# "A STUDY TO ASSESS THE KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE CORONARY ARTERY BYPASS GRAFTING (CABG) ADMITTED IN A SELECTED HOSPITAL OF SURAT CITY IN GUJARAT STATE WITH VIEW TO DEVELOP INFORMATIONAL BOOKLET."

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Abstract: The Aim of this study is to assess the knowledge regarding home care management among patient undergone CABG admitted in a selected hospital of surat city. The Objectives of the study are: To Assess level of knowledge regarding Home care management among patients undergone Coronary artery bypass grafting, to find out the association between level of Knowledge with selected demographic variables, to develop and distribute informational booklet on Home care management among patients undergone Coronary artery bypass grafting. The Assumptions of study are: Patients undergoing Coronary Artery Bypass Grafting may have some knowledge regarding Home care management among patients undergone CABG. The Informational booklet may be a useful source to improve the knowledge related to Home care management among patients undergone Coronary artery bypass grafting. A Descriptive Survey Research Design was used. The Structured Knowledge questionnaire tool was used to assess the knowledge was used. It is included 30 multiple choice questions. There were 4 questions related to Introduction, 8 question related to Home Care, 15 questions related to Healthy Habit, 3 questions related to Rehabilitation. Total 100 Samples were selected by Nonprobability Convenient sampling technique for this study. Results: The study findings revealed that Out of 100 samples most of the samples 48.0 % had Average knowledge. The mean Knowledge score was 2.12 (7.06 %) and there was a significant association between knowledge scores and demographic variable such as Educational Status, Socio Economic Status and Any Training related to CABG.

*Index Terms* – **CABG-** Coronary Artery Bypass Graft.

# INTRODUCTION

# "A HEALTHY HEART IS A WEALTHY START"

Heart is an efficient durable structure which helps to lead a healthy life (Tortora – 2003). Health is maintained and improved not only through the advancement and application of health sciences, but also through the efforts and intelligent lifestyle choice of the individual and society. A healthy lifestyle can help prevent diseases and help keep it from progressing. A heart-healthy lifestyle includes regular exercise, maintaining a healthy weight, no smoking, controlling hypertension, and managing stress.

Every year half a million people undergo CABG procedure to relieve symptoms and prolong their lives. It is often Performed on men (4,20,000) than on women (1,87,000) (CABG statistics – 2010). The symptoms are usually of less intensity compared to before surgery. Also, the recurrence of chest pain is more in women than men. Following CABG, 85 percent of people have significantly reduced symptoms, less risk of future heart attacks, and a decreased chance of dying within 10 years. In 17, 857 patients with disease of all three Coronary arteries who underwent coronary artery bypass surgery, the annual mortality rate was 3.3 %. 1800 patients with three-vessel or left main coronary artery disease to undergo CABG. Every year 28,000 CABGs are performed in the UK.

India will carry 60% of the world's heart disease burden, nearly four times more than its share of the global population, according to a study. The nursing personnel play an important role in improving the post-operative outcome of patients. A Programme of instruction based on the individual's needs is planned and implemented at the proper time. Therefore the study is planned to assess the Knowledge of Patients undergone CABG and provide Information Booklet on Home care management.

Lifestyle Modifications and rapid urbanization has lead to an epidemic of Cardiac disease in India. Lifestyle that is applicable to maintain a 'Healthy Heart' is even more important after surgery. Complete recovery from surgery is a gradual process and it should be taken one day at a time (medlineplus – 2008). The incidence of Coronary artery disease ranges from 14.8 to 65.4 per 1000 population.

Coronary artery bypass graft surgery (CABG) was first performed in India in 1975 about 13 years after its advent in 1962. In the mid 1990 some 10,000 CABG surgeries were being performed annually in India. CABG that accounted for less than 10% of all cardiac surgeries in 1980, today accounts for more than 60% and every year 25000 Coronary bypass operations is being carried out in India. Report from 2010 shows that out of 60,000 open heart surgeries done every year; majority are CABG (Kaul & Bhatia – 2010). In spite of increased risk for patients undergoing Coronary artery bypass graft surgery, overall mortality rates have decreased. There is a need to develop a more unified approach to the care of patients. Education needs to take place in Post-operative care. This is important so that patient can recognize the sign of complication.

Coronary Artery Diseases can be effectively treated by various non-invasive and invasive procedures like Angioplasty, Percutaneous coronary angioplasty with stent, Coronary arteries bypass grafting (CABG) to restore blood supply through coronary arteries. For a patient to be considered for CABG, the coronary arteries to be bypassed must have at least a 70% occlusion. CABG has known to have significant improvements in the patients. Epidemiological studies show a sizeable burden of CAD in rural (3-5%) and urban (7-10%) populations. A conservative estimate indicates that there could be 30 million CAD patients in India of which 14 million are in urban and 16 million in rural areas. It has been shown to improve physical health and decrease subsequent morbidity and mortality in patients with Coronary heart disease - myocardial infarction and after CABG (Dalal et. al; - 2010). The Cardio-thoracic nurse coordinator should be equipped with appropriate skills, knowledge and time to deliver Postoperative education to the client and family members. Hence the researcher has taken interest in Home care management of Patients undergone CABG and the topic is selected for dissertation. Following surgery, some patients may feel their quality of life is poor; therefore, it is important to know the ways to improve quality of life post-surgery. Hence the study was designed to reduce complication and to improve recovery.

### STATEMENT OF THE PROBLEM

A Study to assess the knowledge regarding home care management among patients undergone coronary artery bypass grafting (CABG) admitted in a selected hospital of surat city in gujarat state with view to develop information booklet.

# **OBJECTIVES:**

To Assess level of knowledge regarding Home care management among patients undergone Coronary artery bypass grafting.

To find out the association between level of Knowledge with selected demographic variables.

To develop and distribute informational booklet on Home care management among patients undergone Coronary artery bypass grafting.

# **ASSUMPTIONS:**

Patients undergoing Coronary Artery Bypass Grafting may have some knowledge regarding Home care management among patients undergone CABG.

The Informational booklet may be a useful source to improve the knowledge related to Home care management among patients undergone Coronary artery bypass grafting.

# RESEARCH METHODOLOGY

For the present study the Descriptive Research Approach was used with Non Experimental Descriptive Survey Research Design. The present research study includes: **Research variable**: Knowledge regarding home care management among patients undergone coronary bypass grafting. **Demographic variables**: Variables which include Age, Gender, Duration of sign and symptoms of disease, educational status, socio-economic status, previous training related to CABG, personal habits, previous history of any disease. Total 100 samples are selected for the study. For selecting the sample Non – Probability **Convenient Sampling Techniques** was used. The tool for assessing the Knowledge the **Structured Knowledge questionnaire**. In this study, the **Reliability** will be determined by administering structured questionnaire by using test retest method using **carl'persion co relation coefficient** formula. The reliability co efficient of structure knowledge questionnaire was 0.85 which is more than 0.70 hence the structure questionnaire was found to be reliable, to 100 selected samples from different hospital of surat city. The collected data will be planned and analysed in the form of descriptive and inferential statistics. The analysed data will be presented in the form of figure and tables by using mean, percentage, and association with the selected demographic variables.

### RESULTS

Table-1 Area - wise Mean score and mean percentage of Knowledge Score of the samples

(N-100)

Sr. No.	Area of Content	Max. score	Mean Score	Mean %	
1	Introduction	4	0.40	39.75	
2	Home Care	8	0.59	58.50	
3	Healthy Habit	15	0.53	53.40	
4	Rehabilitation	3	0.60	59.67	
Total		30	2.12	7.06	

The study finding revealed that among 100 sample Mean knowledge score of area related to Introduction was 0.40 and mean percentage was 39.75%. Mean knowledge score of area related to Home Care was 0.59 and mean percentage was 58.50%. Mean knowledge score of area related to Healthy Habit was 0.53 and mean percentage was 53.40 %. Mean knowledge score of area related to Rehabilitation was 0.60 and mean percentage was 59.67 %. Total Mean score was 2.12 and Mean Percentage was 7.06 %.

Table 2: Level of Knowledge of the regarding Home care management among patients undergone Coronary artery bypass grafting.

Level of Knowledge	Frequency(f)	Percentage (%)
Poor (0-10)	48	48.0
Average (11-20)	32	32.0
Good (21-30)	20	20.0
Total	100	100

Among the 100 sample Population most of samples Knowledge level was Poor, 48 (48.0%) and 32 (32%) sample Knowledge level was verage, 20 (20%) samples knowledge level was Good.

.Table:2 Association of knowledge score with selected demographic variable

	1		Laboratory and State of State				(N=100)
Sr.No.	Demographic Variable	Frequency	Chi Square (χ²)		Degree freedom	of	Association
			Calculated value	Table value			
1	Age		V	- 400	7.4 %		
	a) 31-40 years	07	100		107 . 16		
	b) 41-50 years	26	7.23	12.59	6		None
	c) 51-60years	35		100	- W		significance
	d) >60 years	32					
2	Gender	Ŝ	MA A	- S			
	a) Male	52	1.47	5.99	2		None
	b) Female	48		4 W			significance
3	Duration of sign and	1	370	40.7	100		
	symptoms of disease	N %	27	A ( 100	nest All		
	a) <1 year	46	- T				None
	b) 1-3 year	42	7.04	12.59	6		significance
	c) 4-6 year	04	RIL		100		
	d) >6 year	08	- M				
4	Educational status		Section 1	Secretary Property of the Party			
	a) Primary education	28		A STATE OF THE PARTY OF THE PAR			
	b) Secondary	33			6		
	education	30	16.46	12.59			Significant
	c) Graduate	09					
	d) Post graduate or		-				
	more						
5	Socio economic status	• •					
	a) <10,000 per month	38					
	b) 11,000-20,000 per	42					G1 10
	month	20	11.07	9.49	4		Significant
	c) 21,000-30,000 per	20					
	month	0					
	d) >30,000 per month						
6	Any training related to CABG	18					
	a) Yes	82			2		Significant
	b) No	82	21.80	5.99	2		Significant
7	Personal habits		<u> </u>		1		
,	a) Alcohol	32			1		
	b) Smoking	17			1		None
	c) Tobacco chewing	29	3.52	12.59	6		significance
	d) No any personal	22	3.52	12.59			Significance
	habits						
8	Previous history of any	17					
	disease	17			1		N
	a) Diabetes mellitus	26					None
	b) Hypertension	13					significance
	c) Diabetes mellitus	44	2.57	12.59	6		
	with hypertension		]		l		

Sr.No.	Demographic Variable	Frequency	Chi Square (χ²)		Degree of freedom	Association
			Calculated value	Table value		
	d) None of above					

### \*significant at the level 0.05

The association of knowledge and attitude score with selected demographic variable was calculated with chi square. The significance value was at 0.05 level. The finding was analyzed by using descriptive and inferential statistics.

### CONCLUSION

The following conclusions can be drawn from the present study findings: In present study knowledge of samples were average and good. Investigator prepared the Information booklet on Home care management keeping in mind the blue print, review of literature and expert opinion. The main factors considered for preparation of Information booklet were convenience, self-pacing and independent study. Appropriate and colourful illustrations were incorporated to enhance understanding. The final draft of Information booklet was prepared after suggestions given by the experts. The material was developed in English and Gujarati language. The Information booklet was provided to Patients undergone CABG in selected Hospital of Surat city in Gujarat State.

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