

# Original Research Paper

Nursing

"EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF CORONARY ARTERY DISEASE AMONG CARE GIVER OF PATIENTS WITH CHRONIC KIDNEY DISEASE IN DIALYSIS UNIT OF SELECTED HOSPITALS."

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ABSTRACT Introduction: There is strong association between coronary artery disease (CAD) and chronic kidney disease (CKD). Care giver of patient with chronic kidney disease is accountable to maintain lifestyle of CKD patient hence they should be known about the important measures to prevent risk of CAD in CKD patient. The objective of study to find out the effectiveness of video assisted teaching programme on prevention of coronary artery disease among caregiver of patient with chronic kidney disease. Material & method: Data was collected from 70 care giver of CKD patients with by using non-probability convenient sampling technique. One group pre-test and post-test design was used. Structured questionnaires and 5 point Likert scale was used to assess knowledge and attitude about prevention of CAD in care giver of patients with CKD. The 't' test used to find out difference in pre and post test knowledge and attitude. One way ANOVA used to find out association between post test knowledge and post test attitude with selected demographic variables. Result: Maximum of sample 43 (61.42%) in pretest scored good while in post test maximum 64 (91.42%) samples scored excellent. The 't' value for overall knowledge was 17.05 and for the overall attitude was 27.63. Mean difference for over all knowledge and attitude was 6.65 and 18.79 respectively. The association of post test knowledge with age, sex, educational qualification and occupation was found significant and also there were significant association between post test attitude and educational qualification. Conclusion: The study revealed that , video assisted teaching programme is one of the effective method to improve level of knowledge and attitude regarding prevention of CAD among care giver of patients with CKD

# KEYWORDS: CAD: coronary artery disease, CKD: chronic kidney disease

#### INTRODUCTION

The coronary arteries are the major blood vessels which supply heart with blood , oxygen and nutrients. Cholesterol deposition (atherosclerosis) in arteries is the fundamental cause of coronary artery disease and it leads to narrowing of coronary arteries.  $^{\rm l}$  Slow and progressive loss of kidney function over a period of years result in Chronic kidney disease(CKD) and eventually patient go through permanent kidney failure.  $^{\rm l}$ 

Hypercalcemia and vascular calcification occurs due to the alteration in calcium and phosphorus homeostasis and CKD is one of the route cause to make these changes in calcium and phosphorus homeostasis. According to some studies there is 25 % evidence of CAD in patient who are on dialysis which highlight that CAD prevalence is more in CKD patients which boost to morbidity and mortality among the patients with chronic kidney disease.  $^{4.5}$ 

# NEED OF STUDY

There is heavy burden of Coronary heart disease (CHD) in India. Decreased glomerular filtration rate (GFR) and proteinuria were independently associated with CAD. The rate of mortality at five years was found to be 45.7%, 24.3% and 19.5% in patient with CKD stages 4,3 and 1 respectively. Using cardiac mortality has been estimated in dialysis patients. Before become dialysis dependent, about 35% of chronic kidney disease (CKD) patients shown clinical symptoms of heart failure.

There is moderate to severe cognitive impairment in patient on dialysis.  $^{10}$  Hence instead of patient with CKD it needed to be educated the care giver of patient with CKD about prevention of coronary artery disease so they can take proper care of patient at home .

Video assisted programme is well planned teaching material of lecture with videos which help learners to get all concepts cleared and learn more effectively regarding topic. 11,12

# **OBJECTIVES:**

### 1. Primary objective

To evaluate effectiveness of video assisted teaching programme regarding prevention of coronary artery disease among caregiver of patient with chronic kidney disease.

## 2.Secondary objectives

- To assess the pretest knowledge and attitude scores regarding prevention of coronary artery disease among care giver of patients with chronic kidney disease
- To assess post test knowledge and attitude scores regarding prevention of coronary artery disease among care giver of patients with chronic kidney disease after video assisted teaching programme.
- To compare pre and post test knowledge and attitude scores regarding prevention of coronary artery disease among care giver of patients with chronic kidney disease
- To find out association between post test knowledge and attitude score and selected demographic variables regarding prevention of coronary artery diseases among caregiver of patients with chronic kidney disease.

## MATERIAL AND METHOD

70 care givers of patients with chronic kidney disease in dialysis unit of selected hospitals were selected by using non probability convenient sampling technique. Quantitative descriptive evaluatory approach had adopted in study. One group pretest post test design were used to conduct study. The study was conducted in private hospitals of Navi Mumbai, Maharashtra where the full equipped dialysis unit was present. All legal formalities had completed by obtaining approval from ethical committee of the Institution, the concerned authorities of the hospital and informed consent from the samples was taken. Data was collected by using multiple choice structured questionnaire of 25 items to assess knowledge regarding topic and five point Likert scale of 20 items with 4 negative and 16 positive sentences to evaluate attitude of samples regarding prevention of coronary artery diseases. Care giver of patients who were willing to participate in the study and understand Hindi, Marathi as well as English language were included in the study. Care giver of patients above 75 year of old and who were paid for taking care of sample was excluded from the study. Data about existing and post experimental knowledge and attitude of care giver regarding prevention of coronary artery disease had been collected with similar instrument. Difference in pre and post test knowledge and attitude score had calculated with the help of t test and association of post test knowledge and attitude score with selected demographic variables estimated by using one way ANOVA method.

#### RESILLT

Table No. :1- Distribution of sample based on overall knowledge level regarding prevention of CAD among caregivers.

N = 70

Sr No.	Knowledge level	Pre test		Post test	
		F	%	F	%
1.	Poor (0 – 7)	0	0	0	0
2.	Average (8 – 13)	21	30	0	0
3.	Good (14 - 19 )	43	61.42	6	8.57
4.	Excellent (20 - 25)	6	8.57	64	91.42
	TOTAL	70	100	70	100

The table no.1 revealed that maximum 43 (61.42%) of samples were with good knowledge while conducted the pretest and after video assisted teaching programme maximum 64 (91.42%) samples fall in excellent category. No any sample was below score 8 and it indicates all samples were with some basic knowledge regarding prevention of coronary artery disease from starting onwards.

Table No.:2-Effect of video assisted teaching programme on the overall knowledge of the sample.

N = 70

Comparison of overall		Mean	S.D.	M.D	SEMD	t	P
Knowledge area						value	value
Overall	Pre test	15.27	2.81	6.65	0.39	17.05	0.00
knowledge	Post test	21.92	1.75				

df = 69, level of significance is 0.05 for table value of 1.99

Table no.2 revealed that the calculated t value was 17.05 for overall knowledge regarding prevention of coronary artery disease which is more than table value 1.99 at 0.05 level of significance. The mean difference was found to be 6.65 which depict that post test mean (21.92) is higher than pretest mean (15.27). Standard deviation found to be (SD1=2.81) and(SD2=1.75) for pre and post test respectively.

Table No: 3 - Effect of video assisted teaching programme on the overall attitude of the sample.

N = 70

Comparison of overall attitude area		Mean	S.D.	M.D		t value	P value
Overall		76.92	4.89	18.79	0.68		
attitude	Post test	95.71	2.91				

df = 69, level of significance is 0.05 for table value of 1.99

Table no.3 depict that the table value 1.99 at 0.05 level of significance is less than calculated t value (27.63), for overall attitude level of samples regarding prevention of coronary artery disease. Pretest mean (76.92) was less than post test mean (95.71) and mean difference found to be 18.79. Standard deviation for pretest was 4.89 and for post test was 2.91.

The post test knowledge shown significant association with age, sex, educational qualification and occupation and the post test attitude got significant association with educational qualification.

### Recommendations

- 1. Practices can be observed directly
- The study can be conducted on staff nurses and dialysis technicians to improve knowledge regarding prevention of coronary artery disease

### CONCLUSION

The study helps to identify that the care giver of patients with

chronic kidney disease were with somewhat knowledge and favorable attitude regarding prevention of coronary artery disease but after administrating video assisted teaching programme on the same topic their knowledge and attitude level is improved enough and they became aware about need of prevention about coronary artery diseases. Hence video assisted teaching programme found to be effective to increase knowledge regarding prevention of CAD among caregiver of patients with CKD.

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