"A study to assess the effectiveness of health education on knowledge among relatives of hemodialysis patient in selected rural hospital."

1. Mrs Sangeeta Patil, Clinical instructor, Krishna Institute of Nursing Sciences, Karad.

Email.-sangeetapatil675@gmail.com.

- 2. DR. Vaishali .R.Mohite Dean Krishna Institute of Nursing Sciences, Karad.
- 3. Mr.. Ajit A. Pawar . Clinical instructor Krishna Institute of Nursing Sciences, Karad.
- **4.** Mrs. Namrata Mohite. Assistant Professor, , Krishna Institute of Nursing Sciences, Karad.

Corresponding Author

1. **Mrs .Namarata Mohite**. Assistant Professor, , Krishna Institute of Nursing Sciences, Karad.

Phone No-7972174020 Email id-namratamohite5@gmail.com.

ABSTRACT:

Background of the study:-

Every patient should have adequate knowledge about proper management of hemodialysis patient. This will help to maintain wellbeing of the patient to improve quality of life of hemodialysis patient.

Objectives: A study investigated to assess the effectiveness of health education on knowledge among relatives of hemodialysis patient in selected rural hospital.

Material and Methods:-

Experimental study done on 60 patient .30 on control group and 30 on experimental group. In this 67% are male and 33% are female. Sample distributed as per Scio demographic variables like age, sex, and marital life, relation with family, education, family, residence, income and occupation. Health education received by experimental group and routine care received by control group. Questionnaire prepared to assess the knowledge level. Self-prepared questionnaire was prepared to assess the knowledge. Ethical permission taken before data collection

Results: In the Scio demographic variables maximum samples are in age group of 40-50yrs 12(40%) 67% are male are 67%, Hindu are 77%, 43% are married, 33% are husband wife

relation,50% are taken primary education,60% of peoples are from Joint family,56% are living in a rural area. Level of knowledge was increased after intervention.

In the pretest maximum relatives are in poor knowledge57% whereas after intervention 43% of people had good knowledge level.

Conclusion: Health education was very much effective to increase the knowledge level .Adequate knowledge always help the patient to maintain wellbeing of the patient.

Key Words: knowledge level, health education, hemodialysis patient.

INTRODUCTION:-

There are many diseases like diabetics, hypertension cancer condition in this because treatment and disease itself kidney function is going to be damage. Patient has to face so many dietary restrictions It was necessary for every health care professionals to provide proper health education on nutrition diet which was good for kidney functions as well as some of the restrictions patient need to follow in the diet during his daily life.¹

Quality of life was very poor in the hemodialysis patient .Patient can be managed in the hospital but this patient need manage very well in the house settings also. Relatives should properly train because patient needs to follow dietary restriction, fluid restriction, care for infection control. If that not been managed by the patient properly then quality of life was going to reduced so during hospitalization provide them health education is necessary.²

To maintain good quality of life physical exercises are important .during hospitalization patient maintaining his own life but to enhances his physical and mental functioning exercises are important .most of the studies shown patient struggle with his own energy level ,functional ability ,sleep disturbances, his own disturbed marital life, uncontrolled symptoms management these all affect on health status of the person.to provide him well mental wellbeing exercises was important.³

For every patient need to be care it should base on patients own need. Patient face the problem like dietary restriction, fluid restriction, vascular complication, medication management some restriction on physical activity .health education on home care management will helpful for patient to maintain his own wellbeing.⁴

For empowering patient sufficient knowledge is much important because patient has to manage his own life. He has to continue treatment and improve his own functional capacity.⁵

Methods-

Experimental study done on knowledge level of the relatives among hemodialysis patient 30 in control group and 30 in experimental group. Sample distributed as per Scio demographic

variables like age, sex, and marital life, relation with family, education, family, residence, income and occupation. Health education received by experimental group and routine care received by control group. Questionnaire prepared to assess the knowledge level. Self-prepared questionnaire was prepared to assess the knowledge. Ethical permission taken before data collection In the Scio demographic variables maximum samples are in age group of 40-50yrs 12(40%) 67% are male are 67%, Hindu are 77%, 43% are married, 33% are husband wife relation, 50% are taken primary education, 60% of peoples are from Joint family, 56% are living in a rural area. Level of knowledge was increased after intervention.

Table No-1Sample distribution as per Scio-demographic variables

Results -

Sr.no	Variables	Frequency	Percentage	
1	Age			
	21-30	4	13	
	30-40	8	27	
	40-50	12	40	
	50 above	6	20	
2	Sex			
	Male	20	67%	
	female	10	33%	
3	Deligion			
3	Religion			
	Hindu	23	77	
	Christian	2	7	
	Muslim	4	13	
	other	1	3	
4	Married life			
	21-30	13	43	
	30-40	8	27	
	40-50	7	23	
	50 above	2	7	
5	Relation with patient			
	Mother-father	9	30%	
		-		
	Husband-wife	10	33%	
	Brother-sister	8	27%	

	other	3	10%
	·		
6	Education		
	Nonformal education	5	17%
	Primary	15	50%
	Secondary	4	13%
	Higher secondary	6	20%
	·	•	
7	Family		
	Joint	18	60
	Nuclear	11	37
	extended	1	3
8	Resident		
	Urban	11	37
	Rural	17	56
	suburban	2	7
	·	•	
9	Income		
	5000 above	8	27
	5000-10000	16	53
	10000-15000	4	13
	15000 above	2	7
10	Occupation		
	Housewife	6	20
	Expert in work	13	43
	Not expert in work	5	17
	other	6	20

In the Scio demographic variables maximum samples are in age group of 40-50yrs 12(40%) 67% are female and 33% are male ,Hindu are 77%,43% are married,33% are husband wife relation,50% are taken primary education,60% of peoples are from Joint family,56% are living in a rural area. Level of knowledge was increased after intervention.

Table NO-2 Frequency and percentage distribution of experimental group and control group based on knowledge score

Pre Test Score				Post test score		
Knowledge	Knowledge Score Frequency Percentage					
Level				Level		
Good	13-15	6	20	Good	13	43

Average	11-12	7	23	Average	9	30
Poor	0-10	17	57	Poor	8	27

As above table No-2 .Knowledge score was increased in the post test as compare to pretest among the relatives of hemodialysis patient .intervention of health education was effective on the knowledge level of relatives.

Table No-3. Analysis and interpretation of knowledge scores on diet, infection and lifestyle of patient undergoing hemodialysis

	Poor	Average	Good	Mean	Median	t=4.204 With 99% d.f.
Experimental group	8	9	13	12	12	P<0.0001 Consider extremely significant
Control group	6	7	17	10	11	significant

As per above table No-3 in results t=4.204 with99% df and pvalue<0.0001means intervention was effective to increase the knowledge level of relatives.

Table No-4 Mean, median, SD and difference on knowledge score on diet, infection and lifestyle of person undergoing hemodialysis

	Experimental group	Control group	difference
Mean	12.16	10	2.16
Median	12	11	1
mode	1.147	2.688	1.521

Above table no 4 mean median values are 10 and 11 in the control group where as in the experimental group it was 12.16 and 12 .in this study diet, infection and life styles are affecting on relatives knowledge level.

Discussion:-

In the above study findings maximum relatives are under the age of 40 to 50 yrs. 12(40%), 67% are male and 33% are female .in the pretest 6(20%) of relatives are in good level of knowledge and after post test 13 (43%) are in good knowledge. .present study t=4.204 with 99% df and pvalue<0.0001means intervention was effective to increase the knowledge level of relatives.

Parvan K, Hasankhani H, et al. (2015) it is an clinical trial study done 58 hemodialysis patient .two intervention methods like one group on training method and another group on information pamphlet .as result findings face to face training methods was effective to increase level of information and adherences to treatment.⁶

Tavakoli N, Momeni MK,et al.(2022). Experimental study done on patient care giver on knowledge level findings noted after intervention were 10.42 ± 3.23 and 21.47 ± 3.21 (p=0.001)after intervention experimental group increased in knowledge (p=0.001)as compared to control group. (p=0.29) ⁷ Mangrule PR (2017). Experimental study done to assess the level of knowledge on 160 hemodialysis patient .experimental group (n=80) received educational booklet and control group (n=80) received routine standard care. Intervention group shown higher level of knowledge and adherences as compare to control group. 8

Mansouri S, Jalali A,etal.(2020). Experimental study done on 64 patient . Experimental group 32 patient received teaching session 2 times for one week and control group received routine care . quality of life was asses immediate and after one month mean of quality of life shows 36.99,43.3, and 44.9. where as in the control group 36.39, 37.2 and 37.1. Result shows significant differences between immediate and after four week was higher as compare to control group. 9

Conclusion:-

Hemodialysis patient and care taker both need education during and after dialysis. Health care professional has to educate them properly on the basis of need to maintain wellbeing of the patient.

Acknowledgment:

The authors would like to thank all the participants for their cooperation and participation to complete the study successfully.

Financial support and sponsorship:

Self-funded study.

Conflicts of interest:

There are no conflicts of interest.

References:-

- 1. Shinjar FJ, Bakey SJ, Khudur KM. Effectiveness of an Education Program on Hemodialysis Patients, Knowledge towards Dietary Regimen at Al-Hussein Teaching Hospital in Al-Nasiriyha City. Indian Journal of Public Health Research & Development. 2018 Oct 1;9(10).
- 2. Bhosale TS, Kakade SV, Zagade TB. A study to assess effectiveness of structured teaching programme on knowledge regarding home care management of hemodialysis subjects—A statistical approach. International Journal of Medical Science and Public Health. 2019 | Vol 8 | Issue 6 p-407-409.
- 3. Lazarus ER. Effectiveness of education and exercise on quality of life among patients undergoing hemodialysis. Clinical Epidemiology and Global Health. 2019 Sep 1;7(3):402-8.
- 4. Fadlalmola HA, Elkareem EM. Impact of an educational program on knowledge and quality of life among hemodialysis patients in Khartoum state. International Journal of Africa Nursing Sciences. 2020 Jan 1;12:100205.

- Inkeroinen S, Koskinen J, Karlsson M, Kilpi T, Leino-Kilpi H, Puukka P, Taponen RM, Tuominen R, Virtanen H. Sufficiency of Knowledge Processed in Patient Education in Dialysis Care. Patient Prefer Adherence. 2021 May 27; 15:1165-1175. doi: 10.2147/PPA.S304530. PMID: 34079237; PMCID: PMC8166350.
- 6. Parvan K, Hasankhani H, Seyyedrasooli A, Riahi SM, Ghorbani M. The effect of two educational methods on knowledge and adherence to treatment in hemodialysis patients: clinical trial. J Caring Sci. 2015 Mar 1;4(1):83-93. doi: 10.5681/jcs.2015.009. PMID: 25821762; PMCID: PMC4363655.
- 7. Tavakoli N, Momeni MK, Sarani H, Bouya S, Imani JA, Askari H. Effectiveness of Family-Centered Care Education in Care Knowledge of Caregivers of Hemodialysis Patients. Medical-Surgical Nursing Journal. 2022 Feb 28;11(1).
- 8. Mangrule PR. A Study to Identify the Learning needs of Patients Undergoing Hemodialysis and Prepare and Evaluate the Effectiveness of self Instructional Module for home Management of Patients. Int. J. Nur. Edu. and Research. 2017 May 19;5(2):131-5.
- 9. Mansouri S, Jalali A, Rahmati M, Salari N. Educational supportive group therapy and the quality of life of hemodialysis patients. BioPsychoSocial medicine. 2020 Dec;14(1):1-0.