



“Quality Of Life Among Patients Undergoing Hemodialysis At Selected Hospitals Of Kamrup, Assam: A Descriptive Study.”

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ABSTRACT

BACKGROUND

Chronic kidney disease is one of the major public health problem both in developed and developing countries around the globe. Quality of Life of Chronic kidney disease patient before and after Hemodialysis therapy is an important issue especially for patient survivors, their families, and the care providers. In chronic kidney disease prospective, Quality of Life can be defined as a sense of well-being, It is a multidimensional perspective that includes dimensions such as physical, mental, social , emotional and spiritual changes in one Quality of Life dimension,; can influence perceptions in other dimension also.

OBJECTIVES

1. To assess the Quality of Life among Patients undergoing Hemodialysis at selected hospitals of Kamrup, Assam.
2. To find out association between Quality of Life with demographic variables among Patients undergoing hemodialysis at selected Hospitals of Kamrup , Assam.

METHODS AND MATERIALS

A descriptive research design was adopted to assess the quality of life among patients undergoing hemodialysis at selected Hospitals of Kamrup, in order to accomplish the objectives of the study. The study was undertaken on 65 Hemodialysis Patients in selected Hospitals of Kamrup, Assam using Purposive sampling technique. Participants were selected on the basis of inclusion and exclusion criteria. Quality of life was assessed by using Kidney Disease Quality of Life (KDQOL-36) tool and demographic performance.

RESULTS

Out of 65 hemodialysis patients, 46 (70 %) were male, 31 (47.7 %) had completed high school, 18 (27.7 %) had monthly income less than Rs 6767, 56 (86.2%) had undergone 2 times hemodialysis per week, 65 (100%) were diagnosed with chronic kidney disease and 39 (60 %) had duration of hemodialysis ≤ 1 year.

In the assessment of Quality of Life, out of 65 respondents, majority 46 (70.8%) had average quality of life, 10

(15.4 %) had poor quality of life, and 9 (13.8 %) had good quality of life.

In the assessment of Quality of Life on basis of component wise:

In Physical & Mental component, 46 (70.8 %) respondents had average Quality of Life, 12 (18.5 %) had poor Quality of Life, and 7 (10.7 %) had good Quality of Life.

In Burden of Kidney Disease, 29 (44.6 %) had average Quality of Life, 16 (24.6%) had poor Quality of life, and 20 (30.8 %) had good Quality of Life.

In problem and symptoms of disease, 31 (47.7 %) respondents had average Quality of Life, 14 (21.5 %) had poor Quality of Life, and 20 (30.8 %) had good Quality of Life.

In effect of Kidney Disease, 38 (58.5 %) had average Quality of Life, 14 (21.5 %) respondents had poor Quality of Life, and 13 (20 %) had good Quality of Life.

CONCLUSION

From this study out of 65 respondents, majority 46 (70.8%) had average quality of life, 10 (15.4 %) had poor quality of life, and 9 (13.8 %) had good quality of life. The study concludes that as out of 65, 9 (13.8 %) participants had good quality of life, so nursing interventions must be aimed at enhancing the quality of life of patients who are having chronic illnesses and are on hemodialysis for a long term.

KEY WORDS : Assess, Quality of life, Patient, Hemodialysis, Hospital

INTRODUCTION

Chronic Kidney Disease is a global public health problem, involving about 10% of the global population, Particularly in low-income countries. Chronic Kidney Disease is characterized by the presence of kidney damage or an estimated glomerular filtration rate less than $60 \text{ ml/min/1.73 m}^2$, persisting for 3 months or more, irrespective of the cause, Chronic kidney disease is a state of progressive loss of kidney function, ultimately resulting in the need for renal replacement therapy, such as dialysis or transplantation. Nearly 4 million people in the world are living on kidney replacement therapy (KRT), and hemodialysis (HD) remains the commonest form of KRT, accounting for approximately 69% of all KRT and 89% of all dialysis

Quality of Life is a multidimensional concept that includes overall well-being and satisfaction experienced in various aspects of life, including physical status, mental status, emotional and social functioning and the way that patients consider that they are able to function in all aspects of their lives outside medical care. It consists of the expectations of an individual or society for a good life. Low Quality of Life means to decrease living standard in the absence of basic needs as well as physical, social, cultural, emotional and spiritual needs.

NEED OF STUDY

Assessment of Quality of Life of hemodialysis patient is essential as it helps to determine the effect of renal diseases on patient and guide health care team to develop better intervention and also plan for future care

Chronic kidney disease (CKD) affects 13.4% (11.7%-15.1%) of the world's population. The prevalence of CKD worldwide is 10.4% among men and 11.8% among women.

In 2020, the World Health Organisation (WHO) ranked CKD as the 10th leading cause of death. It is expected to become the fifth leading cause of life loss by 2040

Epidemiology study of chronic kidney disease (2022): Chronic kidney disease is a progressive condition that affects >10% of the general population worldwide, amounting to >800 million individuals.

According to National Chronic Kidney Disease registration data, the current CKD prevalence rate in India is 13% to 16%, men are affected around 15% and women are affected around 13%

The Pradhan Mantri National Dialysis Programme (PMNDP) (2025) data reported that 27.56 lakh patients availed dialysis services and 335.81 Lakh Hemo-dialysis sessions held in India. Over 25,000 patients have been registered, and approximately 7.45 lakh dialysis sessions have been conducted in Assam.

OBJECTIVES

1. To assess the Quality of Life among Patients undergoing Hemodialysis at selected hospitals of Kamrup, Assam.
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METHODOLOGY

A descriptive research design was used to assess the quality of life among patients undergoing hemodialysis at selected Hospitals of Kamrup, in order to accomplish the objectives of the study. The study was undertaken on 65 Hemodialysis Patients in selected Hospitals of Kamrup, Assam using Purposive sampling technique. Participants were selected on the basis of inclusion and exclusion criteria. Quality of life was assessed by using Kidney Disease Quality of Life (KDQOL-36) tool and demographic performance.

DESCRIPTION OF THE TOOL :

The tools used for the study consisted of two sections: it includes:

Section –I: Socio- demographic Performance

Section-II: Kidney Disease Quality of Life tool (KDQOL-36)

DATA COLLECTION PROCEDURE:

The data collection period was scheduled from 10th September to 3rd October 2024. A formal written permission was obtained from the respective authorities of the selected hospitals. After getting permission, visited the selected hospitals on given dates respectively. A brief self introduction and the purpose of the study were explained to the authorities. The authorities were very much pleased to give their written consent and assured the all sort of helps and Nursing superintendent and sister incharge of Dialysis unit accompanied to visit the Dialysis unit where patients undergoing regular hemodialysis session. The patients those who fulfilled the inclusion criteria were identified and selected using non-probability purposive sampling technique. The data was collected from the 65 sample after explaining about the purpose and objectives of the study. The written informed contents were also obtained from the sample prior to the study. The ethical aspects of the research were kept in mind. The sample were assured anonymity and confidentiality of information provided by them. The demographic performance and Standardized tool were distributed to Assess Quality of Life among patients undergoing Hemodialysis at selected Hospitals of Kamrup, Assam by self report and it took around 40 – 45 minute to complete the

tools for each patient. All the patients interacted and co-operated well. After completing the assessment thanked the Dialysis incharge ,Nursing superintendent as well as authorities for their valuable support and co-operation.

RESULTS:

SECTION –I : Frequency and percentage distribution of Hemodialysis patients according to their socio-demographic variables.

TABLE :1

AGE (IN YEAR)	FREQUENCY(f)	PERCENTAGE(%)
18-26	04	06.10 %
27-35	10	15.40 %
36-44	17	26.20 %
>45	34	52.30%
GENDER		
MALE	46	70.80 %
FEMALE	19	29.20 %
TRANSGENDER	0	0%
EDUCATION		
PRIMARY	17	26.20%
SECONDARY	31	47.70%
HIGHER SECONDARY	9	13.80%
GRADUATE AND ABOVE	8	12.30 %
FAMILY INCOME (IN RS)		
<6767	18	27.70 %
6768-20273	14	21.50%
20274-33792	17	26.20%
33793-50586	8	12.30%
50587-67586	6	9.20%
67587-135168	2	3.10 %
>1351689	0	0

NUMBER OF HEMODIALYSIS PER WEEK	FREQUENCY(f)	PERCENTAGE(%)
1 Time	4	6.10%
2 Times	56	86.20%
3 Times	5	7.70%
≥4 Times	0	0%
DIAGNOSIS		
Acute Kidney Disease	0	0
Chronic Kidney Disease	65	100%
DURATION OF HEMODIALYSIS (IN YEARS)		
≤1	39	60.1%
2-3	22	33.8%
4-5	3	4.6%
≥ 6	1	1.5%

The table 1, portrays that out of 65 hemodialysis patients, 46 (70 %) were male, 31 (47.7 %) were completed high school, 18 (27.7 %) were getting monthly income less than Rs 6767, 56 (86.2%) had 2 times hemodialysis per week, 65 (100%) were diagnosed with Chronic Kidney Disease and 39 (60 %) had duration of hemodialysis ≤1 year.

SECTION –II: FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO THEIR QUALITY OF LIFE.

TABLE -2

Quality of life	Frequency (f)	Percentage (%)
Poor quality of life (score ≤ 38)	10	15.4%
Average quality of life (Score 39-52)	46	70.8%
Good quality of life (Score ≥ 53)	9	13.8%

Table -2 show that out of 65 samples, 46 (70.8 %) samples had average quality of life, 10 (15.4 %) samples had poor quality of life, and 9 (13.8 %) had good quality of life.

SECTION –III : FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO SUBSCALE / COMPONENT OF QUESTIONS.

TABLE-3(A) : FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO THEIR PHYSICAL AND MENTAL COMPONENT SUMMARY

Quality of Life	Frequency	Percentage (%)
Poor quality of life (score ≤ 26)	12	18.5%
Average quality of life (Score 27-47)	46	70.8%
Good quality of life (Score ≥ 48)	7	10.7%

TABLE-3(A), reveal that in physical and mental subscale , out of 65 samples, 46 (70%) samples had average quality of life,12 (18.5 %) samples had poor Quality of Life, and 7(0.8%) had good Quality of Life.

TABLE-3 (B) : FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO BURDEN OF KIDNEY DISEASE

Quality of Life	Frequency	Percentage (%)
Poor quality of life (score ≤ 7)	16	24.6%
Average quality of life (Score 8-24)	29	44.6%
Good quality of life (Score ≥ 25)	20	30.8%

TABLE -3(B), reveals that in Burden of Kidney Disease ,out of 65 samples, 29 (44.6 %) samples had average quality of life,16 (24.6 %) samples had poor quality of life, and 20 (30 %) had good quality of life.

TABLE-3(C) : FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO SYMPTOMS AND PROBLEMS KIDNEY OF DISEASE

Quality of Life	Frequency	Percentage (%)
Poor quality of life (score ≤ 56)	14	21.5%
Average quality of life (Score 57-75)	31	47.7%
Good quality of life (Score ≥ 76)	20	30.8%

TABLE- 3(C) , reveals that in Problem and symptoms of disease subscale, out of 65 samples, 31 (47 %) samples had average quality of life, 14 (21.5 %) samples had poor quality of life, and 20 (30 %) had good quality of life.

TABLE-3(D) : FREQUENCY AND PERCENTAGE DISTRIBUTION OF HEMODIALYSIS PATIENTS ACCORDING TO EFFECT OF KIDNEY DISEASE

Quality of Life	Frequency	Percentage (%)
Poor quality of life (score ≤ 29)	14	21.5%
Average quality of life (Score 30-56)	38	58.5%
Good quality of life (Score ≥ 57)	13	20.0 %

TABLE- 3(D) , reveals that in effect of Kidney Disease subscale ,out of 65 samples, 38 (58.5 %) samples had average quality of life, 14 (21.5 %) samples had poor quality of life, and 13 (20 %) had good quality of life.

SECTION –IV:ASSOCIATION OF QUALITY OF LIFE AMONG HEMODIALYSIS PATIENTS ADMITTED AT SELECTED HOSPITALS OF KAMRUP,ASSAM WITH THEIR DEMOGRAPHIC VARIABLES

TABLE-4

Demographic Variables	Poor QOL		Average QOL		Good QOL		Chi-Square p-value
	f	%	f	%	f	%	
Age in years							$\chi^2= 2.229$ p=0.89 d.f=6 N.S
18-26	0	0	3	4.7	1	1.6	
27-35	2	3.07	7	10.7	1	1.6	
36-44	2	3.07	13	20	2	3	
≥45	7	10.8	24	36.9	3	4.6	
Gender							$\chi^2= 1.289$ p=0.52 d.f=2 N.S
Male	9	13.9	33	50.7	3	4.6	
Female	2	3.07	14	21.6	4	6.2	
Transgender	0	0	0	0	0	0	
Educational Qualification							$\chi^2= 7.721$ p=0.25 df=6 N.S
Primary	0	0	6	9.3	2	3	
Secondary	1	1.6	7	10.7	1	1.6	
Higher Secondary	6	9.2	10	15.3	1	1.6	
Graduation or above	4	6.2	24	36.9	3	4.6	

Demographic Variables	Poor QOL		Average QOL		Good QOL		Chi-Square p-value
	f	%	f	%	f	%	
Family income/monthly							$\chi^2= 13.22$ p=0.21 d.f=10 N.S
< 6767	6	9.2	9	13.8	3	4.6	
6768-20273	0	0	13	20	1	1.6	
20274-33792	3	4.6	13	20	1	1.6	
33793-50559	1	1.6	7	10.7	0	0	
50560-67586	1	1.6	4	6.1	1	1.6	
67587-135168	0	0	1	1.6	1	1.6	
Hemodialysis/week							$\chi^2= 1.382$ p=0.84 d.f=4 N.S
1 times	1	1.6	3	4.6	0	0	
2 times	9	13.8	40	61.6	7	10.7	
3 times	1	1.6	4	6.1	0	0	
4 or more times	0	0	0	0	0	0	
Diseased diagnosed							N.A
Acute kidney disease	0	0	0	0	0	0	
Chronic kidney disease	11	16.9	47	72.3	7	10.8	
How long been going through Dialysis.							$\chi^2= 4.344$ p=0.63 d.f=6 N.S
Less than a year	7	10.7	27	41.6	5	7.6	
2-3 years	3	4.6	18	27.6	1	1.6	
4-5 years	1	1.6	1	1.6	1	1.6	
6 years and above	0	0	1	1.5	0	0	

p <0.05, N.S-Not Significant , p >0.05 , S-Significant

INTERPRETATION

The table - 4 depicts the Association between quality of life with selected demographic variables:

Age in years: The tables shows that the obtained p value was 0.89, since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with respective age.

Gender: The calculated p value was 0.52, since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with gender.

Educational Qualification: The calculated p value was 0.25 , since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with educational qualification.

Family Income: The calculated p value was 0.21 ,since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with family income per month.

Hemodialysis per week : The calculated p value was 0.84, since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with Hemodialysis per week.

Diseased Diagnosed: No statistics are computed because constant value are found in question no. 6

Duration of being in Hemodialysis: The calculated p value was 0.63, since p value is greater than 0.05 there was no significant association between Quality of Life among Patients undergoing Hemodialysis with duration of being in Hemodialysis.

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