

Factors Affecting Quality of Life among Hemodialysis Patients

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Abstract: Dialysis is most commonly prescribed for patients with temporary or permanent kidney failure. People with endstage renal disease (ESRD) have kidneys that are no longer capable of adequately removing fluids and wastes from their body or of maintaining the proper level of certain kidney regulated chemicals in the bloodstream. Study was aimed to assess the factors affecting of quality of life of patients on Hemodialysis & to assess the association between the factors affecting quality of life and demographic variables of patient on Hemodialysis. **Methodology:** Non experimental design was used with descriptive research approach, study sample was 50 Hemodialysis patient selected by convenient sampling technique. **Results:** Majority 48% Hemodialysis patient had more than 50 years, 26% patients had 40 to 50 years, 18% patients had up to 30 years and 8% patients had in group of 30 to 40 years majority of them 50% had just complete primary education, 34% had complete secondary education, while 8% of Graduates and same 8% illiterate patients. In present study there was no association between demographic variables and factors like physical, social & environmental. and there was association between monthly income of family and psychological factors. **Conclusion:** Monthly income of patient/ family and psychological factors more affecting the quality of life among patient on Hemodialysis.

Keywords: Factors, Quality of life, Patient, Hemodialysis

1. Introduction

Quality of life is an important indicator of health and well-being. Dialysis is most commonly prescribed for patients with temporary or permanent kidney failure. People with end stage renal disease (ESRD) have kidneys that are no longer capable of adequately removing fluids and wastes from their body or of maintaining the proper level of certain kidney regulated chemicals in the bloodstream. For these individuals, dialysis is the only treatment option available outside of kidney transplantation. India gets 1.5 lakh (150,000) patients with kidney failures every year and a majority of them die within five years. Hemodialysis treatment is very expensive. The medicines are also equally costly and a majority of the patients are not able to afford this treatment. Adding to the problem, health insurance policies do not cover the cost of dialysis owing to the high cost [1].

Quality of life is a broad multidimensional concept that usually include subjective evaluation of both positive and negative aspects of life. What makes it challenging in to measure is that, although the term "quality of life". Has meaning for nearly every one and every academic discipline, individuals and groups can define it differently. Philosophers were concerned with the nature of human existence and define the "good life, ethicist debated the shift in health care decision making for the concepts of "sanctity of life" to "quality of life and social utility, environmentalists have place emphasis upon attribute and conditions of the physical and biological environment, economists were concerned with the allocation of resources to achieve the alternative goals psychologist considered human needs and their fulfillment, where as sociologist have advanced a social system approach in which indicators of quality of life are seen variables in total systems and its subsystems' [2]

Gender, age, marital status, unemployment, residence of rural area, economical status, distance covered to reach hospital, mode of transport, total time consumed in getting HD, effect QOL in HD patient. Education level is a positive factor for improving QOL of HD patients.[3]

Study conducted by M.Shinde found that about 97% patients undergoing hemodialysis had severe stress In that 50% of patients undergoing hemodialysis always adopt emotion focused and problem orientation as their coping strategies, while 90% of patient sometimes used avoidance oriented coping strategy, while the others 56% sometime use the coping strategy of seeking support and isolated thoughts. The overall assessment reveals that though the subjects at undergo severe stress of the procedure they undergo. Modification in coping strategies and planned interventions are desirable.[4]

The World Health Organisation (WHO) defines QOL as: "the perception that individual makes about his position in life, within its cultural context and value system, and related to its goals and vital objectives".[6] In patients who are on haemodialysis, health related QOL is usually poorer than that in the age-matched general population, because of the typically high burden of comorbidity and complications of ESRD.[5] Quality of life is a difficult variable to define. Two basic characteristics can be distinguished in the concept of QOL: subjectivity and multidimensionality. Subjectivity should be distinguished because the QOL is a unique perception for each individual, which reflects the patient's self-assessment about their own health, defined by medical and nonmedical aspects of their lives.[7] Rajeshwari, Nagabushan H concluded in their study that QOL was very poor; especially low score was seen with physical and psychological domains.[8].

Md. Yusop NB concluded in their study that provides an

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understanding of factors that are associated with QOL in HD patients. It is important for health professionals to emphasise that low blood flow, DM, increased serum calcium and low level of serum creatinine factors can potentially impair the overall QOL of the HD patients. Low QOL among HD patients is closely associated with higher risk of morbidity and mortality. With the rising prevalence of DM and ESRD worldwide, there could be increasing demand for diabetes-related ESRD treatment, particularly hemodialysis. The development and implementation of multidisciplinary interventions consisting of psychosocial and specific medical and dietetic strategies that focus on factors associated with mental and physical quality of life are warranted to prevent further health complications and to improve quality of life of hemodialysis patients.[9]

The results of study Sathvik BS suggest that the QOL of hemodialysis patients is considerably impaired compared to that of the healthy subjects, especially with respect to the physical, psychological and social relationship domains. Renal transplant patients have better QOL in all the four dimensions of the WHOQOL-BREF compared to hemodialysis patients.[10]

2. Statement of the Problem

A study to assess the factors affecting quality of life of patient on Hemodialysis at tertiary care hospital karad.

Objectives

- 1) To assess the factors affecting on quality of life of patients on hemodialysis.
- 2) To assess the association between the factors affecting quality of life and demographic variables of patient on hemodialysis.

3. Operational Definition

Assess: assess is defined as to evaluate or analyze
In present study assess refers to process of evaluate and analyze the factors affecting on quality of life of patients on hemodialysis.

Tertiary Care Hospital: is a hospital that provides tertiary care, which is health care from specialists in a large hospital after referral from primary care and secondary care.[6]

In present study tertiary care hospital refers to Krishna hospital and medical research Centre, Karad. 1100 bedded multispecialty hospital attached with teaching institution

Quality of Life

The general wellbeing of individuals and societies. Quality of life should not be confused with the concept of standard of living, which is based primarily on income. **FACTORS:** A constituent or element that brings about certain effects or results or indicate a specific multiple number or quantity.

Research Methodology

“Research methodology is a systematic way of conducting a research study to solve a problem. this comprises of the

statement of problem, the objective of study, variable under study method used for data collection and statistical method used for analyzing the data and logic behind it.”[11]

Research Approach: In the present study descriptive research approach adapted to assess the factors affecting quality of life.

Research Design: In the present study non experimental design adapted. Non experimental design in that passively collects data without trying to make any changes or interfaces any treatment in present study Non experimental design is used to assess the factors affecting on quality of life patient on Hemodialysis.

Study Area: present study was conducted at Krishna hospital in dialysis unit, karad. it is a tertiary care hospital at karad city.

Population: A population is a complete set of individuals or objects that possess some common characteristics of interest to researcher. In the present study population include patient who are undergoing in dialysis in Krishna hospital karad.

Sample: A sample then consists of subset of the units that compose the population. The sample for present criteria patient who are the undergoing in hemodialysis in Krishna hospital karad.

Sample Size: The sample include 50 dialysis patient.

Sampling Technique: Sampling is process of selecting the portion of the population to represent entire population. Convenient sampling technique was used.

Inclusive Criteria:

1. Patient is on hemodialysis.
2. Age of patient above 18 year.
3. Interested people who are willingly participate in this research study.

Exclusive Criteria:

1. Patient who are in end stage of life (terminally ill).
2. Multi organ failure patient.
3. Unconscious patient.

Description of tool and data collection procedure

Interview method was used to collect data. The tool comprises of two section.
Section I: Demographic Performa.
Section II: WHOQOL Scale questionnaire which was used.

Procedure for Data Collection

All the dialysis patient coming at tertiary care hospital on march 2016. Interviewed method were conducted among dialysis patients 15 to 20 minute are required to conduct the interview.

Plan for data analysis

For analysis or finding the association between demographic data and factors affecting quality of life, factors like physical,

social, psychological, environmental this In- stat and SPSS 20.0 is used.

Maximum of overall 50% had just complete primary education, 34% had complete secondary education, min 8% of Graduates and same 8% illiterate HD patients.

4. Major Findings

Table 1: Demographic description (Age) of patient on hemodialysis by frequency and percentage
 N=50

| Sr.no | Demographic data | Hemodialysis patient | |
|-------|-------------------|----------------------|--------------|
| | | Frequency | Percentage % |
| Age | | | |
| 1 | up to 30 year | 9 | 18 |
| 2 | 30 to 40 year | 4 | 8 |
| 3 | 40 to 50 year | 13 | 26 |
| 4 | more than 50 year | 24 | 48 |

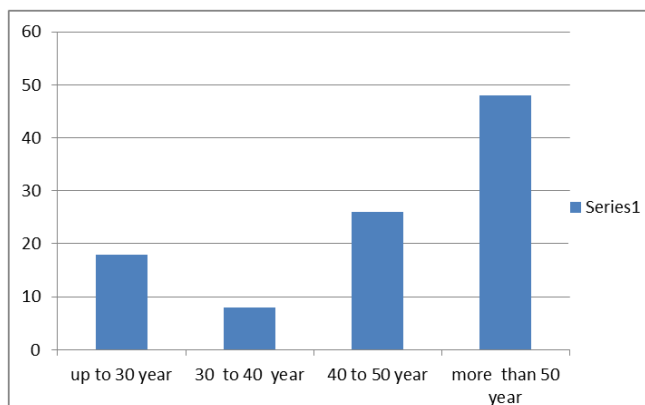


FIG.1: DEMOGRAPHIC DESCRIPTION (AGE) OF PATIENT ON HEMODIALYSIS BY FREQUENCY AND PERCENTAGE

From above table and figure showed that in overall Hemodialysis patient maximum 48% had more than 50 years, 26% patients had 40 to 50 years, 18% patients had upto 30 years and 8% patients had in group of 30 to 40 years

Table 2: Demographic description (Education) of patient on hemodialysis by frequency and percentage
 N=50

| Sr.no | Education | Hemodialysis patient | |
|-------|------------|----------------------|--------------|
| | | Frequency | Percentage % |
| 1. | Primary | 25 | 50 |
| 2. | Secondary | 17 | 34 |
| 3. | Graduate | 4 | 8 |
| 4. | Illiterate | 4 | 8 |

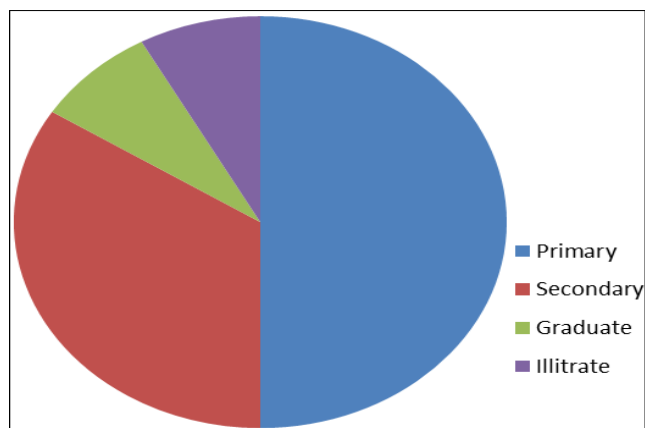
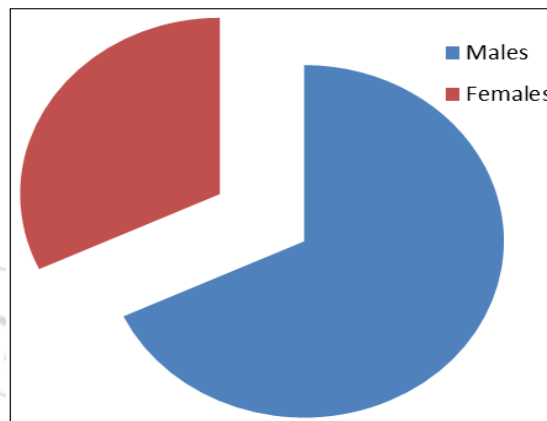


Table3: Demographic description (sex) of patient on hemodialysis by frequency and percentage. N=50

| Sr.no | Gender | Hemodialysis patient | |
|-------|---------|----------------------|--------------|
| | | Frequency | Percentage % |
| 1. | Males | 34 | 68 |
| 2. | Females | 16 | 32 |



In this fig no.3, we can easily observed that 68% HD patients had males and 32% HD patients had females

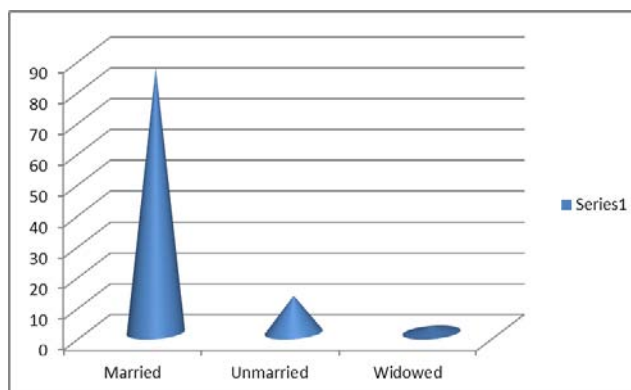
Table 4: Demographic description (occupation) of patient on hemodialysis by frequency and percentage
 N=50.

| Sr.No | Occupation | Hemodialysis patient | |
|-------|-------------|----------------------|--------------|
| | | Frequency | Percentage % |
| 1. | Housewife | 12 | 24 |
| 2. | Daily Wages | 4 | 8 |
| 3. | Labor | 12 | 24 |
| 4. | Job | 22 | 44 |

From above table HD patients 44% had employed did working, 24% had skilled labour, 8% had daily wages worker and 24% had housewives.

Table 5: Demographic description (Marital status) of patient on Hemodialysis by frequency and percentage
 N=50

| Sr.no | Marital status | Hemodialysis patient | |
|-------|----------------|----------------------|--------------|
| | | Frequency | Percentage % |
| 1. | Married | 43 | 86 |
| 2. | Unmarried | 6 | 12 |
| 3. | Widowed | 1 | 2 |



Overall HD Patient 86% had married, 12% had still not married, 2% had widowed.

Table 6: Demographic description (monthly income) of patient on Hemodialysis by frequency and percentage
 N=50.

| Sr.No | Monthly Income | Hemodialysis Patient | |
|-------|-----------------|----------------------|--------------|
| | | Frequency | Percentage % |
| 1. | up to 2000 | 6 | 12 |
| 2. | 2000 to 5000 | 19 | 38 |
| 3. | 6000 to 10000 | 15 | 30 |
| 4. | more than 10000 | 10 | 20 |

The above table showed that 38% HD patient had income group of Rs.2000 to 5000, 30% had in the group of Rs.6000 to 10000, 20% had in income group of Rs. More than 10000

Association between age group and physical factor

We can conclude the P value is 0.9133 which is greater than 0.05. hence there is no association between age group and physical factor. In fig no 7. we can easily observe that mean is nearly same in each age group. Statistically not significant because proportion of hemodialysis patients is more in age group of more than 50 it may have same intellectual properties. So statistical conclusion in our study is correct.

Association between Age Group and psychological factor

By above we can conclude the P value is 0.3055 which is greater than 0.05. hence there is no association between age group and psychological factor.

Association between Age Group and Social factor

We can conclude the P value is 0.8061 which is greater than 0.05. hence there is no association between age group and social factor.

Association between Age Group and Environmental factor

We can conclude the P value is 0.4989 which is greater than 0.05. Hence there is no association between age group and Environmental factor.

Association between monthly income of family and Physical factor

We can conclude the P value is 0.2884 which is greater than 0.05. Hence there is no association between monthly income and Physical factor.

Association between monthly income of family and Psychological Factor

We can conclude the P value is 0.0339 which is less than 0.05. Hence there is association between monthly income group and Psychological factor. Here we got significance level hence our hypothesis is accepted.

Association between monthly income of family and Social factor

We can conclude the P value is 0.0853 which is greater than 0.05. Hence there is no association between monthly income group and social factor

Association between monthly income of family and Environmental factor

By above we can conclude the P value is 0.3713 which is greater than 0.05. Hence there is no association between monthly income group and environmental factor.

Related to Demographic Variable

The result of this study concluded that patient with end stage renal diseases on hemodialysis generally have a fair perception of quality of life. According to Murli R [12] the mean age of the patient observed was 55.75 more number of patient affected was in the age group of 51-60 and they are of about 27. In our study there is also age group of patient who are undergoing the hemodialysis is above 50 years of age is more. According to our study it was found that more male patient are affected than females. In this study majority patient were married 86% and widow 2%. Majority 38 patient were having income upto 2000 to 5000 in month and more than 10000 were 20%

Related to Association between Demographic Variable and Factors Affecting Quality of Life

According to Muhammad anees[3] negative predictor of quality of life in psychological domain. Monthly income is positive predictor of quality of life factor affect more. In our study all factors are affecting in near by same range and also found that there is no association between demographic data or factors like physical, social, environmental. But there is association between monthly income and psychological factors. Seica [6] demographic & clinical variable associated with quality of life the mean physical component (PSC) score was 46.3 and in our study physical factor affect the quality of life of patient on hemodialysis patient, but there is no association between demographic data and physical factor.

Finnegan-John J, [13] emotional, physical, psychological, social factors exist burden. In our study it was found that the all factors like social, psychological factors also affect the quality of life of patient on hemodialysis. But there is no association found between the demographic data and physical, environmental & social factors. In this study environmental factor affect more than others factors. In this study we found that there is positive correlation coefficient between all factors. For example physical factor and all other factors having positive correlation. This study provide health care provider with way to identify the patient quality of life. It also be educating for the patient by increasing their awareness that may affect quality of life.

5. Conclusion

In this study we found that there is no association between demographic variables and factors, like physical, social and environmental. We found that there is association between the monthly income and psychological factors.(0.0339). All factors are affect the quality of life of patient on Hemodialysis in nearby range. This study helps to guide interventions to improve their situation and avert more serious consequences. Development Hemodialysis technology, treatment of co-morbidity, continuous patients educations, social and psychological supports may improve

the quality of life and reduce the factors which can affect the quality of life of patient on Hemodialysis.

6.Scope of Study

Nursing Practice: In nursing practice nurses more focus on the factors which can affect on quality of life of patient on Hemodialysis and they are came to know which factors are more affects on life of Hemodialysis patients. This study will help to reduce these factors at some level using nursing intervention like,

- Giving a psychological & social support to patient.
- Introducing the governmental program or policies for Hemodialysis patient.
- Giving health education about Hemodialysis to reduce the anxiety or other factor.

Nursing Research

Assessing factors which can affect quality of life of patients requires continuous observation/monitoring and evaluation. This study have contributed in nursing research to find out which factors affects the quality of life of patients on Hemodialysis at tertiary care hospital and this study was conducted at town level so there is scope to improve the quality of life of patient at that level also. Researcher in nursing field can use these findings to carry out & find out the some extra factors which can affects the quality of life of patients on Hemodialysis.

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