

A Study to Assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Post-Operative Home Care Following Coronary Artery Bypass Grafting Among Patient Undergoing Surgery in Selected Hospitals

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**A Study to Assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Post-Operative Home Care Following Coronary Artery Bypass Grafting Among Patient Undergoing Surgery in Selected Hospitals**

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**ABSTRACT**

The research design used for study was one group pre-test, post- test non experimental design to collect the sample constitute;50 samples of fourth class workers in selected private hospital. Based on the study objective pre-test and post-test was conducted and questionnaire was used for collecting the data. As the pre-test mean was 8.7 and post-test mean was 15.7, p value is 0.00001 it is highly significant as the p value is a lesser than 0.05 therefore there is improvement in knowledge score of the post-operative patients after planned teaching programme signifying that the planned teaching programme was effective.RESULT AND CONCLUSION: -There were two sections for the research study section 1 consists of demographic variable and Section 2consist of structured questionnaire. Study result shows there is significant increase in the knowledge of post of operative home care related to CABG.Researcher concluded that the planned teaching programme was effective to increase the knowledge of post of operative home care related to CABG.

**Keywords:** Planned teaching Programme, Coronary artery bypass grafting.

**Introduction**

Coronary Artery Bypass Graft (CABG) surgery, recently called aortocoronary bypass (ACB) is the surgical procedure performed to relieve angina and reduce the risk of death from coronary artery disease. Arteries or veins from elsewhere in the patient's body are grafted to the coronary arteries to bypass atherosclerotic narrowing and improve the blood supply to the

coronary circulation supplying the myocardium. Commonly used conduits in CABG are the internal mammary arteries, radial arteries and the greater saphenous vein<sup>6</sup>.

During this century, the number of CABG surgeries done per day is increasing in a tremendous manner. According to American Heart Association statistics, in 2009, 5, 48,000 bypass surgeries were done in United States. Of these 3, 23, 000 were men and 2, 25,000 were women<sup>7</sup>. Each year nearly 3, 00,000 bypass surgeries are performed in US which means 61 in every 1, 00,000 people have a coronary bypass operation. In Britain, only 6 in every 1, 00,000 have the same operation. In Japan, 1 in 1, 00,000 patients will have a coronary bypass operation<sup>8</sup>.

A comparative study was conducted to study of the use of cardiac procedures between the United States and Ontario, Canada. 224,258 Medicare patients were compared to 9,444 patients of a similar age. In the U.S. patients 34.9% underwent coronary angiograms versus 6.7% of the Canadian patients.<sup>4</sup>For coronary artery bypass surgery, 10.6% U. S. patients underwent this treatment, versus only 1.4% of the Canadian patients. The 30 day mortality for the U.S. patients was 21.4% versus 22.3% for the Canadian patients. At one year the mortality was 34.3% in the United States and 34.4% in Canada. The study shows a strikingly higher use of cardiac procedures and the high mortality rates related to CABG.<sup>5</sup>

A retrospective survey was conducted by Escorts Heart Institute and Research Centre (EHIRC), New Delhi to explore the cardiovascular disease trends in India between 1988 and 2005. According to EHIRC data 33,686 CABG surgeries were performed in their hospitals during this period. Of these, majority (26,238) belonged to the age group 51- 65 years. In 2005 alone 3500 cases were performed and the highest mortality rate (23%) was seen in patients >70 years<sup>10.6</sup>.

## **Materials and Methods**

### **Research Approach:**

Research approach is the plan and procedure that consist of the steps of broad assumption to detailed method of data collection, analysis and interpretation.

In this study Quantitative research approach is used.

### **Research Design:**

Pre-experimental one group pre-test and post-test design.

### **Variables under study:**

**Dependent variables:** Knowledge regarding post-operative home care of CABG.

**Independent variables:** Planned teaching program

### **Research Setting:**

The study will be conducted among selected hospitals of Sangli, Miraj and Kupwad Municipal Corporation.

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**Population:**

Patients undergoing CABG surgery

**Sample Size: 50**

**Sample:**

Selected patients undergoing CABG surgery in selected hospitals of Sangli, Miraj Kupwad corporation area.

**Sampling Criteria:**

**Inclusion criteria:**

1. Patient who are willing to participate.
2. Patient who can read, understand and write English and Marathi.

**Exclusion criteria:**

1. Patient who are transferring out to another health care setting.
2. Patient who are planning to take DAMA.
3. Critically ill unresponsive clients

**Sampling method:**

Simple Random Sampling.

**Reliability:**

Reliability of the tool is done by using split half method with the help of Karl Pearson's formula.

The reliability score was 0.8 which is more than 0.7 the tool was found to be reliable, feasible and acceptable. No any changes were done in tool after reliability.

**Results and Discussion**

**SECTION I:-**

**FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES.**

**Table no. 1**

**FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES**

<b>Age (In years)</b>	<b>Frequency</b>	<b>Percentage</b>
30-40	10	20.00
41-50	12	24.00
51-60	16	32.00
61-70	6	12.00
71-80	6	12.00
<b>Gender</b>		
Female	20	40.00
Male	30	60.00
<b>Religion</b>		
Hindu	20	40.00
Muslim	18	36.00
Christian	12	24.00
<b>Education</b>		
Primary	28	56.00
Secondary	10	20.00
Higher Secondary	12	24.00
<b>Information Regarding CABG</b>		
NO	50	100.00

TABLE NO.1 Shows that, maximum sample 32% belong to age group of 51-60 years 60% sample belong to male gender. 40% samples areHindu. 56% sample to primary group of education

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**SECTION II**

**TABLE NO 2**

**COMPARISON OF PRE-TEST AND POST-TEST KNOWLEDGE SCORE ON KNOWLEDGE OF ERGONOMICS.**

N=50

	A.M.	S.D.	t value	p value	Significance
Pre Test	8.62	2.36	22.2086	0	The result is significant at p < .05
Post Test	16.38	1.23			

Table 2 shows that the average score of post-test knowledge 16.38 was found to be significantly higher than average score of pre-test knowledge 8.62

The statistics value of the t value (table value) was 22.2086 and 'p' value 0 shows that there is significant difference in the average knowledge score, at 0.5% level of significance.

Hence, H<sub>0</sub> is rejected as there is significant increase in the post-test knowledge score.

**SECTION III –**

**DEALS WITH ANALYSIS OF DATA RELATED TO ASSOCIATION BETWEEN PRE- TEST KNOWLEDGE SCORE WITH SELECTED DEMOGRAPHIC VARIABLES**

N=50

Sr. no.	Variables	Chi square value	p value	Significance	Conclusion
1	<b>Age</b>	6.15	0.63	The result is not significant at p < .05	No association between Age and pre test knowledge score
	30-40				
	41-50				
	51-60				
	61-70				
	71-80				
2	<b>Gender</b>	1.88	0.39	The result is not significant at p < .05	No association between Gender and pre test knowledge score
	Female				
	Male				
3	<b>Religion</b>	0.47	0.97	The result	No association

	Hindu			is not significant at $p < .05$	between Religion and pre test knowledge score
	Muslim				
	Christian				
4	<b>Education</b>	2.61	0.62	The result is not significant at $p < .05$	No association between Education and pre test knowledge score
	Primary				
	Secondary				
	Higher secondary				

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