International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

# A Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge, Attitude and Practice Regarding Renal Rehabilitation Among Patients with Chronic Kidney Disease who Are Admitted in the Mamata General and Super Specialty Hospital, At Khammam, Telanagana

**Kurimilla Ramathulasi[1], Gudimetla Samba Sukanya[2]**

[1]Dept. of Medical Surgical Nursing, Lecturer, SIMS College of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh
[2]Associate Professor, SIMS college of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh

**ABSTRACT**

**Background**: Kidneys are one of the vital organs in the human body. Kidneys perform vital functions like excretion of waste products, maintenance of water balance, thus maintaining the homeostasis. In addition, kidneys perform many other functions such as role in Homeostasis, Production of Erythrocyte, Endocrine function, Regulation of Blood Sugar and regulation of Blood Calcium level. Because the kidney performs a wide variety of functions, the effects of loss of renal function not only in kidney but also in other organ systems.Hemo dilaysis is used for clients with acute or irreversible renal failure and fluid and electrolyte imbalances. It is usually the treatment of choice when toxic agents, such as barbiturates after an over dose need to be removed quickly. The availability of the treatment for clients with end stage renal failure (ESRF) has become more prevalent. The population receiving hemo dilaysis now represents a wide cross-section of age rehabilitative potential of socio-economic status.

**Materials and Methods:** For the present study, quantitative Evaluative Approach ,Pre – Experimental research design, one group pretest and one group post test design.The study was conducted in the Mamata General and super specialty Hospital at Khammam, Telangana.

**Results:** The above table shows that the pre test mean knowledge score is 10.05 and standard deviation is 3.77 where as post test mean score is 18.02 and standard deviation is 3.36 and mean difference is 7.97, the paired ‘t’ test calculated value is 14.89, which is greater than table value with df value of 79at ($p<0.05$) level.

**Conclusion:** The main study was conducted in Mamata general and super specialty hospital, at Khammam, Telanagana . The sample sizes 30. The sample was selected by using non probability of convenient sampling technique among those fulfill the criteria.

**Keywords:** pre test -post test group , knowledge,attitude &practice ,renal rehabilitation ,patients with chronic kidney disease.

## INTRODUCTION

Kidneys are one of the vital organs in the human body. Kidneys perform vital functions like excretion of waste products, maintenance of water balance, thus maintaining the homeostasis. In addition, kidneys perform many other functions such as role in Homeostasis, Production of Erythrocyte, Endocrine function, Regulation of Blood Sugar and regulation of Blood Calcium level. Because the kidney performs a wide variety of functions, the effects of loss of renal function not only in kidney but also in other organ systems. Dysfunction of the kidney may occur at any age and with varying levels of severity. Renal failure is the severe impairment or total lack of kidney function. Renal failure is classified as acute or chronic. Among them Chronic Renal Failure (CRF) develops insidiously overtime and necessitates the initiation for long term survival.

## NEED FOR THE STUDY

### WORLD HEALTH ORGANIZATION (WHO):

There were estimated to be worldwide chronic kidney diseases there were estimated to be 1.2 million dialysis patients in 2016.Based on an average annual growth rate of 6%, there are now around 1.5 million dialysis patients. In India according to the statistics available about 30000 new cases of chronic renal failure are detected every year. In India the prevalence was estimated that 53% of all deaths and 44% disability adjusted life in the year 2017.changes in life style in urbanization resulted in obesity, hyper tension and diabetes which is associated with increased risk of chronic kidney disease.

Prabahar (2020) stated that chronic kidney disease is a worldwide health problem. Diseases of the kidney and urinary tract contribute to the global burden with approximately 850,000 deaths every year and 1.15,10,100 disability-adjusted life years. Chronic kidney disease is the 12th leading causes of death and 17th causes of disability. Patients with chronic kidney disease are at high risk for cardiovascular disease and cerebrovascular disease (WHO 2012) Suresh C. D (2015) stated that chronic kidney disease is a global threat to health in developing countries. In India, 90% of patients are not able to afford the cost. Over 1 million people worldwide are alive on dialysis or with a functioning graft. The incidence of chronic kidney disease as doubled in the last 15 years.

## OBJECTIVES

1. To describe the socio demographic variables of chronic kidney disease patients.
2. To assess the pre -test levels of knowledge, attitude and practice scores regarding renal rehabilitation among patients with chronic kidney disease.
3. To assess the effectiveness of video assisted teaching programme on knowledge, attitude and practice scores regarding renal rehabilitation among patients with chronic kidney disease.
4. To find out the association between post test knowledge, Attitude and practice scores of patient with their selected socio demographic variables

## HYPOTHESES

H1: There is a significant difference between the pre – test and post test levels of knowledge, Attitude and practice scores regarding renal rehabilitation of patients with chronic kidney disease.

H2: There is significant association between the post – test knowledge, attitude and practice scores of patients with their selected socio demographic variables.

## CONCEPTUAL FRAMEWORK

Dorothea Orem is a nurse theorist who pioneered the Self Care Deficit Nursing Theory. Get to know the biography and works of Orem, including a discussion about the major concepts, sub concepts, nursing met paradigm and application of Self- Care Deficit Theory.

## MATERIALS AND METHODS

**RESEARCH APPROACH**: Quantitative Evaluative Approach PRETEST

**RESEARCH DESIGN**: Pre – Experimental research design, one group pretest and one group post test design.

**SETTING OF THE STUDY**: -The study was conducted in the Mamata General and super specialty Hospital at Khammam, Telangana.

**Sample and sampling technique:** Non- probability convince sampling technique.

**Method of data collection:** Interview technique.

The tool was organized under the following sections:

**SECTION – A:** Deals with socio – demographic data of patients.

**SECTION –B**: Deals with questions on knowledge regarding renal rehabilitation among patients with chronic kidney disease.

**SECTION –C**: Deals with questions on Attitude regarding renal rehabilitation.

**SECTION – D**: Deals with practice check list regarding renal rehabilitation among patients with chronic kidney disease.

**DATA COLLECTION PROCEDURE**: - Formal written permission was obtained from authorities of Mamata General and super specialty Hospital, Khammam, Telangana. The study was conducted at Mamata General and Super speciality, Hospital Khammam, Telangana. Formal consent was obtained from the patients and confidentiality of the responses were assured. A brief introduction was given about researcher and the study was explained. The investigator collected data from the sample with help of tool and interview technique ,it took 30min for each individual to complete interview schedule , after the interview , the investigator conducted video assisted teaching programme on renal rehabilitation of chronic kidney disease after one week of gap the investigator conducted post test with same tool.

## PLAN FOR DATA ANALYSIS:

Data analysis is the systematic organization and synthesis of research data, the testing of research hypothesis by using the obtained data. It is planned to analyze and interpreted data with the help of descriptive and inferential statistics.

## RESULTS

1. 1.Regarding the distribution of patients according to age among 80, majority of them 36 (45.0%) were in the age group between 31-40 years, 37(46.2%) were in the age group between 41-50 years, 07 (08.8%) were in the age group between 51-60 years.
2. 2.Regarding distribution of gender, among 80, majority 28 (35%) were Females and 52(65%) Were Males.

3. In relation to distribution of religion among 80, Majority of them 23(28.8%) were belongs to Hindus, 52 (65.0%) were belongs to Muslim, 11 (13.75%) belongs to Christian and 5(06.2%).
4. 3.Regarding distribution of the educational status, among 80, majority of them 31(38.8%) were had Non-literate, 09 (11.2%) had were secondary education, 34 (42.5%) were had primary education, 06 (07.5%) were had higher secondary. ϖ In relation to distribution of the occupational status among 80, majority of them 13(16.3%) were business, 23(28.8%) were daily wager, 42(52.5%) were home maker and 02 (2.0%) were government employee.
5. 4.According to distribution of the family income per month among 80, majority of them 8(10.0%) were earning above Rs 12000/-, 23(28.8%) were earning Rs 3001-6000/-, 34(42.4%) were earning Rs 6001-9000/-, 15(18.8%) were Rs 9001-12000/- rupees per month.
6. 5.In relation to distribution of family history of Diabetes mellitus and hypertension among 80, majority of them 23 (28.8%) were having Diabetes mellitus and hypertension and 57 (71.2%) they were not having any history of Diabetes mellitus and hypertension.

## INTERPRETATION CONCLUSION

The study concluded that majority of patients had adequate levels of knowledge, moderately favorable attitude and good practice scores regarding renal rehabilitation of chronic kidney disease after conducting the video assisted teaching programme.

**VALIDITY**: The content validity of the tool was be obtained from experts in various fields like medical and nursing departments. The suggestions were incorporated in the tool and approved tool was finalized.

**RELIABILITY**: Φ The split half method will be used to find out the reliability of the tool. ϖ Formula used for the reliability was r = (X-X-) (Y-Y-) (X-X-) 2(Y-Y-)2 ϖ The reliability of the knowledge questionnaire was( r) was = 0.96 ϖ The reliability of the attitude score was ( r) was = 0.96 ϖ The reliability of the practice checklist was ( r) was = 0.96 This donates that the tool was reliable to conduct the research study.

**PILOT STUDY**: -Pilot study was conducted among 10 percent of the sample after obtaining formal consent from authorities of Mamata general and super specialty Hospital, Khammam. Telangana.

## RESULTS

### ASSOCIATION BETWEEN THE POST TEST KNOWLEDGE LEVELS AND SELECTED SOCIO DEMOGRAPHIC VARIABLES.

**N=80**

| S.no | Socio demographic variables | Degree of freedom (df) | Chi square ($x^2$) calculated value | Chi square ($x^2$) table value | Significance |
|---|---|---|---|---|---|
| 1 | Gender | 1 | 1.239 | 3.84 | NS |
| 2 | Religion | 2 | 2.778 | 5.99 | NS |
| 4 | Family income per month | 3 | 4.539 | 7.81 | NS |
| 5 | History of hypertension or diabetes mellitus | 1 | 1.649 | 3.84 | NS |
| 6 | Duration of illness | 2 | 0.226 | 5.99 | NS |
| 7 | Source of information | 2 | 0.882 | 5.99 | NS |

df = (c-1)(r-1) NS: Non significant (p<0.05) The above table shows that there is no significant association between post test knowledge levels and socio demographic variable such as age, gender, religion, occupational status, family income per month, duration of illness and source of information obtained regarding renal rehabilitation of chronic kidney disease as the chi square calculated value is less than the table value at p value

**DISTRIBUTION OF THE SAMPLE ACCORDING TO ASSOCIATION BETWEEN THE POST TEST ATTITUDE SCORES AND SELECTED SOCIO – DEMOGRAPHIC VARIBLES SUCH AS FAMILY INCOME PER MONTH**.

| Family income per month | Attitude score | | df | Calculated $x^2$ value | $x^2$ table value | Significance |
|---|---|---|---|---|---|---|
| | Moderately favourable | Favourable | | | | |
| RS. 3000-6000 | 16 | 7 | 3 | 17.159 | 7.81 | S |
| RS. 6001-9000 | 33 | 1 | | | | |
| RS. 9001-12000 | 8 | 7 | | | | |
| Above 12000 | 8 | - | | | | |

**df = 3 S*:Significance(p<0.05)**

The above table shows that there is a significant association between post test attitude scores and selected socio demographic variable such as educational status, as the chi square calculated value is 17.159 more than the table value is 7.81 at
p value0.05 level.

**ASSOCIATION BETWEEN THE POST TEST PRACTICE SCORES AND SELECTED SOCIO DEMOGRAPHIC VARIABLES SUCH AS AGE.**

(n=80)

| AGE | PRACTICE SCORES | | Df | Calculated $x^2$ value | $x^2$ table value | Significance |
|---|---|---|---|---|---|---|
| | Fair practice | Good practice | | | | |
| 31-40 years | 9 | 27 | 2 | 9.39 | 5.99 | S |
| 41-50 years | 1 | 36 | | | | |
| 51-60 years | 0 | 7 | | | | |

**df = 2 S*:Significance(p<0.05)**

The above table shows that there is a significant association between post test practice scores and selected socio demographic variable such as age, as the chi square calculated value is 9.39 more than the table value is 5.99 at p value

**CONCLUSION**

The study concluded that majority of patients had adequate levels of knowledge, moderately favorable

attitude and good practice scores regarding renal rehabilitation of chronic kidney disease after conducting the video assisted teaching programme.

**RECOMMENDATIONS:**

- A similar study can be conducted on a large sample to generalize the findings.
- A similar study can be conducted by using comparative descriptive design among rural and urban areas with chronic kidney disease.
- A similar study can be conducted at different health care settings like rehabilitation centers.
- A similar study can be conducted among staff nurses with help of pre experimental design.

**Ethical clearance:**

Permission will be obtained from concerned authorities.

- Informed consent will be obtained from samples.
- Privacy and confidentiality of the data will be maintained.

**Sources of funding:** Self

**Conflict of interest:** Nil

**LIST OF REFERENCE**

1. K.Sembulingam, PremaSembulingam. Introduction of ckd Essentials of medical physiology 4th edition, Jaypee brother publication 2006. P. 277
2. Joyce and M. Black, Jane Hokinson Hawks. Introduction of ckd Medical and surgical Nursing. Volume 1. 7th Edition. P. 941.
3. Suzanne C Smeltzer, Brenda G Bare. 3. Suzanne C Smeltzer, Brenda G Bare. Brunner and Suddharth's Text Book of Medical-Surgical Nursing. 10th ed. Philadelphia: Lippincott publishers; 2000; 1285, 1321, 1326.
4. Linda. S. Williams, Paula D Hopper. Understanding Medical surgical nursing 3rd Edition, Jaypee Brother publication, P. 795
5. Spiegel, Healthy People 2010, Objectives Chronic Disease. Available from: URL: http://www.uakp.org/htm
6. Timby K. Barbara. Smith E. Nancy. Introductory Medical Surgical Nursing 9th Ed. Lippincott Williams & Wilkins, Philadelphia; 2007.
7. Soundararajan P. Epidemic of renal disease in India -what can be done?. 2005 Sep; 9(5):847-53.
8. YC Lii, SC Tsay, TJ Wang, Group intervention to improve quality of life in hemodialysis patients, Journal of Clinical Nursing, 2007 Nov; 16(11c): 268-.
9. Masahiro Kozhuki "renal rehabilitation present and future perspectives"ISBN978- 953-51-0988-4 under CCby 3.0Intech publication.
10. Brunner and Siddhartha's Text Book of Medical-Surgical Nursing. 10th edition Philadelphia: Lippincott publishers; 2000; 1285, 1321, 1326.