

Effectiveness Of Self-Management Programme Among The Patients Undergoing Hemodialysis.

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Abstract-A study was conducted to assess the Effectiveness of self management programme among the patients undergoing hemodialysis with Objective-To assess the Self Management ability among the patients undergoing Hemodialysis. And to find out the association between demographic characteristics with pre-test and post test levels of knowledge scores of self management of hemodialysis patients. Probability: simple random sampling was used select the 250 patients. Study concluded that self management programme is the one of the best method to improve the knowledge of patients undergoing Hemodialysis.

Introduction-

Self Management Programme for the patients undergoing Hemodialysis to enhance and sustain ability to function normally, like diet, exercise, fluid management, dialysis cycles, medication, satisfaction, symptom control, complications control and health service utilization and improve their impaired health status.Thus the investigator strongly considers that the self-management program to patients undergoing hemodialysis might have the positive impact on the Quality of Life of the patients. To improve the Quality of Life of patients undergoing Hemodialysis, ensuring their proper self-management abilities can be achieved by self-management programme which will aid them for improving or enhancing their self-management abilities. Hence the investigator felt to prepare and administer the Self-Management Programme among the patient.

Objective-

- To assess the Self Management ability among the patients undergoing *Hemodialysis*.
- To findout the association between demographic characteristics with pre-test and post test levels of knowledge scores of self management of hemodialysis patients.

HYPOTHESIS:

All the hypothesis is tested at 0.05 level of significance.

H₁: The mean post test Self Management ability scores of patients undergoing hemodialysis exposed to Self Management Program will be significantly greater than their mean pretest Self Management ability scores.

Research Approach: Evaluative

Research Design: Quasi-Experimental, one group pre test, post test design.

Variables:

Independent Variable: In the present study the independent variable was Self-Management Programme of Hemodialysis for improving/enhancing their self management abilities.

Dependent Variable: In the present study the dependent variable was Self-management ability of Hemodialysis patients to enhance and sustain ability to function normally.

Research Setting: The study will be conducted at Dialysis and Nephrology Unit of KLES Dr.Prabhakar Kore Hospital and Medical Research Centre, Belagavi, Karnataka

Population: Patients who are diagnosed as Chronic Kidney Disease and undergoing Hemodialysis who are admitted in Dialysis or Nephrology Units

Sample: Patients who are diagnosed as Chronic Kidney Disease and undergoing Hemodialysis.

Sample Size: 250 samples

METHODS OF COLLECTION OF DATA:

- **Sampling technique:** Probability: Simple Random Sampling.

- **Instruments/ Tools:**

1. Structured Questionnaire on Self-Management ability in Hemodialysis

DATA COLLECTION METHOD:

The investigator obtains permission from the respective authority and the ethical clearance to conduct the study. Selection of sample (Patients undergoing Hemodialysis) and explaining the purpose of the research study and Probability Simple Random Sampling technique is used to select the participants for the study. Assessing the self-management ability through Structured Questionnaire on Self Management ability among the patients undergoing hemodialysis .Administering Self Management Programme among the Patients undergoing HD.Conducting the post test to assess the effectiveness of Self Management Programme among the patients undergoing Hemodialysis in the experimental group .

SECTION I: FINDINGS ON DEMOGRAPHIC CHARACTERISTICS OF HEMODIALYSIS PATIENTS.

Table 1.1: Comparison of frequency and percentage distribution of hemodialysis patients .

(N=250)

Demographic characteristics	Study. Group	%
Age groups		
<=50yrs	8	3.20
51-60yrs	104	41.60
61-70yrs	135	54.00
>=71yrs	3	1.20
Gender		
Male	178	71.20
Female	72	28.80
Educational status		
Primary education	15	6.00
Secondary education	69	27.60
Higher secondary education	87	34.80
Graduation	79	31.60
Occupational status		
Agriculture	20	8.00
Business	26	10.40
Government service	10	4.00
Private service	50	20.00

Retired	88	35.20
Unemployed	56	22.40
Monthly income		
Rs. 5000/- and 100 below	40	40.00
Rs. 5001/- - 10,000/-	60	24.00
Rs. 10,001/- - 15,000/-	55	22.00
Rs. 15,001/- - 20,000/-	24	9.60
Rs. 20001/-+	11	4.40
Family types		
Joint family	192	76.80
Nuclear family	58	23.20
Marital status		
Married	235	94.00
Unmarried	9	3.60
Widow	6	2.40
Duration of illness		
<1year	89	35.60
1.1-2year	132	52.80
2.1-3year	29	11.60
Total	250	100.00

The data presented in table 1 indicated that in experimental group, majority 135(54%) of the participants belongs to 61-70 years of age and minority 3(1.20%) belongs to ≥ 71 years of age.

In group maximum 178 (71.20%) of participants were male and 72(28.80%)

were female.

Majority 87(34.80%) participants have completed higher secondary education and minority 15 (6%) have completed Primary education respectively. And majority 88(35.20%) were retired and minority 10(4.00%) were in government service..

Majority 100(40.00%) of participants were having monthly income Rs. 5000/- and below and minority 11(4.40%) were having monthly income Rs. 20,001/- and above.

Majority 192 (76.80%) were staying in joint family and minority 58(23.20%) were staying in nuclear family.

Majority 235(94.00%) were married and minority 6(2.40%) were widow. In experimental group, majority 132(52.80%) of participants were having duration of illness since one year one month to two years and minority 29(11.60%) participants were having duration of illness since two years one month to three years respectively .

Section II: Knowledge of self-management of hemodialysis patients.

Table 2: Comparison of study groups with pretest and posttest levels of knowledge (%) of self-management of hemodialysis patients.

(N= 250)

Time points	Levels	Expt. group(f)	%
Pretest	Low level (<mean-SD)	33	13.20
	Average (>=mean-SD, < mean + SD)	192	76.80
	High level (>=mean + SD)	25	10.00
	Total	250	100.00
Chi-square=9.1832 p=0.0101*			
Post test	Low level (<mean-SD)	2	0.80
	Average (>=mean-SD, < mean + SD)	24	9.60

High level (\geq mean + SD)	224	89.60
Total	250	100.00

Chi-square=292.1581, $p=0.0001^*$

Between Pretestvsposttest, McNemar-Bowker Test, chi-square=202.0000, $p=0.0001^*$

Between Pretestvsposttest, McNemar-Bowker Test, chi-square=16.8000, $p=0.0001^*$

Table 2 depicts that in group majority 192(76.80%) participants were having average level of knowledge and minority 25(10%) participants were having high level of knowledge in pre-test. And in case of post test majority 224(89.60%) were having high level of knowledge and minority 2(0.80%) were having low level of knowledge.

Section III: Findings on association between demographic characteristics with pre-test and post test levels of knowledge scores of self-management of hemodialysis patients.

Table 3.1 Association between demographic characteristics with pretest levels of knowledge of self care in experimental Group.

(N=250)

Demographic characteristics	Pretest levels of knowledge								Chi-square	p-value
	Low level	%	Average level	%	High level	%	Total	%		
Age groups										
≤ 50 yrs	2	25.0	5	62.5	1	12.5	8	3.2	3.6280	0.7270
51-60 yrs	15	14.4	77	74.0	12	11.5	104	41.6		
61-70 yrs	15	11.1	108	80.0	12	8.9	135	54.0		
≥ 71 yrs	1	33.3	2	66.7	0	0.0	3	1.2		
Gender										
Male	24	13.5	135	75.8	19	10.7	178	71.2	0.3920	0.8220
Female	9	12.5	57	79.2	6	8.3	72	28.8		

Educational status

Primary education	5	33.3	10	66.7	0	0.0	15	6.0	10.192	0.1170
Secondary education	7	10.1	57	82.6	5	7.2	69	27.6		
Higher secondary education	10	11.5	64	73.6	13	14.9	87	34.8		
Graduation	11	13.9	61	77.2	7	8.9	79	31.6		

Occupational status

Agriculture	2	10.0	17	85.0	1	5.0	20	8.0	3.4670	0.9680
Business	3	11.5	19	73.1	4	15.4	26	10.4		
Government service	2	20.0	7	70.0	1	10.0	10	4.0		
Private service	8	16.0	37	74.0	5	10.0	50	20.0		
Retired	12	13.6	69	78.4	7	8.0	88	35.2		
Unemployed	6	10.7	43	76.8	7	12.5	56	22.4		

Monthly income

Rs. 5000 and below	18	18.0	73	73.0	9	9.0	100	40.0	9.2920	0.3180
Rs. 5001 - 10,000	7	11.7	50	83.3	3	5.0	60	24.0		
Rs. 10,001 - 15,000	4	7.3	43	78.2	8	14.5	55	22.0		
Rs. 15,001 -20,000	4	16.7	17	70.8	3	12.5	24	9.6		
Rs. 20001+	0	0.0	9	81.8	2	18.2	11	4.4		

Family types

Joint family	24	12.5	150	78.1	18	9.4	192	76.8	0.8200	0.6640
Nuclear family	9	15.5	42	72.4	7	12.1	58	23.2		

Marital status

Married	33	14.0	181	77.0	21	8.9	235	94.0	7.0660	0.1320
Unmarried	0	0.0	7	77.8	2	22.2	9	3.6		
Widow	0	0.0	4	66.7	2	33.3	6	2.4		

Duration of illness

<1year	10	11.2	68	76.4	11	12.4	89	35.6	1.3210	0.8580
1.1-2year	19	14.4	101	76.5	12	9.1	132	52.8		
2.1-3year	4	13.8	23	79.3	2	6.9	29	11.6		
Total	33	13.2	192	76.8	25	10.0	250	100.		

Table 3.1 depicts that there was no association found between the demographic characteristics with pre-test levels of knowledge scores of self-management of hemodialysis patients ($p > 0.005$).

Table 3.2 Association between demographic characteristics with posttest levels of knowledge.

(N=250)

Demographic characteristics	Posttest levels of knowledge						Total	%	Chi-square	p-value
	Low level	%	Average level	%	High level	%				
Age groups										
<=50yrs	0	0.0	0	0.0	8	100.0	8	3.2	3.1240	0.7930
51-60yrs	1	1.0	9	8.7	94	90.4	104	41.6		
61-70yrs	1	0.7	14	10.4	120	88.9	135	54.0		
>=71yrs	0	0.0	1	33.3	2	66.7	3	1.2		
Gender										
Male	1	0.6	16	9.0	161	90.4	178	71.2	0.7290	0.6950
Female	1	1.4	8	11.1	63	87.5	72	28.8		
Educational status										
Primary education	0	0.0	1	6.7	14	93.3	15	6.0	4.4050	0.6220
Secondary education	1	1.4	10	14.5	58	84.1	69	27.6		
Higher secondary education	1	1.1	8	9.2	78	89.7	87	34.8		
Graduation	0	0.0	5	6.3	74	93.7	79	31.6		

Occupational status

Agriculture	0	0.0	2	10.0	18	90.0	20	8.0	6.1280	0.8040
Business	0	0.0	4	15.4	22	84.6	26	10.4		
Government service	0	0.0	0	0.0	10	100.0	10	4.0		
Private service	1	2.0	3	6.0	46	92.0	50	20.0		
Retired	0	0.0	8	9.1	80	90.9	88	35.2		
Unemployed	1	1.8	7	12.5	48	85.7	56	22.4		

Monthly income

Rs. 5000 and below	0	0.0	14	14.0	86	86.0	100	40.0	13.9550	0.0830
Rs. 5001 - 10,000	2	3.3	2	3.3	56	93.3	60	24.0		
Rs. 10,001 - 15,000	0	0.0	4	7.3	51	92.7	55	22.0		
Rs. 15,001 -20,000	0	0.0	4	16.7	20	83.3	24	9.6		
Rs. 20001+	0	0.0	0	0.0	11	100.0	11	4.4		

Family types

Joint family	1	0.5	20	10.4	171	89.1	192	76.8	1.4080	0.4950
Nuclear family	1	1.7	4	6.9	53	91.4	58	23.2		

Marital status

Married	2	0.9	23	9.8	210	89.4	235	94.0	1.4490	0.8360
Unmarried	0	0.0	0	0.0	9	100.0	9	3.6		
Widow	0	0.0	1	16.7	5	83.3	6	2.4		

Duration of illness

<1year	0	0.0	9	10.1	80	89.9	89	35.6	3.5120	0.4760
1.1-2year	1	0.8	13	9.8	118	89.4	132	52.8		
2.1-3year	1	3.4	2	6.9	26	89.7	29	11.6		
Total	2	0.8	24	9.6	224	89.6	250	100.		

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Table 3.2 depicts that there is no association found between the demographic characteristics with post-test levels of knowledge scores of self management of hemodialysis patients ($p > 0.005$).

DISCUSSION

Section I: Findings on demographic characteristics of hemodialysis patients.

Majority 135(54%) of the participants belongs to 61-70 years of age group and minority 3(1.20%) belongs to ≥ 71 years of age group, Maximum 178 (71.20%) of

participants were male and 72(28.80%) were female.

Majority 87(34.80%) participants have completed higher secondary education and minority 15 (6%) have completed Primary education respectively. Majority 88(35.20%) were retired and minority 10(4.00%) were in government service. And majority 100(40.00%) of participants were having monthly income Rs. 5000/- and below and minority 11(4.40%) were having monthly income Rs. 20,001/- and above.

Majority 192 (76.80%) were staying in joint family and minority 58(23.20%) were staying in nuclear family respectively.

In experimental group majority 235(94.00%) were married and minority 6(2.40%) were widow.

In experimental group, majority 132(52.80%) of participants were having duration of illness since one year one month to two years and minority 29(11.60%) participants were having duration of illness since two years one month to three years respectively.

There was no association found between the demographic characteristics with pre-test levels of knowledge scores of self-management of hemodialysis patients ($p>0.005$).

Section III: Findings on association between demographic characteristics with pre-test and post test levels of knowledge scores of self-management of hemodialysis patients in experimental group.

i) Association between demographic characteristics with pretest levels of knowledge of self care.

There was no association found between the demographic characteristics with pre-test levels of knowledge scores of self-management of hemodialysis patients in experimental group ($p>0.005$).

ii) Association between demographic characteristics with posttest levels of knowledge in experimental group.

No association found between the demographic characteristics with post-test levels of knowledge scores of self-management of HD patients in experimental group ($p>0.005$).

Key words: CKD -Chronic Kidney Disease, HD-Hemodialysis,

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