



ORIGINAL RESEARCH ARTICLE

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EFFECTIVENESS OF STRUCTURE TEACHING PROGRAM ON KNOWLEDGE REGARDING CARDIAC REHABILITATION AMONG PATIENTS UNDERGONE CORONARY ARTERY BYPASS GRAFTING SURGERY

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ARTICLE INFO

Article History:

Received 17th June, 2017

Received in revised form

19th July, 2017

Accepted 25th August, 2017

Published online 29th September, 2017

Key words:

Structure Teaching Program,
Cardiac Rehabilitation,
Knowledge, Coronary Artery
Bypass Grafting Surgery.

ABSTRACT

Aim of the study: is to determine the effectiveness of structure teaching program on knowledge regarding cardiac rehabilitation among patients undergone coronary artery bypass grafting surgery in study group

Background: A coronary artery bypass graft (CABG) is a surgical procedure used to treat coronary heart disease. After the coronary artery bypass grafting surgery, patients have doubt about various factors such as exercises, diet pattern, return to work, sexual activity and physical activity. Cardiac rehabilitation (rehab) is a medically supervised program to help people who have A heart attack, Angioplasty or coronary artery bypass grafting for coronary heart disease, A heart valve repair or replacement, A heart transplant or a lung transplant, Angina, Heart failure.

Design: The Quasi experimental- one group pre-test post-test design.

Methods: Non probability convenience sampling technique was used. A total of 30 patients samples who met the inclusion criteria were selected for the study. The patients undergone coronary artery bypass grafting was assessed for level of knowledge regarding cardiac rehabilitation. Demographic variable and structured questionnaire was assessed before giving structured teaching program on cardiac rehabilitation. After administration of structured teaching program on cardiac rehabilitation, the patients were assessed with same questionnaire to find the effectiveness of structured teaching program on cardiac rehabilitation. The study was carried out for 5days.

Result: The findings of the study reveals that in the study group, majority of the patients undergone coronary artery bypass grafting surgery 60(18%) were in the age group of 51-60 years, 16(53.33%) were males, 17(56.67%) were residing in urban area, 12(40%) were illiterates, 28(93.33%) were married, 12(40%) were unemployed and retired and private employee respectively and 18(60%) had family history of CAD and 17(56.66%) had comorbidities. In the pre-test majority 17(56.66%) had average knowledge about cardiac rehabilitation and 13(43.33%) had poor knowledge. Whereas after the administration of structure teaching program regarding cardiac rehabilitation majority 16(53.33%) had good knowledge, 12(40%) had average knowledge and only 2(6.66%) had poor knowledge about cardiac rehabilitation. This clearly indicates that structure teaching program on knowledge regarding cardiac rehabilitation was effective among patients undergone coronary artery bypass grafting surgery.

Conclusions: The finding illustrated that structure teaching program on knowledge regarding cardiac rehabilitation was effective among patients undergone coronary artery bypass grafting surgery.

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Citation: Ms. Hena Leni Grace, D., Mrs. Aruna, S. and Mrs. Mangala Gowri, P.. 2017. "Effectiveness of structure teaching program on knowledge regarding cardiac rehabilitation among patients undergone coronary artery bypass grafting", *International Journal of Development Research*, 7, (09), 15154-15156.

INTRODUCTION

A coronary artery bypass graft (CABG) is a surgical procedure used to treat coronary heart disease. It diverts blood around narrowed or clogged parts of the major arteries to improve blood flow and oxygen supply to the heart.

Coronary Artery Bypass Grafting (CABG), or bypass surgery, is a surgical operation in which the surgeon uses a section of vein, usually from the patient's leg, or an artery from inside the patient's chest, to create a new route for oxygen-rich blood to reach the heart muscle. After the coronary artery bypass grafting surgery, patients have doubt about various factors

such as exercises, diet pattern, return to work, sexual activity and physical activity. Cardiac rehabilitation (rehab) is a medically supervised program to help people who have A heart attack, Angioplasty or coronary artery bypass grafting for coronary heart disease, A heart valve repair or replacement, A heart transplant or a lung transplant, Angina, Heart failure. The goal is to help to return to an active life, and to reduce the risk of further heart problems.

BACKGROUND

Cardiovascular diseases are the number one cause of death globally. More people die annually from cardiovascular diseases (CVDs) than from any other cause. An estimated 17.7 million people died from cardiovascular diseases (CVDs) in 2015, representing 31% of all global deaths. Of these deaths, an estimated 7.4 million were due to coronary heart disease and 6.7 million were due to stroke. So there will be a need of educational program to educate people in order to achieve a healthy life among patients. The goals of the cardiac rehabilitation are medical, psychological, social, sexual and vocational rehabilitation. The overall objective of the cardiac rehabilitation is to resume the patient back to normal activities of daily living and making the patient to be psychologically stable that leads to improvement in the quality of life of the patients.

NeelimaChoure et al. (2015) conducted an experimental study on the effectiveness of self-instructional module on cardiac rehabilitation at the Cardiac Center, Bhandari Hospital and Research Cente in Indore, India. The aim of the present study was to improve nurse knowledge of post-myocardial infarction rehabilitation at selected hospitals in Indore through a newly designed self-instructional module. Sixty cardiac centre staff nurses were selected by simple random sampling technique. The samples were administered a questionnaire, a pre-test on cardiac care and the self-instructional module. Five days after the nurses were administered the module; a post-test was given to assess the gain in knowledge on in post-myocardial infarction cardiac rehabilitation. The findings of the study were mean pre-test score was 8.27 ± 4.40 but increased to 23.18 ± 3.69 in the post-test following administration of the self-instructional module. The change in score was statistically significant ($P < 0.0001$) indicating that the self-instructional module was instrumental in increasing knowledge of post-myocardial infarction rehabilitation. The researcher concluded that there is need for continuing education of nurses in cardiac rehabilitation. Self-instructional modules are a useful tool for furthering nurse education.

cardiac rehabilitation sessions among coronary artery bypass graft patients.

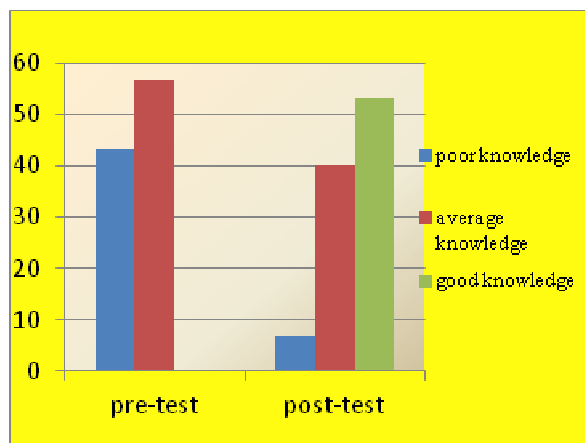
Aim of the study: Was to assess the effectiveness of structure teaching program regarding cardiac rehabilitation among patients undergone CABG surgery.

MATERIALS AND METHODS

After obtaining permission from the Director of Saveetha Medical College and Hospital, the study was carried out in the cardiac ward.

The 30 samples were selected by using non probability convenience sampling technique and 30 samples were selected. The patients undergone coronary artery bypass grafting was assessed for level of knowledge regarding cardiac rehabilitation. Demographic variable and structured questionnaire was assessed before giving structured teaching program on cardiac rehabilitation. After administration of structured teaching program on cardiac rehabilitation, the patients were assessed with same questionnaire to find the effectiveness of structured teaching program on cardiac rehabilitation. The study was carried out for 5days.

Ethical consideration: The project has been approved by the ethics committee of the institution. Informed consent was obtained from the participants before initiating the study.



RESULTS

Frequency and percentage distribution of pre-test and post-test level of knowledge on cardiac rehabilitation among patients undergone coronary artery bypass grafting surgery in study

Knowledge	Poor Knowledge		Average Knowledge		Good Knowledge		Mean	S.D
	No.	%	No.	%	No.	%		
Pre-test	13	43.33	17	56.66	0	0	33.933	13.07
Post Test	2	6.66	12	40	16	53.33	64.666	12.91

Variable	Test	Mean	S.D	't' value
Knowledge	Pre-test	33.933	13.07256	T=19.2054
	Post test	64.666	12.11819	P=0.000, S

* p<0.001, S – significant, N.S – Not Significant

Due to the adverse effects of the cardiovascular disease and surgery, cardiac rehabilitation will be effective to improve the quality of life of the patients. So the investigator has taken an attempt to assess the effectiveness of structure teaching program

group. The table 3 shows that in the pre-test the mean score of knowledge regarding cardiac rehabilitation 33.933 ± 13.07256 and the post-test mean score was 64.666 ± 12.11819 . The calculated paired 't' value of $t = 19.2054$ was found to be statistically highly significant at $p < 0.001$ level.

This clearly indicates that administration of structure teaching program regarding cardiac rehabilitation was found to be effective in improving the level of knowledge regarding cardiac rehabilitation among patients undergone coronary artery bypass grafting surgery.

Conclusion

The calculated value of pre-test 17(56.66%) had average knowledge about cardiac rehabilitation and 13(43.33%) had poor knowledge. Whereas after the administration of structure teaching program regarding cardiac rehabilitation majority 16(53.33%) had good knowledge, 12(40%) had average knowledge and only 2(6.66%) had poor knowledge about cardiac rehabilitation.

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