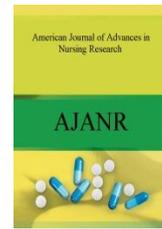




## AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH



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### A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE OF CLIENTS UNDERGOING HEMODIALYSIS REGARDING MANAGEMENT OF HEMODIALYSIS AT SELECTED HOSPITALS, ANDHRA PRADESH.

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#### ABSTRACT

Healthy kidneys clean your blood and remove extra fluid in the form of urine. They also make substances that keep your body healthy. Dialysis replaces some of these functions when your kidneys no longer work. There are two different types of dialysis - hemodialysis and peritoneal dialysis. In haemodialysis, a machine filters wastes, salts and fluid from blood when kidneys are no longer healthy enough to do work adequately. Hemodialysis is the most common way to treat advanced kidney failure. The procedure helps to carry on an active life despite failing kidneys. The study was conducted on 60 clients undergoing hemodialysis between the age of 30 – 60 yrs to assess the knowledge of clients regarding management of hemodialysis. Research approach adopted for this study is quantitative approach. Research design is one group pre test and post test design. The findings revealed that 66.67 percent of clients undergoing hemodialysis had average level of knowledge about the management of hemodialysis and now improved to 53.3 percent above average after structured teaching plan. The study found that the structured teaching programme was effective and the knowledge of the clients was upgraded.

#### INTRODUCTION

The kidney does the major work of the urinary system. The other parts of the system are namely passage way and storage areas. The basic function of the kidney is to clear the blood plasma of the waste products of metabolism and to maintain an internal homeostasis. The two major forms of dialysis are hemodialysis and peritoneal dialysis. Hemodialysis uses a special filter called a dialyzer that functions as an artificial kidney to

clean a person's blood. The dialyzer is a canister connected to the hemodialysis machine. Treatment for hemodialysis takes place in a hemodialysis unit, a special building that is equipped with machines for treatment. In dialysis unit, the client can receive dietary counseling and help with social needs. Patients generally go through the dialysis unit 3 times a week for treatment. Treatment lasts from 2 – 4 hours. During this time, the dialysis staff checks the patient's blood pressure frequently and the machine to ensure whether the proper amount of fluid is being removed from the patient's body [1-5].

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Research Article



### Need for the study

A significant number of patients undergo hemodialysis at Selected Hospital in Andhra Pradesh. Some patients have to repeatedly undergo the procedure. The patients have stay in the dialysis unit for 16 – 36 hour .The procedure lasts for 2 – 4 hours. The investigators clinical posting observed that the patient experience various problems during the procedure and also find that the assessment of the patient's management of the problems is inadequate. The attention paid by nurses to manage the problems are managed well where as some are partially attended, while some other problems go unnoticed. The investigator also observed that though some standard orders are followed, no written protocol for providing nursing care to these patients is available. The responsibility for observation monitoring , carries out all with nurses .Several factors like lack of specially trained staff and lack of orientation to relieving duty staff influences the care of patients [5-10].

### Statement of problem

A study to assess the effectiveness of structured teaching programme on knowledge of clients undergoing hemodialysis regarding the management of hemodialysis at Selected hospital in Andhra Pradesh.

### Operational definition

- ❖ Effectiveness – improvement of post test scores after structured teaching programme regarding the management of hemodialysis.
- ❖ Structured teaching programme – a planned teaching programme with the help of instructional aids prepared by investigator on management hemodialysis.
- ❖ Knowledge – it refers to correct fact and information obtained by clients regarding the management of hemodialysis.
- ❖ Client – one who is sick with or being treated for hemodialysis within the age group of 30 – 60 years.
- ❖ Management - management are a set of activities directed at the efficient and effective utilization of resources for the care of hemodialysis
  - diet
  - exercise
  - access care
- ❖ Hemodialysis – technique of removing waste and balances the electrolyte fluid level of the body.

### Assumption

- ❖ Clients undergoing hemodialysis will have some knowledge about the hemodialysis.
- ❖ Clients selected for the study will respond honestly to the questionnaire.

### Hypothesis

There will be significant increase in the

knowledge of clients undergoing hemodialysis regarding the management of hemodialysis after structured teaching programme. There will be no significant difference between the pre test and post test level of knowledge about the management of hemodialysis [11].

### METHODOLOGY

Research approach adopted for this study is quantitative approach. Research design is one group pre test and post test design. Independent variable is structured teaching programme on management of hemodialysis. Dependent variable is knowledge on management of hemodialysis among clients undergoing hemodialysis. Extraneous variables are sex, age ,education and occupation. Setting of study selected for the study is Selected Hospitals, Andhra Pradesh. Population for the study is clients undergoing hemodialysis in private hospitals. Random sampling is the method of sampling technique. Sample size is 60 clients undergoing hemodialysis. Knowledge questionnaire was the method used for data collection. A value of  $r = .888$  was obtained indicating the tool to be highly reliable and analysis was done with the help of descriptive and inferential statistical method [12-14].

### Analysis and Interpretation

Data was collected from 60 clients undergoing hemodialysis at Selected hospitals in Andhra Pradesh. A structured questionnaire was used for data collection. The knowledge of the clients undergoing hemodialysis was increased after structured teaching programme. and analysis was done with the help of descriptive and inferential statistical methods.

### Findings of the study

Majority Of clients (41.67%) 25 are with 41 -50 years, 56.67% majority are males, 36.67% are with secondary level educational status, 51.67% of clients are privately employed, 25.00 % are government employees, Majority of them [31.67% ] are with 1- 2 yrs of duration of illness, 66.67% are non – vegetarian, 78.33% are having nuclear family 21.67, 40.00% are having family income from Rs 6,001 – Rs 9000/ .

The pre test score was below average for 18.3 % of the clients, where as in the post test 0% of the clients obtained below average score. The obtained chi square was 52.108 was highly significant at 0.05 level with  $df = 2$ .

Comparison of pre test and post test knowledge level of clients undergoing hemodialysis to determine the effectiveness of structured teaching programme on management of hemodialysis.

There is no association between pre test and post test scores with age,sex, religion, marital status,



duration of illness, type of diet, family income and type of family. There is an association between educational status

[p=0.04] [ Table – 1],occupational status [p=0.02] [Table – 11]and post test knowledge level.

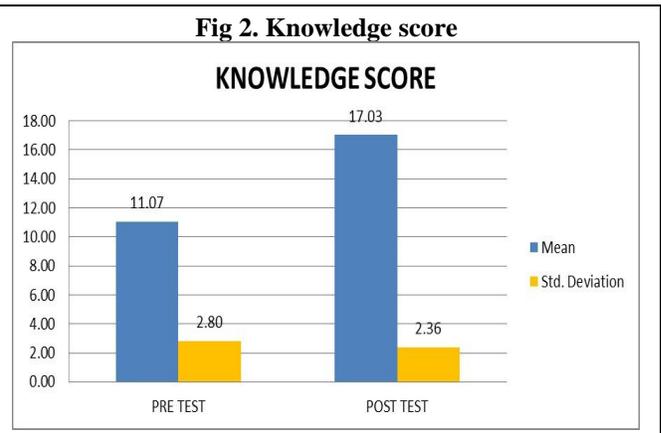
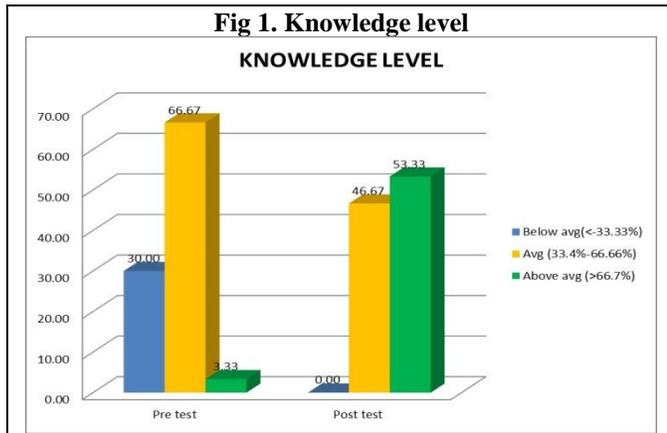


Table 1. Paired Samples Statistics

Pair		Mean	N	Std. Deviation	Std. Error Mean
1	PRE TEST	11.0667	60	2.80355	.36194
	POST TEST	17.0333	60	2.36476	.30529

Table 2. Occupational status

	Educational status	Below avg(<-33.33%)		Avg (33.4%-66.66%)		Above avg (>66.7%)		Total Frequency	Chi-Square Value	df	P-value
		F	%	F	%	F	%				
Pre test	illiterate	6	100.00	0	0.00	0	0.00	6	22.98	8	0.00
	primary education	7	38.89	10	55.56	1	5.56	18			
	secondary education	4	18.18	17	77.27	1	4.55	22			
	intermediate	0	0.00	12	100.00	0	0.00	12			
	graduate and above	1	50.00	1	50.00	0	0.00	2			
	Total	18	30.00	40	66.67	2	3.33	60			
Post test	illiterate			6	100.00	0	0.00	6	9.91	4	0.04
	primary education			7	38.89	11	61.11	18			
	secondary education			7	31.82	15	68.18	22			
	intermediate			7	58.33	5	41.67	12			
	graduate and above			1	50.00	1	50.00	2			
	Total			28	46.67	32	53.33	60			

Table 3. Occupational status

	Occupation	Below avg(<-33.33%)		Avg (33.4%-66.66%)		Above avg (>66.7%)		Total Frequency	Chi-Square Value	df	P-value
		F	%	F	%	F	%				
Pre test	labour	5	100.00	0	0.00	0	0.00	5	21.42	8	0.01
	government employee	1	6.67	13	86.67	1	6.67	15			
	private employee	12	38.71	18	58.06	1	3.23	31			
	business	0	0.00	8	100.00	0	0.00	8			
	others	0	0.00	1	100.00	0	0.00	1			
	Total	18	30.00	40	66.67	2	3.33	60			



Post test	labour			5	100.00	0	0.00	5	11.22	4	0.02
	government employee			3	20.00	12	80.00	15			
	private employee			15	48.39	16	51.61	31			
	business			4	50.00	4	50.00	8			
	others			1	100.00	0	0.00	1			
	Total			28	46.67	32	53.33	60			

## CONCLUSIONS

The findings revealed that 66.67 percent of clients undergoing hemodialysis had average level of knowledge about the management of hemodialysis and now improved to 53.3 percent are above average. So the study shows that structured teaching programme was effective and the knowledge is upgraded.

### Implications

The findings of the study have implemented in four areas like nursing education, nursing practice, nursing management and nursing research.

### Nursing education

This study also has implications for Nursing Education as there is an increased need to train prospective nurses to give knowledge about the management of hemodialysis to the clients. Nursing education must also focus on strategies for maintaining health, coping with the actual and potential complications of hemodialysis.

Nursing students can be trained to impart health education to the clients. So the nursing students develop interest and initial skills and continue to health education about self-Care at home

### Nursing practice

The Nursing Superintendent or in charge of wards should keep available protocol about the management of hemodialysis to ensure that all clients will follow and take the safety measures.

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### Nursing management

Nursing management should plan teaching program for all clients undergoing hemodialysis on management of hemodialysis right from the day of admission till discharge and necessary literature must be provided for future reference.

Management of the hospital should see that appropriate information provided related management of hemodialysis and prevention of complications to the clients. So that the clients and family members will be benefited and educate others.

### Recommendations for future study

- A Same study may be conducted to assess the knowledge of clients admitted in other hospitals.
- A study may be conducted to assess the practices of clients undergoing hemodialysis on management of hemodialysis.
- An evaluation study may be conducted to identify utilization and effectiveness of self informational modules available in Gandhi hospital.
- A same study may be conducted in clients below the age group of 30 years.

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### CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

