



A Study To Assess The Quality Of Life Among Hemodialysis Patient In Selected Hospital At Tamluk, Purba Medinipur, And West Bengal

¹SHELI DUYA, ²SUBHRA RANI DAS, ³ANURADHA BERA

¹sister Tutor, ²senior Sister Tutor, ³sister Tutor

¹nts, Tgmc&H,

²nts, Tgmc&H,

³nts, Tgmc&H

ABSTRACT

The study was conducted to assess the quality of life of a hemodialysis patient in Tamralipto Govt. Medical College & Hospital. The study was conducted by adopting descriptive research design. 60 hemodialysis patient are taken who fulfilled the inclusion and exclusion criteria were selected by non probability sampling technique. The patients were explained about the assessment tool. To find out the quality of life of a hemodialysis patient the score should be obtained from WHO recommended WHOQOL-BREF questionnaire. It has total 26 questions, and which was given the score from 26-130. The following score indicates the quality of life of hemodialysis patient.

The analysis of the study revealed that in initial stage of ESRD patient remain asymptomatic and they may not perceive the significant effect of their quality of life by hemodialysis. The patient who receiving hemodialysis had adequate self efficacy and had a good quality of life. It is important to identify the hemodialysis patient who lack the self care efficacy required self care and focus on educational interventions to build confidence.

INTRODUCTION

Chronic kidney disease is the global health issue , with millions of individuals affected worldwide . when CKD progresses to end stage renal disease(ESRD), hemodialysis becomes a life-sustaining treatment for those who are not candidates for kidney transplantation. While hemodialysis effectively manages the symptoms of ESRD ,it significantly impacts the quality of life of the patient.

Quality of life is a multi dimensional concept that includes physical, psychological, social, and environmental wellbeing. For hemodialysis patients, quality of life is influenced by various factors, such as the severity of symptoms, the burden of treatment,co-morbid conditions and the ability to maintain the normal life activities.

Statement of the problem:

“A study to assess the quality of life among hemodialysis patient in selected hospital at Tamruk, Purba Medinipur, and West Bengal”.

Purpose of the study:

The purpose of the study to investigate quality of life of hemodialysis patient.

Objectives of the study:

1. To identify the quality of life among patients undergoing hemodialysis.
2. To determine the association between quality of life among hemodialysis patient and selected demographic variable.

Operational Definitions:

- **Assessment:**

Assessment means the gathering of information about a patient's physiological, psychological, sociological and spiritual status as measured by structured interview schedule.

- **Quality of Life:**

Quality of life demonstrated through the physical, psychological and social domain of health and appears to be influenced by a hemodialysis patient's experiences, benefits, expectations and perceptions as measured by a standardized tool.

Assumption:

The study assumed that hemodialysis has the potential to alter quality of life of the patients.

Hypothesis:

Null Hypothesis (H0): There is no significant difference in the quality of life among hemodialysis patient's compared to the general population.

Alternative Hypothesis (H1): Hemodialysis patients experience a significant decline in quality of life compared to the general population.

RESEARCH METHODOLOGY**Research Approach:**

In order to achieve the objectives of the study, an evaluative approach was found to be appropriate and selected for the study.

Research design:

Descriptive research design was adopted for this study.

Variables:

Research variable- quality of life among hemodialysis patient

Demographic variable- Age, gender, educational status, religion, occupation, social class, marital status, income, type of family, habit, health insurance and so on.

Setting of the study:

The selection of the setting was done on the basis of the feasibility for conducting the study, availability of the subjects and geographical proximity. Setting for the present study was the dialysis unit at Tamralipto Govt. Medical College & Hospital, Tamluk.

Study population:

Hemodialysis patients from day by day in dialysis unit at Tamralipto Govt. Medical College & Hospital, Tamluk.

Sample:

To fulfil the objective of the study, the patients are taken dialysis in dialysis unit were selected.

Sample size:

The sample size for the study will comprise of 60 hemodialysis patients.

Sampling technique:

Non probability convenience method sampling will be used to select the samples.

Criteria for sample selection**Inclusion criteria for sampling:**

The participants with the following conditions were included in the study

1. Both male and female undergoing hemodialysis.
2. Patients were older than 18 years of age.
3. Patients had confirmed the diagnosis of CKD.
4. Patient undergoing hemodialysis at above 3 months

Exclusion criteria for sampling:

The participants with the following conditions were included in the study

1. Those who were mentally and physically unable to communicate to the interviewer.
2. Those who were seek to answer.

Development and Description of tool

The study aim to assess the quality of life among the hemodialysis patient in selected hospital, Tamluk best on the objectives of the study the researcher reviewed the research literature in the area related to quality of life of hemodialysis patient. The guidance was taken from the teacher to develop the tool. The draft of the tool was done.

Description of the tool:**Tool 1 (a):**

The semi-structured tool was developed for collecting personal information. It describe the socio demographic characteristics of the sample consisting of 14 such as age, gender, religion, educational status ,marital status, family type, no of children , occupation of the patient, monthly family income, having health insurance or not, distance from home to health facility , way of transportation, reachable time from home to health facility, accompanied by someone during transportation.

Tool 1 (b):

It was developed for collecting the disease related data of the patients. it described the patient's profile consisting of 14 items such as duration of receiving hemodialysis , duration of confirmation of the disease , mode used in hemodialysis , time of getting hemodialysis in a month, interval of routine investigation, suffer from any kind of blood born disease as a result of hemodialysis, problem face by patient before , during and after hemodialysis, any alternative treatment therapy, support from other family member, satisfaction about treatment, relation with medical staff and relation with nursing staff/ technician.

Tool 2: Standardized tool- the WHOQOL-BREF

The WHOQOL-BREF, a health related questionnaire developed by WHOQOL. Group was selected to quantify the health related quality of life of ESRD patients. It has 4 domain level profiles that assess the quality of life. It was by selecting at least one question from each of the 26 facts relating to the quality of life as well as two as two items from the overall quality of life and physical health, psychological health, social relations, environment. Five point Likert scales were used in the instrument.

Scoring the WHOQOL-BREF:

The WHOQOL-BREF produces a quality of life profile. It is possible to derive four domain scores and also two items examined separately. The four domain scores denote an individual's perception of the quality of life in each particular domain. Domain scores were magnitude in a positive direction (i.e. higher scores denote the higher quality of life). The mean score of the item within each domain was used to calculate the domain score. The mean score was then multiplied by 4 to make domain score comparable with the score used in the WHOQOL

Validity:

Since the WHOQOL-BREF scale was a standardized tool, further validity not required. Only linguistic validation was done by the respective language experts. The tool was translated into Bengali and re-translated with the help of experts.

Section 1: Findings related to the demographic characteristics of the hemodialysis patients**Table 1:** Frequency & percentage distribution of the patients according to their age and gender

n =60

Variables		frequency	%
Age (years)	20-40	15	25
	41-60	34	56.667
	61-80	11	18.333
Gender	Male	53	88.333
	Female	7	11.667

Data presented in table 1 depict that maximum number (34; 56.667%) of the patient belongs to the age group of 41-60 years followed by 20-40 years (15; 25%) and 61-80 years (11; 18.33%).

Data also shows that maximum number (53; 88.333%) is male.

Table 2: Frequency & percentage distribution of the patients according to their religion & educational status.

Variables		fr	%
Religion	Hindu	56	93.33
	Muslim	4	6.67
Educational status	Uneducated	7	11.67
	Secondary	42	70
	Higher secondary	6	10
	Graduation	5	8.33

Data presented in table 2 depict that maximum number (56; 99.333%) of the patients belongs to Hindu religion and (4; 6.66%) belongs to Muslim religion.

Data also shows that maximum number (42; 70%) patients studied up to secondary level, followed by uneducated (7; 11.667%), higher secondary (6; 10%) and rest of (5; 8.33%) graduation.

Table 3: Frequency & percentage distribution of the patients according to their marital status, types of family & no. of children.

Variables		fr	%
Marital status	Married	53	88.333
	Unmarried	6	10
	Widow	1	1.667
Type of family	Nuclear	44	73.333
	Joint	16	26.667
No. of children	0	9	15
	1	17	28.333
	2	26	43.333
	≥3	8	13.333

Data presented in table 3 depict that maximum number (53; 88.333%) of the patients are married followed by (6; 10%) are unmarried and rest (1; 1.666%) is widow .

Data presented that most (44; 73.333%) of the patients are from nuclear family and rest (16; 26.666%) patients are from joint family.

Data also shows that maximum number of children (26; 43.333%) is 2 and followed by (17; 28.333%) is 1, (9; 15%) have no children, rest (8; 13.333%) are ≥3 children.

Table 4: Frequency & percentage distribution of the patients according to their types of occupation, income & health insurance.

Variables		fr	%
Occupational Status	Farmer	6	10
	Service	6	10
	Business man	4	6.6667
	Labour	13	21.667
	Not occupied	31	51.667
Income	<5000	18	30
	5001-10000	29	48.333
	10001-20000	7	11.667
	>20000	6	10
Availability of health insurance	Yes	34	56.667
	No	26	43.333

Data presented in table 4 depict that maximum number (31; 51.666%) of patients are unemployed, followed by (13; 21.667%) are labour, (6; 10%) are farmer and service and rest (4; 6.6667%) are business man.

Data presented that most (29; 48.333%) of patients have a monthly family income 5001-10000 and (18; 30%) of patients have a monthly family income within 5000,(7;11.667) of patients have a monthly family income of 10001-20000 and rest (6; 10%) of patients have a monthly family income >20000.

Data also presented that (34; 56.667%) patients have availability of health insurance.

Table 5: Frequency & percentage distribution of the patients according to their distance from health centre, travel, time and accompany.

Variables		fr	%
Distance from health centre	<6km	28	46.667
	6-10km	10	16.667
	>10km	24	40
Travel	Walk	12	20
	Cycle	9	15
	Bus	19	31.667
	Toto	20	33.333
Time	<30 min	31	51.667
	30-60 min	19	31.667
	More than 2 hr	4	6.6667
Accompany	Alone	6	10
	With Family member	54	90

Data presented in table 5 that most (28;46.667%)of patient travel a distance of 1-5 km, followed by (24;40%) of patient travel a distance more than 10km and rest (10;16.667%) patient travel a distance of 6-10 km.

Data shows that maximum patients (20; 33.333%) are travel by toto and (19; 31.667%) travel by bus, (12; 20%) travel by walk and rest (9; 15%) are travel by cycle.

Data shows that maximum patients (31;51.667%) reach the health centre within 30 minutes,(19;31667%) patients reach the health centre within 1 hr and (4;6.667%) patients reach the health centre within 1-3 hr.

Data shows that (54; 90%) are travel with family member and rest (6; 10%) are travel alone.

SECTION II: Findings related to the patients profile.

Table 6: Frequency & percentage distribution of the patients according to how long they receive hemodialysis from this unit

variable		fr	%
Duration of receiving hemodialysis	Less than 6 months	12	20
	6 month-24 months	19	31.6667
	25-36 months	16	26.6667
	Above 36 months	13	21.6667

Data presented that maximum(19;31.6667%) of patient taken hemodialysis since 6 month -2 years, followed by (16;26.6667%) of patient taken hemodialysis since 2-3 years, followed by (13;21.6667%) of patient taken hemodialysis since above 3 years, rest (12;20%) of patient taken hemodialysis since 6 months.

Table 7: Frequency & percentage distribution of the patients according to when they diagnosed with this disease

Variable		fr	%
Occurrence of This Disease	Less than 6 months	3	5
	6-12 months	14	23.333
	13-24 months	15	25
	Above 25months	28	46.666

Data presented that most (28; 46.666%) of the patients were diagnosed with this disease above 2 years ago followed by (15; 25%) patients having diagnosed for 13-24 months

years, (14; 23.333%) patients for 6-12 months and the rest of the (3; 5 %) patients were diagnosed with this disease for 6 months.

Table8: Frequency & percentage distribution of the patients according to what type of mode used in hemodialysis, how many times a month you get hemodialysis & which interval routine investigations are done.

variables		fr	%
What type of mode used in hemodialysis	AV fistula	59	98.333
	AV graft	1	1.666
Frequency of hemodialysis	4 times/month	5	8.333
	8 times/ month	22	36.666
	12 times/month	33	55
Time interval for routine investigations	2 weeks	2	3.333
	4 weeks	26	43.333
	More than 4 weeks	32	53.333

Data presented that most of the patients (59; 98.333%) have AV fistula.

Data shows that maximum (33; 55%) patients getting hemodialysis 12 times a month and (22; 36.666%) patients getting hemodialysis for 8 times a month and rest patients (5; 8.333%) getting hemodialysis 4 times per month.

Data also shows that maximum (32; 53.333%) patients do their routine investigation in 1-2 months interval whereas (26; 43.333%) patients in 4 weeks interval and (2; 3.333%) patients perform their routine investigation in 2 weeks interval.

Table 9: Frequency & percentage distribution of the patients according to how much they follow recommended diet and how much difficulties they have in relation with social environment.

variables		fr	%
Quantity Of Following Recommended Diet	very much	6	10
	Quite	37	61.666
	Little	15	25
	Not at all	2	3.333
Difficulties they faced to maintainig relation with social environment	very much	6	10
	Quite	23	38.333
	Little	12	20
	Not at all	19	31.666

Data presented that most (37; 61.666%) patients follow their diet quietly, (15; 25%) patients follow their diet a little, (6; 10%) follow their recommended diet very much and rest (2; 3.333%) do not follow their recommended diet.

Data also shows that most (23; 38.333%) patient have quite difficulties in their relation with social environment, (19; 31.666%) patients faced no difficulties, (12; 20%) patients experienced difficulties a little and rest (6; 10%) patients faced difficulties very much with social environment.

Table10: Frequency & percentage distribution of the patients according to the physical problems they have faced before, during and after hemodialysis.

variables		fr	%
Physical problems they have faced before hemodialysis	Very much	11	18.333
	Quite	17	28.333
	Little	4	6.666
	Not at all	28	46.666
Physical problems they have faced during hemodialysis	Very much	7	11.666
	Quite	15	25
	Little	7	11.666
	Not at all	31	51.666
Physical problems they have faced after hemodialysis	Very much	4	6.666
	Quite	15	25
	Little	10	16.666
	Not at all	31	51.666

Data presented that most (28; 46.666%) patients faced no problem before taking hemodialysis, (17; 28.333%) patients faced problems quietly, (11; 18.333%) patients faced problems very much and rest (4; 6.666%) patients faced problems a little before hemodialysis.

Data shows that most (31; 51.666%) patients faced no problem during hemodialysis, (15; 25%) patients faced problems quietly, followed by (7; 11.666%) patients faced problems very much and (7; 11.666%) patients faced problems a little during hemodialysis.

Data also shows that most (31; 51.666%) patients faced no problem after taking hemodialysis, (15; 25%) patients faced problems quietly, (10; 16.666%) patients faced problems a little and rest (4; 6.666%) patients faced problems very much after hemodialysis.

Table 11: Frequency & percentage distribution of the patients according to alternative treatment they have taken and the support they get from family members.

variables		fr	%
using alternative treatment	Not at all	60	100
Getting support from their family members	Very much	43	71.666
	Quite	13	21.666
	Little	3	5
	Not at all	1	1.666

Data presented that none of the patients (60; 100%) used any alternative treatment.

Data also shows that maximum (43; 71.666%) patients get support from their family members very much, (13; 21.666%) patients get quite support from their family members, (3; 5%) patients get a little support from their family members and rest (1; 1.666%) patients get no support from their family members.

Table 12: Frequency & percentage distribution of the patients according to relation with medical staff and nurse/ technical staff.

variables		fr	%
Cooperation with doctor	Excellent	15	25
	Good	45	75
Cooperation with nurse/ technician	Excellent	21	35
	Good	36	60
	moderate	3	5

Data presented that most (45; 75%) patient have good relationship with the medical staff, and (15; 25%) have excellent relationship with the medical staff.

Data also showed that most (36; 60%) patient have good relationship with the nurse/ technical staff, (21; 35%) have excellent relationship and rest (3; 5%) patient have moderate relationship with the nurse/ technical staff

Section II: Findings related to the quality of life of the patients according to obtained score in WHOQOL-BREF questionnaire.

Table 13: Percentage of obtained score in WHOQOL-BREF questionnaire

Percentage of score	Sample
<20%	0
21-40%	1
41-60%	32
61-80%	27
>80%	0

This data presented that maximum 32 sample score 41-60%, 27 sample score 61-80%, and rest 1 sample score 21-40%

Table 14: Mean Median & standard deviation of different health level of hemodialysis patient.

health level of hemodialysis patient.	mean	median	Standard deviation
Physical	10.69133	10.855	1.7848
Psychological	11.14566	11.33	2.4823
Social	13.3725	13.34	2.2483
environmental	12.23666	12.35	2.114
Total	47.446	47.075	5.847

This data presented that total mean score of different health level is 47.446, total median score of different health level is 47.075 and total standard deviation of different health level is 5.847.

Section A: Description of the demographic variables

Table 15: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi-Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Age	20-40 years	15	100%	0	0%	15	$\chi^2 = 0.77$ df= 2 P>0.05
	41-60 years	33	97.06%	1	2.94%	34	
	61-80 years	11	100%	0	0%	11	
Gender	Male	52	98.11%	1	1.89%	53	$\chi^2 = 0.134$ df= 1 P>0.05
	Female	07	100%	0	0%	07	

- Age:** The data present that 15 patients belong to the age group of 20-40 years, 33 patients belong to the age group of 41-60 years, 11 patients belong to the age group of 61-80 years, who score above median 47.07. 1 patient belongs to the age group of 41-60 years, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and age of the hemodialysis patient is 0.77 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.
- Gender:** The data present that 52 male patients and 7 female patients, who score above median 47.07. 1 male patient, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and gender of the hemodialysis patient is 0.134 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.

Table 16: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Religion	Hindu	55	98.21%	1	1.79%	56	χ^2 = 0.681 df=1 P>0.05
	Muslim	4	100%	00	0%	4	
Education	Primary& secondary	42	100%	00	0%	42	χ^2 =7.751 df=3 P>0.05
	Higher Secondary	6	100%	00	0%	6	
	Graduate	5	100%	00	0%	5	
	Illiterate	6	85.71%	1	14.28%	7	

- Religion:** The data present that 55 Hindu patients and 4 Muslim patients, who score above median 47.07. 1 Hindu patient, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and religion of the hemodialysis patient is 0.681 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.
- Education:** The data present that 42 patients are educated up to primary and secondary level, 6 patients educated up to higher secondary level, 5 patients educated up to graduate and 6 patients are illiterate, who score above median 47.07. 1 illiterate patient, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and education of the hemodialysis patient is 7.751 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 17: Association between quality of life with demographic variable

Demographic variables	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Marital Status	Married	52	98.11%	1	1.8%	53	$\chi^2 = 0.134$ df=2 P>0.05
	Unmarried	1	100%	00	0%	1	
	Widow	6	100%	00	0%	6	
Type of family	Nuclear	43	97.73%	1	2.27%	44	$\chi^2 = 0.75$ df=1 P>0.05
	Joint	16	100%	0	0%	16	

- Marital status:** The data present that 52 married patients and 1 unmarried patient, 6 widow patients who score above median 47.07. 1 married patient, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and marital status of the hemodialysis patient is 0.134 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.
- Type of the family:** The data present that 43 patients belong to the nuclear family, 16 patients belong to the joint family, who score above median 47.07. 1 patient belongs to the nuclear family, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life and age of the hemodialysis patient is 0.75 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.

Table 18: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
No. of children	0	9	100%	00	0%	9	$\chi^2 = 6.62$ df=3 P>0.05
	1	17	100%	00	0%	17	
	2	26	100%	00	0%	26	
	>3	7	87.5%	1	12.5%	8	
Occupation	Farmer	6	100%	0	0%	6	$\chi^2 =$

Employee	6	100%	0	0%	6	14.19* df=4 P<0.05
Business man	3	75%	1	25%	4	
Labour	13	100%	00	0%	13	
Not occupy	31	100%	00	0%	31	

- No of the children:** The data present that 9 patients have no children, 17 patients have 1 child, 26 patients have 2 children, 7 patients have greater than 3 children, who score above median 47.07. 1 patient has greater than 3 children, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and no of children of the hemodialysis patient is 6.62 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.
- Occupation:** The data present that 6 patients are farmer and 6 patients are employee, 3 patients are businessman, 13 patients are labor, 31 patients are not occupied, who score above median 47.07. 1 patient is businessman, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and occupational status of the hemodialysis patient is 14.19 for degree of freedom 4 which is statistically significant to the table value because this value is more than 9.49.

Table 19: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square	
		Above median (47.07)		Below median(47.07)				
		n	%	n	%			
Family income	Rs.0-5000	17	94.44%	1	5.56%	18	χ ² =2.3779 df=2 P>0.05	
	Rs.6000-10000	29	100%	0	0%			29
	Rs.>10000	13	100%	0	0%			13
Health insurance	Present	33	97.05%	1	2.94%	34	χ ² =0.77 df=1 P>0.05	
	Absent	26	100%	00	0%			26

- Family income:** The data present that 17 patients belong to the family whose monthly family income Rs.0-5000, 29 patients belong to the family whose monthly family income Rs.6000-10,000, 13 patients belong to the family whose monthly family income > Rs.10,000, who score above median 47.07. 1 patient belong to the family whose monthly family income Rs.0-5000, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and family income of the hemodialysis patient is 2.3779 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.

- Health insurance:** The data present that 33 patients have health insurance, 26 patients have no health insurance, which score above median 47.07. 1 patient has health insurance, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life and health insurance of the hemodialysis patient is 0.77 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.

Table 20: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi-Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Distance from home to health centre	1-5 km	27	96.43%	1	3.57%	28	$\chi^2 = 1.16$ df= 2 P>0.05
	6-10 km	7	100%	0	0%	7	
	>10 km	25	100%	0	0%	25	
Travel	Walk	11	91.67%	1	8.34%	12	$\chi^2 = 6.62$ df=3 P>0.05
	Cycle	9	100%	00	0%	9	
	Bus	19	100%	00	0%	19	
	Toto	20	100%	00	0%	20	

- Distance from home to health centre:** The data present that 27 patients have distance from home to health centre is 1-5 km, 7 patients have distance from home to health centre is 6-10km,25 patients have distance from home to health centre is >10km, who score above median 47.07. 1 patient have distance from home to health centre is 1-5 km, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and distance from home to health centre of the hemodialysis patient is 1.16 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.
- Travel:** 11 patients are travelled by walk, 9 patients are travelled by cycle, 19 patients are travelled by bus and 20 patients are travelled by toto, who score above median 47.07. 1 patient is travelled by walk, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and travel of the hemodialysis patient is 6.62 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 21: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi-Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Time	<30 mins	46	97.87%	1	21.3%	47	$\chi^2 = 0.88$ df= 2 P>0.05
	30-60 mins	9	100%	0	0%	9	
	More than 2 hr	4	100%	0	0%	4	
Accompany	Alone	5	83.34%	1	16.67%	6	$\chi^2 = 9.13^*$ df=1 P<0.05
	Family member	54	100%	00	0%	54	

- Time:** 46 patients reached the health centre within 30 minutes, 9 patients reached the health centre within 1 hour, 4 patients reached the health centre between 2- 3 hours, who score above median 47.07. 1 patient reached the health centre within 30 minutes, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and travelling time of the hemodialysis patient is 0.88 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.
- Accompany:** 5 patients travelled to the health centre alone, 54 patients travelled to the health centre with the family members, who score above median 47.07. 1 patient travelled to the health centre alone, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life and accompany of the hemodialysis patient is 9.13 for degree of freedom 1 which is statistically significant to the table value because this value is more than 3.84.

Table 22: Association between quality of life with research variable

Research variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Duration Of receiving Hemodialysis From The Unit	Less than 6 months	12	100%	00	0%	12	$\chi^2 = 2.17$ df=3 P>0.05
	6 months-24 months	18	94.74%	1	5.26%	19	
	25-36 months	16	100%	00	0%	16	
	Above 36 months	13	100%	00	0%	13	
Occurrence of This Disease	Less than 6 months	3	100%	00	8.34%	3	$\chi^2 = 3.05$ df=3 P>0.05
	6-12 months	14	100%	00	0%	14	
	13-24 months	14	93.33%	01	6.67%	15	
	Above 25 months	28	100%	00	0%	28	

- DurationOfReceiving Hemodialysis From The Unit :** 12 patients received the hemodialysis for Less than 6 months, 18 patients received the hemodialysis for 6 months-24 months, 16 patients received the hemodialysis for 25-36 months, 13 patients received the hemodialysis for >Above 36 months, who score above median 47.07. 1 patient received the hemodialysis for6 months-24 months, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life of the hemodialysis patient and how long they receive hemodialysis is 2.17 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

- Occurrence of This Disease :** 3 patients diagnosed with this disease Less than 6 monthsago, 14 patients diagnosed with this disease between 6-12 months, 14 patients diagnosed with this disease between 13-24 months, 28 patients diagnosed with this disease >Above 25 monthsago, and who score above median 47.07. 1 patient diagnosed with this disease between 13-24 months ago, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life of the hemodialysis patient and they diagnosed with this disease is 3.05 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82

Table 23: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Mode used in hemodialysis	AV fistula	58	98.3%	1	1.69%	59	$\chi^2 = 0.01$ df=1 P>0.05
	AV graft	1	100%	00	0%	1	
Frequency of getting hemodialysis	4 times/ month	5	100%	00	0%	5	$\chi^2 = 1.73$ df=2 P>0.05
	8 times/ month	21	95.45%	1	4.54%	22	
	12 times/ month	33	100%	0	0%	33	

- Mode used in hemodialysis :** 58 patients received the hemodialysis by AV fistula, 1 patient received the hemodialysis by AV graft, which score above median 47.07. 1 patient received the hemodialysis by AV fistula, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life of the hemodialysis patient and what type of mode they used in hemodialysis is 0.01 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.
- Frequency of getting hemodialysis :** 5 patients are get hemodialysis 4 times per month, 21 patients are get hemodialysis 8 times per month and 33 patients are get hemodialysis 12 times per month, who score above median 47.07. 1 patient gets hemodialysis 8 times per month, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life and how many times a month they get hemodialysis is 1.73 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.

Table 24: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi-Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Interval of routine investigation	2 weeks	2	100%	0	0%	2	$\chi^2 = 0.94$ df= 2 P>0.05
	4 weeks	30	96.77%	1	3.22%	31	
	1-2 months	27	100%	0	0%	27	
Quantity of following recommended diet	Very much	6	100%	00	0%	6	$\chi^2 = 1.04$ df=3 P>0.05
	quite	37	100%	00	0%	37	
	little	14	93.33%	1	6.67%	15	
	Not at all	2	100%	00	0%	2	

- Interval of routine investigation :** 2 patients are done routine investigation 2 weeks intervals, 30 patients are done routine investigation 4 weeks intervals, 27 patients are done routine investigation 1-2 months intervals, who score above median 47.07. 1 patient is done routine investigation 4 weeks intervals who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and in which interval routine investigation done is 0.94 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99.
- Quantity of following recommended diet :** 6 patients are maintain recommended diet very much, 37 patients are maintain recommended diet quite, 14 patients are maintain recommended diet little, 2 patients are not maintain recommended diet, who score above median 47.07. 1 patient maintains recommended diet little who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and how they maintain recommended diet is 1.04 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 25: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Difficulties they have in relation with social environment	Very much	7	100%	00	0%	7	$\chi^2 = 0.95$ $df=3$ $P>0.05$
	quite	22	100%	00	00%	22	
	little	11	91.66%	1	8.33%	12	
	Not at all	19	100%	00	0%	19	
The physical problems they have faced before hemodialysis	Very much	11	100%	00	0%	11	$\chi^2 = 2.62$ $df=3$ $P>0.05$
	quite	16	94.11%	1	5.88%	17	
	little	4	100%	00	0%	04	
	Not at all	28	100%	00	0%	28	

- Difficulties they have in relation with social environment:** 7 patients are face difficulties very much in relation with social environment, 22 patients are face difficulties quite in relation with social environment, 11 patients are face difficulties little in relation with social environment, 19 patients are not face difficulties in relation with social environment, who score above median 47.07. 1 patient faces difficulties little in relation with social environment who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and difficulties they have in relation with social environment is 0.95 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.
- The physical problems they have faced before hemodialysis :**11 patients are faced problem very much before hemodialysis, 16 patients are faced problem quite before hemodialysis, 4 patients are faced problem little before hemodialysis, 19 patients are not faced problem before hemodialysis, which score above median 47.07. 1 patient faced problem quite before hemodialysis, which scored below median 47.07. Chi square value is computed to determine the association between the quality of life and they faced any problem before hemodialysis 2.62 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 26: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
The physical problems they have faced during hemodialysis	Very much	7	100%	0	0%	7	$\chi^2 = 4.05$ df=3 P>0.05
	quite	15	100%	0	0%	15	
	little	7	100%	0	0%	7	
	Not at all	30	96.77%	1	3.22%	31	
The physical problems they have faced after hemodialysis	Very much	4	100%	00	0%	4	$\chi^2 = 0.995$ df=3 P>0.05
	quite	15	100%	00	0%	15	
	little	10	100%	0	0%	10	
	Not at all	30	96.77	1	3.22%	31	

- The physical problems they have faced during hemodialysis :** 7 patients are faced problem very much during hemodialysis, 15 patients are faced problem quite during hemodialysis, 7 patients are faced problem little during hemodialysis, 30 patients are not faced problem during hemodialysis, which scores above median 47.07. 1 patient is not faced problem during hemodialysis, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and they faced any problem during hemodialysis 4.05 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.
- The physical problems they have faced after hemodialysis:** 4 patients are faced problem very much after hemodialysis, 15 patients are faced problem quite after hemodialysis, 10 patients are faced problem little after hemodialysis, 30 patients are not faced problem after hemodialysis, who score above median 47.07. 1 patient is not faced problem after hemodialysis, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and they faced any problem after hemodialysis 0.995 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 27: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
They have taken any alternative therapy	other	0	0%	00	0%	0	$\chi^2 = 0.983$ df=1 P>0.05
Getting support from their family members	Very much	42	97.67%	1	2.32%	42	$\chi^2 = 0.4$ df=3 P>0.05
	quite	13	100%	00	0%	13	
	little	3	100%	00	0%	5	
	Not at all	1	100%	00	0%	1	

- **They have taken any alternative therapy :** 59 patients taken allopathy, who score above median 47.07. 1 patient taken allopathy, which score below median 47.07. Chi square value is computed to determine the association between the quality of life and they taken any alternative therapy is 0.983 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.
- **Getting support from their family members :** 42 patients are get support very much from family members, 13 patients are get support quite from family members, 3 patients are get support little from family members, 1 patient are not get support from family members, who score above median 47.07. 1 patient is get support very much from family members, who scored below median 47.07. Chi square value is computed to determine the association between the quality of life and they gets support from any family members is 0.4 for degree of freedom 3 which is not statistically significant to the table value because this value is less than 7.82.

Table 28: Association between quality of life with demographic variable

Demographic variable	Categories	Quality of life				Total	Chi Square
		Above median (47.07)		Below median(47.07)			
		n	%	n	%		
Cooperation with doctor	Excellent	15	0%	00	0%	15	$\chi^2 = 0.335$ df=1 P>0.05
	good	44	97.77%	1	2.22%	45	
Cooperation with nurse/ technician	Excellent	21	100%	00	0%	21	$\chi^2 = 0.6798$ df=2 P>0.05
	good	35	97.22%	1	2.77%	36	
	Moderate	3	100%	0	0%	3	

- Cooperation with doctor :** 15 patients have excellent relationship with medical staff, 44patients have good relationship with medical staff, who score above median 47.07. 1 patient have good relationship with medical staff, who score below median 47.07. Chi square value is computed to determine the association between the quality of life and relation with medical staffis 0.335 for degree of freedom 1 which is not statistically significant to the table value because this value is less than 3.84.
- Cooperation with nurse/ technician:** 21 patients have excellent relationship with nurse or technician, 35 patients have good relationship with nurse or technician, 3 patients have moderate relationship with nurse or technician, who score above median 47.07. 1 patient have good relationship with nurse or technician, who score below median 47.07. Chi square value is computed to determine the association between the quality of life and relation with nurse or technicianis 0.679 for degree of freedom 2 which is not statistically significant to the table value because this value is less than 5.99

IMPLICATION OF THE STUDY

The present study emphasized the selected nursing interventions such as quality of life of hemodialysis patients.

Nursing Practice: The findings in this study could help nurses; medical professional and family members to better understand the physical and psychological problems of the hemodialysis patients. A skilled nursing personnel provides cost effective care in such a way that patients are able to do the necessary things by themselves which induce a healthy lifestyle among them.

Nursing Education. The findings will enable the nursing teacher to educate the student nurses and nursing personnel by conducting pre-service and in-service education regarding comprehensive care of hemodialysis patients, also will give special attention to increase their self efficacy so that their quality of life may be better.

Nursing Administration: The study findings will help the nurse administrator to arrange in-service education so that the nurses can offer more advance services.

Nursing Research: One of the main aims of nursing research is to contribute knowledge to the body of nursing to expand and broaden the scope of nursing. This is possible only if nurses are taking the initiative to conduct further research. Research should be done to find out the various innovative methods to educate the hemodialysis patients to improve their quality of life by increasing the self efficacy and also overcome all the barriers which they have faced in their daily life.

RECOMMENDATIONS

On the basis of findings, following recommendation are made for further research:

- A similar study could be replicated by using a larger sample with different demographic variables.
- A similar study could be replicated by using a larger sample with different clinical status, questions such as how many hours per dialysis sessions, how many dialysis sessions per week.
- A similar study could be replicated by using a simple random sampling method.
- A comparison study can be done in a different setting like government versus non-government setting or indifferent public- private partnership.

CONCLUSION

In conclusion, the investigator pointed out that during initial stages of ESRD, patients often remain asymptomatic and they may not perceive the significant effect of their quality of life by the hemodialysis. The majority of the patients in this study being diagnosed with ESRD for duration of 6-24 months. It is highly probable that they did not experience the myriad of symptoms side by side. It was determined that the patients receiving hemodialysis had adequate self efficacy and had a good quality of life. Findings from this study suggest that with the purpose of improving patients' quality of life, health care professionals need to first identify hemodialysis patients who lack the self care efficacy required to self care and then focus on specific educational interventions to build confidence.

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