

Effectiveness Of an Educational Program on Knowledge Regarding Cardiac Rehabilitation Among Post-Myocardial Infarction Patients Who Are Admitted to The Cardiac Inpatient Department at A Selected Cardiac Hospital

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ABSTRACT

Introduction - This study evaluates the impact of an educational program on enhancing knowledge about cardiac rehabilitation among post-myocardial infarction patients. Conducted in the cardiac inpatient department of a selected hospital in Dehradun, it aims to assess whether targeted education improves patients' understanding of their recovery process. The findings will inform strategies to promote adherence to cardiac rehabilitation protocols. Ultimately, the study seeks to improve patient outcomes through increased awareness and engagement.

Objectives: The main objective of the study is to evaluate the effectiveness of an educational program on knowledge regarding cardiac rehabilitation among post-myocardial infarction patients who are admitted to the cardiac inpatient department.

Aim: The aim of this study is to evaluate the effectiveness of an educational program in enhancing knowledge about cardiac rehabilitation among post-myocardial infarction patients. It also aims to assess the program's impact on patients' understanding and participation in their recovery.

Method: The study was conducted using a pre-experimental research design (one-group pre-test and post-test design). The sample consisted of 60 post-myocardial infarction patients from Shri Mahant Indires Hospital, Dehradun, Uttarakhand, India. Non-probability convenient sampling technique was used to select the participants for this study. Moreover, the tool used for this study was a structured knowledge questionnaire.

Result: Results of the study indicated that the level of knowledge regarding cardiac rehabilitation showed that, during the pre-test, 44 (73.3%) of the post-myocardial infarction patients had moderately adequate knowledge, 12 (20%) had inadequate knowledge, and only four (6.7%) had adequate knowledge. After the intervention (educational program), there was an improvement in the level of knowledge; on the same day, all post-myocardial infarction patients, 60 (100%), had adequate knowledge. The study concluded that the mean and standard deviation of the level of knowledge regarding cardiac rehabilitation were 26.67 and 1.323, respectively. The t-value was 24.941 (59) at $p < 0.05$, which indicates that the educational program was effective in improving the knowledge of post-myocardial infarction patients about cardiac rehabilitation.

Conclusion: The study concluded that the educational program significantly improved post-myocardial infarction patients' knowledge about cardiac rehabilitation. This indicates that structured education is effective in enhancing patient understanding and engagement in their recovery process..

Keyword: *cardiac rehabilitation, Educational program, knowledge, post myocardial infarction patients.*

1. INTRODUCTION

Cardiovascular diseases (CVDs) are the leading cause of death globally, responsible for approximately 17.9 million deaths annually, which accounts for 32% of all global fatalities, according to the World Health Organization (WHO, 2022). Among these, myocardial infarction (MI) or heart attack remains a significant contributor to morbidity and mortality worldwide. In the United States, the American Heart Association (AHA, 2023) reports that nearly 805,000 Americans experience a new or recurrent MI each year, underscoring the persistent burden of ischemic heart disease. Despite advancements in medical management and interventional procedures, the global prevalence of post-MI patients continues to rise, highlighting the need for effective secondary prevention strategies.

Cardiac rehabilitation (CR) is a comprehensive, multidisciplinary intervention designed to improve cardiovascular health, promote lifestyle modifications, and prevent future cardiac events (Balady et al., 2016). Evidence from the AHA and WHO emphasizes that patient education and awareness about cardiac rehabilitation significantly influence adherence to prescribed therapies and lifestyle changes, thereby improving clinical outcomes (World Health Organization, 2022). Looking toward 2025, the WHO Global Status Report on Noncommunicable Diseases (2023) predicts a continued increase in CVD burden, driven by urbanization, sedentary lifestyles, and unhealthy dietary habits. This escalation necessitates the implementation of effective educational programs to enhance patient understanding of cardiac rehabilitation's benefits. Improving knowledge among post-MI patients is essential to foster active participation in recovery and reduce the risk of recurrent events, ultimately decreasing mortality and improving quality of life on both national and global levels.

The prevalence of heart illnesses is rapidly rising around the world. In 2030, 23.4 million people are expected to die from heart conditions. Therefore, cardiac disorders are a contemporary health concern and their influence will grow in the future. Cardiac rehabilitation is a thorough program that gets the patient ready for a full, active, and successful life despite the limits put on them by the disease.

Coronary heart disease (CHD) is the world's number one killer and a major public health concern. The most frequent cause of death from CHD is acute myocardial infarction (AMI), which accounts for 188,000 hospital episodes annually in the United Kingdom (UK) alone and is a significant source of death and disease. National, European, and international guidelines encourage the provision of cardiac rehabilitation (CR) services in recognition of this burden and the necessity to rehabilitate patients. In a nutshell, CR is a multi-component intervention that typically consists of education, psychological support, and scheduled exercise training to encourage healthy lifestyle changes. Attendance at CRs has been linked to improvements in risk factors, mortality, morbidity, and health-related quality of life (HRQOL).

This study aims to evaluate the effectiveness of an educational program on the knowledge regarding cardiac rehabilitation among post-myocardial infarction patients admitted to a cardiac inpatient department, contributing valuable insights toward optimizing secondary prevention strategies in the context of the ongoing global CVD epidemic.

Back ground of the study

Cardiovascular diseases (CVDs) continue to be the leading cause of death worldwide, accounting for approximately 17.9 million deaths annually, which represents nearly 32% of all global deaths (World Health Organization [WHO], 2024). Myocardial infarction (MI), a critical manifestation of ischemic heart disease, significantly contributes to this burden, with many patients experiencing recurrent cardiovascular events post-discharge. Despite advancements in acute management, secondary prevention strategies such as cardiac rehabilitation (CR) have proven effective in reducing mortality, improving functional capacity, and enhancing quality of life among post-MI patients (Balady et al., 2016). **Global Perspective:** Globally, participation in CR programs remains suboptimal, primarily due to limited awareness, accessibility issues, and lack of patient education (Karmali et al., 2025). Studies indicate that increasing patient knowledge about CR benefits directly correlates with higher participation rates and better health outcomes (WHO, 2024). Educational interventions tailored to patient needs have shown promise in bridging this knowledge gap and promoting engagement in CR activities (Balady et al., 2016). **National and State –Level Perspective:** At the national level, many countries face challenges in implementing comprehensive CR programs due to resource constraints, inadequate healthcare infrastructure, and low health literacy among patients (National Heart Institute, 2024). In the context of the specific state, data reveal that awareness about CR remains low among post-MI patients, resulting in reduced participation and poorer secondary prevention outcomes (State Health Department, 2024). Educational programs within hospital settings have the potential to significantly improve patient knowledge, thereby increasing participation rates and reducing recurrent cardiac events. **Rationale for the Study:** Given the crucial role of patient education in secondary prevention and the observed gaps at global, national, and state levels, this study aims to evaluate the effectiveness of an educational program on improving knowledge regarding cardiac rehabilitation among post-MI patients.

admitted to a selected cardiac hospital. Enhancing patient awareness through structured education can lead to better engagement in CR, ultimately improving clinical outcomes and reducing the overall burden of CVD.

Need of the study

This study is needed to address the low awareness of cardiac rehabilitation among post-MI patients, which limits their participation in secondary prevention. Improving knowledge through education can enhance engagement and health outcomes. Currently, there is a gap in patient education strategies within hospital settings. Evaluating an educational program can help develop effective interventions to promote CR adherence.

Statement of the problem

A study to evaluate the effectiveness of an educational program on knowledge regarding cardiac rehabilitation among post-myocardial infarction patients who are admitted to the cardiac inpatient

Objectives of the study

1. To assess the level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patients.
2. To determine the effectiveness of educational program on level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patients.
3. To associate the pre-test level of knowledge regarding cardiac rehabilitation with selected demographic variables among post-myocardial infarction patients.

Hypotheses

All hypotheses will be measure at the level of $P \leq 0.05$

1. **H₁:** There would be a significant difference in the level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patients before and after educational program.
2. **H₂:** There would be significant association between the level of knowledge regarding cardiac rehabilitation and selected demographic variables among post-myocardial infarction patients.

RESEARCH METHODOLOGY

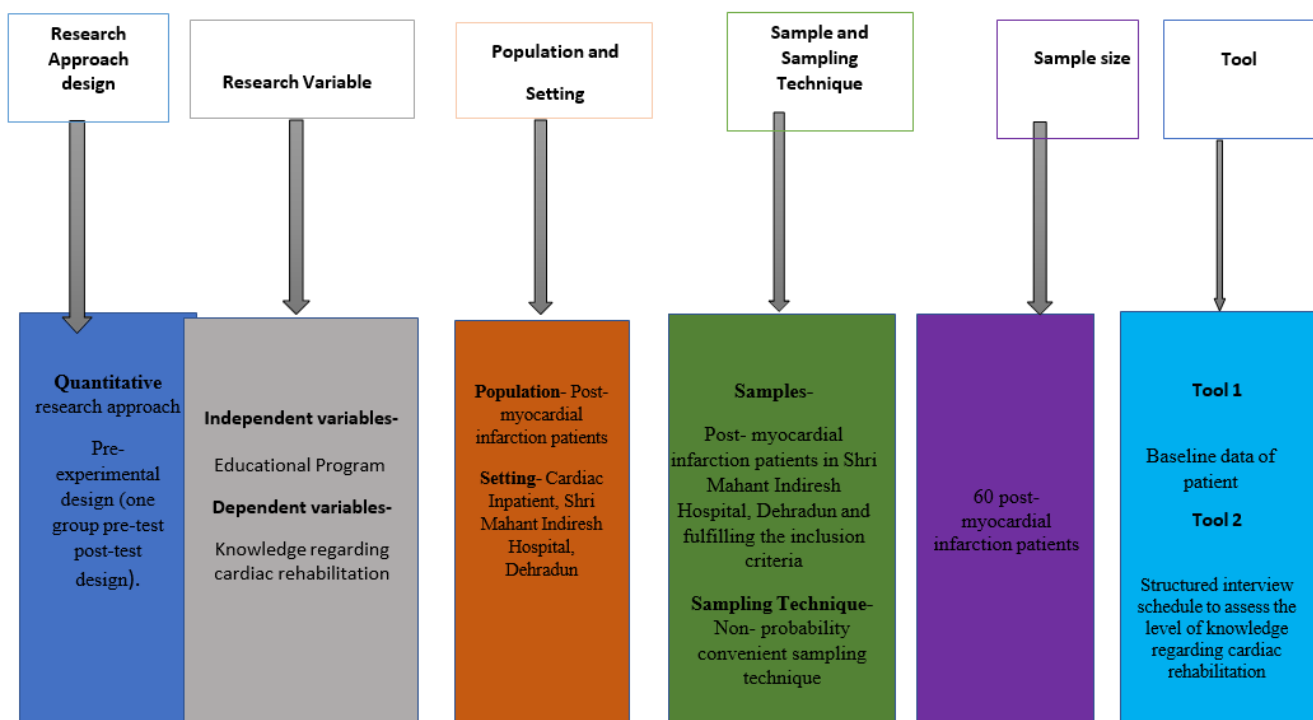


Figure No 1. Schematic diagram of the research design

SAMPLE SELECTION CRITERIA

Inclusion criteria

1. Individuals aged ≥ 18 years with a recent diagnosis of acute myocardial infarction.
2. Patients who have transitioned to the cardiology ward, indicating their readiness for post- acute medical interventions and potential rehabilitative care.
3. Consent to actively participate in the research protocol.

Exclusion criteria

1. Patients necessitating continued intensive care due to their clinical condition.
2. That with a clinical classification as critically ill is precluding them from active participation.
3. Individuals with concurrent significant cardiac pathologies, which could influence baseline understanding or perceptions about cardiac care.
4. Patients with a history of cardiac rehabilitation, as their prior exposure might influence their current knowledge and perceptions.
5. Patients with cognitive impairments or other conditions that might hinder comprehension or response to the study tools.

TOOL FOR DATA COLLECTION

This research study consists of three tools, which are:

Tool 1: Baseline data of patient

Tool 2. Structured interview schedule was used to assess the level of knowledge regarding cardiac rehabilitation

DESCRIPTION OF TOOL

Tool used for the study included the following:

Tool 1

Baseline data of patient

The baseline datasheet of a patient was developed by a researcher in English and Hindi in consultation with a guide and co-guide. It was used to gather data from patients.

Description

Tools of patient's baseline data includes demographic variables and clinical variables. In demographic variables, it includes age, sex, education, occupation, marital status, religion, family monthly income, residential area. In clinical variables, it includes number of myocardial infarction attack, past medical history, family history of cardiovascular diseases, previous cardiac procedures, comorbidities, personal habits and dietary pattern. The baseline datasheet was validated by six experts with 100% agreement.

Tool 2

Structured interview schedule to assess the level of knowledge regarding cardiac rehabilitation

Structured interview schedule was used to assess the level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patients who are admitted to the cardiac inpatient department. It consists of 30 multiple choice questions with four options for each question and patients are expected to choose one correct option. Correct answer is given a score as one. Total score is 30.

SECTION A: DESCRIPTION OF THE BASELINE CHARACTERISTICS OF THE STUDY PARTICIPANTS

Table No. 1 Frequency and percentage distribution of post-myocardial infarction patients based on baseline characteristics (n=60)

S.No.	Socio-Demographic Data	Frequency	Percentage (%)
Demographic variables			
1.	Age in years		
	18-29 years	07	11.7
	30-39 years	12	20
	40-49 years	15	25
	50-60 years	12	20
	≥ 60 years	14	23.3
2.	Sex		
	Male	45	75
	Female	15	25
3.	Marital status		
	Married	15	25
	Unmarried	12	20
	Widow/Widower	18	30
	Divorce	15	25
4.	Educational status		
	No formal education	04	6.7
	Primary school	19	31.7
	High school	13	21.7
	Higher secondary	12	20
	Graduate	12	20
5.	Occupation		
	Private employee	14	23.3
	Govt. employee	12	20
	Self-employee	08	13.3
	Unemployed/Housewife	13	21.7
	Others	13	21.7

6.	Religion		
	Hindu	16	26.7
	Christian	17	28.3
	Muslim	21	35
	Others	06	10
7.	Family monthly income		
	Less than Rs. 10,000	15	25
	Rs. 11,000- Rs. 20,000	08	13.3
	Rs. 21,000- Rs. 30,000	16	26.7
	More than Rs. 30,000	21	35
8.	Area of residence		
	Rural	47	78.3
	Urban	13	21.7
Clinical variables			
1.	Is this your first Myocardial Infarction attack		
	Yes	52	86.7
	No	08	13.3
	Others	00	00
2.	Past medical history		
	Hypertension	14	23.3
	Diabetes mellitus	13	21.7
	High cholesterol	16	26.7
	Others	09	15
	None	08	13.3
3.	Family history of cardiovascular diseases		
	Yes	17	28.3
	No	18	30
	Unsure	25	41.7

4.	Previous cardiac procedures		
	Angioplasty Bypass surgery	03	5
	Pacemaker implantation Others	01	1.7
	None	02	3.3
		06	10
		48	80
5.	Comorbidities Respiratory disease such as Asthma	13	21.7
	Kidney diseases Liver diseases Others	15	25
	None	07	11.7
		13	21.7
		12	20
6.	Personal Habits		
	Smoking	08	13.3
	Alcohol consumption Tobacco chewing	12	20
	Others	17	28.3
	None	12	20
		11	18.3
7.	Dietary pattern		
	Vegetarian Non-vegetarian	18	30
	Both	20	33.3
		22	36.7

Table - 1 Depicted frequency and percentage of area demographic variables and clinical variables of post- myocardial infarction patients

- Most of the post-myocardial infarction patients 07 (11.7%) were lie between the age group of 18-29 years, followed by 12 (20%) were lie between the age group of 30-39 years, 14 (23.3%) were ≥ 60 , 15 (25%) were lie between the age group of 40-49 years, and 12 (20%) were lie between the age group of 50-60 years.
- More than half of the post-myocardial infarction patients 45 (75%) were male and 15 (25%) were female.
- Most of the post-myocardial infarction patients 18 (30%) were widow/widower, followed by 15 (25%) were married and divorce, and 12 (20%) were unmarried.
- Most of the post-myocardial infarction patients 19 (31.7%) had primary education, 13 (21.7%) had high school, 12 (20%) had higher secondary & graduate, and four (6.7%) had no formal education.
- Most of the post-myocardial infarction patients 14 (23.3%) had private employee, followed by 13 (21.7%) had unemployed/housewife & Others, 12 (20%) had government employee and 08 (13.3%) had self-employee.

6. Most of the post-myocardial infarction patients 21 (35%) were belongs to Muslim religion, followed by 17 (28.3%) were belongs to Christian religion, 16 (26.7%) were belongs to Hindu religion and 06 (10%) were belongs to other religion.
7. Most of the post-myocardial infarction patients 21 (35%) had more than Rs. 30,000 family monthly income, followed by 16 (26.7%) had Rs. 21,000- Rs. 30,000, 15 (25%) had less than Rs. 10,000, and 08 (13.3%) had Rs. 11,000- Rs. 20,000.
8. More than half of the post-myocardial infarction patients 47 (78.3%) from rural area and 13 (21.7) from urban area.
9. Majority of the post-myocardial infarction patients 52 (86.7%) had first myocardial infarction attack, followed by 08 (13.3%) had no first myocardial attack and 00(00%) were others.
10. Most of the post-myocardial infarction patients 16 (26.7%) had high cholesterol, followed by 14 (23.3%) had hypertension, 13 (21.7%) had diabetes mellitus, 09 (15%) had others and 08 (13.3%) had none past medical history.
11. Most of the post-myocardial infarction patients 25 (41.7%) had unsure family history of cardiovascular disease, 18 (30%) had no family history of cardiovascular disease and 17 (28.3%) had family history of cardiovascular disease.
12. Mostly 48 (80%) of the post-myocardial infarction patients had none previous cardiac procedure, 1 (1.7%) had bypass surgery, followed by 6 (10%) had others, 2 (3.3%) had pacemaker implantation & none, and 03 (5%) had angioplasty.
13. Most of the post-myocardial infarction patients 15 (25%) had kidney disease, 13 (21.7%) had respiratory disease such as asthma & other, 12 (20%) had none, and 07 (11.7%) had liver diseases.
14. Most of the post-myocardial infarction patients 17 (28.3%) had tobacco chewing, followed by 12 (20%) had alcohol consumption & others, 11 (18.3) had none, and 08 (13.3%) had smoking.
15. Most of the post-myocardial infarction patient's dietary pattern 22 (36.7%) had both, 20 (33.3%) had non-vegetarian, and 18 (30%) had vegetarian.

SECTION B: FINDINGS RELATED TO LEVEL OF KNOWLEDGE

Part 1: Findings related to knowledge regarding cardiac rehabilitation among post- myocardial infarction patients before administration of educational program

Table No. 2 Findings relation to pre-test knowledge score (n=60)

Part	Area wise	No. of items	Mean	SD
1	Myocardial infarction	05	2.20	1.273
2	Cardiac rehabilitation	05	2.38	1.059
3	Physical exercise	08	3.70	1.555
4	Nutrition	06	2.45	1.227
5	Stress management	06	3.37	1.677
Total		30	14.10	3.917

Table No. 2 depicted that the pre-test knowledge score of the post-myocardial infarction patient, the maximum mean obtained in the aspect of physical exercise (3.70), followed by stress management (3.37), nutrition (2.45), cardiac rehabilitation (2.38), and myocardial infarction (2.20). Therefore, overall knowledge mean score of respondents were found to be 14.10 with standard deviation 3.917.

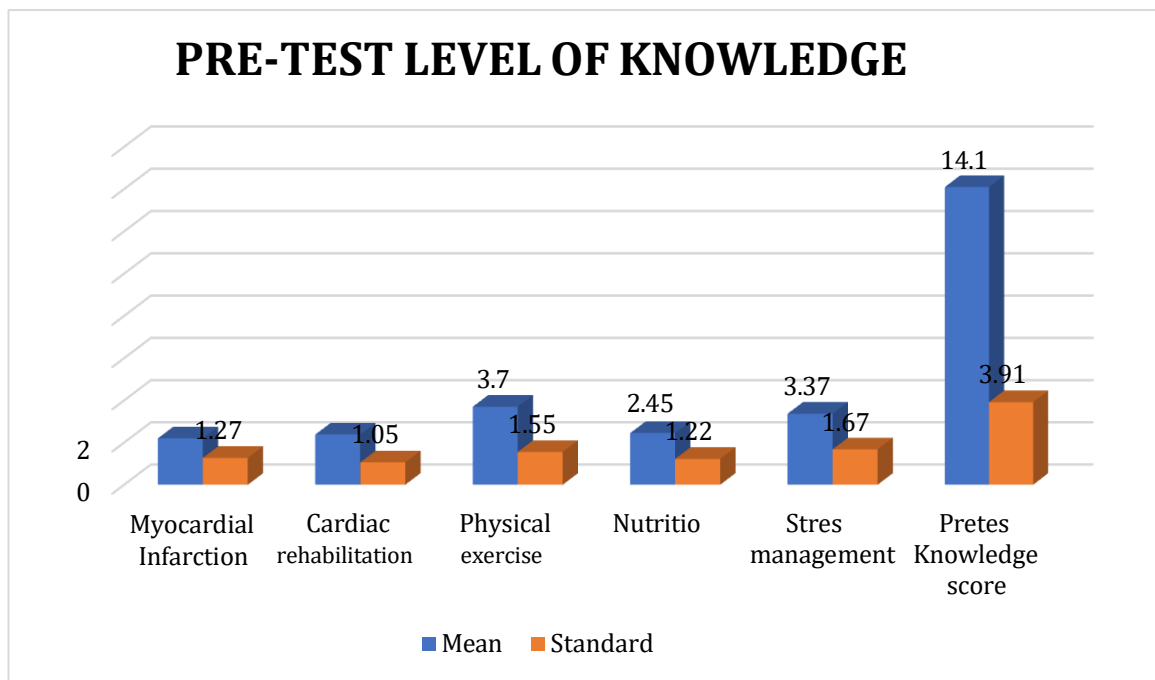


Figure 2 - bar representation of pre-test level of knowledge regarding cardiac rehabilitation

Part 2: Findings related to knowledge regarding cardiac rehabilitation among post- myocardial infarction patients after administration of educational program

Table No. 3 Findings relation to post-test knowledge score (n=60)

Part	Area wise	No. of items	Mean	SD
1	Myocardial infarction	05	4.43	0.563
2	Cardiac rehabilitation	05	4.20	0.777
3	Physical exercise	08	7.13	0.747
4	Nutrition	06	5.45	0.534
5	Stress management	06	5.45	0.675
Total		30	26.67	1.323

Table No. 3 depicted that the post-test knowledge score of the post-myocardial infarction patient, the maximum mean obtained in the aspect of physical exercise (7.13), followed by stress management and nutrition (5.45), myocardial infarction (4.43), and cardiac rehabilitation (4.20). Therefore, overall knowledge mean score of respondents were found to be 26.67 with standard deviation 1.323.

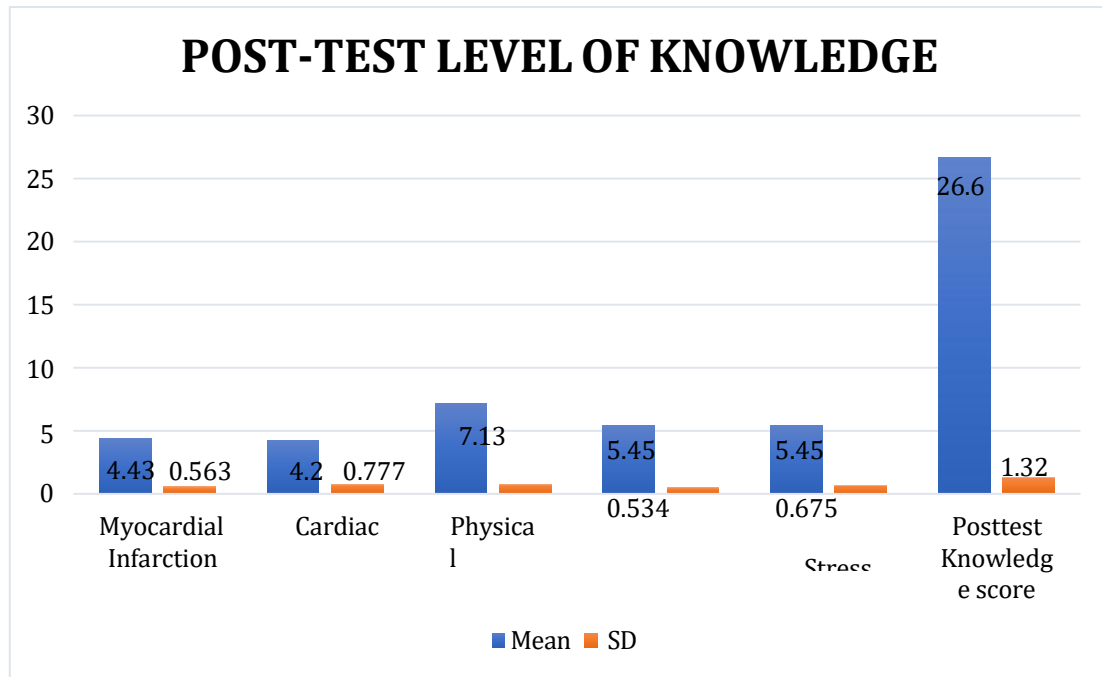


Figure 3. bar representation of post-test level of knowledge regarding cardiac rehabilitation

Part 3: Findings related to level of pre-test and post-test knowledge regarding cardiac rehabilitation among post-myocardial infarction patients

Table No. 4 Assess the level of knowledge regarding cardiac rehabilitation among post- myocardial infarction patients(n=60)

Score	Pretest		Posttest	
	f	%	F	%
1-10 (Inadequate Knowledge)	12	20	-	-
11-20 (Moderately adequate Knowledge)	44	73.3	-	-
21-30 (Adequate Knowledge)	04	6.7	60	100

*f= Frequency & %= Percentage

Table No. 4 depicted that majority 44 (73.3%) of the post-myocardial infarction patients had moderately adequate knowledge, 12 (20%) had inadequate knowledge, and only four (6.7%) had adequate knowledge regarding cardiac rehabilitation in pre-test knowledge.

In post-test knowledge, all the post-myocardial infarction patients 60 (100%) had adequate knowledge.

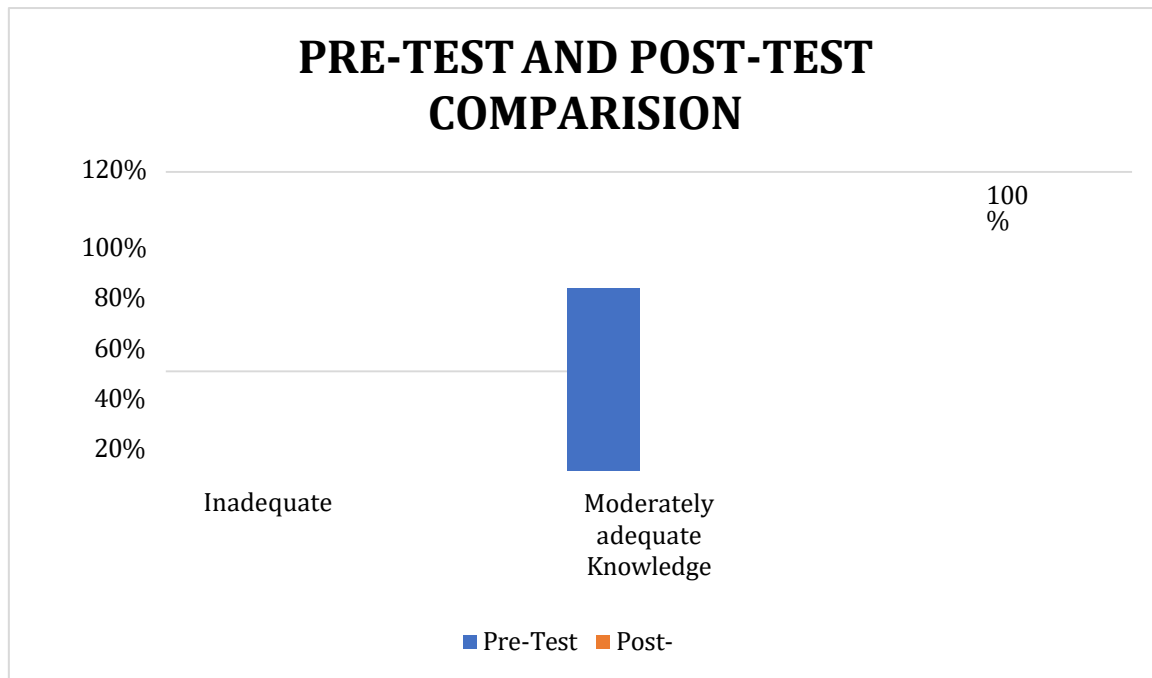


Figure 4 Bar representation of Pre and Post -test level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patients

SECTION C:

EFFECTIVENESS OF EDUCATIONAL PROGRAM ON LEVEL OF KNOWLEDGE REGARDING CARDIAC REHABILITATION AMONG POST- MYOCARDIAL INFARCTION PATIENTS

Table No. 5 Effectiveness of educational program on level of knowledge regarding cardiac rehabilitation among post-myocardial infarction patient (N=60)

Part	Component	Pre-Test Mean	Post-test Mean	t value (df)	p value
1	Myocardial infarction	2.233	4.43	13.652 (59)	0.000
2	Cardiac rehabilitation	1.817	4.20	9.517 (59)	0.000
3	Physical exercise	3.433	7.13	15.820 (59)	0.000
4	Nutrition	3.000	5.45	18.031 (59)	0.000
5	Stress management	2.083	5.45	24.941 (59)	0.000
Total		12.567	26.67	24.941(59)	0.000

Note: * significant at $p < 0.05$

Table No.5 represents, the aspect wise t value was observed and showed a significant in all the aspect of knowledge area. The combined t test value was significant i.e., 24.941 at $p < 0.05$ level. Which indicate educational program was effective

in improving the level of knowledge of the post-myocardial infarction patient regarding cardiac rehabilitation. Hence, H_1 was accepted and null hypothesis was rejected.

SECTION D: ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE WITH DEMOGRAPHIC VARIABLES REGARDING CARDIAC REHABILITATION AMONG POST-MYOCARDIAL INFARCTION PATIENTS

Table No. 6 Association of level of knowledge regarding cardiac rehabilitation among post- myocardial infarction patients with their selected demographic variables (N=60)

S.No	Socio- Demographic Data	Inadequate knowledge (1-10)	Moderate knowledge (11-20)	Moderate knowledge (11-20)	χ^2 value	p value	Degree of freedom	Remark
Demographic variables								
1.	Age in years							
	18-29 years	02	05	00				
	30-39 years	03	08	01				
	40-49 years	03	11	01	4.394	0.820	8	NS
	50-60 years	02	08	02				
	≥ 60 years	02	12	00				
2.	Sex							
	Male	11	32	02	3.232	0.199	2	NS
	Female	01	12	02				
3.	Marital status							
	Married	03	09	03				
	Unmarried	03	09	00	9.157	0.165	6	NS
	Widow/Widower	05	12	01				
	Divorce	01	14	00				
4.	Educational status							
	No formal education	01	03	00				
	Primary school	02	16	01	5.623	0.689	8	NS
	High school	04	09	00				
	Higher secondary	03	07	02				
	Graduate	02	09	01				
5.	Occupation							
	Private employee	05	09	00				
	Govt. employee	01	09	02				

	Self-employee	01	07	00	6.710	0.568	8	NS
	Unemployed/Housewife	02	10	01				
	Coolie	03	09	01				
6.	Religion							
	Hindu	03	13	00				
	Christian	02	15	00	12.198	0.058	6	NS
	Muslim	04	13	04				
	Others	03	03	00				
7.	Family monthly income							
	Less than Rs. 10,000	01	14	00				
	Rs. 11,000- Rs. 20,000	02	06	00	8.574	0.199	6	NS
	Rs. 21,000- Rs. 30,000	03	10	03				
	More than Rs.30,000	06	14	01				
8.	Area of residence	10	34	03				
	Rural	02	10	01	0.535	0.970	4	NS
	Urban							
Clinical variables								
1.	Is this your first Myocardial Infarction attack							
	Yes	10	38	04				
	No	02	06	00	0.734	0.693	2	NS
	Others	00	00	00				
2.	Past medical history	02	12	00				
	Hypertension	04	08	01				
	Diabetes mellitus	03	12	01	3.478	0.901	8	NS
	High cholesterol	02	06	01				
	Others	01	06	01				
	None							

3.	Family history of cardiovascular diseases	05	11	01				
	Yes	02	14	02	2.525	0.640	4	NS
	No	05	19	01				
	Unsure							
4.	Previous cardiac procedures							
	Angioplasty	01	02	00				
	Bypass surgery	00	01	00				
	Pacemaker implantation	01	01	00	4.242	0.835	8	NS
	Others	00	05	01				
5.	Comorbidities	04	09	00				
	Respiratory disease such as Asthma	01	12	02				
	Kidney diseases Liver diseases Others	01	06	00	5.186	0.737	8	NS
	None	03	09	01				
		03	08	01				
6.	Personal Habits	03	05	00				
	Smoking Alcohol consumption Tobacco chewing Others	04	08	00	9.384	0.311	8	NS
	None	02	12	03				
		02	10	00				
		01	09	01				
7.	Dietary pattern	05	12	01				
	Vegetarian Non-vegetarian Both	04	14	02	1.860	0.761	4	NS
		03	18	01				

Note: *S-significant *NS- Not significant at $p < 0.05$

Table no. 4 depicts that the level of knowledge regarding cardiac rehabilitation was not significantly related to specified demographic variables. **Hence, H_2** was rejected and null hypothesis was accepted

2. RESULT

The study found that an educational program significantly improved post-myocardial infarction patients' knowledge of cardiac rehabilitation, with mean scores rising from 14.10 pre-test to 26.67 post-test ($p < 0.05$). Initially, most had moderate or inadequate knowledge, but after the intervention, all achieved adequate knowledge. Significant gains were observed across all knowledge domains. No significant association was found between demographic variables and knowledge levels, indicating the program's broad effectiveness.

NURSING IMPLICATIONS

The present study emphasized on effectiveness of educational program on knowledge regarding cardiac rehabilitation. The finding of the study provided the useful information to participants.

Nursing Education

- Nurse educators must encourage post-myocardial infarction patients to participate actively in educational programmes.
- Nursing education can be improved so that nursing students are aware of current knowledge concerning cardiac rehabilitation, as well as how to encourage educational program among post-myocardial infarction patients.
- Students can utilize the educational program to given health education regarding cardiac rehabilitation among post-myocardial infarction patients.

Nursing Practice

- Staff should be encouraged to participate actively in service training and workshops in order to develop innovative ideas regarding cardiac rehabilitation.
- Nurse as educator, leader, counselor, motivator, supervisor and team member in various situation of work.
- Health promotion is a vital function of the nurse and nurse can use this educational program on three levels of prevention (i.e., Primary, Secondary and Tertiary).
- Health education may be given to post-myocardial infarction patients regarding meaning, phases, physical activity, exercises, and measures to take medication, diet pattern.

Nursing Research

- Educational program still needs supportive background studies to implement in cardiac hospital. The nurse as a researcher has a role to prepare and educate the post-myocardial infarction patients in aspects of cardiac rehabilitation which helping them to live a healthy life style ahead.
- The nurse researcher can use this study as a foundation for future research.
- This study brings about the fact that the more studies need to be done at different setting like community.
- Further replication of the study can be used to generalize the study's findings.
- Nurse researcher should be motivated to conduct more studies on cardiac rehabilitation among various age groups.

Nursing Administration

- The nurse administrator in the hospital can develop guidelines regarding cardiac rehabilitation.
- The public health nurse has a major role in strengthening and designing the primary healthcare services as per the felt needs of the community.
- The nurse has a major role in creating awareness about the cardiac rehabilitation.
- Nursing administrator can formulate policies that will includes all nursing staff to be actively involved in health education program in their respective hospital and colleges.
- Nursing administrators can utilise the educational program for directing and motivating staff towards regarding cardiac rehabilitation among post-myocardial infarction patients.

Strengths

The current study had the following strengths

1. The researcher used a standardized tool for the assessment of the knowledge regarding cardiac rehabilitation.
2. The sample size calculation was done to determine the appropriate sample size.

Weaknesses

The current study had the following weakness

1. Educational program effectiveness was not assessed on post-myocardial infarction patients' status.

Limitations

The current study had the following limitation

1. Intervention was given for a very short period.

Recommendations:

The current study has opened avenues for future research in the following ways

1. A larger study sample can replicate the similar study.
2. An information booklet can be prepared as a teaching aid in the hospitals and out-patient clinics.
3. A comparative study can be conducted in two different hospitals with similar set up.
4. Comparison between two or more interventions can be done to improve the knowledge regarding cardiac rehabilitation.
5. A similar study can be done in urban and rural areas so findings can be compared.
6. A similar study can be conducted using other teaching strategies.
7. The control group can do the same study.
8. A descriptive study can be conducted among post-myocardial infarction patients regarding cardiac rehabilitation.
9. A study on major examples of speculation should be possible.
10. A study can be replicated in outpatient department.
11. A study can be done by involving all the cardiac patients.
12. A similar study can be done in urban and rural areas so findings can be compared.

A longitudinal study can be done using posttest after one month, six months and one year to see retention of knowledge

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