increasingly trying to improve the quality of life of their people. Governments recognize that growing the living standards is not enough for the satisfaction and happiness of the people and should also increase the quality of their life. Furthermore, time spent to control chronic diseases is very important.

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