A Descriptive Study to Assess the Quality of Life among PatientsUndergoing Hemodialysis at a Selected Hospital, Coimbatore.

Santhipriya.A,[1]Prof. Dr. (Mrs) V. Selvanayaki Ph.D. (N)[2]

[1] *Ph.D. (Nursing) Scholar,VMRF (DU), Salem, Tamilnadu, India.*

[2]*Principal,Vinayaka Missions Annapoorna*

College of Nursing,VMRF (DU), Salem, Tamilnadu, India.

[1] santhipriyakumaran@gmail.com

[2] vmaconprincipal@gmail.com

ABSTRACT

Patients with renal failure face many challenges due to their condition which may leave them feeling worn out and depressed. Most of these patients prefer to be placed on hemodialysis which can be debilitating and can threaten body image, finance, relationship and independence. Body image may be affected by fistula or grafting for dialysis access. Finance could also be affected by the high value of weekly treatment due to complication for dialysis and occasional admission to the emergency department due to complication. Relationship and independence are also vulnerable. A Descriptive study was conducted to assess the Quality of Life among patients undergoing hemodialysis at a selected hospital, Coimbatore. Objectives: assess the Quality of Life among patients undergoing hemodialysis, find out the association between Quality of Life among patients undergoing hemodialysis with selected demographic variables. Qualitative approach and descriptive research design were adopted in this study. The study was conducted at KG hospital Coimbatore. The target population was patients undergoing hemodialysis. 30 samples were selected by purposive sampling technique. The tool used in this study was structured questionnaire of Kidney Disease Quality of Life (KDQOL) 36 rating scale, it comprises of 36 items with reference to Quality of Life of hemodialysis patients. This scale consists of physical component summary subscale, mental component summary subscale, burden of kidney disease subscale, symptoms and problem subscale, effect of kidney disease on daily life subscale. Analysis and interpretation: 26 (86.66%) of them had average Quality of Life and 4(13.33%) of them had good Quality of Life. The findings of the study revealed that the majority of patients undergoing dialysis had average Quality of Life.

Keywords *– renal failure, hemodialysis, Quality of Life, Descriptive study, KDQOL.*

I. INTRODUCTION

"To affect the quality of the day, that is the highest of arts." (Henry David Thoreau)

In chronic hemodialysis patient, fatigue plays an impression on daily living, impairs considerably the Quality of Life, increase the cardiovascular events and negatively influences survival. Though varied social, demographic and laboratory variables have been related to fatigue, the causes of this symptoms are unclear. Socio demographic factor including age, sex, race, education, marital, and occupational status may also play a role in the experience of fatigue in dialysis patient. So far, none of the medication tested can be recommended for preventing and treating fatigue in chronic hemodialysis patient. Physical inactivity has been associated with higher level of fatigue, studies show that exercise may considerably improve fatigue in dialysis patients.

Several advance in hemodialysis treatment have extended the lifetime of patient with End Stage Renal Disease, then again this alone will not guarantee Quality of Life. High prevalence of sleep problem, fatigue and depression are reportable in maintenance hemodialysis patient. Overall Quality of Life in patient with End Stage Renal Disease is low, and impairment is area involving physical functioning are notably prominent. With the exception of result on quality of life, poor physical

performance is additionally being reported. Keep with low self-reported physical functioning, the aerobic exercise capability of individuals treated with maintenance hemodialysis therapy is approximately half the expected value for inactive healthy individual. Planned exercise will ameliorate the marked physiological, functional and psychological deterioration.

Because of a rise in survival rate for patient with ESRD, Quality of Life became increasingly important as an outcome measure in the evaluation of dialysis treatment. Quality of Life has become a key outcome measure in treatment of chronic illness, wherever the goal isn't the elimination of disease, however rather the adjustment of the patient to physical limitation, changes in life style, & medical treatment. Patients undergoing Hemodialysis usually attend the hemodialysis center 2 or 3 times per week for 3 or 4 hours per session that influence both professional and personal life. Therefore the Investigator decided to find out the Quality of Life among patients undergoing hemodialysis.

A. Statement ofthe Problem

A Study to Assess the Quality Of Life among Patients Undergoing Hemodialysis at a selected Hospital, Coimbatore.

B.Objectives

1. To assess the Quality of Life among patients undergoing hemodialysis.

2. To find out the association between Quality of Life among patients undergoing hemodialysis with selected demographic variables.

II. METHODS AND MATERIALS

A.*Research Approach*

Quantitative research approach was adopted for this study.

B.*Research Design*

Descriptive research design was adopted for this study.

C.Setting ofthe Study

This study was conducted at KG hospital Coimbatore.

D.Population

In this study population includes the patients undergoing hemodialysis at NephroPlus Department of KG hospital, Coimbatore.

E. Sample and Sampling Technique

The sample size was 30. Purposive sampling technique was utilized in this study.

F. *Description of theTool*

***1.Section* A:** It includes questions to collect demographic data. Demographic variables are age, gender, educational qualification, occupational status, type of family, personal habits, duration of dialysis, co morbid illness.

2.Section B: It includes structured questionnaire of Kidney Disease Quality of Life (KDQOL) 36 rating scale to assess the Quality of Life of patients with hemodialysis, it comprises of 36 items relating to Quality of Life of hemodialysis patients.

This scale consists of physical component summary subscale, mental component summary subscale, burden of kidney disease subscale, symptoms and problem subscale, effect of kidney disease on daily life subscale.

Scoring Key

ABOVE AVERAGE: More than one standard deviation above the mean.

AVERAGE: The mean +/- one standard deviation.

BELOW AVERAGE: more than one standard deviation below the mean.

***G. Content Validity*:** It was determined by experts 'opinion, the tool was given to experts from the field of Medical Surgical Nursing.

***H. Reliability of Tool*:** Reliability of three point rating scale was determined by split half method, using Spearman brown's formula. The value of r was found to be 0.81. Hence tool was considered reliable.

***I. Ethical Considerations*:** Approval was taken from the ethical and research committee of the institution. Permission was obtained from concerned authorities' .Before data collection written informed consent was obtained from individual subject before administering the tool.

***J. Pilot Study*:** Pilot study was conducted with 5 patients undergoing dialysis. Analysis and interpretation of data collected in pilot study was done in accordance to objectives and feasibility was assessed.

***K. Data Collection Procedure*:**Written permission was taken from the concerned authorities'. Before data collection researcher introduced herself, explained the purpose of study, clarified queries and took consent from individual subject.

L. Difficulties faced by researchers: Problems faced were: Some time, subjects got irritated because of their condition, so they avoided to interact.

III. Plan for Analysis

Analysis and interpretation of data was done according to the objectives using descriptive and inferential statistics. The level of significance at p level 0.05 was chosen.

IV. Analyses and Interpretation of Data

The collected data was tabulated and analyzed using descriptive and inferential statistics under following headings

TABLE I: DISTRIBUTION OF DEMOGRAPHIC VARIABLES AMONG PATIENTS UNDERGOING HEMODIALYSIS

n=30

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCIES	PERCENTAGE
1.	**Age in years** 41-50 51-60	 17 13	 56.67% 43.33%
2.	**Gender** Male Female	 22 8	 73.34% 26.66%
3.	**Educational Qualification** No formal education High school Higher secondary Degree	 8 11 2 9	 26.66% 36.66% 6.68% 30.00%
4.	**Occupational Status** Laborer Agriculture Private Retired Home maker	 3 3 14 5 5	 10.00% 10.00% 46.66% 16.67% 16.67%
5.	**Type of Family** Nuclear Joint	 19 11	 63.33% 36.67%
6.	**Personal Habits** Smoking Alcoholism Both Tobacco chewing No badhabits	 2 1 2 1 24	 6.66% 3.33% 6.66% 3.33% 80.02%
7.	**Duration of Dialysis** 1year 2 years 3years 4years 5years	 9 7 6 1 7	 30.00% 23.33% 20.01% 3.33% 23.33%

TABLE II: DISTRIBUTION OF QUALITY OF LIFE AMONG PATIENTS UNDERGOING HEMODIALYSIS

n=30

QUALITY OF LIFE	CATEGORY	RESPONDENT	
		NUMBER	PENCENTAGE
Poor quality	1 - 33%	-	-
Average quality	34 - 66%	26	86.66%
Good quality	67 - 100%	4	13.33%

TABLE III: ASSOCIATION OF QUALITY OF LIFE AMONG PATIENTS UNDERGOING HEMODIALYSIS WITH SELECTED DEMOGRAPHIC VARIABLES

n=30

S. No	Demographic variables	mean		Calculated value	Tabulated value of χ^2 at 5% level of significance
		Above mean	Below mean		
1	**Age in years** Below50 Above 50	 8 4	 9 9	 0.277	3.84
2	**Gender** Male Female	 7 5	 16 2	 2.24	
3	**Education Qualification** Illeterate Literate	 5 7	 3 15	 0.45	
4.	**Type of family** a. Nuclear b. Joint	 8 4	 11 7	 0.0059	
5.	**Personal habits** a. yes b. no	 2 10	 4 14	 0.0086	
6.	**Duration of dialysis** a.<3years b.>3 years	 7 5	 14 4	 0.535	

A.Summary of Major Findings

Table I shows that Majority of patients (17) were in age group of 41-50 years (56.67%), 22(73.34%) were males, 11(36.66%) of them were completed high school education, 14(46.66%) of them were doing private business, 19(63.33%) of them belongs to nuclear family, 24(80.02%) had no bad habits.

Table II shows the distribution of Quality of Life of Hemodialysis patient.On the basis of total score it can inferred that 26 (86.66%) of them had average Quality of Life

Table III shows there is no significant association between the age, gender, educational qualification, type of family, personal habit, duration of dialysis with Quality of Life of among patient undergoing Hemodialysis.

V.Discussion

First objective of present study was to assess the Quality of Life among patients undergoing hemodialysis.Study results revealed that none of them had poor Quality of Life, 26 (86.66%) of them had average Quality of Life and 4(13.33%) of them had good Quality of Life.

VI. Summary and Recommendations

The aim of the study was to assess the Quality of Life among patients undergoing Hemodialysis.The descriptive research design was adopted. Totally 30 patients were selected who fulfilled the inclusion criteria. The Kidney Disease Quality of Life (KDQOL) scale was used to assess the Quality of Life among patients undergoing Hemodialysis. In this study 20 minutes were spent to every Hemodialysis patient for the data collection.

The data was analyzed and interpreted by using chi-square test. Descriptive statistics was used to analyze the frequency and percentage of demographic variables. Inferential statistics was used to determine the association between the Quality of Life with selected demographic variables.

A.*Recommendations*

A similar study can be done on subjects with totally different socio demographic characteristics. A similar study can be done for the patients undergoing Hemodialysis in rural and urban community areas. A comparative study can be done to assess QoL based on duration on hemodialysis. Similar study can be done on larger sample for wider generalization.

References

[1] Abdelghany MA, Elgohary EE, Nienaa YA (2016) Assessment of Health Related Quality of Life in Patients Receiving Regular Hemodialysis. J NephrolTher 6: 246. doi:10.4172/2161-0959.1000246

[2] Liu WJ, Musa R, Chew TF, Lim CT, Morad Z, Bujang A. Quality of life in dialysis: A Malaysian perspective. Hemodial Int. 2014 Apr;18(2):495-506. doi: 10.1111/hdi.12108. Epub 2013 Nov 8. PMID: 26820998.

[3] P, Thenmozhi. (2018). Quality of life of patients undergoing hemodialysis. Asian Journal of Pharmaceutical and Clinical Research. 11. 219. 10.22159/ajpcr.2018.v11i4.24007.

[4] Megari K. (2013). Quality of Life in Chronic Disease Patients. Health psychology research, 1(3), e27. https://doi.org/10.4081/hpr.2013.e27

[5] Monika, .KiranBatra, ShavetaSharma . A Descriptive Study to Assess the Quality of Life in ESRD (End Stage Renal Disease) Patients Undergoing Hemodialysis in Selected Hospital of Mohali, Punjab. Int. J. Nur. Edu. and Research. 2018; 6(1): 31-36. doi: 10.5958/2454-2660.2018.00007.8

[6] Bossola, M., Vulpio, C., Tazza, L., Fatigue in chronic dialysis patients, SEMINARS IN DIALYSIS, 2011; 24 (5): 550-555. [doi:10.1111/j.1525-139X.2011.00956.x] [http://hdl.handle.net/10807/4920]

[7] Joshwa B, Khakha DC, Mahajan S. Fatigue and depression and sleep problems among hemodialysis patients in a tertiary care center. Saudi J Kidney Dis Transpl 2012;23:729-35

[8] Wassef OM, El-Gendy MF, El-Anwar RM, El-Taher SM, Hani BM. Assessment of health-related quality of life of hemodialysis patients in Benha City, Qalyubia Governorate. Menoufia Med J [serial online] 2018 [cited 2020 Oct 14];31:1414-21. Available from: http://www.mmj.eg.net/text.asp?2018/31/4/1414/252064

[9] Bobby Cheema,Maria fiataronesingh. Exercise Training in Patients Receiving Maintenance Hemodialysis: A Systematic Review of Clinical Trials.July 2005American Journal of Nephrology 25(4):352-64

[10] The Free Library. S.v. Quality of life and self-efficacy in three dialysis modalities: incenter hemodialysis, home hemodialysis, and home peritoneal dialysis.." Retrieved Oct 14 2020 from https://www.thefreelibrary.com/Quality+of+life+and+self-efficacy+in+three+dialysis+modalities%3a...-a0432272967

[11] KDQOL COMPLETE 2012 Medical Education Institute, Inc. (608) 833-8033