Effectiveness Of Self Instructional Module On Cardiac Rehabilitation In Patients With Coronary Heart Diseases.

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ABSTRACT
Introduction:-Cardiovascular disorders are the world's number one cause of death. A coronary heart disease (CHD) is and accounts for most of these deaths as the most prevalent form of cardiovascular diseases. Patients with coronary heart diseases and can be asymptomatic or develop chronic stable angina. Unstable angina (UA) and myocardial infarction (MI) are more serious manifestation of coronary heart diseases and are termed acute coronary syndrome (ACS). Cardiac rehabilitation is defined as "Program is designed to limit the physiologic and psychological effect of cardiac illness and also teaches the importance of life style changes to prevent recurrence of cardiac events."Aim: - To assess the effectiveness of self instructional module on cardiac rehabilitation in patients with coronary heart diseases.Objectives:1) To assess the existing knowledge regarding cardiac rehabilitation in patients with coronary heart diseases.2) To assess the effectiveness of self-instructional module on cardiac rehabilitation in patients with coronary heart diseases.3) To find out the association of knowledge score with selected demographic variables.Methods and Materials: The study was an interventional research approach conducted among 70 patients of coronary heart diseases from selected hospital in AcharyaVinobaBhave Rural Hospital Wardhawere used to collect data.Results: Result of the study was Mean value of pretest is 5.34 and posttest is 17.37 and standard deviation values of pretest are ± 1.29 and posttest is ±1.65. The calculated t-value is 50.88 and p-value is 0.001 and there is a substantial difference between pre-test and post-test knowledge scores interpreting successful self-instruction module on cardiac rehabilitation information in patients with coronary heart disease. Conclusion: According to the result of this study statistically interpreted that self-instruction module was successful for cardiac recovery among coronary heart disease patients.

Key words- Knowledge, Effectiveness, Self instructional Module, Cardiac rehabilitation, Coronary heart disease

INTRODUCTION

Cardiovascular disorders are the world's number one cause of death. A coronary heart disease (CHD) is and accounts for most of these deaths as the most prevalent form of cardiovascular diseases. Coronary heart disease patients may be asymptomatic, or may experience chronic stable angina. Unstable angina (UA) and myocardial infarction (MI) are more severe coronary heart disease symptoms and are called acute coronary syndrome (ACS).[1]

Cardiac rehabilitation is defined as "Program is designed to limit the physiologic and psychological effect of cardiac illness and also teaches the importance of life style changes to prevent recurrence of cardiac events".[2]

Focusing on cardiac recovery can avoid coronary heart disease. The primary aim of the change in lifestyle is to get the patient back to an optimum level of physiological, psychological and occupational functioning in order to prevent the development of ischemic heart disease. A combination of exercise, education in psychological rehabilitation seems to be the most important improvement in life style which requires long-term maintenance of improved habits.There is significant evidence that one of the most critical aspects of nursing is accurate knowledge instruction during their rehabilitation in wards which can be continued even after discharge. [3].

STATEMENT OF THE PROBLEM

Effectiveness of self instructional module on cardiac rehabilitation in patients with coronary heart diseases.

OBJECTIVES OF THE STUDY

1. To assess the existing knowledge regarding cardiac rehabilitation in patients with coronary heart diseases.

2. To assess the effectiveness of self-instructional module on cardiac rehabilitation in patients with coronary heart diseases.

3. To find out the association of knowledge score with selected demographic variables.

HYPOTHESIS

H_0– There will be nosignificant difference between pre test and post test knowledge scores of cardiac rehabilitation in patients with coronary heart diseases.

H_1- There will be significant difference between pre test and post test knowledge scores of cardiac rehabilitation in patients with coronary heart diseases.

MATERIALS AND METHODS

Interventional research approach conducted among 70 patients of coronary heart diseases from selected hospital in AcharyaVinobaBhave Rural Hospital Wardha.The inclusion criteria were: a)Patients who are willing to participate in the study. b)Patients who are present during the period of data collection.c)The patients who are medically stable post myocardial infarction, stable angina, coronary artery bypass grafting, heart transplantation, cardiomyopathy, peripheral vascular disease and sudden cardiac death syndrome. Exlucsion dataare a) Patients who are illitrate coronary heart disease.b)The patients who are critically ill.c)The patient who is having other disease than coronary heart disease.d)The who are having unstable angina,systolic blood pressure than 200mmHg and diastolic blood pressure than 100mmHg,severe aortic stenosis, uncontrolledventriculrarrthymias,ucontrolledtachycardia,recentembolism,activepericaritisormyocardiis.
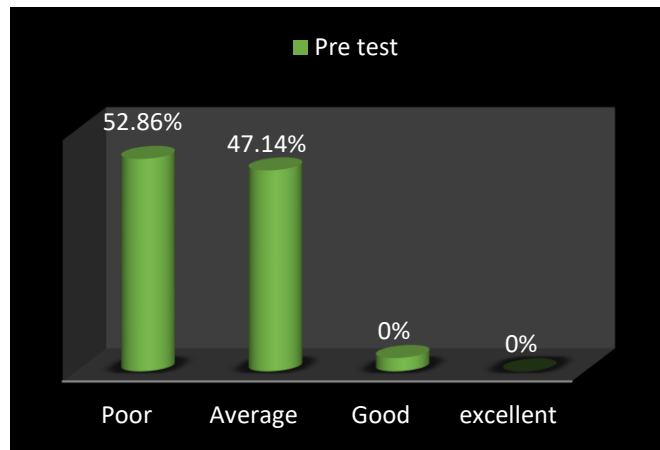
RESULTS

Table1: Assessment of pre test knowledge score regarding cardiac rehabilitation among patients with coronary heart diseases.

 n=70

Level of knowledge	Score range	Frequency	Percentage%
Poor	0-5 (0-25%)	37	52.86
Average	6-10 (26-50%)	33	47.14
Good	11-15 (51-75%)	0	0
Excellent	16-20 (76-100%)	0	0
Minimum score	3		
Maximum score	8		
Mean score	5.34 ± 1.29		
Mean percentage	$26.71. \pm 6.47$		

The above table shows that in pre test 37(52.86%) had poor level of knowledge, 33(47.14%) had average level of knowledge, the minimum score is 3, maximum score is 8, mean score is 5.34 ± 1.29 and mean percentage is $26.71 \pm 6.47\%$.

Graph 1: Assessment of pre test knowledge score regarding cardiac rehabilitation among patients with coronary heart diseases.
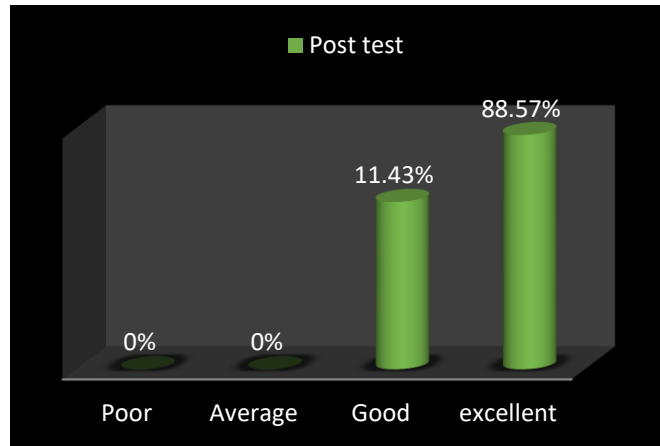
*Table 2:*Assessment of post test knowledge score regarding cardiac rehabilitation in patients with coronary heart diseases.

n=70

Level of knowledge	Score range	Frequency	Percentage%
Poor	0-5 (0-25%)	0	0
Average	6-10(26-50%)	0	0
Good	11-15(51-75%)	8	11.43
Excellent	16-20(76-100%)	62	88.57
Minimum score	13		
Maximum score	20		
Mean score	17.34±1.65		
Mean percentage	86.85.±8.26		

The table above indicates that patients had poor knowledge score, none had poor knowledge score, none had average knowledge level, 8(11.43%) had decent knowledge level, 62(88.57%)

had excellent knowledge score. The minimum score was 13 and the highest score was 20, the average score was 17.34 ± 1.65 with a mean score of $86.85 \pm 8.26\%$.
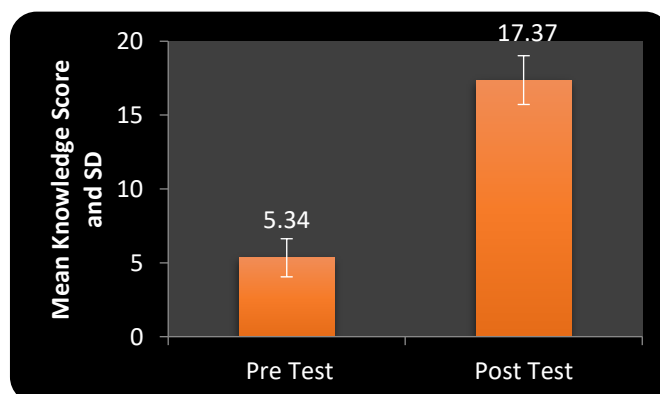

Graph 2: Assessment of post test knowledge score regarding cardiac rehabilitation in patients with coronary heart diseases.

Table3:-Significance difference between knowledge score in pre test and post test of patients with coronary heart diseases.

n=70

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	5.34	1.29	12.02±1.97	50.88	0.0001 S,p<0.05
Post Test	17.37	1.65			

The above table demonstrates that in patients with coronary heart disease, there is a substantial difference between pretest and posttest knowledge scores that interpret successful self-instructional module on information about cardiac recovery. Mean value of pretest is 5.34 and posttest is 17.37 and standard deviation values of pretest are ± 1.29 and posttest is ± 1.65. The estimated t-value is 50.88 and the p-value is 0.001. It is therefore interpreted statistically that the Self Instructional Module on overall knowledge regarding cardiac rehabilitation among coronary heart diseases patients was effective. Thus the H_1 is accepted.

Graph 3- Significance difference between knowledge score in pre and post test of patients with coronary heart diseases.

CONCLUSION

From the study, Mean value of pretest is 5.34 and posttest is 17.37 and standard deviation values of pretest are $\pm$ 1.29 and posttest is $\pm$1.65. The calculated t-value is 50.88 and p-value is 0.001and significant difference between pre test and post test knowledge scores interpreting effective self instructional module on knowledge regarding cardiac rehabilitation in patients with coronary heart diseases.According to the result of this study statistically interpreted that self instructional module.

DISCUSSION

The other studies in this section. The present research was the efficacy of the cardiac rehabilitation self-instruction module in patients with Coronary Heart Diseases.Study conducted by Shalet Alex et.al. onefficacy of an information booklet on knowledge regarding cardiac rehabilitation among clients with coronary artery disease. Most responded had none of poor level of knowledge score, 1(2%) have average level of knowledge score, 28(56%) have good level of knowledge score and 21(42%) have excellent level of knowledge score. The minimum score was 15 and the maximum score was 27, the mean score was 22.02 ± 2.60[4].

A study was conducted by Binu Xavier found the highly significant difference found between the pretest and posttest KS (P<0.01) but no significant association was found between the posttest when compared with the demographic variables of staff nurses (P<0.05)[5].

A number of articles from GBD study reflect on different aspects of Coronary Artery Disease [6-9]. Chiwhaneet. al. studied incremental prognostic value of anemia in acute coronary syndrome from a rural hospital in India[10].

Jyoti J. et. al. reported on Gamma GlutamylTransferase Levels in Patients with Acute Coronary Syndrome[11]. Few of the related studies on Coronary artery disease were reviewed [12-17]

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RESEARCH APPROACH
Interventional evaluator research approach

RESEARCH DESIGN
Quasi experimental one group pretest and posttest research design

TARGET POPULATION
Patients with coronary heart diseases.

ACCESSIBLE POPULATION
AcharyaVinobaBhave Rural Hospital.Sawangi (Meghe), Wardha.

SAMPLING TECNIQUE
Non-Probabilitypurposivesampling technique

SAMPLE SIZE
70 sample

TOOL
Structured Questionnaires &self instructional module

VARIABLES

Dependent Variable	**Independent Variable**
Knowledge of cardiac rehabilitations on coronary heart diseases patients	Self instructional module on cardiac rehabilitation in patients with coronary heart diseases.

DATA COLLECTION
Questionnaire method

ANALYSIS
Descriptive statistics and Inferential Statistics

INTERPRETATION
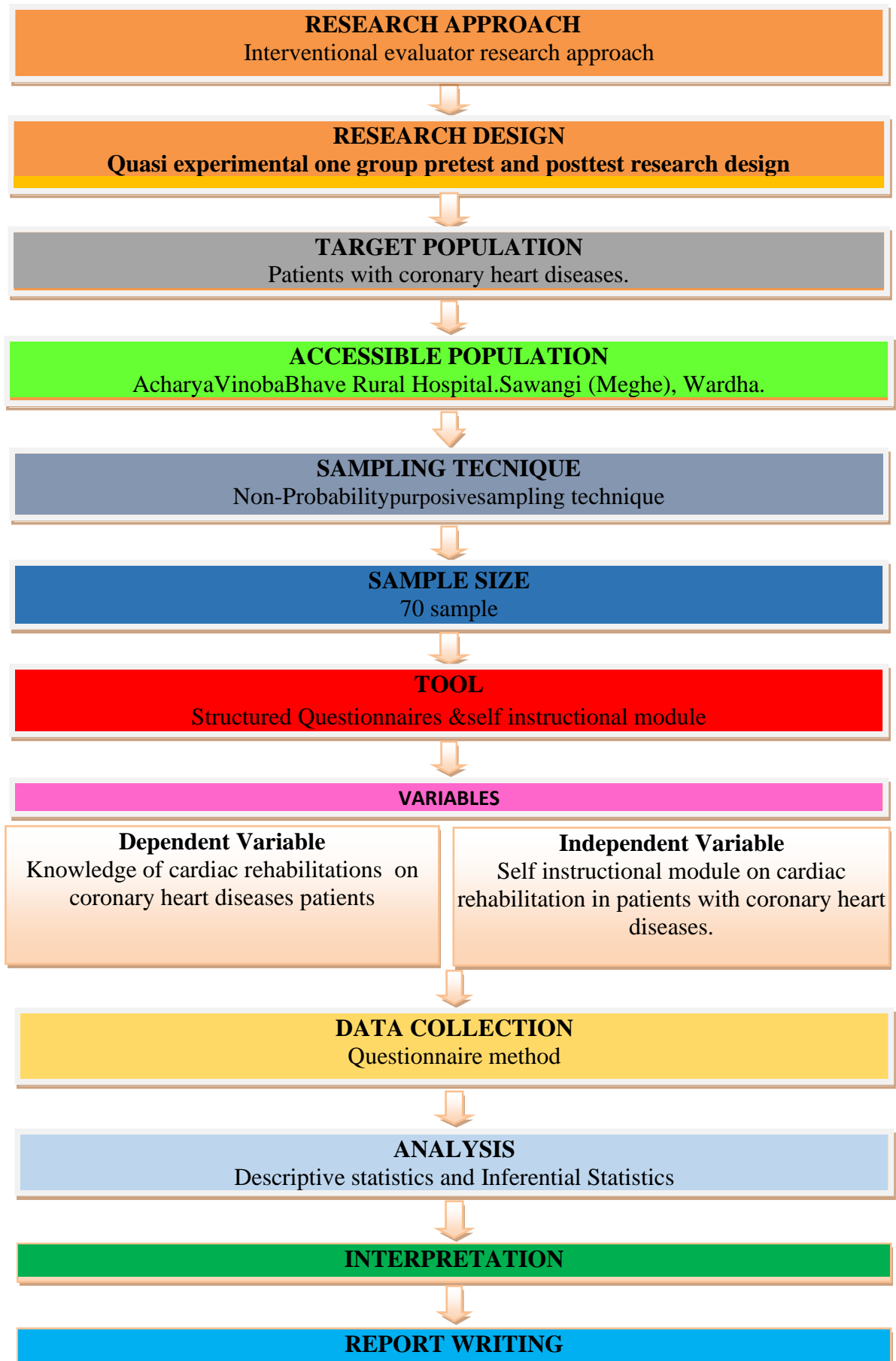
REPORT WRITING

Figure no.2: Schematic Presentation Of Quasi Experimental One Group Pre Test And Post Test Design For The Present Study