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Self-Care and Quality of Life Among Hemodialysis Patients in A Selected Hospital, Trichy

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ABSTRACT

Background of the study: Hemodialysis is a treatment option for end-stage kidney disease. These individuals experience several stressful social, psychological, and physical situations that lower their quality of life. The capacity for self-care is one element that effectively raises quality of life.

Materials and methods: The study assessed self-care and Quality of life among hemodialysis patients. Data were collected using a descriptive research approach and a questionnaire that includes three parts: demographic variables, Quality of life (SF 36 QOL scale), and self-care (Romberg scale).

Results: The result indicates that the quality of scale is 86.6% was satisfied and self-care is 93.3% moderate. Correlation between self care and quality of life is ($p<0.001$, $r=0.0889$).

Conclusion: The study findings revealed that self-care and quality of life are positively correlated, it is advised that healthcare planners educate and strengthen these hemodialysis patients' capacity for self-care to enhance their quality of life.

Keywords: *Hemodialysis, quality of life, self-care*

1. INTRODUCTION

Background of the study:

The progressive loss of kidney function known as chronic renal failure causes abnormalities in the body's water and electrolyte balance, which can lead to uremia [(1)]. Kidney transplantation is the primary treatment for end-stage disease; however, because to the challenges associated with this procedure, the patient should receive hemodialysis until a suitable kidney is found for transplant. Renal failure claims the lives of around 6000 people worldwide each year. Around 242 persons worldwide experience this incidence rate for every 1,000,000,000, and it has been rising at a rate of 8% each year. Incidence rates vary from nation to nation [(2)].

Hemodialysis patients have among the lowest quality of life of any chronic condition, and their quality of life is substantially poorer than that of the general population. A higher risk of hospitalization and mortality is linked to size with lower quality [(3)].The availability and usage of healthcare facilities, family life, socioeconomic status, and the growing number of ESRD patients all have an impact on quality of life (QOL). Poverty and discrimination are key issues that are particularly affecting the elderly [(4)].

Quality of life is one of the concepts that has been finalized as a criterion for assessing the outcome of medical effects in recent years. Following the physical, psychological, and social aspects of health that are influenced by personal experiences, attitudes, and expectations are distinct dimensions of quality of life [(5)].Self-care has many benefits: it increases functionality, enhances the sense of well-being, reduces the risk of complications, increases control and autonomy, promotes dealing with or adjustment to disease, and, in the end, improves quality of life [(6)].

2. NEED FOR THE STUDY

The WHO estimates that CKD causes 8500,000 deaths a year. According to this data, chronic kidney disease (CKD) ranks 12th globally in terms of cause of mortality and 17th in terms of cases of disability. Global increases in diabetes mellitus, hypertension, obesity, and aging are the main causes of elevated CKD. Increased cardiovascular death rates and a decline in

disability-adjusted quality of life are linked to chronic kidney disease (CKD). In India, CKD cannot be reliably assessed. About 800 pmp is the approximate prevalence of CKD, while 150–200 pmp is the frequency of ESRD[7].

Numerous research has revealed that patients with chronic renal disease report symptoms of depression and mental illness; yet, less is known about the health issues and quality of life that patients' carers face. Sustaining treatment adherence and improving quality of life may be achieved by ongoing education and patient counseling. The ability to take care of oneself aids in coping, and treatment adherence and increases the quality of life [8].

The aim of the was to determine the Quality of life and self-care ability in hemodialysis patients and correlate between quality of life and self-care among hemodialysis patients.

3. PROBLEM STATEMENT

Self-care and quality of life among Hemodialysis patients in a selected hospital, Trichy.

OBJECTIVES:

- Toassess the self-care and Quality of life among hemodialysis patients in a selected hospital, Trichy.
- To find a correlation between self-care and quality of life among hemodialysis patients in a selected hospital, Trichy.
- To find the association between self-care and quality of life among hemodialysis patients in a selected hospital, Trichy.

4. OPERATIONAL DEFINITION

QUALITY OF LIFE:

The quality of life of hemodialysis in comparison to healthy individuals of the general population particularly physical, psychological, and social relationships.

SELF-CARE:

The power of individuals to prevent and treat diseases themselves, in the context of a safe and supportive enabling environment.

5. MATERIALS AND METHODS

RESEARCH APPROACH

Adescriptive research approach was used to conduct this study.

STUDY DESIGN:

Quantitative design – Non experimental method.

TOOLS:

PART – 1:

In this study, socio-demographic variables are age, gender, years of hemodialysis, education, and occupation are selected.

PART – 2:

SF-36 quality of life questionnaire was used to estimate the Quality of life, it consists of 36 questions and assessed various aspects like general health, limitation of activities, physical health, emotional health, pain, energy, emotions, and social activities. The tool was categorized as unsatisfied (score 0-33), satisfied (score 34- 66), and highly satisfied (score 67- 100).

PART -3:

Romberg scale was used to assess the Self-care ability. The components are diet and physical activity. The tool was categorized as low (score 1-13), Moderate (score 14 -27), and High (score 28 -40).

DATA COLLECTION PROCEDURE:

The study was conducted among hemodialysis patients who fulfilled the inclusive criteria and the sample were selected by using purposive sampling. The purpose of the study was defined by every participant. The consent was obtained from each participant in the study before starting data collection. Questionnaires were distributed and data was collected from hemodialysis patients.

DATA ANALYSIS:

The data has been analyzed in terms of descriptive and inferential statistics. Karl Pearson test was used to correlate the self care and quality of life, and Chi-square test was used to find out the relationship between self care and quality of life among

hemodialysis patients with selected demographic variables.

6. RESULTS AND DISCUSSION

Table 1: Frequency and percentage distribution of study participants (N=30)

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	**AGE**		
	(A) 35 – 45 Years	15	50%
	(B) 46 – 55 Years	9	30%
	(C) 56 -65 Years	6	20%
2	**GENDER**		
	(A)Male	19	63.3%
	(B)Female	11	36.6%
3	**YEARS OF HEMODIALYSIS**		
	(A)1 – 3 Years	2	6.66%
	(B) 4 – 6 Years	12	40%
	(C)7 – 10 Years	16	53.33%
4	**EDUCATION**		
	(A)Secondary	17	56.6%
	(B)Higher secondary	6	20%
	(C)Under graduate	5	16.6%
	(D)Post graduate	2	6.6%
5	**OCCUPATION**		
	(A)Government	3	10%
	(B)Private	4	13%
	(C)Others	7	23.3%
	(D)Nil	16	53.33%

Table 1 represents the frequency and distribution of hemodialysis patients. In the present study reveals that Majority 15 (50%) of belongs to the age group of 35 – 45 years, 9 (30%) of belongs to the age group of 46 – 55 years, 6 (20%) of belongs to the age group of 56 - 65 years. Majority 19 (63.3%) of males, 11 (36.6%) of females. Majority 16 (53.33%) of belongs to years of hemodialysis 7 – 10 years, 12 (40%) of belongs to years of hemodialysis 4 – 6 years, 2 (6.66%) belongs to years of hemodialysis 1 – 3. Majority 17 (56.6%) had completed their secondary education, 6 (20%) had completed their higher secondary education, 5 (16.6%) had completed their under graduate, 2 (6.6%) had completed their post graduate. Majority 16 (53.33%) of occupation is unemployment, 7(23.3%) of occupation is other workers, 4 (13.3%) of occupation is private workers, 3 (10%) of occupation is government workers.

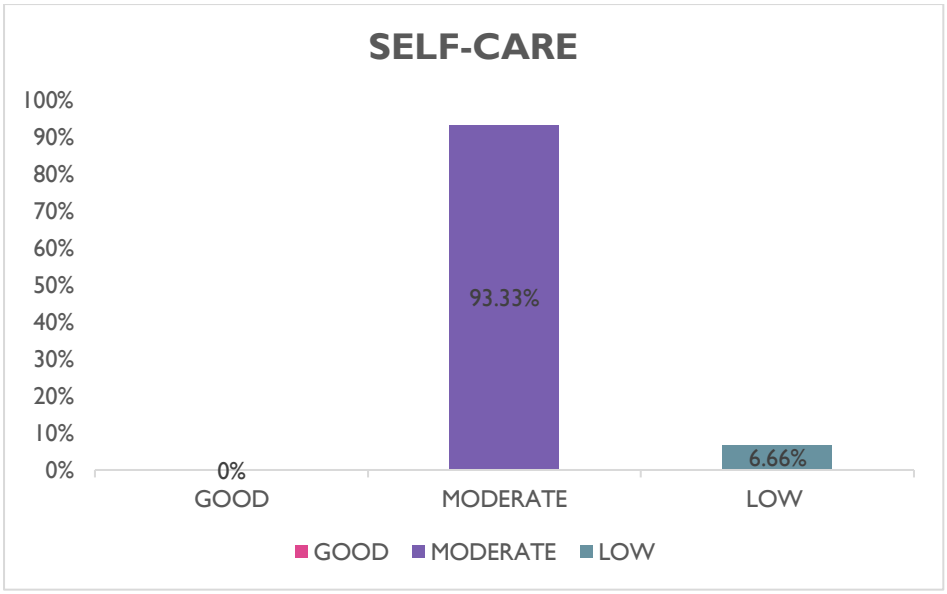

Fig 1: Shows percentage distribution of level of self- care ability among Hemodialysis patients

Figure 1: shows the level of self-care ability among hemodialysis patients. It represents that most of them had moderate self-care ability 28 (93.33%) and low self-care ability 2 (6.67%).

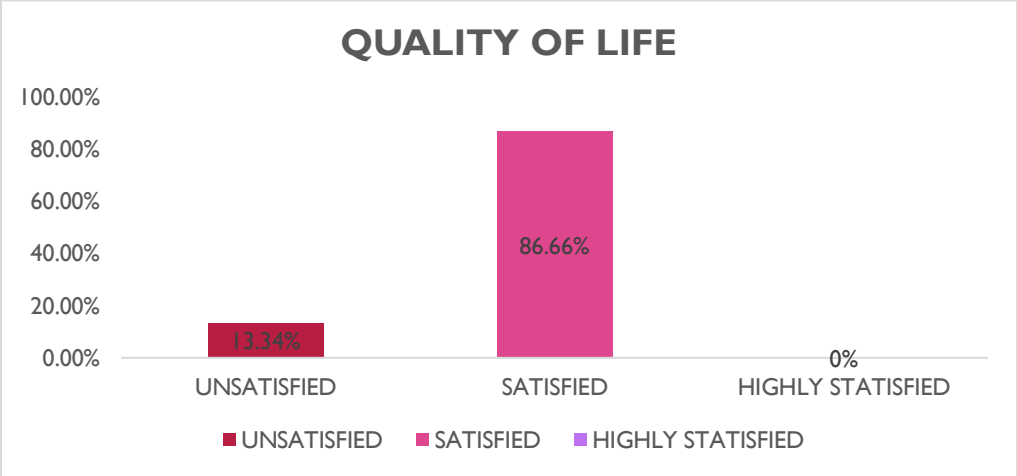

Fig 2: Shows percentage distribution of level of quality of life ability among Hemodialysis patients

Figure 2: shows the level of quality of life among hemodialysis patients. It represents that most of them were satisfied 26 (86.66%) and were unsatisfied 4 (13.44%).

Table 2: Mean, Standard Deviation value of quality of life and self-care among hemodialysis patients

S.NO	VARIABLES	MEAN	STANDARD DEVIATION	CORRELATION COEFFICIENT
1	Quality of life	83.1	6.253	r = 0.0889
2	Self-care	19.1	2.555	

Table 2: show Mean, Standard Deviation value of quality of life and self-care among hemodialysis patients. Mean score of quality of life was 8.31 (SD= 6.253) and Mean score of self-care was 19.1(SD=2.55). Correlation between self care and quality of life is ($p<0.001$, $r=0.0889$).

Table 3: relationship between quality of life among hemodialysis patients with their selected demographic variables

S. NO	DEMOGRAPHIC VARIABLES	QUALITY OF LIFE						Chi square	P value
		Unsatisfied		Satisfied		Highly Satisfied			
		F	%	F	%	F	%		
1	**AGE**								
	(A)35 – 45 Years	0	0%	13	43.33%	2	6.66%		
	(B)46 – 55 Years	0	0%	8	26.66%	1	3.33%	0.425	9.49 (NS)
	(C)56 -65 Years	0	0%	5	16.66%	1	3.33%		
2	**GENDER**								
	(A)Male	0	0%	18	60%	1	3.33%	2.938	5.99 (NS)
	(B)Female	0	0%	8	26.66%	3	10%		
3	**YEARS OF HEMODIALYSIS**								
	(A)1 – 3 Years	0	0%	2	6.66%	0	0%	0.4614	9.49
	(B) 4 – 6 Years	0	0%	10	33.3%	2	6.66%		(NS)
	(C)7 – 10 Years	0	0%	14	46.66%	2	6.66%		
4	**EDUCATION**								
	(A)Secondary	0	0%	15	50%	0	0%		
	(B)Higher secondary	0	0%	4	13.3%	2	6.66%	6.1	12.59
	(C)Under graduate	0	0%	5	16.66%	2	6.66%		(NS)
	(D)Post graduate	0	0%	2	6.66%	0	0%		
5	**OCCUPATION**								
	(A)Government	0	0%	3	10%	0	0%		
	(B)Private	0	0%	3	10%	1	3.33%	2.4221	12.59
	(C)Others	0	0%	7	23.3%	0	0%		(NS)
	(D)Nil	0	0%	13	43.33%	3	10%		

Table 3: depicts the relationship between quality of life among hemodialysis patients with their selected demographic variables. There is no association between quality of life and their selected demographic variables.

Table 4: relationship between self care among hemodialysis patients with their selected demographic variables

S. NO	DEMOGRAPHIC VARIABLES	SELF-CARE						CHI SQUARE	P Value
		Unsatisfied		Satisfied		Highly Satisfied			
		F	%	F	%	F	%		
1	**AGE**								
	(A)35 – 45 Years	1	3.33%	14	46.66%	0	0%		9.49
	(B)46 – 55 Years	0	0%	9	30%	0	0%	1.984	(NS)
	(C)56 -65 Years	1	3.33%	5	16.66%	0	0%		
2	**GENDER**								
	(A)Male	1	3.33%	18	60%	0	0%		
	(B)Female	1	3.33%	10	33.3%	0	0%	0.162	5.99
									(NS)
3	**YEARS OF HEMODIALYSIS**								
	(A)1 – 3 Years	0	0%	2	6.66%	0	0%		
	(B) 4 – 6 Years	1	3.33%	11	36.66%	0	0%	3.4774	9.49
	(C)7 – 10 Years	1	3.33%	15	50%	0	0%		(NS)
4	**EDUCATION**								
	(A)Secondary	1	3.33%	16	53.33%	0	0%		
	(B)Higher secondary	1	3.33%	5	16.66%	0	0%	1.476	12.59
	(C)Under graduate								(NS)
	(D)Post graduate	0	0%	5	16.66%	0	0%		
		0	0%	2	6.66%	0	0%		
5	**OCCUPATION**								
	(A)Government	0	0%	3	10%	0	0%		
	(B)Private	0	0%	4	13.3%	0	0%	1.8765	12.59
	(C)Others	0	0%	7	23.3%	0	0%		(NS)
	(D)Nil	11	36.66%	14	46.66%	0	0%		

Table 4: depicts the relationship between self-care among hemodialysis patients with their selected demographic variables. There is no association between self care and their selected demographic variables.

7. DISCUSSION

The present study estimated the self care ability and level of quality of life and correlation among hemodialysis patients. Majority of them from age group 35-45 years (46.66%) and majority of them undergoing dialysis past 7 – 10 years (50%).

Objective1: Toassess the self-care and Quality of life among hemodialysis patients in this study Self care ability most of them had moderate self-care ability 28 (93.33%) and low self-care ability 2 (6.67%). Quality of life assessment most of them were satisfied 26 (86.66%) and were unsatisfied 4 (13.44%).

Objective 2: To find a correlation between self-care and quality of life among hemodialysis patients in this study Mean score of quality of life was 8.31 (SD= 6.253) and Mean score of self-care was 19.1(SD=2.55). Correlation between self care and quality of life is ($p<0.001$, $r=0.0889$). It revealed that self care and quality of life has positive correlation. While the majority of the studies in this review found a low quality of life (QoL) among patients with HF, other research (Iqbal et al., 2010; Kozhekenova et al., 2014) indicated a moderate QoL. A number of the previously indicated variables, as well as insufficient or poor self-care behavior, were linked to low QoL. Other investigations (Hwang et al., 2014; Nesbitt et al., 2014; Sedlar et al., 2017; Vellone et al., 2017) corroborate this conclusion.

Objective 3: To find out the association between self-care and quality of life among hemodialysis patients with their selected demographic variables. In this study there is no significant difference in the chi square value with their selected demographic variables.

8. CONCLUSION

It is recommended that healthcare planners educate and build these hemodialysis patients' ability for self-care to improve their quality of life, as the study's findings showed a favorable correlation between self-care and quality of life.It is necessary to understand the advantages of practicing self-care to enhance their quality of life and slow the course of their illness. must be made aware of the advantages of practicing self-care to enhance their quality of life and slow the course of their illness.

9. RECOMMENDATIONS

Based on the findings the following recommendations are stated

1. A similar study can be done with an educational programme to improve self-care ability.
2. A similar study can be conducted as a qualitative approach.

Conflict of Interest:

All contributing authors declare no conflict of interest.

Source of Funding:

None.

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