

**How to Cite:**

Parekh, A. J., & Gurjar, V. (2022). Quality of life among CKD patients: A pilot trial. *International Journal of Health Sciences*, 6(S9), 2301–2310. <https://doi.org/10.53730/ijhs.v6nS9.12931>

## Quality of life among CKD patients- A pilot trial

**Mrs. Arpita J. Parekh**

Ph.D. Scholar, Sumandeep Vidyapeeth Deemed to be University, Piparia, Waghodia, Vadodara – 391760, Gujarat, India  
ORCID <https://orcid.org/0000-0002-5815-4358>  
Corresponding author email: [arpita.parekh03@gmail.com](mailto:arpita.parekh03@gmail.com)

**Dr. Vipul Gurjar**

Professor, Dept. of Surgery, SBKSMIRC, Sumandeep Vidyapeeth Deemed to be University, Piparia, Waghodia, Vadodara – 391760, Gujarat, India

**Abstract**--Introduction: Kidney is a critical organ and the principle feature of the kidneys is to cast off waste produces and extra water from the blood. The kidneys purify about 200 liters of blood each day and produce approximately two liters of urine. The waste products are generated from ordinary metabolic strategies inclusive of the breakdown of active tissues, ingested ingredients, and different substances. Kidney illnesses are silent killers which largely affect the pleasant of life. Chronic kidney disease, additionally called continual renal disease, is the progressive loss in renal function over a period of months or years. Chronic kidney sickness is a substantial medical situation this is innovative in nature. Aim: To assess QOL of CKD Patients undergoing hemodialysis. Material and Method: A descriptive cross sectional survey research design was adopted for the study and non-probability purposive sampling technique was used to drawn samples from the participants. For the data collection researcher has used WHOQOL- QOL is a 26 item self report scale designed to assess the QoL of CKD patients, it is a standardized tool. Prior to the data collection written permission obtained from the head of the hospital as well prior informed consent was obtained from the participants, the objectives and methods of the study were appropriately explained to the samples. The total sample size was 20 chronic kidney disease patients undergoing hemodialysis procedure. The research data collection consist of following section I (Demographic variables) and section II (WHOQOL- QOL) questionnaire self rating scale. Statistical Analysis: Descriptive statistics applied where, data were analyzed by using SPSS software, and frequency, percentage, tables etc. were used to represent the statistical data in the tables and graph and figure. Result: The majority of participants (65%)were male, samples (60%) belongs to the age group of above 49 years, (65%) were from hindu religion, (65%) were married, (40%) were studied till elementary school, (35%)were unemployed, (65%) were living in joint family, (30%)

having monthly family income 20,000 – 30,000, (55%) were residing in urban area, (40%) were suffering from CKD for more than 3 year, (75%) were taking 3 cycles of HD in a week, (30%) were suffering from hypertension in association of CKD. The Findings revealed, that majority of the subjects 60% (12) had poor overall quality of life, among all subjects domain wise quality of life in physical function 50% has poor and 50% had average QoL, in psychological domain 60% were having poor QoL, in social relationship again its 50% poor and 50% average quality of life and in environmental related health 50% were poor, 35% average and 15% good QoL was measured. Conclusion: The current study ended to assess the quality of life of the chronic kidney disease patients undergoing hemodialysis, and it suggested that majority of patients having moderate to poor quality of life in all domains. The people above the age of 49 years having higher risk of compromised quality of life due to chronic illness.

**Keywords**---CKD, Quality of Life, Hemodialysis

## **Introduction**

Chronic renal disorder represents a primary problem for public health and it brings approximately complex implications to social and economic systems of every country within the global. According to Kidney Wales foundation in UK, indicates that greater than 500 million human beings in international-approximately one in ten adults have a few shape of kidney damage. Too many human beings forget about the close inter-courting between kidney diseases and diabetes or Hypertension [1]. Worldwide, 246 million humans suffer from diabetes and anticipated that it is going to be 380million by using 2025. Diabetic nephropathy affects one third of human beings tormented by diabetes and about 1.5million humans international are saved alive via renal dialysis [2]

Quality of lifestyles is the diploma of pride of these needs like physical, mental and social. Physiologic problems due to renal failure are bad practical capability, fatigue, altered sleep and relaxation. Common psychological issues encompass adjustments in body photograph, tension, melancholy, hopelessness, ambivalent feelings, uncooperativeness and dependence. Family distress, isolation, change in roles and strained relationships affect the social properly-being of the affected person [3].

## **Objectives:**

1. To assess the overall quality of life among CKD patients undergoing hemodialysis
2. To assess the domain wise quality of life among CKD patients undergoing hemodialysis

## **Assumption:**

The study is based on following assumption:

1. The patients with CKD may have average to poor quality of life.

**Delimitation:**

A study is delimited:-

- 1) The study was limited to the patients with CKD undergoing hemodialysis at selected hospital, Nadiad.
- 2) The sample size was limited to 20 CKD patients.

**Materials and Methods****Research Approach**

Non-experimental research approach

**Research Design**

Cross-sectional study research approach was used

**Variable:**

1. Background variable includes:- such as Gender, age in years, Religion, Marital status, Education, Occupation, Type of family, Family monthly Income in Rs, Area of residence, Duration of illness, No. of Hemodialysis cycle in a week and Co morbidity.
2. Research variable: Quality of Life

**Population of The Study:** The population includes all the patient of CKD admitted in MPUH hospital of the Nadiad city.

**Sample and Sampling Techniques:** The sample size was 20 CKD patients and the sampling techniques was non-probability convenient sampling techniques.

**Description of the tool:**

1. Section A: such as Gender, age in years, Religion, Marital status, Education, Occupation, Type of family, Family monthly Income in Rs, Area of residence, Duration of illness, No. of Hemodialysis cycle in a week and Co morbidity.
2. Section B: WHOQOL – QOL self rating scale was used to assess the quality of life of CKD patients. It includes 26 question specific to domain wise quality of life.

**Statistical Analysis**

The data obtained were statistically analysed using Statistical Package for Social Sciences (SPSS) version 22. The data obtained from the samples was analysed by using descriptive statistics.

**Results**

[Table/Fig-1]  
Frequency and Percentage distribution of CKD Patients according to demographic variables.

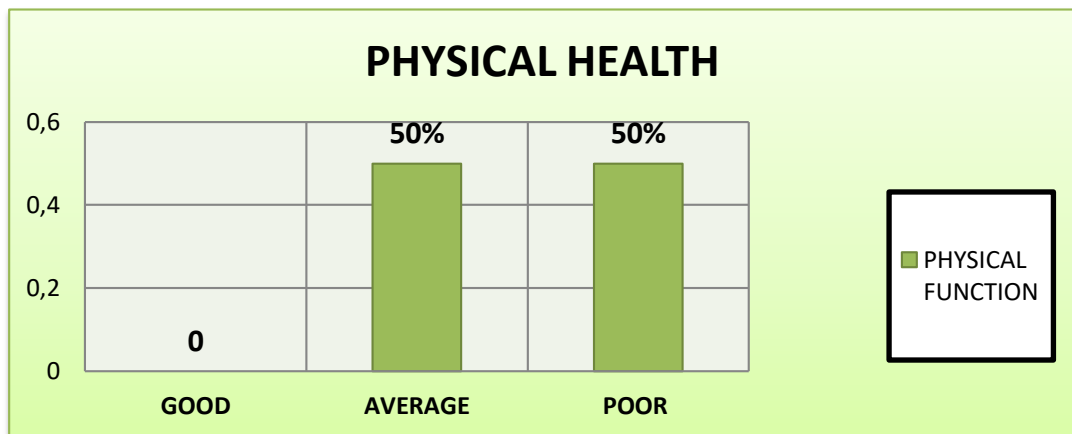
[N=20]

Variable	Categories	(F)	(%)
GENDER	Male	13	65
	Female	7	35
Age	18-28	4	20
	29-38	2	10
	39-48	2	10
	>49	12	60
Religion	Hindu	13	65
	Muslim	3	15
	Christian	3	15
	Others	1	5
Marital status	Unmarried	3	15
	Married	13	65
	Widow/widower	4	20
Education	Illiterate	5	25
	Elementary/ Middle school	8	40
	Higher secondary	3	15
	Graduate	4	20
Occupation	Employed	5	25
	Business	3	15
	Retired	5	25
	Unemployed	7	35
Type of family	Joint	13	65
	Nuclear	7	35
Family income	<10,000	5	25
	10,000-20,000	4	20
	20,000-30,000	6	30
	Above 30,000	5	25
Residential area	Rural	9	45
	Urban	11	55
Duration of illness	6 months - 1 yrs	6	30
	1 yrs - 3 YRS	6	30
	> 3 yrs	8	40
No.of HD in a week	1 cycle	0	0
	2 cycle	5	25
	3 cycle	15	75
	>3 cycle	0	0
Co-morbidity present	Hypertension	6	30
	Diabetes mellitus	4	20
	Both (a) and (b)	5	25
	Others	5	25

[Table/Fig-2]  
Frequency and percentage distribution of chronic kidney disease patients according to the level of physical function.

[N=20]

SN	Physical Domain	No.	%
1	Good	00	00
2	Average	10	50
3	Poor	10	50
	Total	20	100

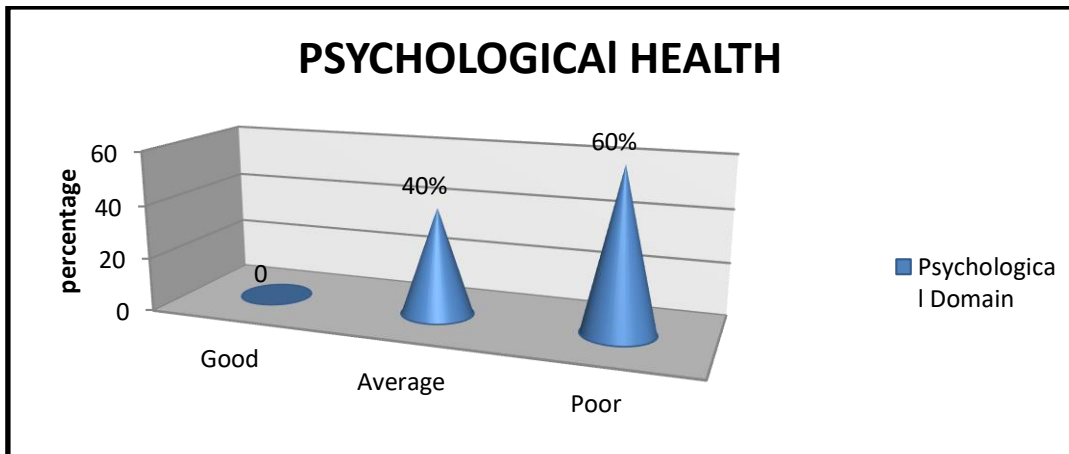


This above table and graph showed the frequency and percentage distribution of chronic kidney disease according to the level of physical function, 50 % (10) kidney disease patients had poor physical function, 50% (10) kidney disease patients had average physical function and no one had good physical function.

[Table/Fig-3]  
Frequency and percentage distribution of chronic kidney disease patients according to the level of psychological function

[N=20]

SN	Psychological Domain	No.	%
1	Good	00	00
2	Average	8	40
3	Poor	12	60
	Total	20	100



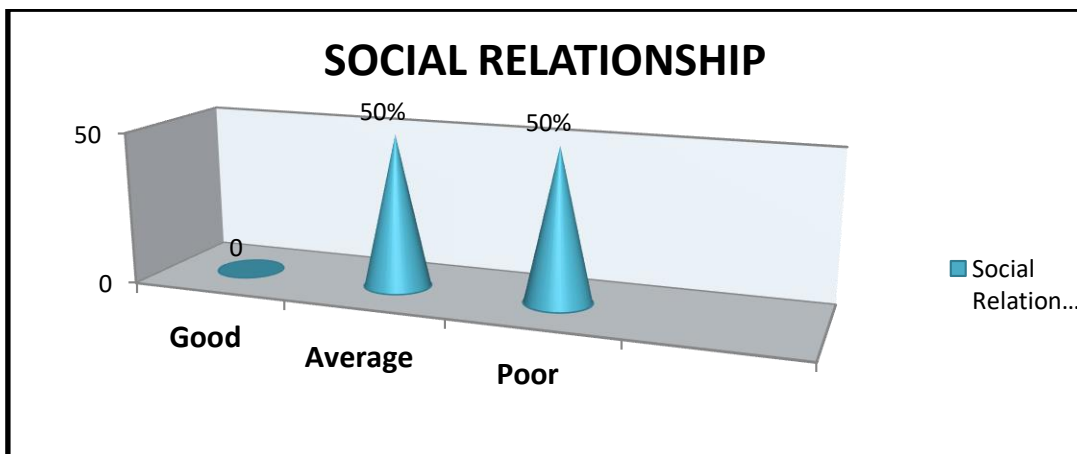
This above table and graph showed the frequency and percentage distribution of chronic kidney disease according to the level of psychological function, 60% (12) kidney disease patients had poor psychological function, 40% (8) kidney disease patients had average psychological function and no one had good psychological function.

[Table/Fig-4]

Frequency and percentage distribution of chronic kidney disease patients was according to the social relationship

[N=20]

SN	Social Relationship	No.	%
1	Good	00	00
2	Average	10	50
3	Poor	10	50
	Total	20	100



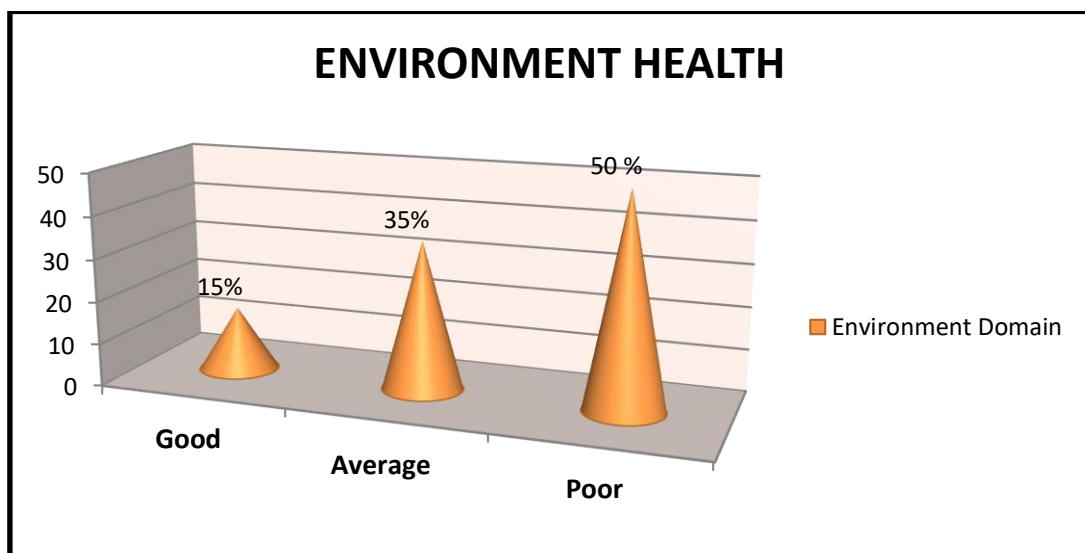
This above table and graph showed the frequency and percentage distribution of chronic kidney disease according to the level of Social Relationship, 50% (10) kidney disease patients had poor Social Relationship, 50% (10) kidney disease

patients had average Social Relationship and no one had good Social Relationship.

[Table/Fig-5]  
Frequency and percentage distribution of chronic kidney disease patients according to the environment domain

[N=20]

SN	Environment Domain	No.	%
1	Good	03	15
2	Average	07	35
3	Poor	10	50
	Total	20	100

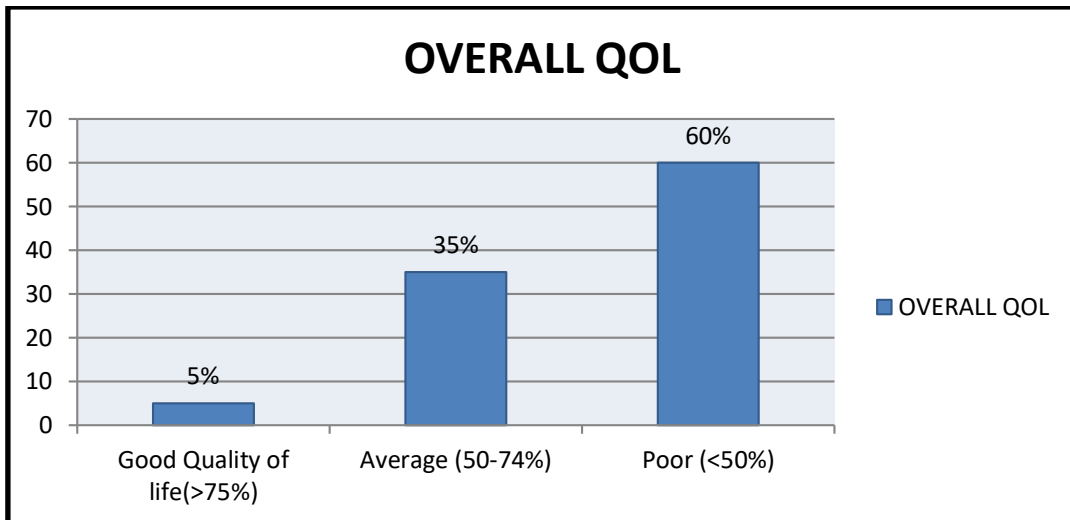


This above table and graph showed the frequency and percentage distribution of chronic kidney disease according to the Environment Domain, 50% (10) kidney disease patients had poor Environment Domain, 35% (7) kidney disease patients had average Environment Domain and 15% (3) had good Environment Domain

[Table/Fig-6]  
Frequency and percentage distribution of patients with chronic kidney disease according to the overall quality of life

[N=20]

SN	OVERALL QOL	NO	%
1	Good Quality of life (>75%)	1	5
2	Average (50-74%)	7	35
3	Poor (<50%)	12	60



The above table and graph showed the frequency and percentage distribution of patients with chronic kidney disease overall quality of life. It revealed that quality of life 60% (12) was having poor quality of life, 35 % (7) were having average quality of life and only 5% (1) of them was found to be having good quality of life.

[Table/Fig-7]

Mean SD and range of quality of life among patients with chronic kidney disease.

[N=20]

SN	Aspects of Quality of Life	Max Score	Range	Mean	SD	Mean %
1	General Health	10	2-8	2.13	0.84	21.3
2	Physical Health	35	13-21	2.45	0.94	24.5
3	Psychological Health	30	7-23	2.42	0.92	24.2
4	Social Relationship	15	3-12	2.71	1.04	27.10%
5	Environment Health	40	8-31	2.65	1.05	26.50%
	Overall	130	40-85	12.43	4.8	24.66%

The above table depicted the mean, SD, and range of quality of life among patients with CKD. In aspect general health maximum score 10, range 2-8, mean 2.13,SD 0.84, mean percentage 21.3, In aspect of physical health maximum score 35, range 13-21, mean 2.45,SD 0.94,mean percentage 24.5%,In aspect of psychological health maximum score 35 range 7- 23,mean 2.42,SD 0.92, mean percentage 24.2%. In aspect of social relationship, maximum score 15, range 3-12, mean 2.71, SD 1.04,mean percentage 26.5% and the aspect of environment 40 of them were maximum score, range 8-31, mean 2.65,SD 1.05,mean percentage 26.5%, and the overall the pre test quality of life, maximum score 130,range 40-85,mean 12.43,SD 4.8, mean percentage 24.66%.



## Result and Discussion

Findings related to distribution of sample according to gender (65%) were male, samples (60%) belongs to the age group of above 49 years, (65%) were from hindu religion, (65%) were married, (40%) were studied till elementary school, (35%) were unemployed, (65%) were living in joint family, (30%) having monthly family income 20,000 – 30,000, (55%) were residing in urban area, (40%) were suffering from CKD for more than 3 year, (75%) were taking 3 cycles of HD in a week, (30%) were suffering from hypertension in association of CKD. Findings related to distribution of sample according to overall quality of life only 5% patients were having good quality of life, 35% samples were having average quality of life and majority, that is 60% patients were having poor quality of life.

## Conclusion

The current study ended to assess the quality of life of chronic kidney disease patients undergoing hemodialysis procedure, the study result concluded that majority 60% pa patients were having poor quality of life. The people in age group >49 years were having more poor quality of life.

**Conflict of Interest:** Nil

**Statement of Informed consent:** Informed consent was acquired from the participants prior to data collection.

## References

1. James B. Wetmor, Allan j. Global challenge posed by growth of end stage of renal disease, Renal Replacement therapy, 23 Feb 2015.
2. National kidney foundation India internet 2011. Available from: <http://www.nkfi.i.in>.
3. Quality of life is the degree of satisfaction of physical, psychological and social needs study: Available from <http://www.geq.socjologia.uj.edu.pl.com>.
4. National kidney foundation: clinical practice guidelines for chronic kidney disease. [Online] 2002 [cited 2012 Dec 5]. Available from: URL:[http://www.kidney.org/professionals/KDOQUI\\_guidelines\\_ckd](http://www.kidney.org/professionals/KDOQUI_guidelines_ckd)
5. Health (home page) 2012 Den (cited 2012 dec 10); Available from; url:<http://en.wikipedia.org/wiki/health>.
6. Suzanne. C. Smeltzer, Brenda G. Brunner and Suddarth's text book of medical surgical nursing. 11th edition. India: Wolters Kluwer; 2009.
7. Curtin R, Oberlet E, Sacksteder P: Assessing functional status and well-being: practical consideration. Talbert j health care 1996-97.
8. Lewis, Heitkemper, Dirksen. Medical Surgical Nursing. 7th edition. India: Elsevier publication; 2011.
9. Parsons TL, Toffelmire EB. Exercise training during haemodialysis improves dialysis efficacy and physical performance. Journal of Physical medicine and rehabilitation. India 2007 Jan; 88:130-135.
10. Meguid El, Nahas, Levin A. Chronic Kidney Disease a practical guide to Understanding and management, New York: Oxford University Press; 2009.

11. National Kidney Foundation. Staying fit with kidney diseases (internet) 2012. Available from: <http://www.kidney.org/atoz/content/stayfit.cfm> .