



A STUDY TO ASSESS THE KNOWLEDGE REGARDING RISK OF COMPLICATION AND THEIR PREVENTION AMONG PATIENTS UNDERGOING HAEMODIALYSIS AT TERTIARY CARE HOSPITAL, JODHPUR

Shankar Lal Nehra
M.Sc. Nursing (MSN)

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ABSTRACT

INTRODUCTION: Haemodialysis is a method for removing waste products such as potassium and urea, as well as free water from the blood when the kidneys are in renal failure. Haemodialysis is one of three renal replacement therapies¹. Accuracy of figures on RRT prevalence may vary, as few countries have comprehensive dialysis and transplant registries, hence underreporting may be an issue. It is clear, however, that large numbers of people in low- and middle-income countries LMIC die from kidney failure without receiving any treatment.

AIM OF THE STUDY: Assess the knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis at tertiary care hospital.

MATERIAL AND METHOD: A descriptive study was carried out on 60 patients undergoing hemodialysis at tertiary care hospital Jodhpur. Samples were selected by using Non Probability Purposive Sampling Technique. Data was collected using structured knowledge questionnaire and analyzed by using descriptive and inferential statistics.

RESULT: The findings of the study reveals that (53.33%) of patients undergoing haemodialysis had average level of knowledge, the remaining (33.33%) had poor level of knowledge, (13.33%) had good level of knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis. However there was no significant association found between knowledge and selected demographic variables except qualification, types of residence.

CONCLUSION: It can be reiterated that patient have average knowledge regarding risk of complication and their prevention as per current research recommendations. They require Regular education program for patients in frequent intervals should be carried out regarding risk of complication and their prevention.

KEY WORDS: Knowledge, risk of complication, patients undergoing hemodialysis,

INTRODUCTION & BACKGROUND OF THE STUDY

Haemodialysis is the most common method used to treat advanced and permanent kidney failure. Since the 1960s, when hemodialysis first became a practical treatment for kidney failure. In recent years, more compact and simpler dialysis machines have made home dialysis increasingly attractive. even with better procedures and equipment, hemodialysis is still a complicated and inconvenient therapy that requires a coordinated effort from whole health care team, including nephrologists, dialysis nurse, dialysis technician, dietitian, and social worker. The most important members of health care team are patients and their families.

By learning about treatment, patients can work with health care team to give him the best possible results, and he can lead a full, active life. Healthy kidneys clean a person's blood by removing excess fluid, minerals, and wastes.¹³

The prevalence of CKD in India is estimated at 7572 per million and ESRD (End-stage kidney disease) at 757 per million populations with a staggering financial and social burden. Current estimates indicate approximately 10 million persons aged 12 years and older have some form of CKD. The rate increased from 142 per million population in 1987 to 296 per million population in 1997, representing an increase in the annual number of new cases from 34,797 to 80,248 respectively.



There is need for this study as an investigator found limited knowledge among the patients regarding complication and prevention. When investigator was posted as a student in hospitals, there were majority people are having chronic kidney failure and undergoing hemodialysis. Some of patient are suffering from after hemodialysis complication they didn't know about how to prevent from those complications. So he has opted this to enhance the knowledge regarding risk of complication and their prevention undergoing the hemodialysis.

OBJECTIVES OF THE STUDY

- To assess the knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis.
- To assess the association between knowledge and selected demographical variables.
- To determine the correlation between the knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis.

OPERATIONAL DEFINITION

- **ASSESS:** In this study refers to critical analysis of systematic and organized collection of objectives data which are helpful to identify and define the level of knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis at tertiary care hospital, Jodhpur.
- **KNOWLEDGE:** In this study knowledge is the response of patients about information regarding risk of complication and their prevention among patients undergoing haemodialysis gained in terms of scores through self-administered knowledge questionnaire.
- **RISK OF COMPLICATION:** In this study risk of complication is condition may adversely affect the prognosis or outcome of haemodialysis.
- **PREVENTION:** In this study Prevention refers to protect, promote, and maintain health of patients who are undergoing haemodialysis at tertiary care hospital, Jodhpur.
- **PATIENTS:** In this study patients who are undergoing haemodialysis at tertiary care hospital, Jodhpur.
- **HAEMODIALYSIS:** It is a process of purifying the blood of a person whose kidneys are not working normally. This type of dialysis achieves the extracorporeal removal of waste products such as creatinine and urea and free water from the blood when the kidneys are in a state of kidney failure.

HYPOTHESIS

- **H₀:** There may be no significant association between knowledge regarding risk of complication and their prevention among patients

undergoing haemodialysis with demographic variables.

- **H₁:** There is a significant association between knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis with demographic variables.

ASSUMPTION

- Patients undergoing haemodialysis may have average knowledge regarding risk of complication and their prevention.
- The knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis may vary with the selected demographic variables.

DELIMITATION

The study will be limited to the Patients undergoing hemodialysis in M.D.M Hospital, Jodhpur.

RESEARCH METHODOLOGY

• RESEARCH APPROACH

Quantitative research approach is considered appropriate for the present study.

• RESEARCH DESIGN

Descriptive survey design was adopted for this study.

RESEARCH VARIABLE

• Research variable

Research variables are those variable which are observed a measured in natural setting as they exist without any manipulation in the descriptive study no last effect relationship is examined. In my study the research variables is Knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis.

• Demographic variable

Demographic variables are the characteristics and attributes of the study sample. In my study the demographic variables are Age, gender, qualification, number of haemodialysis per week, family history of kidney failure, type of residence, duration at which the patient is on haemodialysis.

POPULATION

Patients undergoing haemodialysis in M.D.M Hospital, Jodhpur.

SAMPLING SIZE

In this study, the sample consists 60 Patients undergoing haemodialysis.

SAMPLING TECHNIQUE

Non-probability purposive sampling technique was used for this study.

**RELIABILITY OF THE TOOL**

The reliability was established by using Cronbach's Alpha Coefficient formula and it is found to be reliable ($r = 0.909$).

MAJOR FINDING OF THE STUDY

Table 1 Depicted that of patients undergoing hemodialysis participated in the study, majority of Age 41-50 (35, 58.33%), Gender Male (31, 51.67%), Educational qualification secondary (16, 26.67%), Number of haemodialysis per week (35, 58.33%), Duration at which the patient is on haemodialysis (27, 45%), Type of residence

urban (34, 56.67%), Family history of kidney failure No (54, 90%).

Table 2 Depicted that that level of knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis. The major findings are (53.33%) of patients undergoing haemodialysis had average level of knowledge, the remaining (33.33%) had poor level of knowledge, (13.33%) had good level of knowledge. The mean of the level of knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis is 13.08 with SD ± 3.61 .

Table 1. Frequency and percentage distribution of demographic variables among patients undergoing haemodialysis. (N=60)

S. No	Socio-demographic variable	Frequency	Percentage	
1.	Age in years	< 30 years	2	3.33
		31 - 40 years	11	18.33
		41 - 50 years	35	58.33
		> 50 years	12	20
2.	Gender	Male	31	51.67
		Female	29	48.33
3.	Educational qualification	Illiterate	13	21.67
		Primary	15	25
		Secondary	16	26.67
		Graduate	14	23.33
		Post graduate	2	3.33
4.	Number of haemodialysis per week	Once	13	21.67
		Twice	35	58.33
		Thrice	12	20
5.	Duration at which the patient is on haemodialysis	Up to 1yr	27	45
		1-2 yr	18	30
		More than 2yr	15	25
6.	Type of residence	Rural	26	43.33
		Urban	34	56.67
7.	Family history of kidney failure	Yes	6	10
		No	54	90

Table 2. Frequency and Percentage distribution of patients undergoing haemodialysis according to their level of Knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis. (n=60)

Level of Knowledge	Frequency (f)	Percentage (%)
Poor (0-6)	20	33.33
Average (7-13)	32	53.33
Good(14-20)	8	13.33
Mean	13.083	
SD	3.61	

DISCUSSION

The hypothesis made in the study is there is a significant association between knowledge regarding risk of complication

and their prevention among patients undergoing hemodialysis with demographic variables at the level of $P \leq 0.05$. However there was no significant association found between knowledge



and selected demographic variables except qualification, types of residence with the level of knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis

- The two assumptions were made in this study. The first one was the finding of the study reveals that Patients undergoing haemodialysis may have average knowledge regarding risk of complication and their prevention.
- Similar studies were also done in different parts of the country and same results were found that all the patient were having average knowledge regarding risk of complication and their prevention.
- The second assumption was knowledge regarding risk of complication and their prevention among patients undergoing haemodialysis may vary with the selected demographic variables except qualification, types of residence.

CONCLUSION

The finding raised concerns about all aspects of risk of complication and their prevention of patients with undergoing hemodialysis and results showed considerable average knowledge about various aspects of risk of complication and their prevention of patients with undergoing hemodialysis. This study has made some progress in establishing the current status of patient's knowledge and is able to provide a framework for developing patients with undergoing hemodialysis.

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