

A Study to Assess the Quality of Life among Patients with Chronic Renal Failure on Regular Hemodialysis in a Selected Hospital at Chennai

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Abstract

Onset of chronic illness requires adjustment in lifestyle in prolonging life and improves the quality of life. Patients with end stage renal disease are faced with complicated and demanding treatment regimen that include dietary and fluid restrictions and medication schedule and regular dialysis they can lead a near normal life provided that they have the good quality of life. Hence the investigator assessed the Quality of life of patients with chronic renal failure on regular hemodialysis in the different aspects of physical, physiological, psychological, social and spiritual, to assess the overall level of quality of life, and to associate the level of quality of life of chronic renal failure patients with selected demographic variables. A descriptive design was chosen to assess the quality of life of patients with chronic renal failure with the help of a standardized questionnaire, data was collected and analyzed using inferential statistics. The findings revealed that in physiological aspects 58% patients were in poor quality of life, in physical status 56% patients were in moderate quality of life, in psychological aspects 58% patients were in moderate quality of life, in social aspects 80% patients were in moderate quality of life, and in spiritual aspects 78% patients were in moderate quality of life. The study concluded that 92% of patients were having moderate quality of life, only 4% of patients were having poor quality of life and 4% of patients were having good quality of life.

E-mail: Chronic illness; Chronic renal failure; Hemodialysis.

Introduction

Bones can break, muscles can atrophy, glands can loaf, even brain can go to sleep without immediate danger to survival; but should the kidney fail, neither bone, muscle, glands or brain could carry on". This statement underlines the importance of kidneys in our lives. Adequate functioning of the kidneys is essential for the maintenance of a healthy kidney. If there is complete kidney failure and treatment is not given, death is inevitable. Modern information and scientific evidence have give persuasive evidence that there is more kidney disease that had been actually thought. Developed countries worldwide treat over 1000.000 individuals yearly and as many

as 25,000 new cases each year. In the U.S and the Netherlands, it is estimated that 6.5-10% of general population suffer from some degree of kidney disease and therefore at increased risk of preventable cardiovascular disease and renal failure [National Kidney Foundation, 2006]. Our two kidneys with their 1 million filtering units keep our internal environment of salt and water in a wonderfully precise balance, allowing all our cells, tissues and organs to function well, with the exception of acute renal failure, a potentially reversible condition caused by severe dehydration, obstetrical complications, toxic medications or toxic venoms. Kidney disease usually begins silently unless brutally announced by severe pain of a stone in the ureter. Mostly kidney disease reveals itself as a rise in blood pressure, fluid retention in the legs and around the eyes, development of anemia and a gradual feeling of illness [National Kidney Foundation, 2006].

Renal failure affects every body system and solely compromise nutritional status. Unable to rid itself of excess fluid, the body swells and electrolyte and acid-base balance are disrupted. As renal failure

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progresses, build up of toxic wastes in the blood precipitates a complex interplay of symptoms known as uremic syndrome. The patient develops fatigue, weakness, muscular twitches, muscle cramps, nausea, vomiting, stomatitis, itchy skin and unpleasant taste in the mouth. In later stages, GI ulcers and bleeding common [Gallher, 1990]. Dialysis is a therapeutic procedure used in acute and chronic renal failure to lower the blood level of metabolic waste products and toxic substances and to correct abnormal electrolyte and fluid balances [Phipps, 1999].

Early detection and treatment are the keys to keeping kidney diseases from progressing to kidney failure. Simple tests that can be done to detect early kidney diseases are blood pressure measurement testing protein in urine and serum blood creatinine. If the patient is in high-risk group such as elderly diabetic, hypertensive or have a family history of kidney disease, they must undergo routine tests to determine early disease. [National Kidney Foundation, 2002].

The holistic treatment of a patient requires the health care team to assess what is most important for that individual. In some cases, it is not possible to attain complete freedom from the signs and symptoms of a disease. In those cases, the goal is to achieve quality of life which is as good as possible despite the diseases. Also in people who have suffered disabilities or lost psychological or physical skills it is important to emphasize the positive aspects of what has been lost. Quality of life is an important concept and has proved difficult to define, because it has many meanings. Draper (1997) suggests that quality of life may vary depending on whether it is used as an objective measure to evaluate the general social policy and make a decision about how to allocate scarce resources or whether it is used as a subjective measure to evaluate the effects of nursing practice or medical treatment at the level of the individual. For most nurses, it is the latter aspect of Quality of life that is particularly salient.

Nursing is an essential health service for person whose Quality of life is greatly or irreversibly affected because of serious disruption of integrated functioning. The World Health Organization (WHO) 1974 focused on quality of life. So it has been considered as an issue of psychological importance for the chronically ill. The modern technological advancements in the treatment of Chronic renal failure patients on hemodialysis have increased their life expectancy and highlighted the psychological aspects and physical conditions. This study is concerned with the nature and effects of

these stressors [Physical, physiological, psychological, social and spiritual] and their treatment and care of the individual as a whole.

The Statement of the Problem

A study to assess the 'Quality of life' of patients with chronic renal failure on regular hemodialysis in a selected hospital at Chennai.

Aim of the Study

To assess the level of normal functioning in relation to physiological, physical, psychological, social and spiritual aspects of chronic renal failure patients.

Objectives

The specific objectives of the study are

- To assess the level of quality of life of patient's who are undergoing hemodialysis in the regarding physical, physiological, psychological, social and spiritual domain of life.
- To associate the level of quality of life of chronic renal failure patients with selected demographic variables.

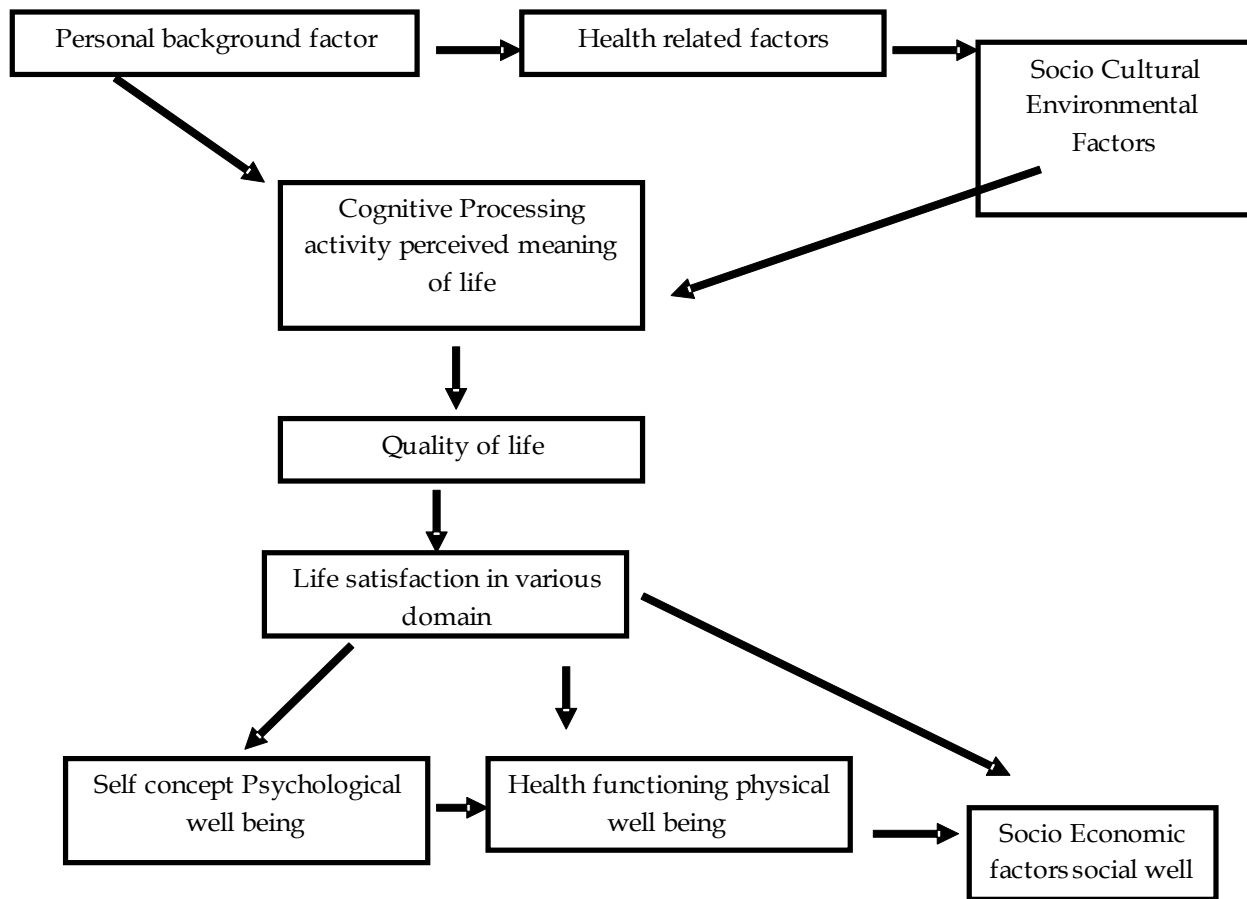
Conceptual Framework Model

The conceptual framework of this study is based on Linzhan's model of quality of life (1992). She described that quality of life is determined by life satisfaction in various domain of the life which are interrelated. Self concept, physical health, socio-economic factors and perceived meaning of life of an individual determines the quality of life. It is an abstract concept which is the sum total of the effects of intrapersonal and interpersonal factors acting on the individual.

Life Satisfaction

Life satisfaction is influenced by personal background, environment and health functioning status. Therefore an understanding of the external condition and influencing factors is essential for nursing interventions to enhance the individuals satisfaction with life. A report of life satisfaction is essentially the cognitive assessment of one's progress toward desired goal, implying a judgment based on cognitive experiences. It refers to life as a whole rather than to specific domains of life experiences.

Conceptual Framework Based on Linzhan’s Model of Quality of Life



Review of Literature

The primary purpose of reviewing relevant literature is to gain broad background knowledge or understanding of the information that is available and relevant to the research problem of interest. Quality of life during the 1980’s the multidimensional concepts of quality of life has generated a growing focus for research. De Haes & Van Knippenberg (1987) states that life has come to the fore front in health care with the growing realization that the well-being of patients is an important consideration when treating them for cure & sustainment of life. The first attempt of visualize quality of life was done by WHO (1947) by defining “health as a stall of complete physical, mental, social well being and not merely an absence of disease or infirmity”. Karofsty (1949) who first discussed quality of life studied the performance status & satisfaction of patients who were on long treatment chronic diseases have become the focus of attention in the field of health care. LEE AJ, et.al. (2005) Conducted a study comparative to assess the health related quality of life in patients with kidney failure

who had received transplant and receiving haemodialysis. The study was conducted at the university hospital of wales, using SF-36 and the kidney disease quality of life questionnaire [KDQOL] from the KDQOL there were significantly higher for dialysis. Patients compared with renal transplant patient. Kidney failure has a high cost in terms of health related quality of life. Haemodialysis should be the treatment of choice for kidney failure.

Methodology

A descriptive survey research design was chosen for this study, as it would bring forth all necessary information. The study was conducted at selected Hospital, Chennai which is multispeciality 350 bedded hospitals with outpatient department facilities. The dialysis unit consists of 12 dialysis machines with the required equipments. Three qualified doctors, five nurses, 12 technicians and 6 attenders are working here and the department is headed by a Nephrologist patients were coming for hemodialysis as out patients twice or thrice in a week,

stays for four to five hours to under go hemodialysis and went back home. During, pre and post dialysis vitals are monitored. Weight was checked before, after dialysis for each patients. The population of this study consisted of all patients with chronic renal failure undergoing regular hemodialysis in the hemodialysis unit of the selected hospital. The sample consisted of 50 patients with chronic renal failure on regular hemodialysis in the selected hospital. Criteria for selection of the sample. Chronic renal failure patients who underwent regular heamodialysis, Between the age group 30 to 60 years who had heamodialysis, Clients who were willing to participate, Clients on heamodialysis for 6 months or more and Clients who were able to read and

understand Tamil and English. Development and description of the instrument, the instrument developed was which has two parts. The demographic details of patients were it included, age, sex, educational status, occupation, marital status, monthly income, place of living, type of family, duration of chronic renal failure, and period of dialysis. Modified kidney disease quality of life short-form [KDQOL.SF] questionnaire was used to assess the level of quality of life of patients with chronic renal failure on regular hemodialysis. The standard questionnaire, the KDQOL SF-36 Item that can be used to formally assess the different aspects of quality of life [WHO 1976]. And was modified by the researcher for the study purpose into 4 four point

Table 1: Frequency and Percentage distribution of Demographic variables among patients

Demographic variables	(n=50)	
	No.	%
Age in years		
21-30	15	30
31-40	12	24
41-50	20	40
51-60	3	6
Gender		
Male	28	56
Female	22	44
Education		
Secondary and above	21	42
Primary	18	36
Illiterate	11	22
Marital Status		
Married	33	66
Unmarried	17	34
Occupation		
Employed	21	42
Daily wages	13	26
self-employed/Retired	16	32
Income (Rs./ month)		
1000-3000	3	6
3001-6000	15	30
6001-9000	19	38
>9001	13	26
Type of family		
Joint	24	48
Nuclear	26	52
Residence		
Rural	28	56
Urban	22	44
Family history		
No	24	48
Yes	26	52
Duration of treatment		
1-3 years	4	8
4-6 years	17	34
>7 years	29	58
History of co-morbid illness		
Diabetes	32	64
Hypertension	11	22
Diabetes and Hypertension	7	14
Others	-	-

scale, which consists of 25 negative and 25 positive statements of quality of life. The responses were stated as always, frequently, rarely and never. The score interpretation for the response were as follows. The total minimum score was 50 and maximum score was 200. Based on the scoring the percentage of scoring and interpreted as follows:

Quality of Life -76% and above - Good Quality of Life (Scoring 154-200), 51% to 75%- Moderate Quality of Life (Scoring 101-150) and 26% to 50%- Poor quality of life (Scoring 50-100). The data collection procedure was after obtaining permission from the head of the Department of Nephrology and the Nursing superintendent, the main study was conducted from 50 hemodialysis patients were selected using convenient sampling criteria selected for the study. The data collected were analyzed using descriptive statistics.

Major Findings of the Study

Table 1 describes the frequency and percentage distribution of demographic variables of chronic renal failure patients. 20 (40%) of them were in the age group of 41 to 50 years. 28 (56%) of them were male patients. 26 (52%) of them had significant family history of renal illness. 29 (58%) of them was on dialysis more than 7 years. 32(64%) of them had history of diabetes has their co-morbid illness.

Figure 1 revealed that in physiological aspects 58% patients were in poor quality of life, in physical status 56% patients were in moderate quality of life, in psychological aspects 58% patients were in moderate quality of life, in social aspects 80% patients were in moderate quality of life, and in spiritual aspects 78% patients were in moderate quality of life.

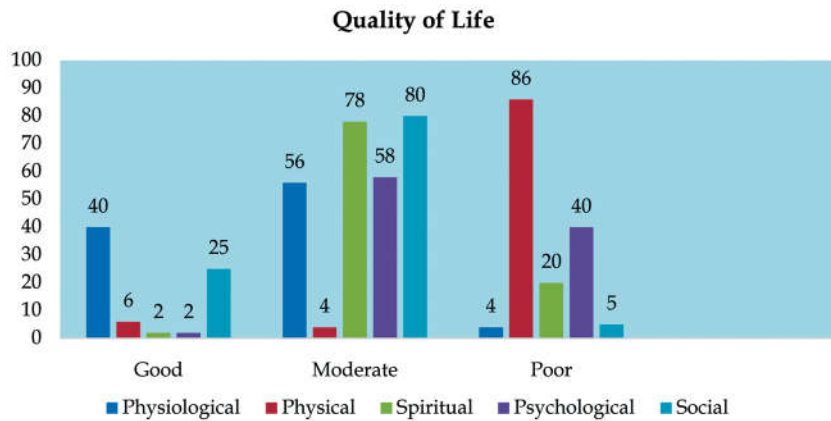


Fig. 1: Level of Quality of life among patients with chronic renal failure who is on hemodialysis (n=50)

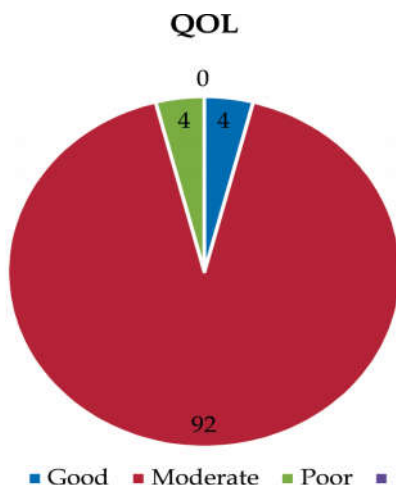


Fig. 2: Percentage of overall Quality of life among patients with Chronic renal failure (n=50)

The study concluded that 92% of patients were having moderate quality of life, only 4% of patients were having poor quality of life and 4% of patients were having good quality of life.

Conclusion

The findings of the study were consistent with the literature and supported by the studies conducted around the world. Based on the method of selection, sample size and support from many studies conducted throughout the world, the findings could not be generalized to the patients with chronic renal failure. Hence larger sample size is needed to generalize the level of quality of life among patients undergoing hemodialysis. Weisbord S.D et al. (2005) conducted a study to assess symptoms and their relationship to quality of life and depression. The illness effects questionnaire and Beck Depression

Inventory were used to evaluate quality of life and depression, A total of 162 patients from three dialysis units were enrolled. Mean age was 62%, 48% were black, 62% were men, and 48% had diabetes. The median number of symptoms was 90. Dry skin, fatigue, itching and bone/joint pain each were reported by >33% of patients. Physical and emotional symptoms are prevalent can be severe, and are correlated directly with impaired quality of life and depression in maintenance hemodialysis patients. A standard assessment of symptoms into the care provided to maintenance hemodialysis patients may provide a means to improve quality of life in this patient population.

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