



ASSESSMENT OF QUALITY OF LIFE IN END STAGE RENAL DISEASE PATIENTS UNDERGOING HAEMODIALYSIS IN A TERTIARY CARE TEACHING HOSPITAL

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ABSTRACT End stage renal disease (ESRD) is responsible for high morbidity and mortality in our population. It requires long term treatment as hemodialysis may impair quality of life (QOL) of patients. Primary objective of this study was to assess QOL of ESRD patients on hemodialysis by using World Health Organization QOL assessment scale. Sample size for study was 100 ESRD patients coming for hemodialysis who were assessed for QOL. 61 male & 39 female patients participated in our study. 73% of patients were married, while 16% unmarried & 11% were divorcee. Irrespective of educational status 56 persons have good QOL according to physical symptoms score and 72 persons having average QOL in personal belief & feeling score. From the findings of present study it can be concluded that ESRD patients undergoing hemodialysis have average quality of life which may help professionals working in hospital and community.

KEYWORDS : ESRD, QOL, hemodialysis

Introduction-

Kidneys are significant organs that contribute to our overall wellbeing. But when kidneys function at 10-15% below of their normal capacity, they cannot effectively do their job such as remove waste or excess fluid from blood. The renal failure may be caused by systemic diseases such as diabetes mellitus, hypertension, chronic glomerulonephritis, pyelonephritis, obstruction of urinary tract, vascular disease and toxic agents. (1) End stage renal disease (ESRD) is a chronic illness that requires medical intervention including dialysis, education on life style modification, alteration in diet and fluid restriction. (2) The disease has an impact on patient's quality of life (QOL) potentially affecting their physical, mental health, functional status, general well being, personal relationships & social functioning. (3) Though conventional hemodialysis is the most widely used treatment modality still ESRD is a major health problem that disturbs patient's quality of life. (4) Previous studies on health related quality of life of ESRD have identified that the modality of treatment is a factor influencing quality of life in ESRD. They reported that patients undergoing dialysis have a reduced quality of life compared with transplant patients who were shown as having a similar quality of life to the general population. (5) Health related quality of life is a multi-dimensional concept that includes physical functioning, social and role functioning, mental health and general health perception. It includes subjective evaluation of both positive and negative aspects. (6) A description of person's QOL should not reflect the opinion of health professional or family members. (7) QOL measures the individual subjective perception of his functioning and wellbeing, his/her day to day living. WHO defined QOL as the individual's perception of their position in life in the context of the culture and value system where they live and in relation to their goals, expectations, standards and concern. (8) QOL declines overtime with the perception of the quality of physical health deteriorating more than mental health, however many patients continue to be hopeless, anxious and worry about finance, loss of sexual function, family burden and loss of independence. (9) QOL is considered as an important outcome measure in this regard. Researchers have claimed that it is even better than clinical parameters. Understanding quality of life ESRD patient is necessary because renal disease is a serious illness and treatment is challenging and prolonged. (10) In India it is estimated as 100 person per million populations develop CRF in a year. (11) According to WHO, the global burden of disease project, disease of kidney and urinary tract contribute to global burden with app. 8, 50,000 deaths every year & 115,010,107 disability adjusted life years. Chronic kidney disease is the 12th leading cause of death & 17th cause of disability worldwide. (12)

Materials & Methods:

A descriptive survey was carried out to assess the quality of life of

ESRD patients undergoing hemodialysis. The study samples were ESRD patients undergoing hemodialysis and the sample size for study was 100 ESRD patients coming for hemodialysis to our hospital, who were assessed for the Quality of Life (QOL).

Objectives :

- To assess the quality of life of ESRD patient undergoing hemodialysis
- To compare the selected demographic variable with the quality of life
- To find out the correlation between the physical symptoms with the personal beliefs and feelings.

Data were collected from 100 ESRD patients who were undergoing hemodialysis in our hospital. The following criteria were set for the selection of the sample.

Inclusion criteria:

- Diagnosed as ESRD
- Who were willing to participate in study
- Who could understand local language
- Who were in age group >18 years
- Who were present during period of data collection

Exclusion criteria:

- Patients not willing to participate
- Who does not understand local language
- Suffering from many chronic diseases, malignancies, terminally ill patients
- Had history of Substance abuse

Method of data collection :

In the present study, data were collected regarding age, sex, education, marital status, family income & other socio demographic profile in a pre-designed proforma. To measure quality of life, structured questionnaire along with a rating scale for assessing QOL of ESRD patients based on World Health Organization QOL assessment scale was used. On an average, the time taken by each subject for completing the questionnaire was 20 minutes. The standardized tool was again subjected to undergo validity by 5 subject experts. The selections of the experts was based on their experience, clinical practice and interest in problem being studied. The experts were requested to give their suggestion and opinion regarding the relevance, clarity, simplicity and ambiguity of the items in the tools. The data analysis was done on the basis of objectives like distribution of subjects with their socio demographic variables, QOL of ESRD patients which were analysed using frequency percentage through

graphical presentation. This study was approved by institutional ethics committee and informed consent was taken from patients .

Results : The data collected from 100 ESRD patients were analyzed and tabulated .

Table 1 : Demographic profile of ESRD patients undergoing dialysis in a tertiary care teaching hospital

Parameters	Types	No. of patients
Educational status	Illiterate	5
	Upto primary	7
	Upto matric	27
	>HSC	61
Gender	Male	61
	Female	39
Monthly income	<5000	25
	5000-10000	19
	10000-15000	19
	>15000	37
Family status	Married	73
	Unmarried	16
	Divorced	11
Type of family	Nuclear	46
	Joint	32
	Single	22

In our study , 5 patients were illiterate,7 persons were having educational qualification upto primary , 27 up to matric, 61 patients had studied >HSC. 61 & 39 out of 100 number of patients were male and female respectively. Monthly income shows that 25%of patients are earning < Rs5000, 19% of patients between Rs5000to10000 , another 19% of patients between Rs10,000 to 15,000 and 37% patients were earning more than Rs15000.Distribution of data according to family status shows that 73 were married ,16 were unmarried &11 were divorcee. 46 number of patients were residing in nuclear families.

Table 2 : Quality of life score of ESRD patients undergoing dialysis in a tertiary care teaching hospital

Parameters		Quality of life scores in ESRD patients					
		Physical symptoms score			Personal belief & feeling score		
		Good	Average	Poor	Good	Average	Poor
		(No. of Patients)			(No. of Patients)		
Educational status		56	30	14	10	72	18
Gender	Male	4	20	37	7	45	9
	Female	1	10	28	3	27	9
Monthly income	<5000	0	6	19	3	19	3
	5000-10000	3	6	10	1	13	5
	10000-15000	1	9	9	4	14	1
	>15000	1	9	27	2	26	9
Family status	Married	4	23	46	9	54	10
	Unmarried	0	4	12	1	9	6
Type of family	Nuclear	3	13	31	5	34	8
	Joint	1	11	19	4	22	5
	Single	1	6	15	5	16	1

Irrespective of educational status 56 persons have good quality of life according to physical symptoms score and 72 persons having average quality of life in personal belief & feeling score.37 males and 28 females with poor quality of life in physical symptom score where as 9 each males and females have poor quality of life in personal belief and feeling score. It can be concluded that they were having average to poor QOL irrespective of gender which is represented in figure 1.

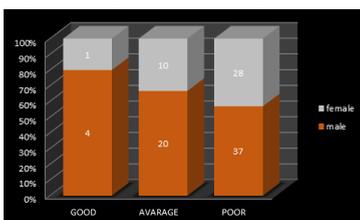


Figure 1 : showing categories of physical symptom according to gender

46 married and 12 unmarried persons have poor quality of life in physical symptoms score but only 10 married and 6 unmarried persons have poor score in personal belief and feeling score.while comparing the family status with quality of life, 31 persons in nuclear family have poor physical symptoms score while 34 persons with nuclear family having average quality of life score in personal belief and feeling score.

Table 3 : Correlation between physical symptoms, personal beliefs & feelings.

AREA	MEAN	SD	MEAN %	KARL PEARSON CORRELATION COEFFICIENT	INTERPRITATION
Physical symptoms	28.64	10.65	35.8%	r=0.14	It was concluded that there was a perfectly positively correlation between physical symptoms, personal beliefs feelings.
Personal beliefs & feelings	62.26	15.64	51.88%		

This table shows the correlation between physical symptoms, personal belief and feelings. In this physical symptoms mean score was (28.64±10.65) which was 35.5% and personal belief and feelings was(62.26± 15.64) which was 51.88% here r=0.14. It was concluded that there was a perfectly positively correlation.

DISCUSSION-

This descriptive survey to assess the quality of life of ESRD patient undergoing hemodialysis was conducted in our hospital among 100 ESRD patients by using convenient sampling technique .According to our study 61% were highly educated, 61% were male,46%belong to nuclear family,73% were married&37%earn more than Rrs15,000/month. The mean score of quality of life (physical symptoms, personal beliefs and feelings) of ESRD patient was (28.64 ±10.65) and (62.26 ±15.64) respectively which indicated that ESRD patients undergoing haemodialysis had average quality of life.

From few studies done earlier it is evident that the quality of life of hemodialysis patients are highly impaired (13,14,15). Association of poorer HRQOL(Health related quality of life score) with preventable or controllable factors suggests that attention should be given to psychosocial and medical interventions to improve HRQOL in hemodialysis patients (13). The quality of life of hemodialysis patients was found to be considerably impaired when compared to that of healthy individuals of the general population as well as of renal transplant patients.(14) Another study demonstrated that patient counseling plays an important role in improving the QOL by changing their psychological thinking and bringing them toward spirituality. (15)

But in present study revealed that the ESRD patients who were taken hemodialysis had an average quality of life & there was a perfectly positively correlation between physical symptoms, personal beliefs & feelings.

CONCLUSION: From the findings of the present study it can be concluded that ESRD patients undergoing hemodialysis had average quality of life .The findings of our study will help the professionals working in hospital and community to know the quality of life of ESRD patient undergoing hemodialysis and in planning any health education program related to that .These study findings can be utilized to prepare a module and health education to improve the quality of life of ESRD patients. The study has proved the importance of improving the quality of life of ESRD patients undergoing haemodialysis.

Limitations of our study :

On the basis of findings and limitations of the study the following recommendations are offered for further research.

- This study can be replicated on a large sample there by findings can be generalized.
- A Similar study can be conducted in different setting and different population.
- A correlation study can be made to assess the physical symptoms, personal beliefs & feelings in dialysis patient in different hospitals.

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