ISSN Print: 2581-8546 ISSN Online: 2582-2934

Original Article

A Descriptive Study to Assess the Knowledge and Attitude Regarding Treatment Modalities among Renal Failure Patients Admitted in Selected Hospital of District, Mohali, Punjab

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Abstract

Introduction : Renal failure, also known as kidney failure, is a medical condition where the kidneys lose their ability to filter waste products and excess fluids from the blood effectively. This dysfunction can lead to a buildup of toxins and fluids in the body, resulting in various complications. Renal failure can be acute or chronic, depending on the duration and severity of the condition. Acute renal failure occurs suddenly and is often reversible with prompt medical intervention. Common causes include severe dehydration, sudden drop in blood pressure, infections, drug toxicity, or obstruction of the urinary tract.

Methodology : The Descriptive research design was used. The total sample size of the study was 100 renal failure patients, which were selected by non-probability purposive sampling technique. The tool selected for the present study was self structure knowledge questionnaire and likert scale. The tool was validated by 7 nursing experts for establishing the content validity. The reliability of the tool was assessed by cronbach's Alpha method and it was found to 'r' 0.70 and 0.79. hence the found was highly reliable.

Results : The major analysis revealed that Out of 100 sample majority (81%) had average knowledge with mean 9.814, median 10 and SD 1.88 followed by (19%), below average knowledge with mean 5.78, median 6 and SD .418 and no one fall in good knowledge score. The calculated chi-square values were not less than the table value at the 0.05 level of significance.

Conclusions : In present research study ,renal failure patients having inadequate knowledge and attitude regarding treatment modalities ,need to improve knowledge ,which help people to save lives of many patients, who are at the progressing stage of end stage renal disorder.

Keywords : Assess, Knowledge, Attitude, Renal failure

How to cite this article : Jaggi.P, Kaur S, Vermani S "A descriptive study to assess the knowledge and attitude regarding treatment modalities among renal failure patients admitted in selected hospital of District Mohali, Punjab. Glob. Nurs. J. India 2024; 8: I: 798-804.

Submitted: 16/02/2025, Accepted: 24/03/2025, Published:06/05/2025

DOI:10.46376/GNJI/8.I.2025.798-804

ISSN Print: 2581-8546 ISSN Online: 2582-2934

Introduction

Renal failure is a condition in which the kidney cannot concentrate urine, conserve electrolytes and excrete waste products. Renal failure in children may occur as an acute or chronic condition. Some cases of acute renal failure resolve without further complications while dialysis is necessary in other children. When acute renal failure continues to progress, it becomes chronic renal failure. Dialysis and kidney transplantation are treatment modalities used for chronic renal failure .Renal failure is a challenging complication in patients with advanced cirrhosis. Patients with cirrhosis are susceptible to develop acute kidney injury which is associated with poor prognosis. Pathogenesis of renal dysfunction in chronic liver disease is complex.

The kidneys perform endocrine functions also. The kidneys are the major organs for the metabolism of calcitonin, parathyroid hormone and insulin. Function of the renal and urinary systems is essential to life. The primary purpose of the renal and urinary system is to maintain the body's state of homeostasis by carefully regulating the fluid and electrolytes, removing wastes. Dysfunction of the kidneys and lower urinary tract is common and may occur at any age with varying degrees of severity.

Kidney diseases attack the nephrons, causing them to lose their filtering capacity. Damage to the nephrons can happen quickly, or gradually. But most of the kidney diseases destroy the nephrons slowly and silently. Only after years or even decades the damage becomes apparent. The common kidney disorders are acute kidney injury, acute nephritic syndrome, anuria, chronic kidney diseases, interstitial nephritis, nephrosclerosis, nephritic syndrome, oliguria, acute renal failure, chronic renal failure, pyelonephritis, polyuria etc. In the developed and developing countries, with advance in life expectancy and changes in life style, chronic diseases such as diabetes mellitus, cardiac diseases and End Stage Renal Diseases are increasing steadily. The most common and serious health problems are Acute and Chronic Renal Failure. According to National Kidney Foundation stated that chronic kidney Disease includes conditions that impair the kidneys and diminish their ability to keep healthy.

Chronic Renal Failure is a progressive irreversible deterioration in renal function in which the body's power to maintain metabolic, fluid and electrolyte balance fails, resulting in uremia which contribute the patient to depend up on hemodialysis for the maintenance for the internal milieu and to avoid uremia. In early stage of renal damage, symptoms may be reduced through hemodialysis, control of fluid intake and regulation of diet, and use of medication, as renal function worsen, these treatments become insufficient.

Objectives of the study

- To assess the knowledge regarding treatment modalities among renal failure patients.
- To assess the attitude regarding treatment modalities among renal failure patients.
- To find out correlation between knowledge and attitude regarding treatment modalities among renal failure patients.
- To find out the association between socio-demographic variables and knowledge regarding treatment modalities among renal failure patients.
- To find out the association between socio-demographic variables and attitude regarding treatment modalities among renal failure Patients.

Material and Methods

- **Research approach :** Quantitative research approach was used to assess the attitude regarding treatment modalities among renal failure patients.
- **Research Design :** Non-Experimental research design was used to assess the attitude regarding treatment modalities among renal failure patients.
- **Research setting of the study :** The settings of the study refer to the area where the study is conducted. Present study was conducted at Indus International Hospital Derabassi, District Mohali, Punjab.
- **Population :** The target population for the present study were renal failure patients admitted in Indus International Hospital Derabassi, District, Mohali, Punjab.
- **Sampling Technique :** Non-Probability Purposive sampling technique was adopted to select the samples.

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- **Sample size :** Sample is the process of selecting a portion of population to represent the entire population. In the present study, sample size were 100 renal failure patients.

Variables under the Study

- **The Demographic Variable :** The demographic variable is an uncontrolled variable that influences the study. The study also consist of demographic variable like- age (in years), gender, religion, education, occupation, Income (in rupees) per month, Marital status, types of family, dietary pattern, residence.
- **Research Variables :** In this study research variables were the Knowledge and attitude.

Description and interpretation of the tool

SECTION-I : It contains the question of socio-demographic variables of students comprising of age (in years), gender, religion, education, occupation ,income (in rupees) per month, Marital status, types of family, dietary pattern, residence.

SECTION- II : Self- Structured Knowledge questionnaire regarding treatment modalities

SECTION- III : Attitude questionnaire regarding treatment modalities.

Validity of Tools : The validity was established by experts from different specialties i.e. medical surgical nursing.

Reliability of the tool : Reliability of research instrument is defined as the degree of consistency or dependability with which an instrument measures an attributes. The internal consistency of of the tool was assessed by Cronbach's alpha and it was found to be 0.70 and 0.79 hence the found was highly reliable.

Results : Collected data were organized, tabulated and analyzed by using the frequent distribution, Descriptive statistics (mean, SD, and mean score percentage and inferential statistics (Paired 't' test Chi square) which was done on the basis of the objective of the study to find out association of pre-test and post-test knowledge score regarding junk food among adolescents with selected socio demographic variables.

Table-1: Frequency and percentage distribution of socio demographic variables

N=100

Socio-Demographic variables	Option	F	%
Age	18-28 years	11	11
	29-38 years	26	26
	39-48 years	26	26
	Above 49 years	37	37
Gender	Male	65	65
	Female	35	35
Religion	Hindu	29	29
	Muslim	36	36
	Christian	16	16
	Sikh	11	11
	Any other	08	08
Education	No formal education	35	35
	Primary	01	01
	Secondary	35	35
	Higher secondary	25	25
	Graduate & above	04	04
Occupation	Labor	11	11
	Self employed	10	10
	Private job	38	38
	Govt. job	32	32
	House maker	09	09
Income (in rupees) per month	Rs. 5000	19	19
	Rs. 5001-1000	43	43
	Rs. 10001-15000	33	33
	Rs. 15001	05	05
Marital status	Married	60	60
	Unmarried	16	16
	Divorced	22	22
	Widow	02	02
Type of family	Nuclear family	42	42
	Joint Family	58	58
Dietary pattern	Vegetarian	30	30
	Non- vegetarian	70	70
Residence	Urban	55	55
	Rural	45	45

DOI:10.46376/GNJI/8.I.2025.798-804

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Section II-Findings related to level of Knowledge regarding treatment modalities among renal failure patients.

Table No. 2 : Knowledge score Regarding treatment modalities among renal failure patients.

CRITERIA MEASURE KNOWLEDGE SCORE					
Level of knowledge	**Frequency**	**Percentage**	**Mean**	**Median**	**SD**
Good (21-30)	00	0%	0	0	0
Average (07-20)	81	81%	9.814	10	1.88
Below Average(0-6)	19	19%	5.78	6	.418
Maximum = 30, Minimum = 0					

Section III-Findings related to attitude regarding treatment modalities among renal failure patients.

Table No.3 : Attitude score regarding treatment modalities among renal failure patients.

N=100

CRITERIA MEASURE KNOWLEDGE SCORE					
Level of Attitude	**Frequency**	**Percentage**	**Mean**	**Median**	**SD**
Favorable (41-70)	97	97%	48.83	49	3.65
Neutral (21-40)	03	03%	38.66	39	1.52
Unfavorable (1-20)	00	0%	0	0	0
Maximum = 30, Minimum = 0					

Section V : Findings related to the association between knowledge regarding treatment modalities with selected demographic variables among renal failure patients.

Table No.4 : Association of knowledge score with selected socio-demographic variable.

Socio-demographic variables	Option	Good Knowledge	Average Knowledge	Below Average	Chi TEST	Df	p value	Result
Age	18-28 years	0	10	01	1.3687	3	0.7129	NS
	29-38 years	0	22	04				
	39-48 years	0	20	06				
	Above 49 years	0	29	08				
Gender	Male	0	51	14	0.7776	1	0.3778	NS
	Female	0	30	05				
Religion	Hindu	0	26	3	8.8045	4	0.0660	NS
	Muslim	0	31	5				
	Christian	0	13	3				
	Sikh	0	06	5				
	Any other	0	05	3				
Education	No formal education	0	28	07	1.680	4	0.7943	NS
	Primary	0	01	00				
	Secondary	0	29	06				
	Higher secondary	0	19	06				
	Graduate & above	0	04	00				

DOI:10.46376/GNJI/8.I.2025.798-804

Occupation	Labor	0	07	04	5.5695	4	0.2016	NS
	Self employed	0	06	04				
	Private job	0	30	08				
	Govt. Job	0	26	06				
	House maker	0	09	00				
Income (in rupees) per month	Rs. 5000	0	14	05	2.8194	3	0.4202	NS
	Rs. 5001-1000	0	37	06				
	Rs. 10001-15000	0	27	06				
	Rs. 15001	0	03	02				
Marital status	Married	0	51	09	3.4423	3	0.03282	NS
	Unmarried	0	11	05				
	Divorced	0	18	04				
	Widow	0	01	01				
Type of family	Nuclear family	0	29	13	6.721	1	0.0094	**
	Joint Family	0	52	06				
Dietary pattern	Vegetarian	0	22	08	1.5507	1	0.2129	NS
	Non- vegetarian	0	58	11				
Residence	Urban	0	47	08	1.5759	1	0.2093	NS
	Rural	0	34	11				

Significant = ** Not significant = NS

Table No. 5 : Association of Attitude score with selected socio-demographic variable

Socio-demographic variables	Option	Favorable 50-70	Neutral 21-40	Unfavorable 1-20	Chi TEST	Df	p value	Result
Age	18-28 years	10	01	00	2.2817	3	0.5160	NS
	29-38 years	26	00	00				
	39-48 years	25	01	00				
	Above 49 years	36	01	00				
Gender	Male	62	03	00	1.6653	1	0.1968	NS
	Female	35	00	00				
Religion	Hindu	29	00	00	4.2502	4	0.3731	NS
	Muslim	35	01	00				
	Christian	16	01	00				
	Sikh	11	00	00				
	Any other	07	01	00				
Education	No formal education	29	00	00	4.3051	4	0.3662	NS
	Primary	35	01	00				
	Secondary	15	01	00				
	Higher secondary	11	00	00				
	Graduate & above	07	01	00				

DOI:10.46376/GNJI/8.I.2025.798-804

Occupation	Labor	09	01	00	2.0721	4	0.7225	NS
	Self employed	10	00	00				
	Private job	37	01	00				
	Govt. Job	34	01	00				
	House maker	04	00	00				
Income (in rupees) per month	Rs. 5000	18	01	00	1.9125	3	0.5907	NS
	Rs. 5001-1000	41	02	00				
	Rs. 10001-15000	33	00	0				
	Rs. 15001	05	00	00				
Marital status	Married	58	02	00	1.7969	1	0.7574	NS
	Unmarried	15	00	00				
	Divorced	19	01	00				
	Widow	02	00	00				
Type of family	Nuclear family	56	02	00	1.3255	1	0.2496	NS
	Joint Family	41	01	00				
Dietary pattern	Vegetarian	30	00	00				NS
	Non- vegetarian	67	03	00				
Residence	Urban	55	00	00	3.7801	1	0.0518	NS
	Rural	42	00	00				

Significant, not significant, p-level<0.05.

Table 5. Shows the association between the attitude score of with socio demographic variable. The Chi-square value shows that there was no significance association between the level of attitude score with any of demographic variables The calculated chi-square values was not less than the table value at the 0.05 level of significance.

Conclusions

From the finding of the study concluded that the main study has been conducted successfully. Out of 100 sample Majority (81%) had average knowledge with mean 9.814, median 10 and SD 1.88 followed by (19%) below average knowledge with mean 5.78, median 6 and SD .418. and no one fall in good knowledge score. Out of 100 sample Majority (97%) had favorable attitude with mean 48.83, median 49 and SD 3.65 followed by(3%) neutral attitude with mean 38.66, median 39 and SD 1.53. And no one fall in unfavorable attitude level.

Recommendation

- On the basis of the findings of the study, the following recommendations have been made for further study.
- A comparative research between community settings can be done.
- The research might be carried out in different hospitals.
- A study with the same focus may be carried out utilizing a variety of instructional approaches
- It is possible to carry out a experimental investigation to find out the effectiveness of awareness programme.

Financial support and sponsorship : Nil

Conflicts of interests : The authors declare that they have no conflict of interest with regard to the content of the report.

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