Effectiveness of structured teaching programme on knowledge regarding exercise among clients undergoing hemodialysis in selected hospital, at Karimnagar, Telangana

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Abstract

Background: Objectives: Generation today is very different from the past years. Many things are invented in terms of food, technology and other things. Due to sedentary life style, stress from daily living and lack of healthy activities, numerous people are now suffering from certain diseases. One common disease in this present time is kidney failure. Hemodialysis is the most common method used to treat advanced and permanent kidney failure. Hemodialysis patients must be able to perform exercise in order to prevent complications and live life productivily.

Objectives: Assess the level of knowledge regarding exercise among clients undergoinghemodialysis. Determinethe effectiveness of structured teaching programme on knowledge regarding exercise among clients undergoing hemodialysis. Find out the association between the post-test knowledge score regarding exercisesamong clients undergoing hemodialysis with theirselected demographic variables.

Materials and Methods: Pre experimental research design was chosen to assess the knowledge.The sample size was 30 hemodialysis clients. Demographic variables and the level of knowledge among hemodialysis clients concerning regarding exercise were collected by using structured questionnaire.

Results: The current knowledge level of hemodialysis clients regarding exercise portrays that score in pre test 46.7% had below average knowledge and 53.3% had average knowledge score, where as in post test 20% had average knowledge and 80% of hemodialysis clients had above average knowledge score. The knowledge score in pre test mean 12.16 and standard deviation 3.30 and post test mean 20.3 and standard deviation 3.52. The difference in level of knowledge is found statistically significant by calculating 't' value which was found to be 9.35 which is more than the table value 2.05.

Conclusion: The findings reveals that most of the hemodialysis clients improved their knowledge level after the structured teaching programme.

Key words: exercise, clients undergoing hemodialysis.

INTRODUCTION
"An ounce of prevention is worth a pound of cure"
        William Clark
Health of the hemodialysis clients has a dynamic condition resulting from a body's constant adjustment and adoption in response to stresses and changes in the environment for maintaining an inner equilibrium. Kidneys are important organs with many functions in the body including producing hormones, absorbing minerals and filtering blood and producing urine. Dialysis is medical treatment that makes up for decrease kidney function by filtering toxins out of the body, Hemodialysis is a therapy that filters waste removes extra fluid and electrolytes. Hemodialysis clients should adopt many exercise for reducing the complications due to dialysis.

STATEMENT OF PROBLEM
        "Effectiveness of structured teaching programme on knowledge regarding exercise among clients undergoing hemodialysis in selected hospital, at Karimnagar, Telangana.**"**

OBJECTIVES
The objectives of the study were to:
* assess the level of knowledge regarding exercise before and after structured teaching programme among clients undergoing hemodialysis.

- determine the effectiveness of structured teaching programme on knowledge regarding exercise among clients undergoing hemodialysis.
- Find out the association between the post test knowledge score regarding exercise among clients undergoing hemodialysis with their selected demographic variables.

II RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem..

Research Design:pre experimental research design was chosen to assess the knowledge.

Settings of the Study: The study was conducted in selected hospital at Karimnagar.

Population; The study population comprises clients undergoing hemodialysis in selected hospital at Karimnagar.

Sample size; The sample of 30 clients undergoing hemodialysis who fulfilled the inclusion criteria is considered as sample for this study.

Sampling Technique: Convenient sampling technique was used for the selection of sample for the study.

Criteria for sample selection

Inclusion criteria

- Clients who are undergoing hemodialysis in selected hospital, at Karimnagar
- Clients who are willing to participate in the study.

Exclusion criteria

- Clients who are not available at the time of study.
- Clients who are having other medical conditions.

Description of the tool

It consists of two sections:

SectionA. It deals with demographic variables such as age, gender, educational qualification, health resources, source of information,since how many years on hemodialysis.

Section B. A structured questionnaire consisting of 30 multiple choice questions and each question has 4 choices, each correct response carries 1 mark and wrong response carries 0 marks.

PROCEDURE FOR DATA COLLECTION

Data was collected from clients undergoing hemodialysis after obtaining a formal written permission from the hospital authority of selected hospital. Each person was assured for data collected from them was utilized only for the purpose of study and will be kept confidential. The investigator used structured questionnaire to collect data.

PLAN FOR DATA ANALYSIS

Descriptive and inferential statistics was used to analyze the collected data.

SECTION-I: The demographic data was analyzed by using frequency and percentage.

SECTION-II: Distribution of respondents according to pre-test and post-test scores was analyzed by mean and standard deviation.

SECTION-III: Effectiveness of structured teaching programme was analyzed by paired 't' test.

SECTION-IV: Association of post test knowledge score among clients undergoing hemodialysisregarding exercise with their selected demographic variables was analyzed by chi-square.

III . RESULTS

Descriptive and inferential statistics was used to analysis the collected data.

SECTION-I

Table-1 Frequency and percentage distribution regarding exercise among clients undergoing hemodialysisaccording to their demographic variables.

n=30

SI.NO	Demographic variable	clients undergoing hemodialysis	
		Frequency	Percentage%

1.	Age		
	a) <30 years	4	13.34
	b) 31-40 years	5	16.66
	c) 41-50 years	11	36.66
	d) 51-60 years	4	13.34
	e) >60 years	6	20
2.	Gender		
	a) Male	21	70
	b) Female	9	30
3.	Education qualification		
	a) Illiterate	5	16.67
	b) Primary education	11	36.66
	c) Secondary education	10	33.33
	d) Degree and above	4	13.34
4	Source of information		
	a) Television	9	30
	b) Radio	1	3.34
	c) News papers	5	16.66
	d) Health professionals	11	50
5	Health resources		
	a) Aarogyasree	26	86.66
	b) Others	4	13.34
6	Since how many years on hemodialysis		
	a) 1 month-1 year	3	10
	b) >1 year- 3 years	13	43.34
	c) >3years-5 years	11	36.66
	d) More than 5 years	3	10

SECTION-II
PART-I
   Table-2 : Frequency and percentage distribution of clients undergoing hemodialysisaccording to their pre test knowledge score regardingexercise.

n=30

SI.No	Level of knowledge	Frequency	Percentage%
1.	Below average (1-10)	14	46.7%
2.	Average (11-20)	16	53.3%
3.	Above average (21-30)	-	-

Table -2 Shows that 14 (46.7%) of clients undergoing hemodialysis had below average knowledge and 16 (53.3%) of clients undergoing hemodialysis had average knowledge and none of them had above average knowledge.

PART-II
Table-3 : Frequency and percentage distribution of clients undergoing hemodialysisaccording to their post test knowledge scores regarding exercise.

n=30

SI.No	Level of knowledge	Frequency	Percentage%
1.	Below Average(1-10)	-	-
2.	Average (11-20)	6	20%
3.	Above average (21-30)	24	80%

Table-3 : Shows that 24 (80%) of clients undergoing hemodialysis had above average knowledge and 6 (20%) of clients undergoing hemodialysis had average knowledge and none of the hemodialysis had below average knowledge.

SECTION-III
Table-4 : Comparison of pre test and post test scores of clients undergoing hemodialysisregarding exercise.
n=30

Parameters	Time interval	No.of subjects	Mean	Standard Deviation	t value	Critical value
Knowledge regarding exerciseamong clients undergoing hemodialysis	Pre test	30	12.16	3.30	9.35*	2.05
	Post test	30	20.3	3.52		

*=Significant

Table – 4 Shows that the mean knowledge score during pre test was 12.16 and standard deviation 3.30 where as during post test was 20.3 and standard deviation 3.52. This difference of knowledge score is found to statistically significant. The computed 't' value is 9.35 that are more than the table value of 2.05 at 0.05% level. This reveals standard deviation between pre test and post test.

SECTION-IV

Table- 5 Association between post test knowledge scores of clients undergoing hemodialysisregarding exercise with their selected demographic variables.
n=30

			Knowledge score			

SI. No	Variables	Category	1-10 below average	11-20 average	21-30 Above average	Chi-square	Df	Critical value
1.	Age	<30 years 31-40 years 41-50 years 51-60 years >60 years	0 0 0 0 0	0 1 2 3 0	9 2 9 2 2	8.08 NS	8	15.50
2.	Gender	Male Female	0 0	0 6	16 8	8.56*	2	5.99
3.	Educational qualification	Illiterate Primary education Secondary education Degree	0 0 0 0	0 4 0 2	6 8 10 0	13.32*	6	12.59
4.	Source of information	Television Radio News paper Health professionals	0 0 0 0	2 0 1 3	4 0 4 16	1.24 NS	6	12.59
5.	Health resources	Aarogyasree Others	0 0	6 0	22 2	2.13 NS	2	5.99
6	Since how many years on hemodialysis	1 month- 1 year 1year-3 years 3years-5 years 5 years and above	0 0 0 0	0 5 1 0	18 2 4 0	14.2*	6	12.59

*=Significant, NS= Non significant

Table-5 Shows that gender, educational qualification, since how many years on hemodialysis had significant association with knowledge score as the chi- square value is greater than critical value and there is no significance association between knowledge score and other demographic variables such as age, , source of information, health resources,

IV DISCUSSION

The purpose of the present study was to assess knowledge of clients undergoing hemodialysis regarding exerciseat selected hospital.The study found that more than half of the clients undergoing hemodialysishad improved knowledge and less had average knowledge on exerciseamong clients undergoing hemodialysis.There was a significant association between the level of knowledge with selected demographic variables ..Similar result has been observed in another study done **Varesh G. Chilpur, 2018** Conducted a pre experimental study to assess the effectiveness of structured teaching programme on exercise among clients undergoing hemodialysis in Bhubaneswar . A sample of50 clients undergoing hemodialysis are selected at kumareshwar hospital .The results revealed that there was significance difference between pre test and post test knowledge score that is pre test mean 18.9 and standard deviation 2.20 and post test mean was 23.5 standard deviation 3.56 (t=19.11, p<0.05). The study

concluded that structured teaching programme on knowledge regarding exerciseamong clients undergoing hemodialysis was effective.

CONCLUSION:

The knowledge of clients undergoing hemodialysis regarding exercise hemodialysis was below average and average before structured teaching programme where as the knowledge of clients undergoing hemodialysis was average and above average after structured teaching programme. The post test mean knowledge score of the clients undergoing hemodialysis was higher than pre test mean knowledge score.

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