

Assess the knowledge on causes and complications of chronic kidney disease among adults at NMCH, Nellore.

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Abstract: Background: The Chronic kidney disease mainly associated caused by the primary cause diabetes mellitus effects leading to chronic kidney disease and second leading cause is hypertension and vascular disease. Cystic kidney disease, tubule interstitial disease. Urinary tract obstruction and dysfunction, recurrent kidney stone disease, congenital defects of the kidney or bladder, nephropathy glomerulonephritis and renal artery stenosis. Objectives: 1. To assess the knowledge regarding causes and complications of chronic kidney disease among adults. 2. To find out the association between level of knowledge regarding causes and complication of chronic kidney disease among adults with their selected socio demographic variables Methods: A quantitative research approach with descriptive design, 50 sample of adult population who are working in nephrology and dialysis wards in NMCH, Nellore and who met the inclusion criteria were selected by using Non-probability convenience sampling technique. Results: Study revealed that the study revealed that 2 (4%) adults had A grade, 6 (12%) had B+ grade and 10(20%) had B grade 3(6%) had C grade and 29(58%) had D grade. For reduce chronic kidney disease among adults 2(4%) adults had excellent knowledge and 29(58%) adults had poor knowledge. The comparison of mean and standard deviation of knowledge regarding chronic kidney disease mean value is 9.42 and standard deviation was 0.43. Conclusion: These results shows that they have poor knowledge regarding causes and complications of chronic kidney disease. KEYWORDS: Knowledge, causes and complications, chronic kidney disease, adults.

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**Introduction:** The chronic kidney disease knowledge regarding the kidneys lie on the posterior abdominal wall one on each side of the vertebral column, behind the peritoneum and below the diaphragm. Kidneys are bean shaped organs about 11 cm long 6 cm wide, 3 cm thick and weigh about 150 g. The main functions of the kidneys are filtration selective re absorption

secretion. Chronic kidney disease describes knowledge on it is an umbrella term that describes kidney damage or a decrease in the glomerular filtration rate (GFR) lasting for 3 or more months. This occurs when there is irreversible damage to about 75% of nephrons. Onset is usually slow and asymptomatic progressing over several years.

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Chronic kidney disease is the progressive and irreversible destruction of the kidneys. Your kidneys are essential parts of your body. Early identification and active management of patients with renal impairment in primary care can improve outcomes. the number of patients with end stage renal disease is growing worldwide. About 20-30 patients have some degree of renal dysfunction for each patient who needs renal replacement treatment. Diabetes and hypertension are the two most common causes of end stage renal disease and are associated with a high risk of death from cardiovascular disease. Mortality in patients with end stage renal disease remains 10-20 times higher than that in the general population. The focus in recent years has thus shifted to optimising the care of these patients during the phase of chronic kidney disease, before the onset of end stage renal disease.

The chronic kidney disease mainly associated knowledge on caused by the primary cause diabetes mellitus effects leading to Chronic kidney disease and second leading cause is hypertension and vascular disease. Cystic kidney disease, tubule interstitial disease. Urinary tract obstruction and dysfunction, recurrent kidney stone disease, congenital defects of the kidney or bladder, nephropathy glomerulo nephritis and renal artery stenosis.

Risk factors for CKD include: cigarette smoking, obesity ,high cholesterol diabetes (types 1 and 2), autoimmune disease, obstructive kidney disease, including bladder cancer, obstruction caused by benign prostatic hyperplasia atherosclerosis, liver failure, narrowing of the artery that supplies your kidney. Kidney cancer bladder cancer kidney stones, kidney infection, systemic lupus erythemato sussclero derma, vasculitis vesicoureteral reflux, which occurs when urine flows back into your kidney.

### **NEED FOR THE STUDY:**

Worldwide according to WHO (2013-2017): Chronic kidney disease is progressive, irreversible, deterioration in renal function in which the body is unable to maintain metabolic, fluid and electrolyte balance resulting uremia.

It is a International level According to WHO in 2017; 30 million people 15% of adults are having chronic kidney disease 48% of those with severly reduced kidney function bit not dialysis are not aware of having chronic kidney disease most 9.6% people with kidney damage or mildly reduced kidney function are not aware of having Chronic kidney disease .

In India according to WHO in (2017): chronic kidney disease is one of the major threat which increased 80% globally and its prevalence, all over world 13700, population 50/1000 million. The prevalence of chronic kidney disease is 6 times higher in the age group 40 to 60 years 70,000 adults treated in the United States. common growing problems in the united states >10% of adults. In people aged (65) through (74) men kidney damaged or reduced kidney function. The number of cases of kidney failure will increase in developing countries, such as china and India where the number of adult people are 50 million increasing chronic kidney disease cases.

In Andhra Pradesh, according to WHO in (2014-2017): In 70,000 people die from causes related to renal failure at least 40 million. Americans are not risk of clean in the states the leading causes of end stage

kidney disease are the diabetes mellitus and hypertension.

In Nellore level according to WHO in 2017; that 90,000 people in the districts 1.1% of renal failure. The size affected (mandle and home) to about 40,000 people. In India level according to WHO is 2017, has 25,000 people (or) 17% of adults are having chronic kidney disease. In India to diabetes and hypertension, prevalence of Indian adult population had mean age of 39.88  $\pm$  15.87 years with 3.82% prevalence of diabetes and 33.62% hypertension in India today account for 40-60% cases of Chronic kidney disease. Hence the researcher has come across many people with chronic kidney disease at NMCH so the research felt bad there is a need to conduct the study.

# **PROBLEM STATEMENT**

A Study to assess the knowledge on causes and complications of chronic kidney disease among adults at NMCH, Nellore.

# **OBJECTIVES**

✤ To assess the causes and complications of chronic kidney disease among adults.

✤ To find association between the causes and complications of chronic kidney disease with their selected socio demographic variables.

## **OPERATIONAL DEFINITIONS:**

**Assess:** to make a judgement about something or to officially easy what the amount value of something.

**Knowledge:** The fact condition of knowing something with familiarity gained through experience or association.

**Causes:** A person or thing that gives rise to an action, phenomenal or condition.

**Complications:** Secondary disease or condition that develops in the cause of primary disease or condition and arise either as a result of it or from independent causes.

**Chronic kidney disease:** Progressive, irreversible, deterioration in renal function in which the body is unable to maintain fluid and electrolyte balance

**Adults:** A person who has reached legal age of majority.

#### **ASSUMTPIONS:**

Adults may have some knowledge regarding the chronic kidney disease.

#### DELIMITATIONS

The study is delimited to the samples staying in NMCH.

The study is delimited to adult in NMCH

The sample size is 50 only.

The data collection duration is two weeks only.

### MATERIALS AND METHODS

**Research approach**: The quantitative research approach.

Research design: A descriptive design.

**Setting**: The study was conducted in Narayana Medical College Hospital, Nellore.

**Sample:** Adults at nephrology and dialysis wards in Narayana Medical College and Hospital, Nellore. Who full fill the inclusion criteria for this study.

**Sampling Technique:** The convenience sampling technique was used.

**Sample Size:** The Sample size for the present study was 50 adults in NMCH, Nellore.

CRITERIA FOR SAMPLE SELECTION: Inclusion criteria:



>Patient with Chronic kidney disease who are willing to participate in the study.

Who know to read and write in Telugu and EnglishBoth male and female

#### **Exclusion criteria:**

Patient who are not willing to participate in the studyPatient who are all not present at the time of data collection

>Adults who don't know Telugu or English

## **DESCRIPTION OF THE TOOL:**

Part - A: Socio demographic variables

**Part - B: Questionnaire:** It consists structured questions of 30 questions to assess the causes and complications of Chronic kidney disease among adults in Narayana Medical College Hospital. SCORING **KEY:** It was given, score of one mark for each correct answer and zero mark for each wrong answer.

#### **SCORING PROCEDURE:**

GRADE	SCORE	PERCENTAGE					
A+	>22	More than 85%					
А	19-21	More than 75%					
B+	17-18	More than 65%					
В	14-16	More than 55%					
D	>12	Less than 50%					

# **DATA COLLECTION PROCEDURE:**

The data was collected for 2 week 23-3-18 to 04-4-18 after obtaining formal permission from the principal of Narayana College of nursing, medical officer of Narayana Medical College and Hospital, Nellore. The sample was informed by the investigator about the purpose of the study and then written consent was obtained from the sample. After obtaining the consent, maintained communication and rapport with the samples. 50 sample of adult population in nephrology and dialysis wards in NMCH, Nellore. Confidentiality of the information was assured. The data was collected with 7 samples per day from 9-12pm .the standardized tool was administered to adults who full filled the inclusion criteria and data collection took 10 minutes for each sample.

# **RESULTS AND DISCUSSION:**

Table-1: Frequency and percentage distributionof adults based on level of knowledge.(N=50)

Level of Knowledge	Adu	ılts
	FRE (F)	<b>PER (%)</b>
А	2	4
B+	6	12
В	10	20
С	3	6
D	29	58
Total	50	100

Shows that with regard to level of knowledge 2 (4%) had A grade,6 (12%)had B+ grade, 10(20%) had B grade, 3(6%) had C grade and 29 (58%) had D grade knowledge.



**Fig-1: Frequency Distribution Of Level Of Attitude Among Mothers.** 

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Table - II: The Mean and standard deviation ofknowledge score among adults.

CategoryMean SDLevel of Knowledge among adults9.420.43

Table - III: Association between the level ofknowledge regarding causes and complications ofchronic kidney disease among adults.(N=30)

SL.	DEMOGRAPHIC		A		B+		В		С		)	СНІ
NO	VARIABLES	F	%	F	%	F	%	F	%	F	%	SQUARE
1.	Occupation											Cv=26.219
	a)Coolie	-	-	1	2	5	10	2	4	7	14	df=12
	b)House wife	-	-	2	4	1	2	1	2	12	24	tv=26.22
	c)Government employee	-	-	1	2	2	4	-	-	7	14	P=0.001
	d)Private employee	2	4	2	4	2	4	-	-	3	6	S*
2.	Family income											Cv=44.174
	a)RS 5000-7000/-	-	-	3	6	5	10	2	4	7	14	df=12
	b)RS 7001-9000/-	-	-	-	-	2	4	1	2	6	12	tv=32.91
	c)RS 9001-11000/-	1	2	3	6	3	6	-	-	12	24	P=0.001
	d)RS >11000/-	2	4	-	-	-	-	-	-	4	8	S*

Among all the demographic variables, occupation and family income of the adults had significant association with causes and complications of chronic kidney disease among adults at P<0.001 level.

# MAJOR FINDINGS OF THE STUDY

Among adults the level of knowledge shows, 2 (4%) had A grade, 6 (12%) had B+ grade, 10 (20%) had B grade, 3 (6%) had C grade, 29 (58%) had D grade.
Mean knowledge on causes and complications of

chronic kidney disease among adults mean score was 9.42with standard deviation 0.43.

Among all the demographic variables, there was significant association with occupation and family income had significant association with causes and complications of chronic kidney disease among adults at P<0.001 level.

# RECOMMENDATIONS

➢ On the basis at the findings of the study, the following recommendations are being made

A similar study can be conducted by using large sample to generalize the findings.

A similar study can be conducted in different settings.
 A quasi experimental study can be conducted for identifying the knowledge on causes and complications of chronic kidney disease among adults.
 Conclusion: The study occluded that, among 50 adults 28 (59%) had D grade knowledge. The study included the adults having poor knowledge about causes and complications of chronic kidney disease among adults.

#### BIBLIOGRAPHY

1. BRUNNER AND SUDHART; TEXT BOOK OF MEDICAL AND SURGICAL NURSING. 10<sup>th</sup> edition; published by LIPPINCOTT company.

2. B.T.BASIAVANTHAPPA; TEXT BOOK OF MEDICAL AND SURGICAL NURSING; 2<sup>nd</sup> edition; published by Jaypee.

3. ABAEL JOHAN' Communicable disease of cholera: American journals of public health; December-2006; Vol 4.

4. DINO JOSEPH; Awareness of prevention of cholera among adults; Indian journals of nursing studies; July -2007; Vol-5

5. JERALD REMAN; prevention of cholera among older adults; Indian journal of continuing nursing education; March -2008; Vol -6

6. MARADONA D ALWIN; prevention of cholera; journals of applied nursing research; January-2010; Vol -9

7. Basu Williams; Knowledge regarding prevention of cholera; American journals of nursing implication; April-2004 ; VOL-12

 ALBERT LUMEN; prevention of cholera among older adults; 2013 http://www.medicalnewtoday.com
 ALMRELD WILIAMP ;prevention of cholera in adults; 2012 www.google.com