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ORIGINAL ARTICLE

Exploratory Study on Adherence to Instructions for Care at Home Given by Staff Nurses among Clients on Haemodialysis

Shivani Devi

Lecturer, Medical Surgical Nursing, Mata Padmawati College of Nursing, Nahan, Himachal Pradesh 173001, India.

Abstract

Chronic kidney failure is worldwide health problem. Haemodialysis is a lifesaving therapy. The main objective of study wasto identifies the adherence to instructions for care at home given by staff nurses among clients on haemodialysis. 50 samples were taken by purposive sampling technique. The data were collected by interview schedule. The data showed that clients on haemodialysis had moderate adherence to instructions for care home given by staff nurses.

Keywords: Adherence; Instructions; Haemodialysis.

Background of Study

Renal Failure, also called Kidney failure is diagnosed when the kidneys are no longer functioning adequately to maintain the normal process. This results in dysfunction in almost all other parts of the body as result of imbalance in fluid electrolytes, calcium levels, as well as RBC production and decreased elimination of waste products [1]. Chronic kidney disease is a worldwide health problem. WHO reported that about one million new cases of end stage renal disease are reported worldwide every year. In India, the approximate prevalence of chronic renal failure is 800 million populations and incidence of ESRD (end stage renal failure) is 150-200 per million populations. Renal disease is a growing rapidly in India because of high prevalence of diabetes and hypertension which are root causes of ESRD. Haemodialysis is the most common treatment advised for permanent kidney failure [2]. Haemodialysis remove waste products and excess fluid directly from the blood by pumping it through a filter called dialyzer artificial kidney. A small amount of blood is continually removed from the body, pumped through the dialyzer filter and returned to the body [3].

Adherence is defined as "the extent to which a person's behaviour corresponds with the agreed recommendations of a health- care provider in terms of taking medications, following a recommended diet and/or executing lifestyle changes" [4]. Adherence to complicated treatment regimen associated with haemodialysis is vital. However, by comprising the delivery of dialysis, no adherence can affect both patients' morbidity and mortality [5]. To manage the chronic condition successfully, haemodialysis patients should be responsible for many aspects of their own treatment including adherence to medication prescription, adherence to diet and fluid restrictions and complete attendance at haemodialysis sessions [6]. Adherence to diet and fluid is paramount for treatment success. Failure to adhere may lead to increased complication rates and associated costs, and decreased survival [7].

Need of Study

Renal failure is one of the most common disease

Reprint Request: Shivani Devi, Lecturer, Medical Surgical Nursing, Mata Padmawati College of Nursing, Nahan, HP. E-mail: shivu.rana22@gmail.com

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in India [1]. Renal disease is a growing rapidly in India because of high prevalence of diabetes and hypertension which are root causes of ESRD [8]. The mean age of ESRD in India is between 32 and 42 years [3]. In India about 2,20,000–2,75,000 new patients need RRT (renal replacement therapy) every year [1]. It is estimated that there are about 55,000 patients on dialysis in India [2]. Dialysis population is growing at the rate of 10–20% annually in India [2].

The care of patient on haemodialysis focussed on preventing the complications of dialysis, dietary management, medications, promoting the quality of life [9]. Clients on haemodialysis have instructions for care at home. Adherence to complicated treatment regimen associated with haemodialysis is vital [5]. Adherence to instructions can increase quality of life for clients on haemodialysis. After adhering to instructions the mortality rate of clients on haemodialysis were decreased from 4-5% annually in India [10].

Statement of Problem

An exploratory study on adherence to instructions for care at home given by staff nurses among clients on haemodialysis at Surya Kidney Care Unit of Shivalik Hospital, Sector-69, Ajitgarh, Punjab.

Objectives of Study

- To assess and describe the adherence to instructions for care at home given by staff nurses among clients on haemodialysis.
- To determine association between socio-demographic data and adherence to instructions.

Assumption

Clients on haemodialysis have adherence to instructions for care at home given by staff nurses at Surya Kidney Care Unit of Shivalik Hospital, Sector 69, Ajitgarh, Punjab.

Research Methodology

A quantitative exploratory non experimental approach was used for the study.The study was conducted in Surya Kidney Care Unit of Shivalik Hospital, Sector 69, Ajitgarh, Punjab. 50 Samples of study subjects were selected by Purposive non probability sampling technique. Data was collected by using self structure interview schedule which was divided into two parts. Section 1: Identification and socio-demographic data and Section 2: Interview schedule to assess adherence to instructions for care at home given by staff nurses. This section consisted questions related to adherence like weight and blood pressure monitoring, fluid restriction, dietary restriction, alcohol and smoking, fistula care, medication, investigation and dialysis. To ensure content validity tool was submitted to experts of different field of nursing. The reliability of the tool was determined by using Split half method. The 'r' value calculated was r= 0.90, hence tool was considered reliable. The permission was obtained from head of department of Surya Hospital. Interview was conducted on 50 clients on haemodialysis. Descriptive and inferential statistical were used to analyse the data.

Results

Table 1: Grading of adherence score of study subjects on instructions for care at home (N=50)

S. No.	Grading of Adherence Score	F	% age
1	No adherence 1-7	09	18
2	Moderate adherence 8-14	30	60
3	Complete adherence 15-22	11	22

Table 2: Area wise level of adherence of study subjects regarding instructions for Care at home (N=50)

S. No.	Area Wise Adherence of Study Subjects	Mean	SD ±
1	Weight and blood pressure monitoring	0.60	1.42
2	Fluid restrictions	1.46	1.42
3	Dietary restrictions	3.28	2.05
4	Alcohol and smoking	1.52	0.69
5	Fistula care	2.96	1.15
6	Medication	1.12	0.98
7	Investigation and haemodialysis	1.50	0.77

Table 3: Association of adherence score of study subjects with various socio demographic variables

Demographic variable	Level of adherence			Chi square	DF	Table value	P value
	No adherence	Moderate adherence	Adequate adherence				
Age in year							
<25	02	04	Nil				
25-40	01	05	02				
41-56	02	06	05	6.98	8	15.51	<0.05
57-72	02	11	04				NS
>72	02	04	Nil				
Gender							
Male	06	19	06				< 0.05
Female	05	11	03	0.36	2	5.99	NS
Marital Status							
Married	04	17	10				
Unmarried	02	05	Nil	5.62	4	9.49	<0.05
Widow/widower	03	08	01				NS
Education							
Illiterate	01	05	Nil				
Primary	03	06	01				
Middle	01	09	03	7.65	8	15.51	<0.05
Higher Secondary	03	06	06				NS
Graduate and above	01	04	01				
Occupation							
Self employed	02	05	03				
Service employed	01	01	02				<0.05
Unemployed	06	19	06	6.39	6	12.59	NS
Pensioner	Nil	05	Nil				
Annual income							
Nil	06	19	06				
10,000-30,000	01	02	Nil				<0.05
30,001-50,000	01	05	02	2.53	6	12.59	NS
>50,000	01	04	03				
Type of family							
Nuclear	04	09	04				<0.05
Joint	05	21	07	0.67	2	5.99	NS
Religion							
Hindu	04	09	04				<0.05
Muslim	Nil	Nil	01	4.41	4	9.49	NS
Sikh	05	21	06				
Dietary habit							
Vegetarian	03	13	07				<0.05
Non Vegetarian	06	17	04	2.04	2	5.99	NS
Habit of smoking							
Yes	06	11	03	3.54	2	5.99	<0.05
No	03	19	08				NS
Frequency of smoking							
1-2/day	06	11	01	10.11	4	9.49	**<0.05**
3-4/day	Nil	01	01				**SS**
Hypertension and Diabetes mellitus							
Yes	09	29	11	0.68	2	5.99	< 0.05
No	Nil	01	Nil				NS

NS- Not Significant, S-Significant

Major Findings

- Majority of study subjects (60%) were found to be moderately adhere, 22% were completely adhere and 18% were not adhere to instructions for care at home supported byMellon L, Regan D, Curtis R (2013).

- It was found with the help of mean score that the study subject had highest adherence in dietary restriction (3.28 ±2.05) supported by KhalliAA, Darawad M, AI Gamal E, Hamdon Mansour M, Abed MA (2013), fistula care (2.96±1.15) and alcohol and smoking (1.52± 0.69)supported by Cleo JRichard (2006) also showed the result with mean score 2.1 ±1.2. [5,6].
- Further decrease in mean score in the area of investigation and haemodialysis were (1.50± 0.77), Also supported by Fathima, Vijaya(2004), fluid restriction (1.46±1.42), lastly the least mean score were observed in the areas of medication (1.12±0.98). Finding of study also supported by Louise C (2004) and weight and blood pressure monitoring (0.60±1.42) Aliagharpor M, Shomali M, Moghaddam MZ, Faghihzadeh S (2012).
- Study showed that there were no significant association of adherence with age, gender, marital status, education, occupation, annual income, type of family, religion, dietary habit, habit of smoking, hypertension and diabetes mellitus supported by Ozmeet E, Uckardes y (2003). However, adherence and frequency of smoking were found to be statistically significant Similar by Bhan Mk, Arora NK (2002).

Recommendation

- The study can be replicated on a larger sample to validate and generalize finding.
- Same study can be conducted by including feedback.
- An exploratory study can be done on factor influencing on adherence to instructions for care at home and to improve levels of adherence.

Conclusion

In the present study total 50 study subjects participated. Majority of the study subjects were in the age group of 56-70, majority of study subjects had hypertension 98% and diabetes mellitus 98% and were moderately adhere 60% to instructions for care at home given by staff nurses. Inference was drawn that age, gender, marital status, education, occupation, annual income, type of family, religion, dietary habit, habit of smoking, hypertension and diabetes had no effect on adherence to instructions for care at home. However association between frequencies of smoking was found to be statistically significant. Hence, this implies that adherence score of the subjects were dependent on with frequency of smoking.

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