"A STUDY TO ASSESS THE KNOWLEDGE REGARDING THE WARNING SIGNS OF RENAL FAILURE AMONG SELECTED PATIENTS OF SVIMS, OPD'S, TIRUPATI."

Miss.B. Krupa Bharathi[1], Mrs.V.Naganandini[2] and Dr.M.Nagarathnam [3]

[1]M.Sc Nursing student, Department of Medical-Surgical Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India.

[2]Senior Nursing Tutor Grade -I, Department of Medical-Surgical Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India

[3]Associate Professor, Department of Medical Surgical Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India

ABSTRACT

Objectives:

- ❖ To assess the knowledge regarding the warning signs of renal failure among selected patients of SVIMS OPD's.
- ❖ To find out the association between the level of knowledge regarding the warning signs of renal failure with their selected socio-demographic variables among selected patients of SVIMS, OPD's.

Material and methods:

Methodology: The research approach used for the present study was Cross-Sectional Descriptive Research Design. The sample of the study chosen by Non-Probability Convenience Sampling Technique, which includes 100 selected patients of SVIMS, OPD's. A self structured questionnaire was used to collect the data which consists of 30 dichotomous questions.

Results The major findings of the study was out of 100 selected patients of SVIMS, OPD's. 44% patients had moderate knowledge, 32% patients had inadequate knowledge and only 24% patients had adequate knowledge regarding warning signs of renal failure. The associations of demographic variables with the level of knowledge

on warning signs renal failure determined by using chi-square test which revealed that there was a significant association with age, gender, education, occupation, marital status, place of residence, presence of chronic illness, family history of hypertension and diabetes mellitus, history of chronic illness and duration of chronic illness regarding warning signs of renal failure.

Conclusion: The study concluded that majority of Cardiology OPD's and Endocrinology OPD's patients had moderate knowledge regarding warning signs of renal failure. Hence there is a need to improve the knowledge regarding the warning signs of renal failure. So informational booklet has been given for improving knowledge.

KEY WORDS: knowledge, warning signs of renal failure.

INTRODUCTION:

Renal failure is a condition in which the kidneys cannot concentrate urine, conserve electrolyte or excrete waste products. The causes of chronic kidney failure are hypertension prolonged are severe, diabetes mellitus, glomerulopathies, interstitial nephritis, hereditary renal diseases, polycystic kidney disease obstructive uropathy.

It is estimated that more than 25.8 million people in the united states have diabetes although almost one third of these cases are undiagnosed. By 2030, the number of cases is expected to exceed 360 million in World Health Organization.

A "warning signs of renal failure" has been seen as serious to diagnose and there is a need to control blood pressure and diabetes mellitus disease management to improve the patients outcomes and slow progressions of renal failure in patients.

NEED FOR STUDY:

Chronic kidney disease (CKD) is common and harmful: 1 out of 10 adult people worldwide have it, and if left untreated it can be deadly.

While early detection allows for disease care and management to help prevent morbidity and mortality, and improve cost effectiveness and sustainability, kidney disease related mortality continues to increase yearly and is projected to be the 5th leading cause of death by 2040.

The World Kidney Day Joint Steering Committee **has declared 2022 to be the year of** "**Kidney Health for All".** The 2022 campaign focus on efforts to increase **education and awareness about kidney health** and on reducing the stubbornly high CKD knowledge gap at all levels of kidney care.

Country	Prevalence rate
Russia	2,832
Mexico	2,107
South Africa	11,718
Nigeria	1,387

Iran	1 0,924
India	9,529
Japan	8,404
United states	8,144
Brazil	7,337
China	7,180
South Korea	7,103
Australia	6,982
Canada	6,023
Germany	5,687

STATEMENT OF THE PROBLEM:

A STUDY TO ASSESS THE KNOWLEDGE REGARDING THE WARNING SIGNS OF RENAL FAILURE AMONG SELECTED PATIENTS OF SVIMS OPD'S, TIRUPATI.

OBJECTIVES:

1. To assess the knowledge regarding warning signs of renal failure among selected patients attending to SVIMS OPD's.

2. To find out the association between the levels of knowledge regarding warning signs of renal failure with their selected demographic variables among selected patients of SVIMS OPD's.

OPERATIONAL DEFINITIONS:

Assess: - Measure the level of knowledge of patients

Knowledge: - Information possessed by patients regarding warning signs of renal failure.

Warning Signs: - It is a alarm sign in the individual regarding a particular disease.

Renal Failure: - It is a progressive loss in a renal function over a period of months or years

Selected Patients of OPD's:- Patients came for regular follow up to concerned OPD's.

ASSUMPTIONS:

• Selected patients of SVIMS OPD's may not have knowledge on warning signs of renal failure.

CONCEPTUAL FRAMEWORK:

The conceptual framework for the present study was adopted from '**General system theory by Ludwig Von Bertalanff (1968).** General system theory explains that, a system of interrelated elements in the abstract system are the human being their environment. A system must achieve the balance internally and externally.

According to general system theory, 'silence of wholeness and its purpose is scientific thinking across the discipline and which provide frame work for analyzing the whole of any system'.

A system can be resolved into an aggregation of feedback circuit such as:

- Input
- Throughput
- Output

Feed back

Fig-1: Conceptual Frame work
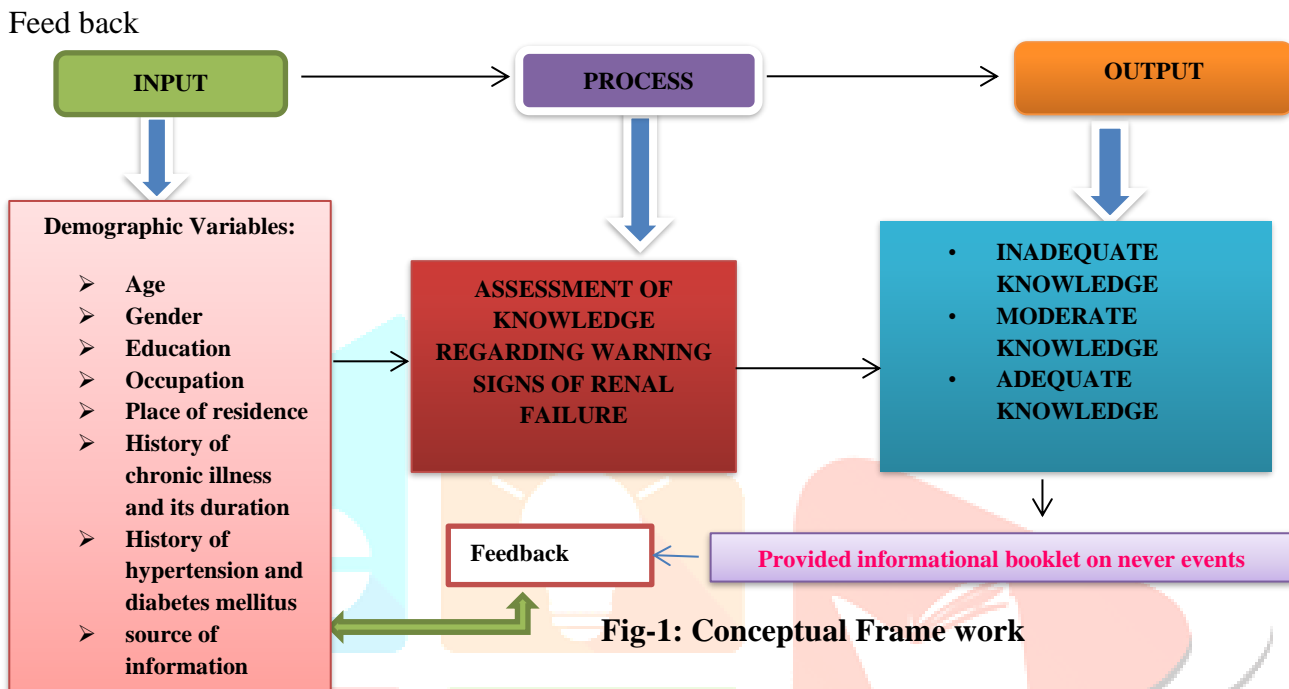
METHODOLOGY

RESEARCH APPROACH

The research approach adopted was Descriptive research approach to achieve the objective of the study, which is felt to be most appropriate in the field of education for its practicability in real life situations.

RESEARCH DESIGN

The research design selected for the present study was Cross-Sectional Descriptive Research Design.

SETTING OF THE STUDY

The study was conducted at Cardiology OPD's and Endocrinology OPD's selected SVIM, OPD's, Tirupati. The setting was chosen on the basis of the investigator's feasibility in terms of availability of required sample and cooperation extended by the management and health personnel. The study was conducted during the month of July- 2022.

POPULATION

Target population: Cardiology OPD's and Endocrinology OPD's in SVIMS OPD's at the time of data collection.

Accessible population: 100 selected OPD's patients.

SAMPLE

The sample of the present study comprised of Cardiology OPD's and Endocrinology OPD's patients of SVIMS OPD's Tirupati. Who fall under inclusion criteria.

SAMPLE SIZE

Sample size consists of 100 patients of selected SVIMS, OPD's who fall under inclusion criteria.

SAMPLING TECHNIQUE

The patients were selected on by using non-probability convenience sampling technique based on the inclusion criteria.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

Patients who are:

➢ Attending to selected OPD'S of SVIMS.

➢ Willing to participate in the study and availability at the time of data collection.

Patients who are:

➢ Patients who are suffering with chronic kidney disease.

➢ In health care professionals

➢ Unable to read English or Telugu

TOOL

The tool was developed with the help of related literature from journals, text books, websites, discussion and guidance from experts in the field of nursing and Nephrology.

The tool consists of II sections:

Section I: Consist of questions related to demographic data.

Section II: Consists of questions to assess the knowledge regarding warning signs of renal failure. This section comprises of 30 dichotomous questions with options YES or no items. The questions was prepared on following aspects.

- General information
- Functions of kidney
- Causes and risks factors for chronic kidney disease
- Investigations
- Warning signs of kidney failure

Scoring Key

Section I: By coding the sociodemographic variables.

Section II: it consists of 30 dichotomous questions with YES or NO options. Questions based on knowledge regarding warning signs of renal failure.

Scoring interpretation

0-50% - Inadequate knowledge.

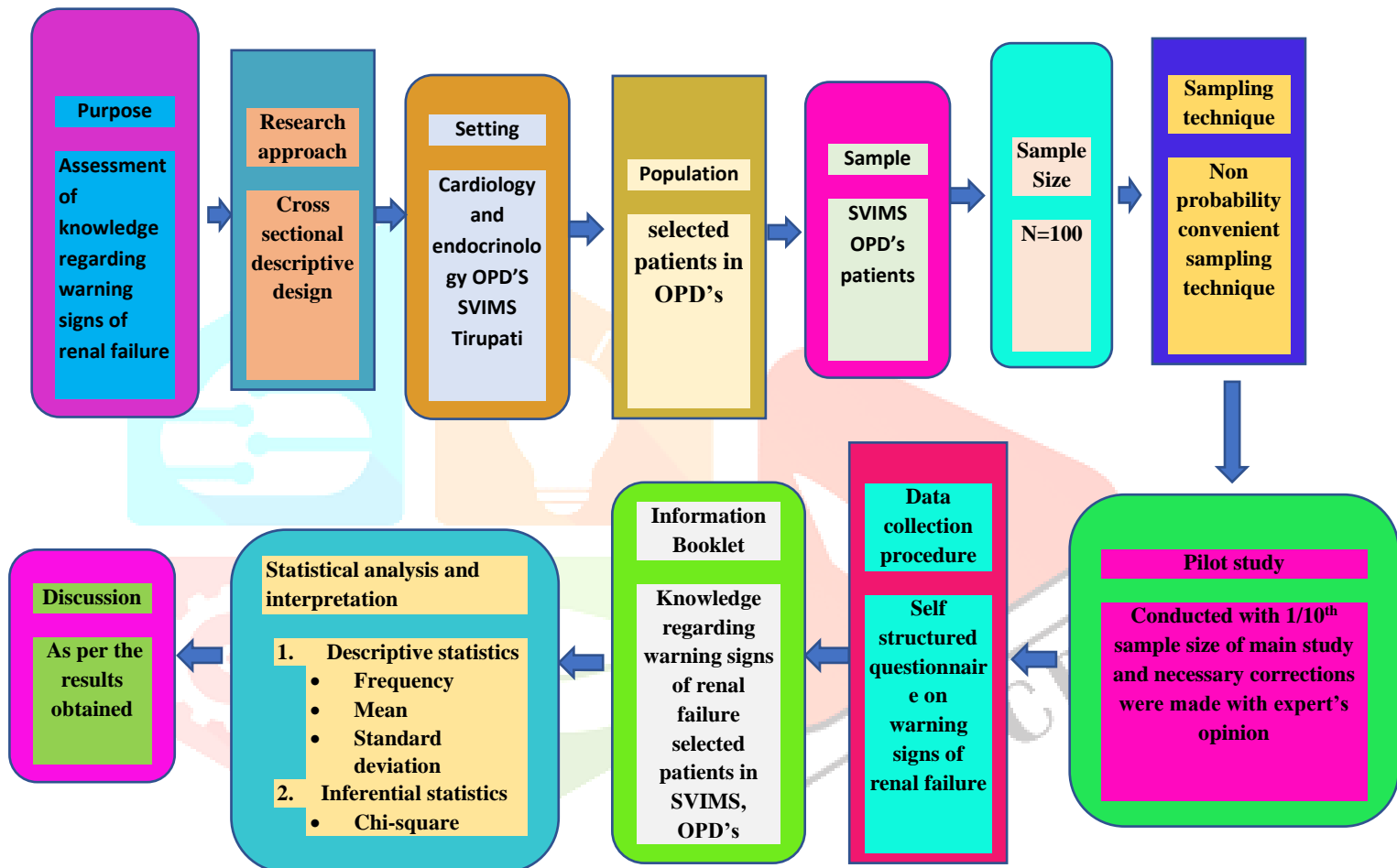51-75% - Moderate knowledge.

>75% - 100%- Adequate knowledge

FIG:2 SCHEMATIC REPRESENTATION OF DESCRIPTIVE RESEARCH DESIGN

RESULTS

Majority of patients 69 (69%) age above 55 years, 67(67%) were male, 36(36%) were no formal education, 30(30%) were business, 78(78%) were <20000 rupees, 84(84%) conveys that married, 52(52%) were urban, 53(53%) were yes with chronic illness, 28 (28%) belongs to hypertension, 38(38%) were above 10 years duration of illness, 40 (40%) belongs to family history of hypertension and diabetes mellitus, (both A and B), 83(83%) were gain source of information by health care professionals.

The findings of the study revealed that 44% of selected patients have moderate knowledge, 32% selected patients have inadequate knowledge and 24% selected patients have adequate knowledge.

Table 5:- Frequency and distribution of level of knowledge regarding warning signs of renal failure among selected patients of SVIMS OPD's.

(n=100)

S.NO	KNOWLEDGE REGARDING WARNING SIGNS OF RENAL FAILURE	FREQUENCY (f)	PERCENTAGE (%)
1.	Inadequate knowledge	32	32%
2.	Moderate knowledge	44	44%
3.	Adequate knowledge	24	24%

Table 7:-shows Mean and standard deviation of variables wise knowledge regarding warning signs of renal failure among selected patients of OPD's.

(n= 100)

Sl. No	KNOWLEDGE ON VARIABLES	MEAN	STANDARD DEVIATION
1	General information	1.79	0.98
2	Functions of Kidney	4.10	1.17
3	Causes and risk factors	3.29	1.14
4	Investigations	2.66	1.15
5	Warnings signs of renal failure	5.01	1.68
	Overall	**16.85**	**2.72**

Table 7:-Shows that total mean and standard deviation knowledge scores were 16.85 ± 2.72 of selected patients of SVIMS, OPD's.

The association of demographic variables with level of knowledge regarding warning signs of renal failure revealed that Chi-square value of age (12.661), gender (8.657), education (14.122), occupation (20.332), marital status (12.541), place of residence (16.341), chronic illness (9.295), chronic illness if yes (14.937) , duration of chronic illness (18.657), history of diabetes mellitus and hypertension (16.000) on knowledge regarding warning signs shows significant at $p<0.05$.

CONCLUSION

The study findings revealed that, a majority of selected SVIMS, OPD's patients were had moderate knowledge regarding warning signs of renal failure and some of the demographic variables were statistically significant and hence it can be concluded that, selected patients should improve the knowledge regarding warning signs of renal failure. So informational booklet has been given for improving knowledge.

IMPLICATIONS

Nursing practice

- Nurses should update the knowledge through Planned health teaching programmes scheduled on warning signs of renal failure in the outpatient departments on fixed dates for patients.

Nursing education: -

- Nursing staff, nursing students, technicians and other health team members should be encouraged to teach the patients regarding the importance of the knowledge regarding warning signs of renal failure.

- Effective teaching material and audio-visual aids should be used to communicate and express the content clearly.

- Established planned teaching programmes, which could be used as illustrative informational models for student nurse, nursing personnel, patients and people in the OPD'S ,wards as well as community.

Nursing Administration:-

- The nursing administration can create awareness on knowledge regarding warning signs of renal failure conducting teaching programmes among the patients in OPD's

- The nursing administration should take initiative to conduct effective Inservice Education programmes and conducting nursing education programmes on warning sign of renal failure management.

Nursing research:-

- The findings of the study can be practice in their teaching programmes on knowledge on warning signs of renal failure, because they are going to provide knowledge regarding warning signs of renal failure. Health education is a process which affects and changes the health practice of people in their knowledge regarding warning signs of renal failure.

RECOMMENDATIONS: -

- A quasi-experimental study can be conducted on effectiveness of planned teaching programme regarding renal failure management in diabetic patients.

- A comparative study can be conducted to assess the knowledge regarding warning signs of diabetes mellitus and hypertension among renal failure at selected OPDS.

- A descriptive study that can be conducted to assess the level of knowledge on risk factors of renal failure at selected OPD'S.

REFERENCES

1. World Kidney day: Chronic Kidney Failure. 2021; https;//www.worldkidneyday. org/impact-report-2021.

2. World kidney day; Chronic Kidney Failure. 2015; https;//www.kidney. org/kidney disease/ global- facts-about-kidney-disease. https:/www.statista.com>statistics)

3. https://kidney360.asnjournals.org/content/1/10/1143#:~:text=The%20Million%20Death%20Study%20estimated,per%20million%20population%20(3).

4. Medical Surgical Nursing clinical management for positive outcomes. Volume-1, 8th edition, Joyce M.Black, Jane Hokanson Hawks Elsevier publishers, page no-780.

5. Abraham G, Varughes S, Thandavan T, Lyengar A, Femando E, Naqvi SA, Sheriffer, Ur-Rashid H, ; Chronic Kidney Failure hotspots in developing countries in south Asia. Clinical Kidney J9; 135-141, 2016.

6. https://pubmed.ncbi.nlm.nih.gov/23714169/ epidemiology and risk factors of Chronic Kidney Failure in India.

7. Deneise F. Polite, Cheryi Tatano Beek. Nursing research generating and assessing evidence for nursing practice. Wolter Kelrwer. Health and Lippincott Company. New Delhi; 160-168.

8. Alobaidi S. Knowledge of Chronic Kidney Failure Among the Population of Saudi Arabia Evaluated using a validated Questionnaire; A Cross sectional study. Patient prefer Adherence 2021;15-1281-1288 https://doi.org/10.2147/PPA.S315369.

9. https://www.researchgate.net/publication/344854468_Kidney_Disease_Knowledge_and_Its_Determinants _Among_Patients_With_Chronic_Kidney_Disease

10. Assessment of knowledge of Chronic Kidney Failure among non-nephrology nurses in Akure, south west Nigeria https://www.sjkdt.org/article.asp?issn=1319-2442;year=2018;volume=29;issue=6;spage=1417;epage=1423;aulast=adejumo.

11. Gheewala, P.A., Peterson, G.M., Zaidi, S.T.R. *et al.* Public knowledge of Chronic Kidney Failure evaluated using a validated questionnaire: a cross-sectional study. *BMC Public Health* 18, 371 (2018). https://doi.org/10.1186/s12889-018-5301-4

12. Younes, S., Mourad, N., Safwan, J. *et al.* Chronic Kidney Failure awareness among the general population: tool validation and knowledge assessment in a developing country. *BMC Nephrol* **23**, 266 (2022).