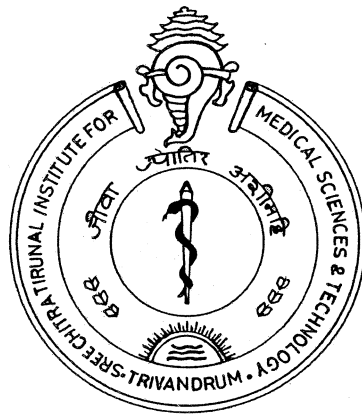


**A STUDY TO ASSESS THE EFFECT OF  
INDIVIDUALIZED HELTH EDUCATION ON  
KNOWLEDGE ABOUT HOME CARE AMONG  
PATIENTS AFTER CABG**



**PROJECT REPORT**

*Submitted in partial fulfillment of the requirements for the*

*Diploma in Cardiovascular and Thoracic Nursing*

**SANDHYA . L**

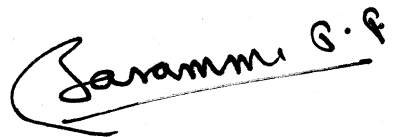
**CODE NO : 6079**

**SREE CHITRA TIRUNAL INSTITUTE FOR  
MEDICAL SCIENCES AND TECHNOLOGY  
TRIVANDRUM**

**2010**

## CERTIFICATE FROM SUPERVISORY GUIDE

This is to certify that Miss. SANDHYA . L has completed the project work on '*A study to assess the effect of Individualized health education on knowledge about home care among patients after CABG*', under my direct supervision for the partial fulfillment for the Diploma in Cardiovascular and Thoracic Nursing in the university of Sree Chitra Tirunal Institute for Medical Sciences and Technology. It is also certified that no part of this report has been included in any other thesis for processing any other degree by the candidate.



**Dr. Saramma. P.P, MN, PhD**

Senior Lecturer in Nursing

SCTIMST

Trivandrum

November 2010

## **CERTIFICATE FROM THE CANDIDATE**

This is to certify that the project on ' *A study to assess the effect of individualized health education on knowledge about home care among patients after CABG* ', is a genuine work done by me, under the guidance of Dr. Saramma .P.P, M.N, PhD, Senior Lecturer in Nursing, SCTIMST, Trivandrum. It is also certified that this work has not been presented previously to any other university for award of degree, diploma or other recognition.

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November 2010

## APPROVAL SHEET

This is to certify that **Miss. SANDHYA . L**, bearing code no :6079, has been admitted to Diploma in Cardiovascular and Thoracic Nursing , January 2010 and she has undertaken the project entitled, '*A study to assess the effect of individualized health education on knowledge about home care among patients after CABG* ', which is approved for the Diploma in Cardiovascular and Thoracic Nursing , awarded by the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum and is found satisfactory.

### EXAMINERS

(1).....

(2).....

### GUIDE

(1).....

(2).....

Trivandrum

November 2010

## *Acknowledgement*

Investigator owes sincere thanks to God Almighty, who accompanied and directed her to achieve success throughout this study.

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## ABSTRACT

### **A study to assess the effect of individualized health education on knowledge about home care among patients after CABG**

**Background:** Coronary Artery Disease (CAD) one of the non – communicable diseases, has become a major public health problem in the developing countries. CAD in India is showing an increasing trend.

Coronary Artery Bypass Graft surgery improves quality of life of the CAD patients and help them to return to the normal life, the early recovery period presents a number of challenges for patients, carers and nurses. Early and adequate discharge planning based on in- depth knowledge of the post discharge experience will help to ensure optimal recovery.

**Objectives:** (1) To assess the effect of individualized health education on knowledge about home care among patients after CABG.

( 2) To assess the relationship between knowledge of patients after CABG and selected variables.**Method :** It was a true experimental study, a randomized trial was done among 50 patients who have undergone

CABG, 25 each in control group and experimental group (who have got individualized health education). Both groups were given pretest on the day of admission and post test on the day of discharge. A structured questionnaire was used to assess the knowledge of the patients. **Result :** The data were analysed using Epi info. This study revealed that knowledge score has increased in the experimental group compared to the control group and there is a statistically significant difference in the mean knowledge of the experimental and control groups ( $p = 0.006$ ). **Conclusion –** Individualised health education is an appropriate method for imparting health education on home care to the patients after CABG prior to discharge from the hospital.

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## ABBREVIATIONS

ANOVA	—	Analysis of Variance
CABG	—	Coronary Artery Bypass Graft
CAD	—	Coronary Artery Disease
CSW	—	Cardiac Surgery Ward
OPD	—	Out Patient Department
PCI	—	Percutaneous Coronary Intervention
SCTIMST	—	Sree Chitra Tirunal Institute for Medical Sciences and Technology

# CHAPTER I

## INTRODUCTION

### 1.1 Introduction

Coronary Artery Disease (CAD) one of the non – communicable diseases, has become a major public health problem in the developing countries. CAD in India is showing an increasing trend. The incidence of CAD ranges from 14.5 – 65.4 per 1000 population, mainly because of the changing life style and dietary habits that involves a stress full life and diet replete with cholesterol. (Sabik, 2007)

Treatment generally reduces the cardiac workload, improve coronary artery blood flow and, over the long term halts and reverse the atherosclerotic process. Coronary blood flow can be improved by Percutaneous Coronary Intervention (PCI) or Coronary Artery Bypass Grafting (CABG). An acute coronary thrombosis may sometimes be dissolved by fibrinolytic drugs. Patient's demands for less invasive procedures are reflected in the rapid growth of minimally invasive technique for the treatment of CAD. This growing trend has not replaced the need for traditional 'open ' techniques: rather it has expanded the treatment option for myocardial revascularization. Newer technologies

using laser, robots, genetic engineering, and aortic graft replacement organs have increased the number of available therapeutic interventions for CAD (Seifert et al, 2008).

American Heart association position statement declared that CABG is indicated if medical management does not satisfactorily control angina in patients with CAD or if the patient has >50% obstruction of the left main coronary artery or three vessel disease with moderate or severe left ventricular dysfunction regardless of symptoms (Eagle et al, 2004). Reports from 2005 shows that out of 60,000 open heart surgeries done every year majority are CABG.

Coronary artery bypass graft surgery is a lifesaving intervention, but the early recovery period presents a number of challenges for patients, carers and nurses. Early and adequate discharge planning based on in- depth knowledge of the post discharge experience will help to ensure optimal recovery (Theobald and McMurray, 2004).

The education and counseling needs of cardiac surgery patients and family members vary over time and with the type of surgery, length of hospitalization, degree of social support, personal understanding of the surgery, presence of co morbidities and personal preference. Research studies showed that only 25 % or less of cardiac surgery patients receive nursing home care after discharge (Seifert et al, 2008)).

## 1.2 Background of the study

CABG are commonly conducted in two ways, “On pump” CABG and “Off pump” CABG. In On pump CABG, cardiopulmonary bypass is used during surgery, it helps to stop the heart in order to perform the coronary attachments under direct vision in a relatively dry motionless field. Off-pump coronary artery bypass graft surgery on a beating heart has been facilitated by the development of positioning devices and stabilizer systems. The most commonly used conduits for CABG are internal mammary artery and great saphenous vein. Other conduits which less commonly used are radial artery, gastroepiploic artery and inferior epigastric artery. The minimally invasive endoscopic saphenous vein harvesting technique have significantly reduced incision morbidity (Munro, 2009).

Coronary Artery Bypass Graft surgery improves quality of life of the CAD patients and help them to return to the normal lives, it is stated that during the post-operative period, patients are more active, exercise performance increases, they experience less chest pain, less disease related symptoms, and they become more socially interactive. However, despite the remedial and positive effect of the open -heart surgery, it can cause some physical, emotional and social problems for patient for six

months during the post – operative period. Furthermore the increasing tendency towards early discharge with a view to reducing the stay period and hospital cost can result in increasing nursing needs during the home stay period. The increased nursing needs result in increased need for information (Ozcan and Findik, 2010).

The information provided during the discharge training should consist of the physiological and psychological changes in patients and complication symptoms and the 'Do's and Don'ts' for patients. Later post-operative complications are Atelectasis, psychological complications, gastro intestinal complications and wound infection. Wound infections are generally a post-operative complication that increases cost, length of stay and unplanned rehospitalization (Seifert et al, 2008). The patients should be given health education regarding the following aspects

### Wound care

It is important that the patients are informed about daily care of wound and checking the wound for complication symptoms such as rash, wound dehiscence, drainage, swelling, fever, the factors that increase and decrease the pain and understanding the use of analgesics (Seifert et al, 2008).

## Diet Modification

The major dietary recommendations for patients after cardiac surgery focus on maintaining or achieving a healthy body weight, desirable blood cholesterol level and blood pressure. Inclusion of this information in discharge education is essential because dietary changes often do not occur after CABG.

## Sleep

The greatest period of sleep disturbance is in the first week after surgery. Impaired sleep contributes to worse physical and emotional function, pain, nocturia, impaired sleep cycles, difficulty in finding comfortable positions, and inability to perform usual routines before bed appear to be important contributors to impaired sleep after cardiac surgery. Non pharmacological interventions such as music, therapeutic touch and back massage have varying degree of success in decreasing pain, anxiety and improving sleep efficiency in post cardiac surgery patients.

## Smoking cessation

A major emphasis of nurses after discharge from the hospital is assessment of smoking cessation begun during the hospitalization. Nicotine replacement therapy can be used cautiously in post cardiac

et al, 2008).

### Other areas

Informing patients about the name and characteristics of drugs is also important. Prevention of constipation, which has negative impacts on both the physical and psychological health of patients and which might be prevented if measures are taken, and measures that might be taken in emergencies, and care practices to be applied in home. Furthermore training should also include hygienic care, first bath time, exercises, sexual activity time, and time for starting daily activities; After a well organized discharge training reaching to the set targets, the patients recovery process is accelerated (Ozcan and Findik, 2010).

Johanson et al reviewed previous studies aimed at training surgery patients, and stated that 40% of the training practices were applied to cardiac surgery patients, and that a minority of these were applied after surgery and after discharge. Patient education post coronary artery bypass graft surgery is an essential component of nursing care aimed at assisting patients in caring for themselves at home, following discharge from hospital (Fredericks and Ibrahim, 2009).

Sree Chitra Thirunal Institute for Medical Sciences and Technology (SCTIMST) is an institute of national importance by an act of Indian parliament. It is an autonomous institute under the administrative control of the Department of Science and Technology, Govt of India, and is situated at Trivandrum, the capital city of Kerala. It has a 239-bedded tertiary referral hospital with major specialties like Cardiology, Cardiac surgery, Neurology, Neuro surgery. At least two CABG surgeries are performed daily, both On pump and Off pump CABG, On pump CABG is the most common than Off pump. Endoscopic saphenous vein harvesting technique also is used as a trial. By knowing the importance of post-operative health education a group health education is practiced in the Cardiac Surgery ward for all patients.

### **1.3 Need for study**

CABG is not a curative surgery, in is only bypassing the blood supply through the blocked artery by grafting with other blood vessels and reestablishing blood supply to the heart muscle. There is chance of further incidence of myocardial infarction. Complete recovery from surgery is a gradual process, care should be continued in the home also. So home care is very important. Lack of knowledge regarding home care is an important factor in developing complications. Most wound infections are identified after discharge from the hospital, so it is important to give

discharge training to patients regarding home care including diet modification, rest, exercise, drugs and personal hygiene. A satisfactory significant association was found between knowledge and smoking cessation and diet modification after surgery (Nahapetyan, 2006) .

In SCTIMST at least two patients are undergoing CABG daily. Two patients came in the review cardiac surgery OPD with wound infection in the month of June, this may be due to lack of knowledge regarding home care. From this point of view the researcher decided to under take a study to assess the effect of individualized health education on knowledge about home care among patients after CABG.

#### **1.4 Statement of the problem**

A study to assess the effect of individualized health education on knowledge about home care among patients after CABG

#### **1.5 Objectives**

- To assess the effect of individualized health education on knowledge about home care among patients after CABG.
- To assess the relationship between knowledge of patients after CABG and selected variables.

### ***Individualized health education***

Individualized health education means health education given to each patient by the investigator about home care after CABG, which include wound care, exercise, rest, diet, medications and follow up.

### ***Knowledge***

A state of awareness or understanding with conscious mind. In this study 'knowledge' refers to awareness or understanding about the home care, measured as the score obtained in the validated knowledge test on home care after CABG.

### ***Home care***

Home care is the health care or supportive care provided to the patient in the home by family, friends, health care professionals or the patient himself.

### ***Patients***

In this study patients refer to the persons who have undergone CABG in SCTIMST, Trivandrum.

### ***CABG***

Coronary Artery Bypass Graft (CABG) is a surgical procedure in which a blood vessel from another part of the body is grafted to the occluded artery beyond the occlusion in such way that blood flow

bypasses the blockage. Blood vessels commonly used are internal mammary artery and saphenous vein.

### **1.7 Delimitations**

- The study is limited to Malayalam speaking patients.
- Patients who have undergone CABG.
- Patients who are willing to participate in the study.
- The data collection period is limited to one month.
- The study setting is limited to SCTIMST, Trivandrum.

### **1.8 Summary**

This chapter included the introduction, background of the study, need and significance of the study, statement of the problem, objectives, operational definitions and delimitations of the study.

# **CHAPTER II**

## **REVIEW OF LITERATURE**

### **2.1 Introduction**

Review of literature is the key step in the research process, which helps to lay a foundation for the study. The literature review provides a background for understanding current knowledge on a topic and illuminates the significance of the study. Also literature review is important to gain better understanding and insight necessary to build upon existing knowledge.

The literature review relevant for this study is presented in the following sections.

**2.2** Studies on effect of post-operative teaching in knowledge of patients after CABG.

**2.3** Studies on effect of post-operative teaching in recovery outcomes after CABG.

**2.4** Studies on need for discharge information.

## **2.2. Studies on effect of post-operative teaching in knowledge of patients after CABG.**

Ozcan and Findik (2010), conducted a study to assess the information level of patients in discharge training given by nurses following open-heart surgery. It was a prospective study with sample size of 50. The information level of patients who received discharge training was assessed before training and one month after training. Data were collected using personnel information form, and pretest and post-test. The result of this study showed that patients were well informed after discharge training ( $P=0.05$ ), and the age and marriage variables affected the information level ( $P= 0.032$ ,  $P=0.045$  respectively). The study concluded that discharge training after open -heart surgery increases the knowledge of patients.

Marshall et al(1986), conducted a study to assess the effectiveness of a structured teaching guide used by nurses in educating the patient and the family about normal postoperative recovery. One group was educated by an unstructured method and the group received structured teaching with the use of a guide developed by nurses experienced in recovery after open- heart surgery. Knowledge was assessed before instituting and on the discharge from the hospital. All patients were again assessed 6 weeks after discharge. An analysis of variance was also done which revealed

that both group had higher total knowledge score after surgery. The study finding showed that the patients who had structured teaching walked more long after surgery (mean = 15.61) than those who received routine teaching (mean = 7.00) ( $p < 0.005$ ) and patients who had structured post operative teaching had higher total compliance scores (mean = 86.2) than those who had unstructured teaching (mean = 79.5) ( $p < 0.05$ ). The study concluded that the structured teaching might not have initially affected patient's knowledge, but it might have had an impact on their compliance with postoperative health behaviors.

Steele and Ruzucki (1987), conducted a study to evaluate the effect of cardiac teaching during hospitalization. In this evaluation, patients readily learned information that prepared them to deal with post-operative experiences, that is ambulation, exercise, resumption of sexual activity, and symptoms to report indicating lack of tolerance to such activities. Areas that showed limited knowledge gain were those that required long term behavioral changes , such as diet modification and stress modification.

Beckie (1989), conducted a study to assess the impact of supportive - educative telephone program on the level of knowledge and anxiety of patients undergoing CABG during the first week after discharge from the

hospital. The patients were assessed by a knowledge test and a state anxiety inventory. The data were collected without knowledge of the participant's group assignment. Data analysis with independent tests revealed a statistically significant ( $P < 0.05$ ) difference between the knowledge level of the experimental and control group in the areas of coronary artery disease, diet, medications, physical activity restrictions, exercise and rest. A statistically significant difference between the state anxiety level of the controlled and experimental group was also evident.

### **2.3 Studies on effect of discharge information in recovery outcomes after CABG**

Moore (1996), conducted a study to assess the effect of a discharge information intervention on physical and psychological outcomes one month following CABG. Recovery outcomes were compared between two groups of patients, those receiving an audiotape of information focusing on expected physical symptoms and their management in addition to usual care, and those received a usual cardiac discharge information protocol. The outcome measurements included psychological stress measured by a profile of mood states, and physical functioning measured by a sickness impact profile. The audiotape intervention produced positive effects on physical functioning ( $P < 0.01$ ). The study concluded that audiotapes containing discharge information about

expected recovery experiences are a feasible and effective approach to enhancing the physical recovery after CABG.

Barnason and Zimmerman (1995), conducted a study to assess the effect of three different teaching approaches (an inpatient teaching program, a post discharge telephone follow-up program, and a post discharge group teaching program) among 90 patients who had undergone CABG. The teaching outcomes were evaluated in this study by the use of a questionnaire and cardiac surgical patient teaching satisfaction inventory. The study result supported the effectiveness of inpatient teaching protocol, which focused on survival skill for self-care management post discharge regardless of the type of teaching.

Cebeci and Celik (2008), conducted a study to determine the effect of discharge training and counseling on self-care ability and post discharge problems in CABG patients. The study was a prospective quasi-experimental study with an interventional and control group of 57 patients. The interventional group received a discharge training and counseling on the day of hospitalization. The study result showed that the interventional group had a positive impact on self-care score than control group.

Driscoll (2000), conducted a study to assess the patients and caregivers' perception of information, and their utilization of post-discharge care received from the health care professionals during their stay in the hospital. The study was conducted in two stages. Stage one included a qualitative approach of interviews two weeks after the discharge from the hospital. A quantitative approach using two sets of questionnaire was used in stage two with a sample size of 40 patients. The finding suggested that the carers received very little information from the health care professionals concerning their health care problems.

#### **2.4 Studies on need for discharge information**

Jickling and Graydon (1997), conducted a study to compare the discharge information needs 24 to 48 hours before the hospital discharge of male and female patients who have undergone first time CABG. The study was conducted in 20 samples. The study found no differences in the information need between the men and women. The study concluded that men and women have similar information need after CABG, and both wanted information concerning treatment, complications, activities for daily living and medications.

Heper et al (2006), conducted a study to examine incision care knowledge and discharge concerns of patients who have undergone gastric bypass bariatric surgery. The study was conducted in patients of age 21 yrs and above those who can understand English. The knowledge was assessed by using rating scale regarding incision care, fears and discharge concerns. The study result showed that knowledge of incision care and amount of incision care information received were rated low. The higher the amount of information received about incision care the higher the patient's knowledge( $r = .57, p < 0.001$ ).

Bednarski et al (2007), conducted a study to assess the patient's wound care knowledge and concerns prior to discharge from an acute care hospital. A questionnaire was used to assess the knowledge of patients, which included questions regarding health, wound care, beliefs about wound and their care, pain and wounds, literacy and learning, and discharge concerns. The study result showed that, patients with acute and chronic wound did not differ significantly in their concerns. Participants generally had appropriate knowledge regarding wound and hand washing, nutrition, and cigarette smoking. They had incorrect knowledge about drying out wound and leaving them open to air.

Griffiths et al (2007), conducted a study to identify the aspects of discharge that could be strengthened to assist people in managing the post hospital care and maintaining the community care. It was a qualitative interpretive study in which patients were interviewed one week after discharge, the sample size was 13 general surgical patients. The findings of the study illuminated the need for more individualized approach to discharge planning.

Jacobs (2000), conducted a study to assess the information needs of surgical patients following discharge. Study was conducted in 45 patients who were discharged from hospital by short -term surgical procedures. In this study patients identified information related to activity, wound care, complications and pain management as highly important.

Borgsteede et al (2010), conducted a study to assess the information need of patients about medications. A qualitative, semi-structured interviews were performed with 31 patients who were discharged with at least one drug prescription from the hospital. The study result showed that patients needed individualized information regarding drugs.

Astin et al (2008), conducted a study to assess the information need of patients treated with primary angioplasty for heart attack. In this study a

qualitative methodology using semi-structured interviews was conducted with 29 patients 3-12 days after discharge from the hospital. The study result showed that health information provision was satisfactory for most but should be improved by the closer matching of patient's preferences with provision.

## **2.5 Summary**

The review of literature showed that a structured health education regarding home care after CABG increases the knowledge of patients, decreases the anxiety level of patients regarding recovery, helps in physical recovery after surgery. The studies also showed that patients both men and women have similar information need regarding drugs, diet, prevention of complications etc.

## **Key words**

- ◆ Home care management after CABG
- ◆ Patient education after CABG
- ◆ Post operative health education after CABG
- ◆ Knowledge of patients after CABG
- ◆ Prevention of secondary MI

**METHODOLOGY****3.1 Introduction**

Research methodology is the systematic way to solve problem. It includes the steps that the researcher adopts to study the problem with logic behind. It indicates the general pattern of organizing the procedure of gathering valid and reliable data for an investigation.

This chapter provides a brief description of the method adopted by the investigator to conduct this study. This chapter includes research approach, research design, setting of the study, sample and sample technique. It further deals with the development of tools, procedure for data collection and plan for data analysis.

**3.2 Research approach**

It is a true experimental study. The samples are divided into two groups, experimental and control group.

Research design is concerned with the overall framework for conducting the study. The design used for fulfilling the objectives of the study. In order to assess the knowledge of patients about the home care after CABG, a self-prepared questionnaire including 10 questions are used. The samples are divided into two groups, experimental and control group, each containing 25 patients. Pretest and posttest are conducted in both groups.

### **3.4 Setting of the study**

This study was conducted in the cardiac surgery ward of SCTIMST, Trivandrum. The rational of selecting this institute was that the investigator was more familiar with the institution. SCTIMST is an institute of national importance, where there is a separate department for Cardiac Surgery, which includes Cardiac Surgery Intensive Care Unit and Cardiac Surgery Ward.

### **3.5 Study population**

The target population of the study was both male and female patients who have undergone CABG

### **3.6 Sample and sampling technique**

Patients were recruited consecutively to the control and interventional group using random sampling. It consists of 50 patients, 25 in the interventional group and 25 in the control group .Ten samples were selected for pilot study. The samples selected for the study are patients who are admitted for undergoing CABG surgery in SCTIMST, Trivandrum during the data collection period who fulfilled the inclusion criteria.

### **3.7 Criteria for sample selection**

#### ***Inclusion criteria***

- Patients who can understand and read Malayalam.
- Patients who are willing to participate.
- Patients ho have no perception problems
- Patients who are admitted for undergoing CABG surgery.

#### ***Exclusion criteria***

- Patients who can't understand Malayalam

### **3.8 Data collection tool**

Data collection tool refers to the instrument, which was used by the investigator to obtain relevant data. The investigator prepared a structured questionnaire after an extensive review of literature. The questionnaire

was then examined and content validated by experts in SCTIMST. The research tool was finalized according to expert's opinion.

### **3.9 Description of the tool**

The structured questionnaire consists of two sections

#### ***Section : I***

General information or Demographic data

It includes, name, age, sex, educational status and financial category (according to the hospital records).

#### ***Section :II***

It consists of 10 questions regarding deferent aspects of home care after CABG.

### **3.10 Pilot study**

A pilot study was conducted from September 24 to 29 for 5 days. The aim of the pilot study was to find out the practicability and feasibility of the tool. The pilot study was conducted among 10 samples. The sampling technique used was random sampling. Informed consent was taken from each sample. Then finalized tool was used to assess the knowledge of samples regarding home care after CABG. The pilot study finding revealed that the study was feasible and practicable.

Since there was no problem produced in the pilot study, the same method of data collection was used for the final study. The final study was conducted during the month of October 2010, for a period of 30 days.

The sample recruitment was done on the day of admission in CSW. The samples are recruited to interventional and control group by selecting the patients undergoing surgery in alternative days. The researcher first introduced her self and then explained the need and purpose of the study. Informed consent was taken from the patients. The research tool was given to the patients and then 15 minutes was given to answer the questions. A pre test was conducted for both interventional and control group. Then the researcher gave individualized health education regarding home care after CABG to the patients in the interventional group by using a structured educational pamphlet. Both the interventional and control group received the existing group health education in the CSW and a posttest was conducted on the day of discharge to both interventional and control group using the same questionnaire in the pretest. The samples were very cooperative and no problems occurred during data collection.

### **3.12 Plan for analysis**

After data collection, data will be organized, tabulated, summarized and analyzed by using Epi info 3.5.1.

### **3.13 protection of human subjects**

The proposed study was conducted after the approval of the guide. Permission was obtained from the Head of the Cardiac Surgery Department, and the Sister-in-Charge. Informed consent was taken from each sample before the data collection. Assurance was given to the study participants regarding the confidentiality of data collected.

### **3.14 Summary**

This chapter includes the research approach, research design, setting of the study, study population, sample, sample size, sampling technique, selection criteria, description of tool, pilot study, data gathering process, plan for data analysis and protection of human subjects.

## ANALYSIS AND INTERPRETATION OF DATA

### 4.1 Introduction

Analysis is categorizing, ordering, manipulating and summarizing the data to an intelligible and interpretable form, so that research problem can be studied and tested including relationship between variable.

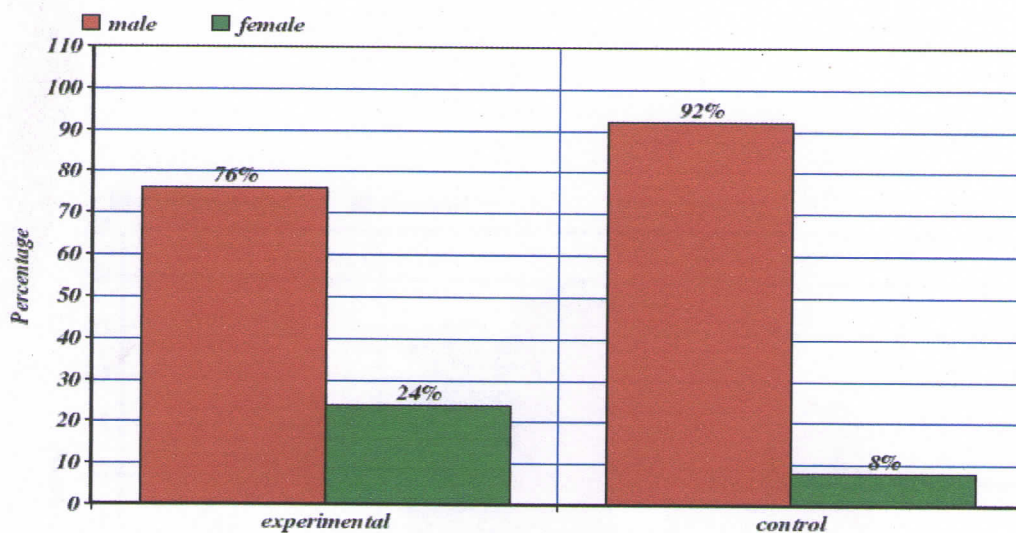
Interpretation is a process of making a sense of the result and examining the implication of finding with in a broader context.

The data in this study was arranged and analyzed under the following sections.

- 1) Distribution of sample according to the demographic data
- 2) Distribution of sample according to knowledge on the specific areas of home care
- 3) Relationship between patient's knowledge regarding home care after CABG and selected variables.

**Table 4.1 Distribution of sample according to sex**

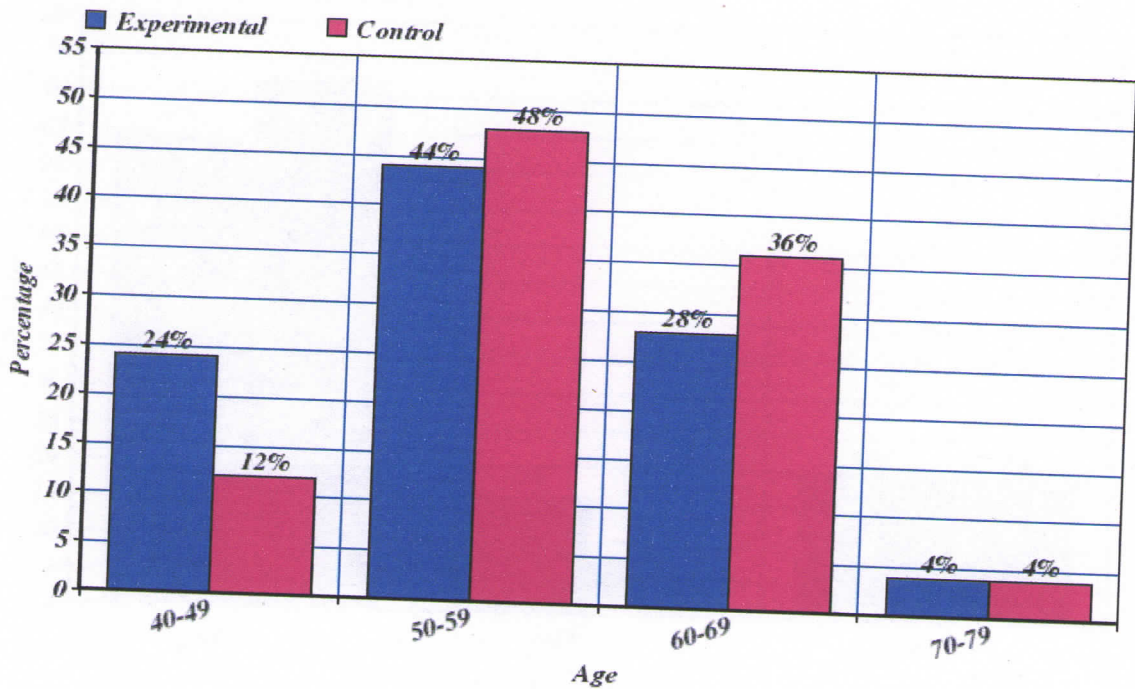
Sex	Experimental group N (%)	Control group N (%)	P value
Male	19(76%)	23(92%)	0.12
Female	6(24%)	2(8%)	
Total	25(100%)	25(100%)	

**Figure 4.1 Distribution of sample according to sex**

Data presented in the table 4.1 denotes that males are majority than females in both experimental and control group. p value = 0.12 by using chi-square test, fisher exact. There is no statistically significant difference between the sex of patients in two groups.

**Table 4.2 Distribution of samples according to age**

Age in years	Experimental group N (%)	Control group N (%)	P value
40 – 49	6(24)	3(12)	0.73
50 -59	11(44)	12(48)	
60 -69	7(28)	9(36)	
70 -79	1(4)	1(4)	
Total	25(100)	25(100)	

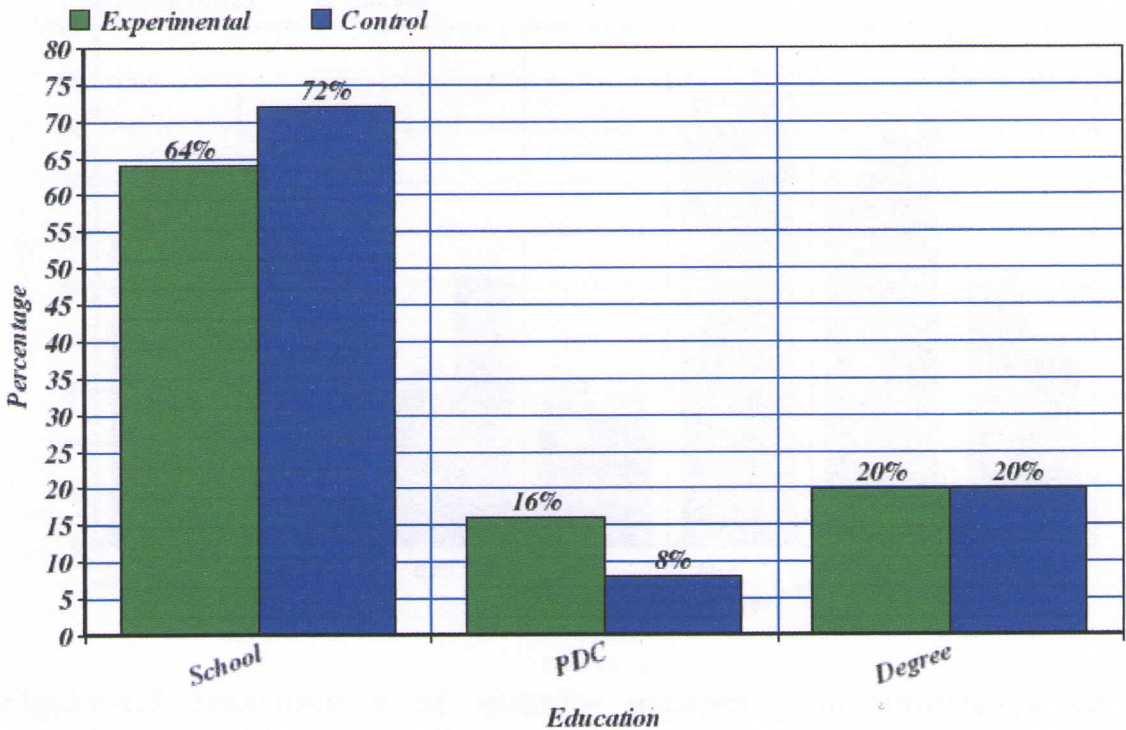


**Figure 4.2 Distribution of samples according to age**

Data shows that age of the samples range from 40yrs to 72yrs with a median of 56yrs. by using chi-square test p value is 0.73 . There is no statistically significant difference between ages in the two groups.

**Table 4.3 Distribution of samples according to educational status**

Education	Experimental group N (%)	Control group N (%)	P value
School	16(64)	18(72)	0.68
PDC	4(16)	2(8)	
Degree	5(20)	5(20)	
Total	25(100)	25(100)	



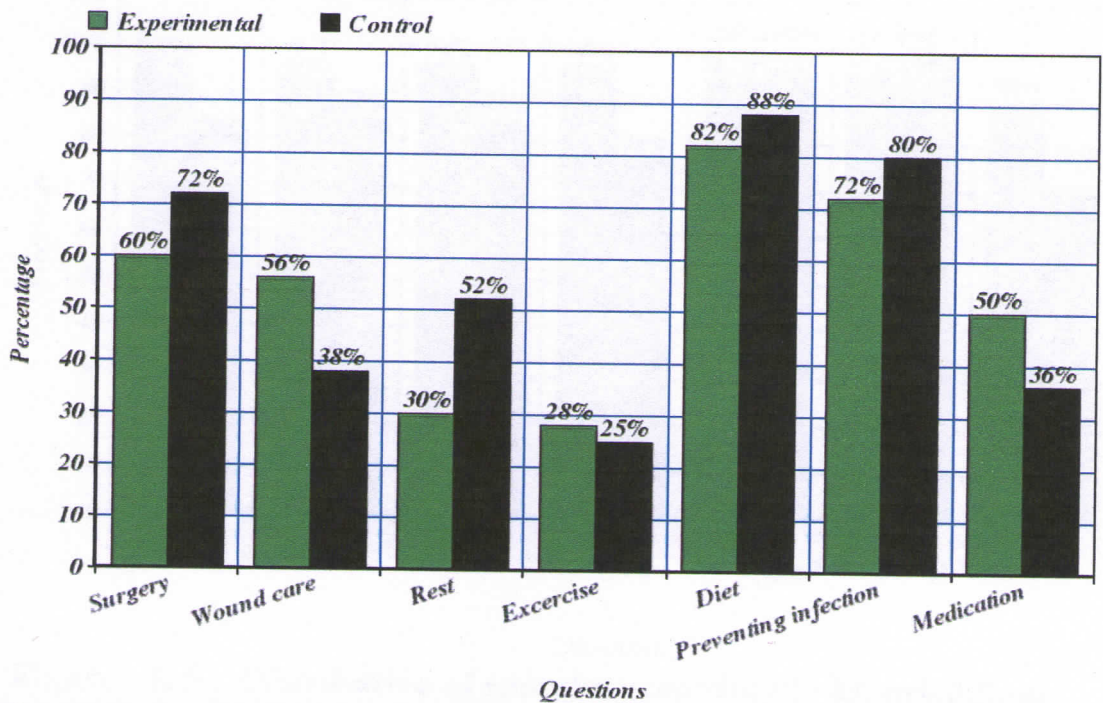
**Figure 4.3 Distribution of samples according to educational status**

The data shows that most of the patients were having school education . By using chi- square method p value is 0.68. There is statistically no significant difference in the educational status in two groups.

#### 4.3 Distribution of samples according to knowledge on specific areas of home care

**Table-4 .4** Distribution of samples according to knowledge on specific areas of home care in pretest

Questions	Experimental group(%)	Control group (%)
Surgery	60%	72%
Wound care	56%	38%
Rest	30%	52%
Exercise	28%	25%
Diet	82%	88%
Preventing infection	72%	80%
Medication	50%	36%

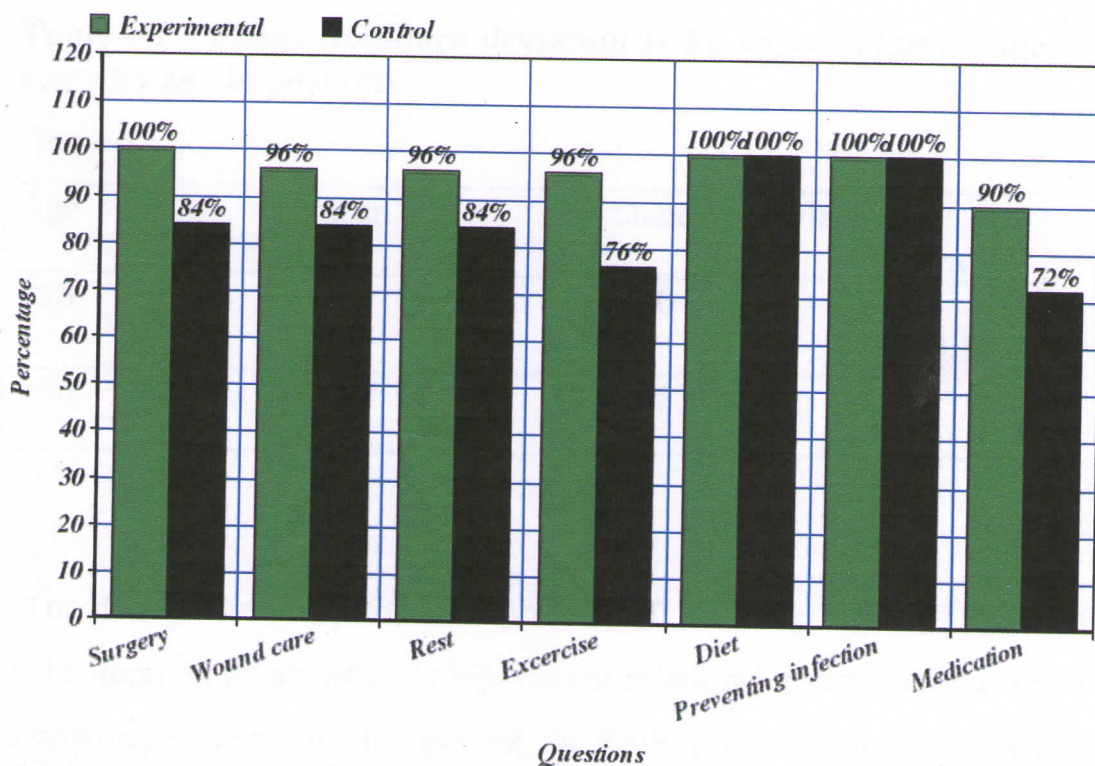


**Figure-4.4** Distribution of samples according to knowledge on specific areas of home care in pretest

Data shows that patients in the both group were having low knowledge ( score 30%> ) regarding exercise after the surgery and having good knowledge ( score 70%< ) regarding diet. The control group was having more knowledge in four out of seven areas, though it was not statistically significant as shown in table 4.10.

**Table-4.5 Distribution of samples according to knowledge on specific areas of home care in post test**

Questions	Experimental group (%)	Control group (%)
Surgery	100%	84%
Wound care	96%	84%
Rest	96%	84%
Exercise	96%	76%
Diet	100%	100%
Preventing infection	100%	100%
Medication	90%	72%



**Figure -4.5 Distribution of samples according to knowledge on specific areas of home care in post test**

Data shows that patients were having 100% knowledge regarding diet in both group in post test. Patients in the experimental group are having equal or more knowledge in all areas than those in the control group.

#### 4.4 Relationship between patient's knowledge regarding home care after CABG and selected variables

**Table –4. 6 Mean, Standard deviation and p value of knowledge score by age in Pretest**

Age	mean	Standard deviation	P value
<56	5.74	2.01	0.17
>56	4.87	2.40	

**Table – 7 Mean, Standard deviation and p value of knowledge score by age in post test**

Age	mean	Standard deviation	P value
<56	9.33	1.00	0.15
>56	8.97	1.25	

The data shows the p value of pretest is 0.17 and p value of post test is 0.15, there is no statistically significant relationship between the age and knowledge level of the patient in both pretest and post test. The knowledge score ranged from 1 – 9 in pretest and 6 – 10 in post test. The median was used to divide the sample in to two groups.

**Table –4. 8 Mean, Standard deviation and p value of knowledge score by educational qualification in pretest**

Education	mean	Standard deviation	P value
Higher	7.06	1.29	0.0001
School	4.53	2.11	

**Table –4. 9 Mean, Standard deviation and p value of knowledge score by educational qualification in post test**

Education	mean	Standard deviation	P value
School	8.82	1.24	0.006
Higher	9.75	0.45	

The data shows the relationship of knowledge and educational status of the patients. The p value of pretest is 0.0001 and the p value of post test is 0.006, there is statistically significant relationship between the educational status of the patient and the knowledge level. The higher education group had significantly better knowledge both in the pre test and in the post test.

#### 4.5 Mean, Standard deviation and p value of intervention and control group based on Knowledge score

**Table –4. 10 Mean, Standard deviation and p value of intervention and control group based on Knowledge score in pretest.**

Group	Mean	Standard deviation	P value
intervention	5.12	2.05	0.49
Control	5.56	2.40	

The data shows the mean knowledge score of patients in pretest of both the intervention and control group. The p value is 0.49, there is no statistically significant difference in the mean knowledge of patients in the pretest of both groups.

**Table –4. 11 Mean, Standard deviation and p value of intervention and control group based on Knowledge score in Post test**

Group	Mean	Standard deviation	P value
intervention	9.64	0.63	0.0007
Control	8.6	1.29	

The data shows that the mean knowledge score of patients in posttest of both the intervention and control group. The knowledge score of patients in the intervention group ranges from 8 – 10 and the knowledge score of patients in the control group ranged from 6 – 10. The p value is 0.0007, there is statistically significant difference in the mean knowledge score of patients in the intervention and control group in post test. The experimental group scores higher mean knowledge indicating that the individualized health education was effective.

**Table 4.12 Mean, Standard deviation and p value of control group in Pretest and post test**

Control Group	Mean	Standard deviation	P value
Pretest	5.56	2.40	0,000
Post test	8.6	1.29	

**Table 4.13 Mean, Standard deviation and p value of intervention group in Pretest and post test**

intervention Group	Mean	Standard deviation	P value
Pretest	5.12	2.05	0,000
Post test	9.64	0.63	

A paired 't' test was done to test the significance of mean increase in knowledge in the control and experimental group. The data given in the table 4. 12 and 4. 13 shows that there was a significant increase in knowledge on home care among both control and intervention group indicating that the existing group health education is effective in improving knowledge. However the individualized health education is more effective as shown in table 4. 11.

## **4.6 summary**

As a conclusion of this study, it is evident that majority of the sample taken in this study were male patients after CABG and knowledge level of patients in the intervention group was more compared to control group in the post test. There is a statistically significant difference between the mean knowledge of interventional and control group in the post test, which shows that individualized health education was effective.

## SUMMARY, CONCLUSION, LIMITATION, AND RECOMMENDATIONS

This chapter gives a brief account of the present study including conclusion drawn from the findings are possible applications of the result. Recommendations for the future result and suggestions for improving the present study are also included.

### 5. 1 SUMMARY

This study was undertaken to assess the effect of individualized health education on knowledge about home care among patients after CABG.

The specific objectives of this study were

- To assess the effect of individualized health education on knowledge about home care among patients after CABG.
- To assess the relationship between knowledge of patients after CABG and selected variables.

( variables taken for this study includes age, sex, and educational level ).

The questionnaire prepared containing 10 questions based on the various aspects of home care. Pilot study was done prior to main study. The sample of the study was 50. The obtained results were analysed using Epi info 3.5.1. Tables and Bar diagrams were used to illustrate the findings of this study.

## **5.2 Major findings of the study**

The study revealed that percentage of males were more than females who have undergone CABG. The maximum number of patients were coming under 50 – 59 years and most of them are having school education only. There was no statistically significant relationship between the age and knowledge level of the patient but statistically significant relationship was exists between the educational status of the patient and the knowledge level in both pretest and post test. The knowledge score of patients in the intervention group ranges from 8 – 10 and the knowledge score of patients in the control group ranged from 6 –10 in the post test. There is a statistically significant difference in the knowledge score of patients in the post test( $p = 0.0007$  ). The knowledge level of patients in the intervention group has increased more than those in the control group, which shows that the individualized health education was effective.

### **5.3 Limitations**

The study was limited to SCTIMST, Trivandrum. The study was conducted in small group of population who has undergone CABG. Patients who were not haemodynamically stable were excluded.

### **5.4 Conclusion**

Based on the findings of the study, the following conclusions were drawn. With the limited number of samples, it is not possible to generalize the findings. Therefore studies using more number of patients may be useful to validate the findings. Finally from the conducted study we could conclude that the individualized health education was effective.

### **5.5 Discussion**

The result of the present study is comparable to the study conducted by Ozcan and Findik (2010), who has conducted a study to assess the information level of patients in discharge training given by nurses following open- heart surgery. The study concluded that discharge training after open -heart surgery increases the knowledge of patients. It is also comparable to the study done by Cebeci and Celik (2008), to

determine the effect of discharge training and counseling on self-care ability and post discharge problems in CABG patients. The study result showed that the interventional group had a positive impact on self-care score than control group. It is also comparable to the study done by Marshall et al(1986), to assess the effectiveness of a structured teaching guide used by nurses in educating the patient and the family about normal postoperative recovery. The study concluded that the structured teaching may not have initially affected patient's knowledge, it might have had an impact on their compliance with postoperative health behaviors. Since patients are the most important person in the hospital, proper and timely health education is necessary .

## **5.6 Recommendations**

- A similar study can be conducted in large sample.
- A similar study can be conducted in patients after other surgeries.
- A follow up study can be conducted on effect of health education on the long term outcome of patients.

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**ANEXURE I**  
**INFORMED CONSENT**

I,..... hereby agree to participate in the research study, to assess patients knowledge about home care after CABG, conducted by Miss. SANDHYA.L, Ist year Diploma in Cardiovascular and Thoracic Nursing, of SCTIMST, Trivandrum. I understand that there will not be any change in the nature of care I receive and the data given by me will be kept confidential, and will be used only for research purpose.

Name and Signature of the participant

.....

Date

Place

**QUESTIONNAIRE TO ASSESS THE KNOWLEDGE  
REGARDING HOME CARE AMONG PATIENTS AFTER  
CABG**

**DEMOGRAPHIC DATA**

1. Name of the patient :
2. Age :
3. Sex : male \ female
4. Educational status :
5. Hospital number :
6. Income category : A \ B \ B1 \ C \ D
7. Surgery :

Put a tick (✓) mark on the correct answer for the questions from the following options

1. What is mean by bypass surgery?
  - a. surgery in the heart valves
  - b. surgery in the heart muscles
  - c. surgery in the coronary arteries
  - d. I don't know

2. What are the signs of wound infection?
  - a. Itching around the wound
  - b. fever and serous discharge
  - c. Vomiting and loss of appetite
  - e. I don't know
  
3. Which of the following is a false statement ?
  - a. While sitting keep the leg elevated
  - b. Apply bandage from top to bottom
  - c. Walk only with the bandage on the leg
  - d. While sleeping remove the bandage
  
4. How long do you need rest after operation?
  - a. 2 weeks – 4 weeks
  - b. 1 month – 2 months
  - c. 2 months –3 months
  - d. 4 months – 6 months
  
5. Which type of exercise is to be done?
  - a. Very heavy
  - b. Moderately heavy
  - c. Simple
  - d. I don't know
  
6. Which of the following food can be taken?
  - a. Fatty fish
  - b. Egg yolk
  - c. Cream removed milk
  - d. Red meat (Beef)

7. Which of the following food is to be avoided?

- a. Vegetables
- b. Butter
- c. Green gram
- d. Small fish as curry

8. With whom should you avoid close contact ?

- a. Persons with diabetes mellitus
- b. persons with cough and cold
- c. persons who had another surgery
- d I don't know

9. Can you change the regularity of medicine by yourself?

- a. Yes, the dose can be changed
- b. Yes, the time can be changed
- c. No, it can't be changed
- d. I don't know

10. How should you take Ecospirin tablet?

- a. Before food
- b. Soon after food
- c. One hour after food
- d. I don't know

Answer key

1 : c

2 : b

3 : b

4 : c

5 : c

6 : c

7 : b

8 : b

9 : c

10 : b

# **POST OPERATIVE INSTRUCTIONS AFTER**

## **CABG**

Heart is one of the most important organs in our body, it pumps blood to all parts of the body. Coronary Artery Bypass Graft (CABG) is a surgical procedure in which a blood vessel from another part of the body is grafted in to the occluded coronary artery beyond the occlusion in such a way that, blood flow bypasses the blockage. Blood vessels are commonly taken from the chest and leg. In order to get free from the disease and to get the benefit of surgery for a long time the patient need care with attention, it should be continued in the home also. So read and follow the instructions given bellow.

### **WOUND CARE**

- The person who has undergone CABG usually has wound in the chest and leg.
- Daily bath with soap and water.
- Dry the wound with clean, ironed towel smoothly.
- Do not scratch the wound and not allow to sweat.
- Do not use any ointment in the wound unless prescribed by the doctor.

- If there is any pain, swelling, pus or serous discharges in the wound consult nearby doctor.
- Don't apply any cream, oil, or talcum powder in the wound
- Wear clean cotton dress.
- Use clean elastic bandage and apply it starting from the bottom to top moderately tight.
- Walk only with the tight bandage in the affected leg/s
- Use clean elastic bandage, daily wash and keep spare one ready in case if it gets wet.

### **REST**

- Rest is needed up to 3 months, then slowly you can back to the normal life.
- Support the chest with thick towel pad while coughing for 2 – 3 months.
- While getting up from bed turn to side and then get up.
- Avoid keeping the hand at the back to support while sitting and not to stretch the chest and shoulder backward.
- Avoid lifting weight for two months.
- Keep the leg elevated while sitting and keep it elevated on the pillow while sleeping.
- Sleep 8 – 10 hrs daily.

- Sexual contact can be resumed after 5 –6 months.
- After 3 months of surgery according to the instruction of the doctor you can return to work.

## **EXERCISE**

- Daily walk for 15 – 20 minutes and increase it slowly as tolerated.
- Avoid heavy exercise eg : basket ball, foot ball .
- Stair climbing is to be limited to 2 – 3 steps at a time with the companion for 3 months.
- Do breathing exercise as often as possible.

## **DIET**

- Avoid fatty foods.
- Add plenty of vegetables and fruits to daily consumption.
- Drink more water and eat high fiber diet to prevent constipation.
- Can use cream removed milk, small fish as curry and chicken as curry without oil.

## FOODS TO BE AVOIDED

- Meat and Fish fried in oil.
- Fatty fish, fat and skin of animals, organ meat, egg yolk.
- Butter and bakery items.
- Persons with diabetes mellitus should avoid sweet items, fruits and root vegetables.
- Persons with hypertension should reduce salt intake.

## MEDICINES

- Take medicines in correct dose and in the correct time according to the doctor's order.
- Don't take T. Lasix at night.
- Take T. Ecospirin only after food without breaking.
- Potassium chloride syrup to be diluted in lime or mosambi juice.
- Don't discontinue the drug without the instruction of the doctor.
- The person with diabetes mellitus should take insulin injection in correct dose according to the doctor's order.

## COMMON INSTRUCTIONS

- Avoid smoking, alcoholism and the use of pan masala.
- Patient's room should be clean and need good ventilation.
- Patient should avoid the close contact with persons having cough, fever or cold.
- Persons with diabetes mellitus should check the blood glucose level periodically.
- Come for regular follow up, usually after 3 days, 6 weeks and after 6 months.
- Consult nearby doctor if you have any minor problems, and if the doctor advises you may come to this hospital at any time without appointment.

## സമ്മത പത്രം

ബൈപ്പാസ് ശസ്ത്രക്രിയ കഴിഞ്ഞ് വീട്ടിൽ പോകുന്നവർ അറിഞ്ഞിരിക്കേണ്ട വസ്തുതകൾ പറഞ്ഞ് മനസ്സിലാക്കിത്തരുന്നതിനും അതുമായി ബന്ധപ്പെട്ട് എന്റെ അറിവ് വിലയിരുത്തുന്നതിനും തിരുവനന്തപുരം എസ്.സി.ടി.ഹോസ്പിറ്റലിലെ ഡി.സി.എൻ വിദ്യാർത്ഥിനിയായ സന്ധ്യ.എൽ നടത്തുന്ന പഠനത്തിൽ സഹകരിക്കാൻ ഞാൻ സമ്മതിക്കുന്നു. എല്ലാവിവരങ്ങളും തികച്ചും രഹസ്യമായി സൂക്ഷിക്കുമെന്നും അവ പഠനത്തിനുമത്രമേ ഉപയോഗിക്കുകയുള്ളൂ എന്നും ഞാൻ മനസ്സിലാക്കുന്നു. ആയതിനാൽ സ്വമനസ്സാലെ ഞാൻ ഈ പഠനത്തിന്റെ ഭാഗമാകാമെന്ന് സമ്മതിക്കുന്നു.

സ്ഥലം:

വിവരം നൽകുന്ന വ്യക്തിയുടെ

തീയതി:

ഒപ്പ് :

പേര് :

പരിശോധിക്കുന്നതിനുള്ള ചോദ്യാവലി

വ്യക്തിഗതവിവരങ്ങൾ

- 1. രോഗിയുടെ പേര് :
- 2. വയസ്സ് :
- 3. പുരുഷനോ/സ്ത്രീയോ :
- 4. വിദ്യാഭ്യാസം :
- 5. ഹോസ്പിറ്റൽ നമ്പർ :
- 6. വരുമാന കാറ്റഗറി ഡേറ്റ :
- 7. ശസ്ത്രക്രിയ :

താഴെപ്പറയുന്ന ചോദ്യാവലിയിലെ ഏറ്റവും ശരിയായ ഉത്തരത്തിന് നേരെ ശരി (✓) അടയാളപ്പെടുത്തുക.

- 1. ബൈപ്പാസ് ശസ്ത്രക്രിയകൊണ്ട് ഉദ്ദേശിക്കുന്നത് എന്താണ് ?
  - a. ഹൃദയവാൽവിലുള്ള ശസ്ത്രക്രിയ
  - b. ഹൃദയ പേശികളിലുള്ള ശസ്ത്രക്രിയ
  - c. ഹൃദയ രക്തക്കുഴലുകളിലുള്ള ശസ്ത്രക്രിയ
  - d. അറിയില്ല.
- 2. മുറിവിൽ അണുബാധയുടെ ലക്ഷണങ്ങൾ എന്തെല്ലാം ?
  - a. മുറിവിനുചുറ്റും ചൊരിച്ചിൽ
  - b. പനി, നീരാലിപ്പ്
  - c. ചർദ്ദി, വിശപ്പില്ലായ്മ
  - d. അറിയില്ല
- 3. താഴെപ്പറയുന്നവയിൽ തെറ്റായ പ്രസ്താവന ഏത് ?
  - a. കാലിൽ ബാൻഡേജ് ചുറ്റിക്കൊണ്ടുമാത്രം നടക്കുക
  - b. ബാൻഡേജ് മുകളിൽ നിന്നും താഴേക്ക് ചുറ്റുക
  - c. ഇരിക്കുമ്പോൾ കാൽ ഉയർത്തി വയ്ക്കുക
  - d. ഉറങ്ങുമ്പോൾ ബാൻഡേജ് അഴിച്ച് വയ്ക്കുക.
- 4. ശസ്ത്രക്രിയ കഴിഞ്ഞ് എത്രനാൾ വിശ്രമം ആവശ്യമാണ് ?
  - a. 2 ആഴ്ച - 4 ആഴ്ച
  - b. 1 മാസം - 2 മാസം
  - c. 2 മാസം - 3 മാസം
  - d. 4 മാസം - 6 മാസം

- a. വളരെ ആയാസമുള്ളവ
  - b. സാമാന്യം ആയാസമുള്ളവ
  - c. ആയാസം കുറഞ്ഞവ
  - d. അറിയില്ല
6. താഴെപ്പറയുന്നവയിൽ ഏതൊക്കെ ആഹാരം കഴിക്കാം ?
- a. നെയ്യുള്ള വലിയ മത്സ്യം
  - b. മുട്ടയുടെ മഞ്ഞക്കരു
  - c. പാടമാറ്റിയ പാൽ
  - d. മാട്ടിറച്ചി
7. താഴെപ്പറയുന്നവയിൽ ഉപേക്ഷിക്കേണ്ട ആഹാരം ഏത് ?
- a. പച്ചക്കറികൾ
  - b. വെണ്ണ
  - c. ചെറുപയർ
  - d. ചെറിയ മത്സ്യം കറിയായി
8. നിങ്ങൾ ആരുമായുള്ള സമ്പർക്കമാണ് ഒഴിവാക്കേണ്ടത് ?
- a. പ്രമേഹമുള്ളവർ
  - b. ചുമയും ജലദോഷവും ഉള്ളവർ
  - c. മറ്റ് ശസ്ത്രക്രിയ കഴിഞ്ഞവർ
  - d. അറിയില്ല
9. നിങ്ങൾ കഴിച്ച്കൊണ്ടിരിക്കുന്ന മരുന്നിന്റെ ക്രമത്തിൽ സ്വന്തമായി മാറ്റം വരുത്താമോ ?
- a. അളവിൽ മാറ്റം വരുത്താം
  - b. സമയത്തിൽ മാറ്റം വരുത്താം
  - c. മാറ്റം വരുത്താൻ പാടില്ല
  - d. അറിയില്ല
10. എകോസ്പിരിൻ ഗുളിക എങ്ങനെ കഴിക്കണം ?
- a. ആഹാരത്തിനുമുമ്പ്
  - b. ആഹാരം കഴിച്ച ഉടനെ
  - c. ആഹാരം കഴിച്ച് ഒരു മണിക്കൂർ കഴിഞ്ഞ്
  - d. അറിയില്ല.

നമ്മുടെ ശരീരത്തിലെ ഏറ്റവും പ്രധാനപ്പെട്ട അവയവങ്ങളിൽ ഒന്നാണ് ഹൃദയം. ശരീരത്തിന്റെ എല്ലാഭാഗങ്ങളിലേക്കും യഥാസമയം ആവശ്യാനുസരണം രക്തം എത്തിച്ച് കൊടുക്കുന്നത് ഹൃദയമാണ്. ഹൃദയപേശികൾക്ക് രക്തം നൽകുന്ന രക്തക്കുഴലുകളിൽ തടസ്സം ഉള്ളതിനാൽ കാലിൽ നിന്നോ നെഞ്ചിൽ നിന്നോ എടുത്ത രക്തക്കുഴലുകൾ വച്ച് പിടിപ്പിച്ച് ആ ഭാഗത്തേക്കുള്ള രക്തയോട്ടം പുനസ്ഥാപിക്കുന്ന പ്രക്രിയയാണ് ബൈപ്പാസ് ശസ്ത്രക്രിയ. രോഗവിമുക്തി നേടാനും ശസ്ത്രക്രിയയുടെ ഗുണം ദീർഘകാലം ലഭിക്കാനും ഇവർക്ക് അതീവശ്രദ്ധയോടുകൂടിയുള്ള പരിചരണം ആവശ്യമാണ്, ആശുപത്രിവാസം കഴിഞ്ഞ് വിട്ടിൽ എത്തിയതിനുശേഷവും ഇത് തുടരേണ്ടതാണ്. അതിനാൽ താഴെ പറയുന്ന നിർദ്ദേശങ്ങൾ ശ്രദ്ധയോടുകൂടി വായിച്ചു മനസ്സിലാക്കുകയും അതിനനുസരിച്ച് പ്രവർത്തിക്കുകയും ചെയ്യുന്നത് ആരോഗ്യനില കൂടുതൽ മെച്ചപ്പെടുത്തുന്നതിന് സഹായിക്കും.

**1. മുറിവിന്റെ പരിചരണം**

- ബൈപ്പാസ് ശസ്ത്രക്രിയ കഴിഞ്ഞ രോഗികൾക്ക് സാധാരണയായി നെഞ്ചിലും കാലിലും മുറിവ് ഉണ്ടായിരിക്കും
- സോപ്പ് ഉപയോഗിച്ച് ദിവസവും കുളിക്കുക
- വൃത്തിയുള്ള അലക്കിത്തേച്ചതുണികൊണ്ട് മുറിവ് അമർത്താതെ തുടച്ച് ഈർപ്പരഹിതമാക്കുക
- മുറിവിൽ ഉരസ്സുകയോ, ചൊറിയുകയോ, വിയർക്കാൻ അനുവദിക്കുകയോ ചെയ്യരുത്.
- ഡോക്ടറുടെ നിർദ്ദേശപ്രകാരമല്ലാത്ത ഒരു മരുന്നും മുറിവിൽ പുരട്ടരുത്,
- മുറിവിൽ വേദന, വീക്കം, നീരൊലിപ്പ്, രക്തസ്രാവം, പഴുപ്പ് എന്നിവ ഉണ്ടെങ്കിൽ, ഉടൻ തന്നെ അടുത്തുള്ള ഡോക്ടറെ കാണുക.
- എണ്ണ, കുഴമ്പ്, പൗഡർ എന്നിവ മുറിവുള്ള സ്ഥലത്ത് പുരട്ടാതിരിക്കുക.
- അലക്കിത്തേച്ച കോട്ടൺ വസ്ത്രങ്ങൾ ഉപയോഗിക്കുക.
- പനിയുണ്ടാവുകയാണെങ്കിൽ മുറിവിന്റെ കാര്യത്തിൽ പ്രത്യേക ശ്രദ്ധവേണം, പനി അണുബാധയുടെ ലക്ഷണമാണ്.
- വൃത്തിയുള്ള ഇലാസ്റ്റിക് ബാൻഡേജ് ഉപയോഗിച്ച് കാലിൽ താഴെനിന്ന് മുകളിലേക്ക് സാമാന്യം മുറുക്കി ചുറ്റുക.
- കാലിൽ ബാൻഡേജ് ഇട്ടുമാത്രം നടക്കുക.
- വൃത്തിയുള്ള ഇലാസ്റ്റിക് ബാൻഡേജ് ഉപയോഗിക്കണം, എല്ലാ ദിവസവും ബാൻഡേജ് കഴുകണം, നനഞ്ഞാൽ പകരം ഉപയോഗിക്കാൻ ഒരേണ്ണം കരുതിയിരിക്കണം.

- മൂന്ന് മാസം വരെ വിശ്രമം ആവശ്യമാണ്. ക്രമേണ സാധാരണ ജീവിതത്തിലേക്ക് വരാം.
- രണ്ട് മൂന്ന് മാസത്തേക്ക് ചുമക്കുമ്പോൾ കട്ടിയുള്ള അലക്കിയതുണികൊണ്ട് നെഞ്ച് താങ്ങിപ്പിടിക്കണം.
- കട്ടിലിൽ നിന്നും എഴുന്നേൽക്കുമ്പോൾ ഒരു വശം ചരിഞ്ഞ് എഴുന്നേൽക്കുക
- നെഞ്ചും തോളും വലിയത്തക്കവിധം ഞെളിയുകയോ കൈകുത്തി എഴുന്നേൽക്കുകയോ ചെയ്യരുത്.
- മൂന്ന് മാസത്തേക്ക് ഭാരമുള്ള വസ്തുക്കൾ പൊക്കി എടുക്കാതിരിക്കുക.
- ഇരിക്കുമ്പോൾ കാൽ ഉയർത്തി വയ്ക്കണം, ഉറങ്ങുമ്പോൾ കാൽ തലയിണയുടെ മുകളിൽ ഉയർത്തി വയ്ക്കണം
- ദിവസവും 8-10 മണിക്കൂർ ഉറങ്ങുക
- 5-6 മാസത്തിന് ശേഷം ലൈംഗിക ബന്ധം ആകാം
- ശസ്ത്രക്രിയ കഴിഞ്ഞ് 3 മാസങ്ങൾക്ക് ശേഷം ഡോക്ടറുടെ ഉപദേശമനുസരിച്ച് ജോലിയിൽ തിരികെ പ്രവേശിക്കാം.

### 3. വ്യായാമം

- ദിവസവും 15-30 മിനിട്ട് വരെ നടക്കണം. ക്രമേണ സമയവും ദൂരവും കൂട്ടാം.
- ആയാസം കൂടിയ വ്യായാമങ്ങൾ ഒഴിവാക്കുക. ഉദാ. നീന്തൽ, ബാസ്ക്കറ്റ് ബോൾ, ഫുട്ബോൾ
- മൂന്ന് മാസത്തേക്ക്, പടികൾ കയറുമ്പോൾ ആരുടെയെങ്കിലും സഹായം ആവശ്യമാണ്.
- ശ്വസന വ്യായാമം ഇടയ്ക്കിടെ ചെയ്യണം

### 4. ഭക്ഷണക്രമം

- കൊഴുപ്പ് കുറഞ്ഞ ആഹാരം കഴിക്കുക
- ഭക്ഷണത്തിൽ പച്ചക്കറികളും, പഴവർഗ്ഗങ്ങളും ധാരാളം ഉൾപ്പെടുത്തുക.
- മലബന്ധം ഒഴിവാക്കാൻ ധാരാളം വെള്ളം കുടിക്കുകയും നാരുള്ള ഭക്ഷണം കഴിക്കുകയും ചെയ്യുക.
- പാടമാറ്റിയ പാൽ, ചെറിയ മത്സ്യങ്ങൾ കറിയായും, കോഴിയിറച്ചിക്കറിയായും (എണ്ണ ഒഴിവാക്കുക) ഉപയോഗിക്കാം.
- ഒഴിവാക്കേണ്ട ആഹാരപദാർത്ഥങ്ങൾ
- എണ്ണയിൽ വറുത്ത ഇറച്ചിയും മീനും
- നെയ്യുള്ള വലിയ മത്സ്യം, മൂഗങ്ങളുടെ നെയ്യ്, തൊലി, ആന്തരികാവയവങ്ങൾ, മുട്ടയുടെ മഞ്ഞക്കരു, മാട്ടിറച്ചി

- പ്രമേഹ രോഗം ഉള്ളവർ, മധുരം കുറയ്ക്കുക, പഴവർഗ്ഗങ്ങൾ, കിഴങ്ങ് വർഗ്ഗങ്ങൾ എന്നിവ ഉപേക്ഷിക്കുക.
- രക്തതാതിമർദ്ദം ഉള്ളവർ ഉപ്പിന്റെ അളവ് കുറയ്ക്കുക.

### 5. മരുന്നുകളുടെ ഉപയോഗം

- ഡോക്ടറുടെ നിർദ്ദേശപ്രകാരമുള്ള മരുന്ന് കൃത്യമായ അളവിലും സമയത്തും കഴിക്കുക
- ലാസിക്സ് ഗുളിക രാത്രി ഉപയോഗിക്കാതിരിക്കുക.
- എക്കോസ്പിരിൻ ഗുളിക, ആഹാരത്തിനു ശേഷം മാത്രം കഴിക്കുക, പൊടിച്ച് കഴിക്കരുത്.
- പൊട്ടാസിയം ക്ലോറൈഡ് സിറപ്പ് വെള്ളത്തിലോ, നാരങ്ങാവെള്ളത്തിലോ, മൊസാംബി നീരിലോ നേർപ്പിച്ച് കുടിക്കണം.
- ഡോക്ടറുടെ നിർദ്ദേശപ്രകാരം അല്ലാതെ മരുന്നുകൾ നിർത്താൻ പാടില്ല.
- പ്രമേഹ രോഗമുള്ളവർ ഡോക്ടറുടെ നിർദ്ദേശപ്രകാരം ശരിയായ അളവിൽ ഇൻസുലിൻ കുത്തിവയ്പ്പ് എടുക്കുക.

### 6. പൊതുവായിട്ടുള്ള നിർദ്ദേശങ്ങൾ

- പുകവലി മദ്യപാനം, പാൻമസാലയുടെ ഉപയോഗം എന്നിവ ഉപേക്ഷിക്കുക.
- കിടക്കുന്ന മുറി വൃത്തിയുള്ളതും വായുസഞ്ചാരമുള്ളതുമായിരിക്കണം.
- പനി, ചുമ, ജലദോഷം തുടങ്ങിയ രോഗമുള്ളവർ രോഗിയുമായി ഇടപെടാൻ അനുവദിക്കരുത്.
- പ്രമേഹരോഗമുള്ളവർ രക്തത്തിലെ പഞ്ചസാരയുടെ അളവ് കൃത്യമായ ഇടവേളകളിൽ പരിശോധിക്കണം.
- സാധാരണയായി ഓപ്പറേഷൻ കഴിഞ്ഞ് ഡിസ്ചാർജ്ജ് ചെയ്തിട്ട് മൂന്ന് ദിവസം, 6 ആഴ്ച, 3 മാസം എന്നീകാലയളവുകളിൽ പുന:പരിശോധന ഉണ്ടാകും.
- നിസ്സാര പ്രശ്നങ്ങൾ ഏതെങ്കിലും ഉണ്ടെങ്കിൽ അടുത്തുള്ള ഡോക്ടറെ ഡിസ്ചാർജ്ജ് സമ്മറിയും, മരുന്നിന്റെ കുറിപ്പുമായി കാണിക്കുക. അടുത്തുള്ള ഡോക്ടർ നിർദ്ദേശിക്കുകയാണെങ്കിൽ സമയഭേദമന്യേ എപ്പോൾ വേണമെങ്കിലും ഈ ആശുപത്രിയിൽ വരാം. ഇതിന് അപ്പോയിന്റ്മെന്റ് എടുക്കേണ്ട ആവശ്യമില്ല.