



# Effectiveness Of Planned Teaching Program On Knowledge Regarding Impact Of Life Style Modification On Cardiovascular Health Among Cardiac Patients Admitted In Cardiac Unit, Btct Hospital”

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## Abstract

**Introduction:** In today’s fast-paced world, where unhealthy habits are often the order of the day, cardiovascular diseases have become a thorn in the side of public health. Cardiac patients frequently find themselves between a rock and a hard place, struggling to juggle medical treatments and lifestyle changes. It is said that prevention is better than cure, and in this light, lifestyle modification stands out as a silver lining in the battle against heart disease. However, without proper guidance, many patients are left in the dark, unaware of the profound impact their daily choices can have on their heart health. This study aims to turn the tide by evaluating the effectiveness of a planned teaching program designed to shed light on lifestyle modification and its role in improving cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital, helping them take the bull by the horns and lead healthier lives.

**Aims:** To evaluate the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital.

**Objectives:** 1) To assess the pretest level of knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital. 2) To develop a structured teaching program to improve knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients. 3) To administer the structured teaching program among cardiac patients admitted in the cardiac unit of BTCT Hospital. 4) To assess the post-test level of knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital. 5) To find out the effectiveness of the structured teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients. 6) To determine the association between the pretest level of knowledge and selected demographic variables of cardiac patients.

**Materials and Methods:** A pre-experimental one-group pre-test and post-test design was adopted to evaluate the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted to the cardiac unit of BTCT Hospital, Sagar (M.P.). A total of 30 cardiac patients were selected using a purposive non-probability sampling technique based on specific inclusion and exclusion criteria. Data collection tools included a self-structured knowledge questionnaire comprising 30 multiple-choice questions, and a structured teaching program developed by the researcher. The tool's content validity was established by six nursing experts, and reliability was tested using Karl Pearson's split-half method, yielding a correlation coefficient of  $r = 0.75$ . The study was conducted after obtaining formal permission from hospital authorities and informed consent from participants. Data were collected through pre-test administration, followed by implementation of the teaching program, and then a post-test. The pilot study was conducted prior to the main study to assess feasibility. Data analysis involved descriptive statistics such as frequency, percentage, mean, and standard deviation, and inferential statistics including paired t-test to assess effectiveness, and chi-square test to determine the association between pre-test knowledge scores and selected demographic variables. Ethical considerations were observed throughout the study to maintain participant confidentiality and rights.

**Findings:** The study revealed that prior to the planned teaching program, the majority of cardiac patients (73.33%) had inadequate knowledge regarding the impact of lifestyle modification on cardiovascular health, with a mean pre-test score of 10.56 and standard deviation of 5.39. Following the administration of the structured teaching program, there was a marked improvement in knowledge, with 90% of participants achieving an adequate knowledge level in the post-test, yielding a mean score of 22.53 and standard deviation of 2.403. The paired t-test value of 5.105 indicated a statistically significant difference between pre- and post-test scores at the 0.05 level, confirming the effectiveness of the teaching intervention. Furthermore, chi-square analysis demonstrated a significant association between marital status and pre-test knowledge scores, while no significant associations were found with other demographic variables such as age, gender, religion, education, income, diet preference, smoking, or exercise habits. Overall, the findings support the positive impact of structured educational interventions in enhancing knowledge among cardiac patients.

**Conclusion:** The study concludes that the structured teaching program was effective in significantly enhancing the knowledge of cardiac patients regarding the impact of lifestyle modification on cardiovascular health. The marked improvement in post-test scores compared to pre-test scores highlights the importance of planned educational interventions in empowering patients to make informed lifestyle choices. While most demographic variables showed no significant association with knowledge levels, marital status was found to have a significant influence. These findings underscore the need for regular, targeted health education as part of cardiac care to promote better health outcomes and prevent further complications related to cardiovascular disease.

**Keywords:** Lifestyle modification, Cardiovascular health, Cardiac patients, Structured teaching program, Knowledge assessment, Pre-test and post-test, Health education, Patient awareness, Behavior change, BTCT Hospital.

## INTRODUCTION

Cardiovascular diseases (CVDs) remain a leading cause of morbidity and mortality worldwide, often linked to modifiable lifestyle factors such as poor diet, physical inactivity, smoking, and stress. Despite advancements in medical treatment, the burden of heart disease continues to rise, especially in developing countries like India. Lifestyle modification, including regular exercise, balanced nutrition, smoking cessation, and stress management, plays a pivotal role in preventing and managing cardiovascular conditions. However, many cardiac patients lack adequate knowledge about these preventive strategies, which hampers their recovery and long-term health outcomes. Structured teaching programs offer a practical and effective method to bridge this knowledge gap and empower patients with the necessary information to adopt healthier lifestyles. This study aims to assess the effectiveness of a planned teaching program on improving knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital, Sagar.

### Background of the Study

Cardiovascular diseases (CVDs) are among the most prevalent and life-threatening health issues globally, accounting for nearly 17.9 million deaths each year, according to the World Health Organization. In India, the incidence of heart diseases has seen a sharp rise due to urbanization, sedentary lifestyles, unhealthy dietary habits, tobacco use, and increased stress levels. These lifestyle-related risk factors are not only modifiable but also preventable through awareness and behavior change. Research has shown that effective lifestyle modification—such as improved diet, regular physical activity, smoking cessation, and stress reduction—can significantly reduce the risk of heart disease and improve outcomes in cardiac patients. However, lack of awareness, education, and motivation often prevent patients from adopting these changes. Hospitals and healthcare providers play a crucial role in educating patients during their hospital stay, which can serve as a critical moment for intervention. A structured teaching program tailored to the needs of cardiac patients can

bridge the knowledge gap and promote positive behavioral changes. Therefore, this study was undertaken to assess the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital, Sagar.

### **Significance and Need for the Study**

Cardiovascular diseases are not only a leading cause of death but also a major contributor to disability and healthcare burden in India and across the world. Despite the availability of medical treatments, many cardiac patients continue to suffer repeated complications due to poor adherence to recommended lifestyle changes. A significant reason for this is the lack of adequate knowledge and understanding about how daily habits—such as diet, physical activity, smoking, alcohol use, and stress—directly impact heart health. Early education and awareness among cardiac patients are crucial to empower them to take control of their health and prevent further deterioration. Hospitals provide an ideal setting for such interventions, where patients are already receptive to information about their condition. Structured teaching programs serve as a valuable tool in improving patient knowledge, encouraging healthy behaviors, and enhancing quality of life. This study is therefore essential to evaluate whether a planned teaching intervention can effectively improve knowledge among cardiac patients regarding the importance of lifestyle modification in managing and preventing cardiovascular complications. The findings may help nurses, educators, and healthcare providers implement evidence-based strategies to improve patient education and long-term outcomes in cardiac care.

### **Statement of the Problem**

A study to evaluate the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital.

### **Objectives of the Study:**

- 1) To assess the pretest level of knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital.
- 2) To develop a structured teaching program to improve knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients.
- 3) To administer the structured teaching program among cardiac patients admitted in the cardiac unit of BTCT Hospital.
- 4) To assess the post-test level of knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted in the cardiac unit of BTCT Hospital.

5) To find out the effectiveness of the structured teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients.

6) To determine the association between the pretest level of knowledge and selected demographic variables of cardiac patients.

### Research Hypothesis

**RH<sub>1</sub>:** There will be a significant difference in the knowledge level regarding the impact of lifestyle modification on cardiovascular health among cardiac patients after the administration of the structured teaching program in BTCT Hospital, Sagar.

**RH<sub>2</sub>:** There will be a significant association between the pre-test knowledge level regarding the impact of lifestyle modification on cardiovascular health and selected socio-demographic variables among cardiac patients in BTCT Hospital, Sagar.

### Null Hypothesis

**H<sub>01</sub>:** There will be no significant difference in the knowledge level regarding the impact of lifestyle modification on cardiovascular health among cardiac patients after the administration of the structured teaching program in BTCT Hospital, Sagar.

**H<sub>02</sub>:** There will be no significant association between the pre-test knowledge level regarding the impact of lifestyle modification on cardiovascular health and selected socio-demographic variables among cardiac patients in BTCT Hospital, Sagar.

### Assumptions

- Cardiac patients have some level of baseline knowledge regarding cardiovascular health and lifestyle modification, which may vary from person to person.
- Planned teaching programs can influence knowledge and potentially encourage behavioral change among cardiac patients.
- Participants will respond honestly and accurately to the pre-test and post-test questionnaires.
- The content of the teaching program is appropriate, understandable, and culturally relevant for the study population.
- The improvement in knowledge is measurable through a structured questionnaire designed for the study.
- Participants are mentally and physically capable of attending and understanding the planned teaching sessions.
- Environmental and hospital settings will be conducive to the implementation of the teaching program without significant interruptions.

- Knowledge gained during hospitalization will influence future lifestyle choices, especially concerning diet, exercise, smoking, and stress management.
- There is a cause-effect relationship between increased knowledge and improved lifestyle practices, even if not measured behaviorally in this study.
- No other major educational interventions or external influences on cardiovascular health are provided to participants during the study period that might affect outcomes.

## **Operational Definitions**

### **Evaluate**

In this study, evaluate refers to the process of assessing and comparing the level of knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients before and after the administration of the planned teaching program, using a structured knowledge questionnaire.

### **Effectiveness**

Effectiveness refers to the extent to which the planned teaching program has successfully improved the knowledge scores of cardiac patients about lifestyle modification and its impact on cardiovascular health, as measured by the difference between pre-test and post-test knowledge scores.

### **Planned Teaching Program**

Planned teaching program refers to a systematically designed and structured educational intervention consisting of information related to lifestyle modification such as diet, exercise, smoking cessation, stress management and its benefits for cardiovascular health. The program is delivered to cardiac patients admitted in the cardiac unit through lectures, visual aids, and interactive discussion sessions.

### **Knowledge**

Knowledge refers to the awareness and understanding of cardiac patients regarding lifestyle modifications and their effects on cardiovascular health. It is measured using a validated structured knowledge questionnaire comprising multiple-choice and/or true-false questions.

### **Impact of Lifestyle Modification on Cardiovascular Health**

This term refers to the influence of behavioral changes such as healthy diet, regular physical activity, stress reduction, and avoidance of harmful habits (e.g., smoking, alcohol) on improving or maintaining cardiovascular health. In this study, it is measured by the extent to which patients understand these influences, as demonstrated through their responses in the knowledge assessment.

## Cardiac Patients

Cardiac patients refer to individuals who are diagnosed with cardiovascular conditions (such as coronary artery disease, myocardial infarction, hypertension, etc.) and are currently admitted to the cardiac unit of BTCT Hospital during the study period.

### Delimitations

- The study is limited to cardiac patients admitted in the cardiac unit of BTCT Hospital only.
- Only medically stable cardiac patients are included in the study.
- The study is conducted within a specific time frame, limiting its generalizability over time.
- Only patients who are able to understand and communicate in the selected language(s) of the teaching program are included.
- The study includes participants within a specific age group (e.g., 30–70 years).
- The teaching program used is standardized and not personalized for individual learning needs.
- The study evaluates only the knowledge gained, not long-term lifestyle changes or clinical outcomes.
- The effectiveness is measured using a structured questionnaire developed by the researcher, which may limit the scope of information gathered.
- The sample size is restricted to the available and consenting patients during the data collection period.

### Scope of the Study

- The study focuses on evaluating the effectiveness of a planned teaching program designed to improve knowledge about lifestyle modification and its impact on cardiovascular health.
- It is limited to cardiac patients admitted in the cardiac unit of BTCT Hospital, providing a controlled hospital-based setting.
- The study assesses pre- and post-teaching knowledge levels using a structured questionnaire, allowing measurable comparison.
- It aims to enhance patient awareness regarding key lifestyle changes such as diet, physical activity, smoking cessation, stress management, and medication adherence.
- The study may help in developing patient education strategies that can be implemented in clinical practice to promote secondary prevention of cardiovascular diseases.
- It contributes to nursing and health education practices by providing evidence on how structured teaching programs can improve health literacy among cardiac patients.
- Findings of the study can be used to inform policy makers, educators, and healthcare providers in designing patient-centered education interventions.
- The research is confined to a hospital-based population, and the findings are primarily applicable to similar healthcare settings.

Conceptual Framework

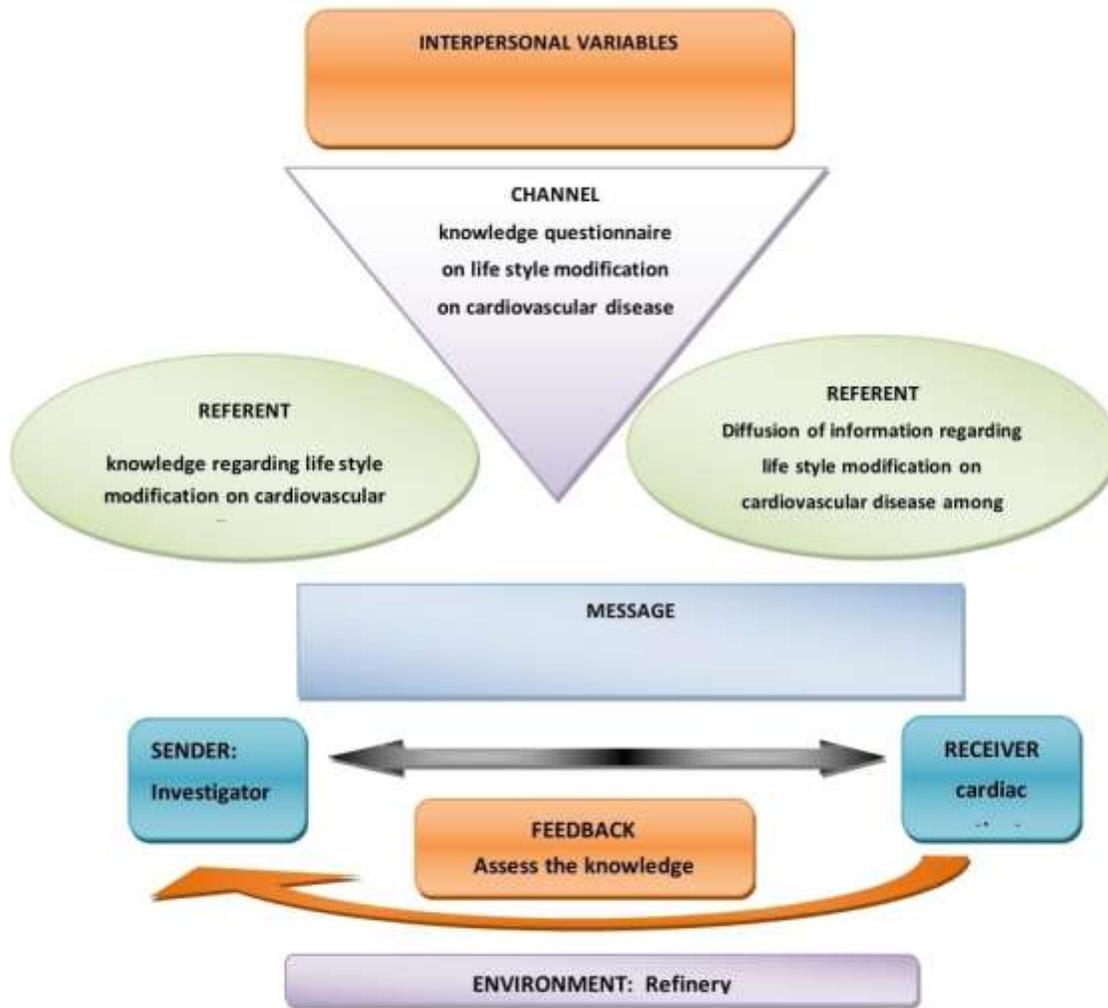


Fig:1.1 Theoretical Framework Based on Interpersonal Communication Model to assess the knowledge regarding life style modification on cardiovascular disease

**RESEARCH METHODOLOGY:**

**Research approach:** Quantitative Evaluative Research Approach.

**Research design:** Pre – experimental one group pre – test post – test research design.

**Variables:**

**Independent Variable:** Planned Teaching Program on lifestyle modification and its impact on cardiovascular health.

**Dependent Variable:** Knowledge level of cardiac patients regarding lifestyle modification and its impact on cardiovascular health (measured before and after the teaching program).

**Extraneous Variable:**

- Age of the patient
- Gender
- Educational status
- Socioeconomic status
- Duration of illness
- Previous knowledge or exposure to cardiac education
- Language and comprehension ability
- Motivation or interest level of the participant
- Support from family or caregivers
- Cognitive ability or mental status

**Population:** In the present study, the population comprises cardiac patients.

**Target Population:** In this study, the target population includes cardiac patients admitted in the cardiac unit of BTCT Hospital, Sagar (M.P.).

**Accessible Population:** In this study, the accessible population comprises cardiac patients receiving treatment in the cardiac unit of BTCT Hospital, Sagar (MP).

**Sample:** In this study, the sample includes cardiac patients admitted in BTCT Hospital.

**Sample size:** In the current study, the sample size is 30 cardiac patients.

**Sampling technique:** In this study, samples were selected using a purposive non-probability sampling technique. A total of 30 samples were selected based on defined criteria.

**Criteria for sample selection****Inclusion criteria**

Cardiac patients who:

- ✓ Are admitted to the cardiac unit of BTCT Hospital, Sagar (M.P.) and are undergoing treatment.
- ✓ Are within the age group of 20 years and above (as per the age options in the demographic section).
- ✓ Can read, understand, or communicate in Hindi or English, ensuring they can respond to the questionnaire and participate in the teaching program.
- ✓ Are willing to participate in the study and provide informed verbal or written consent.
- ✓ Are medically stable to undergo an educational session and complete the questionnaire.

## Exclusion Criteria

Cardiac patients who:

- ✓ Are not admitted in the cardiac unit of BTCT Hospital during the study period.
- ✓ Are below 20 years of age.
- ✓ Cannot understand or communicate in Hindi or English.
- ✓ Are unwilling to participate or refuse to give consent.
- ✓ Are critically ill or cognitively impaired, making them unable to complete the questionnaire or attend the teaching session.

## DEVELOPMENT AND DESCRIPTION OF TOOL

The tool was developed in the following structured manner:

### Section A: Demographic Variables

This section captures the demographic profile of participants which may influence knowledge and health behaviour. The variables included are:

- ✓ Age
- ✓ Gender
- ✓ Marital status
- ✓ Religion
- ✓ Educational qualification
- ✓ Monthly income
- ✓ Dietary preference
- ✓ Smoking habits
- ✓ Daily exercise routine

### Section B: Structured Knowledge Questionnaire

Comprises 30 self-structured MCQs, each with one correct answer and three distractors.

Covers six domains:

- Basics of cardiovascular health
- Risk factors and causes
- Symptoms and related conditions
- Diagnostic and screening methods
- Lifestyle modifications
- Prevention and awareness

### Scoring and Interpretation

Each correct answer is awarded 1 mark; incorrect responses receive 0 marks. The total score is 30.

#### Interpretation of Knowledge Level

Grade	Score Range	Interpretation
Inadequate	1–10	Poor knowledge
Moderate	11–20	Moderate knowledge
Adequate	21–30	Good knowledge



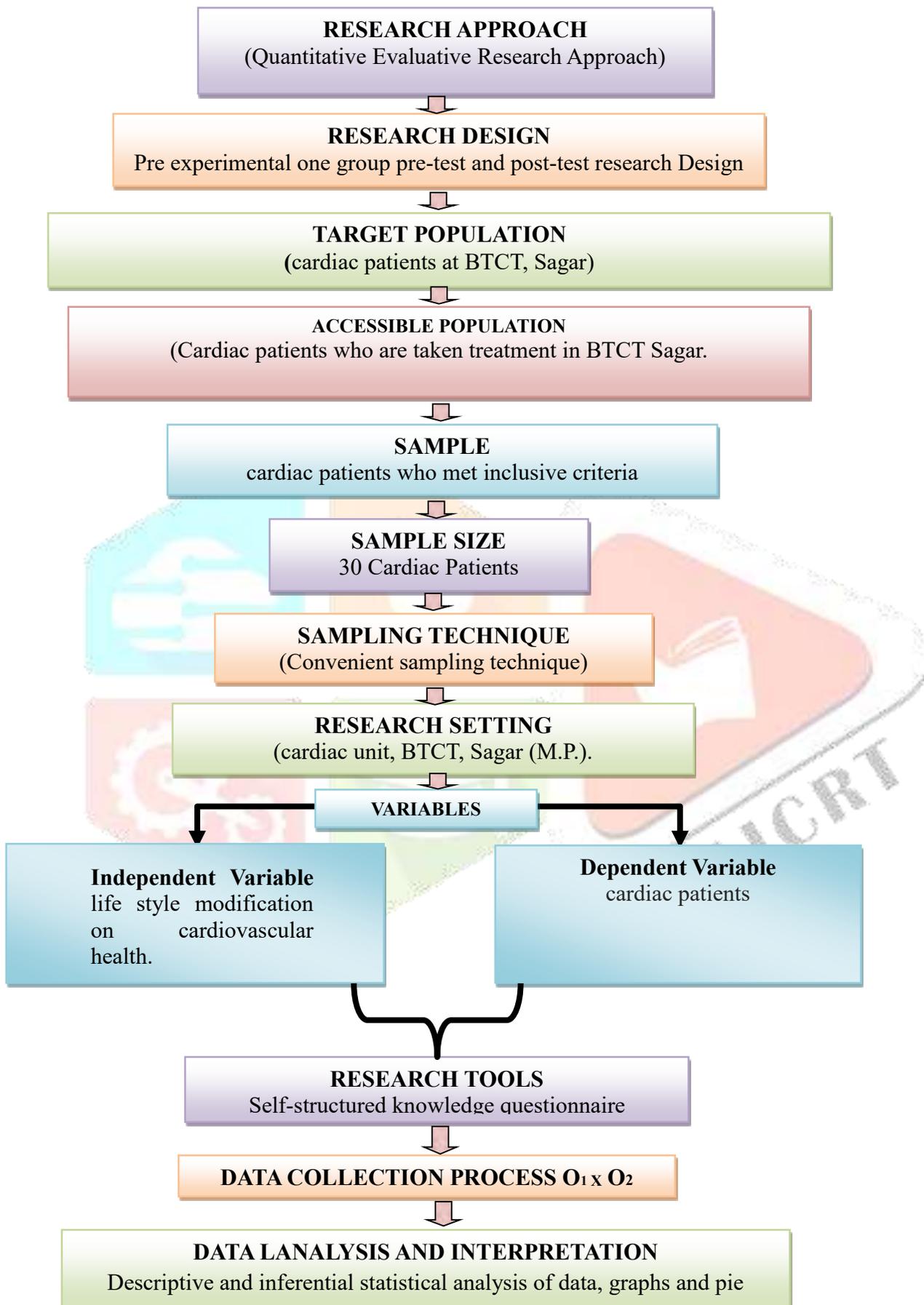


Figure-3.1: Schematic representation of research design.

Description of the Intervention

The intervention employed in this study was a Planned Teaching Program designed to enhance the knowledge of cardiac patients regarding the impact of lifestyle modification on cardiovascular health. The educational content was developed based on current literature, expert opinion, and clinical guidelines on cardiovascular disease prevention and management.

The program included information on the structure and function of the cardiovascular system, common cardiac conditions, modifiable and non-modifiable risk factors, signs and symptoms of cardiovascular disease, and the role of lifestyle changes such as healthy diet, physical activity, smoking cessation, stress management, and medication adherence in promoting heart health.

The teaching session was delivered in Hindi and/or English through a lecture-cum-discussion method, supported by visual aids and handouts. Each session lasted approximately 45–60 minutes and was conducted in a small group or one-on-one setting, depending on patient availability.

Knowledge levels were assessed pre- and post-intervention using a structured knowledge questionnaire to determine the effectiveness of the program.

## **PILOT STUDY**

A pilot study was conducted at Bhagyoday Tirth Charitable Trust (BTCT) Hospital, Sagar (M.P.) to evaluate the feasibility, clarity, and reliability of the research tools and procedures prior to the main study. Three cardiac patients who met the inclusion criteria were selected using convenient sampling. The structured knowledge questionnaire and planned teaching program were administered after obtaining verbal consent and assuring confidentiality. The pilot study confirmed that the content was understandable, the tool was appropriate for measuring knowledge, and the time required for data collection was feasible. No major revisions were necessary, and the tool was deemed reliable and suitable for use in the main study.

## **PROCEDURE FOR DATA COLLECTION**

The data collection for the main study was conducted in the cardiac unit of BTCT Hospital, Sagar (M.P.) after obtaining formal administrative permission and informed consent from the participants. A total of 30 cardiac patients were selected using purposive non-probability sampling technique based on predefined inclusion and exclusion criteria. Initially, demographic data were collected using a structured form, followed by administration of the pre-test using a self-structured knowledge questionnaire to assess baseline knowledge regarding lifestyle modification and cardiovascular health. After the pre-test, a planned teaching program was delivered to the participants in Hindi and/or English, using lecture-cum-discussion method supported by visual aids. The teaching session lasted approximately 45–60 minutes. On the seventh day post-intervention, the same questionnaire was re-administered as a post-test to evaluate the effectiveness of the planned teaching program. Confidentiality was maintained throughout the study, and all ethical considerations were strictly followed.

**DATA ANALYSIS AND INTERPRETATION OF DATA:****Description of Demographic Variables of the Cardiac Patients in BTCT Hospital, Sagar**

The demographic characteristics of the cardiac patients admitted in the cardiac unit of BTCT Hospital, Sagar, were collected to understand the distribution of the sample and identify factors that may influence their knowledge and lifestyle practices. The variables included age, gender, marital status, religion, education, monthly income, dietary preference, smoking habits, and exercise routine. N=30

<b>S.NO.</b>	<b>DEMOGRAPHIC VARIABLES</b>	<b>FREQUENCY (F)</b>	<b>PERCENTAGE (%)</b>
1.	<b>Age (in year)</b>		
	a) 20- 30	0	0
	b) 31- 40	0	0
	c) 41- 50	9	30
	d) 51 and above	21	70
2.	<b>Gender</b>		
	a) Male	22	73.33
	b) Female.	8	26.66
3.	<b>Marital status</b>		
	a) Married.	18	60
	b) Unmarried	0	0
	c) Widow.	8	26.66
	d) Widower.	4	13.33
4.	<b>Religion</b>		
	a) Hindu.	13	43.33
	b) Muslim.	5	16.66
	c) Christian.	0	0
	d) Other.	12	40
5.	<b>Education</b>		
	a) No formal education.	0	0
	b) Primary.	0	0
	c) Higher secondary.	19	63.33
	d) Graduate and above.	11	36.66
6.	<b>Monthly Income (In rupees)</b>		

	a) 5000-9000.	0	0
	b) 10000-14000.	0	0
	c) 15000-19000	16	53.33
	d) 20001 and above.	14	46.66
7.	<b>Diet preference</b>		
	a) Vegetarian	21	70
	b) Non- vegetarian	9	30
	c) Eggetarian	0	0
8.	<b>Smoking</b>		
	a) Never	5	16.66
	b) Quit	0	0
	c) Occasionally	16	53.33
	d) Regular	9	30
9.	<b>Do you exercise daily?</b>		
	a) No	17	56.66
	b) 15 minutes	0	0
	c) 30 minutes	13	43.33
	d) >45 minutes	0	0

Frequency and distribution of pre-test knowledge mean score and standard deviation of cardiac patients regarding impact of life style modification on cardiovascular health to prior administration of plan teaching program.

N = 30

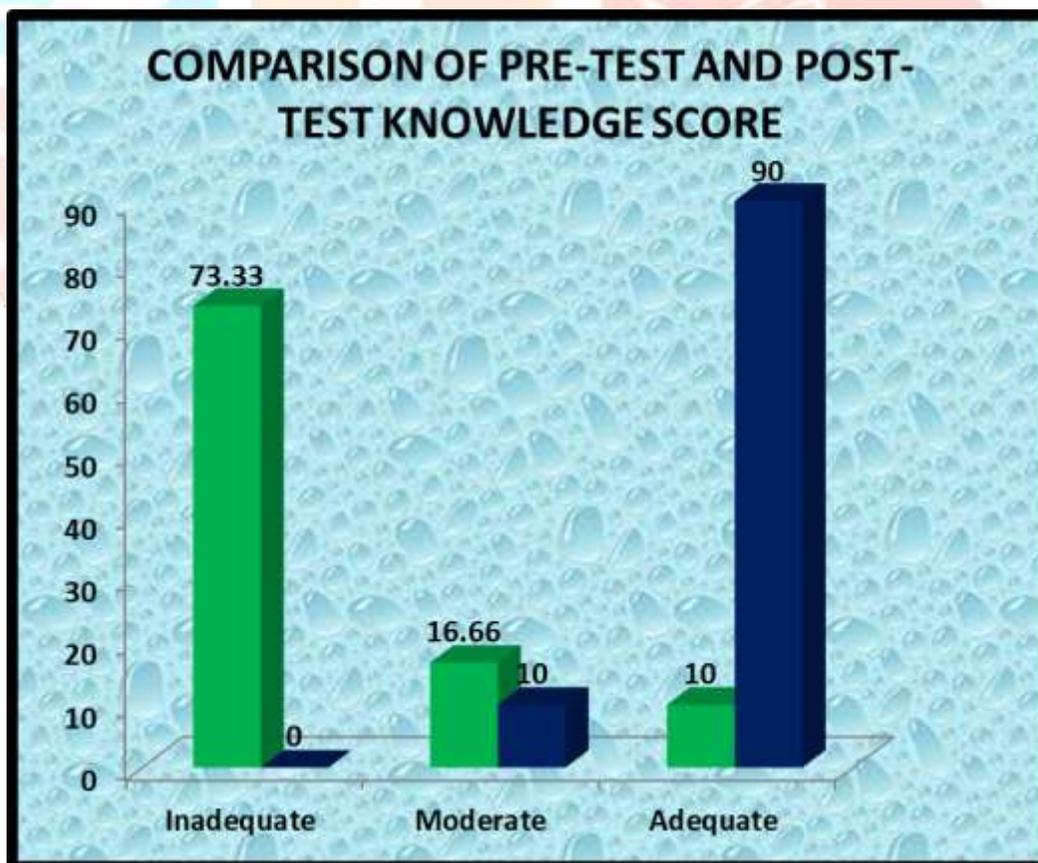
Sr. No.	Score	Grade	Total response	Percentages (%)	Mean	Standard deviation
1.	0 – 10	Inadequate	22	73.33	10.56	5.39
2.	11 – 20	Moderate	5	16.66		
3.	21 – 30	Adequate	3	10		

Frequency and distribution of post-test knowledge mean score and standard deviation among cardiac patients on impact of life style modification on cardiovascular health after administration of plan teaching program.

N = 30

S. No.	Score	Grade	Total response	Percentages (%)	Mean	Standard deviation
1.	0 – 10	Inadequate	0	0	22.53	2.403
2.	11 – 20	Moderate	3	10		
3.	21 – 30	Adequate	27	90		

Comparison of pre-test and post-test knowledge regarding impact of life style modification on cardiovascular health among cardiac patients.



Association between pre-test knowledge score and with their selected demographic variables among cardiac patients at 0.05 level.

This section deals with the association of knowledge score cardiac patients with their selected demographic variables. Chi square test was used to determine the association of knowledge score with their selected demographic variables.

Sr. No.	Demographic variables	Inadequate	Moderate	Adequate	df	Chi Square	Tabulated value <0.05
1.	<b>Age (in year)</b>	0	0	0	2	0.292 Not significant	5.991
	a) 20- 30	0	0	0			
	b) 31- 40	0	1	1			
	c) 41- 50	7	4	2			
	d) 51 and above	14	5	3			
2.	<b>Gender</b>				2	.6721 Not significant	5.991
	a) Male	17	3	2			
	b) Female.	5	2	1			
3.	<b>Marital status</b>				4	17.480* Significant	9.49
	a) Married.	14	2	2			
	b) Unmarried	0	0	0			
	c) Widow.	6	1	1			
	d) Widower.	2	2	0			
4.	<b>Religion</b>					4.395 Not significant	9.49
	a) Hindu.	10	2	1			
	b) Muslim.	4	0	1			
	c) Christian.	0	0	0			
	d) Other.	8	3	1			
5.	<b>Education</b>				2	0.3161 Not significant	5.991
	a) No formal education.	0	0	0			
	b) Primary.	0	0	0			
	c) Higher secondary.	14	3	2			

	d) Graduate and above.	8	2	3			
6.	<b>Monthly Income (In rupees)</b>				2	0.992	5.991
	a) 5000-9000.	0	0	0			
	b) 10000-14000.	0	0	0			
	c) 15000-19000	13	2	1			
	d) 20001 and above.	9	3	2			
7.	<b>Diet preference</b>				2	1.945	5.991
	a) Vegetarian	14	4	3			
	b) Non- vegetarian	8	1	0			
	c) Eggetarian	0	0	0			
8.	<b>Smoking</b>						
	a) Never	3	2	0			
	b) Quit	0	0	0			
	c) Occasionally	10	3	3			
	d) Regular	9	0	0			
9.	<b>Do you exercise daily?</b>				2	5.6731	5.991
	a) No	15	2	0			
	b) 15 minutes	0	0	0			
	c) 30 minutes	7	3	3			
	d) >45 minutes	0	0	0			

## Summary

The present study was undertaken to assess the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted to the cardiac unit of BTCT Hospital, Sagar (M.P.). A total of 30 cardiac patients were selected using purposive sampling based on defined inclusion and exclusion criteria. Data collection was carried out using a self-structured knowledge questionnaire developed by the researcher, which consisted of 30 multiple-choice questions covering various aspects of cardiovascular health, risk factors, symptoms, lifestyle practices, and prevention. The planned teaching program was delivered through a lecture-cum-discussion method with visual aids, lasting approximately 45–60 minutes. Pre- and post-test assessments were conducted to evaluate the change in knowledge levels. Demographic variables such as age, gender, marital status, religion, education, income, diet, smoking, and physical activity were also collected. The study findings aimed to demonstrate whether structured education can effectively improve knowledge, promote awareness, and ultimately support behavioural changes among cardiac patients for better cardiovascular outcomes.

## NURSING IMPLICATIONS

The findings of this study have several important implications for nursing practice, education, administration, and research, particularly in the context of cardiovascular health and patient education.

### Nursing Practice

- Nurses play a crucial role in health promotion and disease prevention. The results of this study highlight the effectiveness of structured teaching programs in improving patient knowledge regarding lifestyle modifications.
- Incorporating individual and group education sessions into routine care for cardiac patients can enhance patient awareness, adherence to treatment, and overall cardiac outcomes.
- Nurses can act as advocates and educators, guiding patients to adopt heart-healthy behaviours such as dietary changes, smoking cessation, physical activity, and stress management.

### Nursing Education

- Nursing curricula should emphasize the importance of preventive cardiology and lifestyle interventions.
- Students should be trained to develop and implement evidence-based teaching programs tailored to different populations, especially those with chronic conditions like cardiovascular disease.

## Nursing Administration

- Hospital administrators and nursing leaders should promote ongoing in-service education programs for staff to ensure effective patient teaching strategies.
- Nurse managers can allocate time and resources for patient education as a routine part of discharge planning or inpatient care for cardiac patients.

## Nursing Research

- The study encourages further nursing research on behavioural interventions and their impact on clinical outcomes.
- Future studies can explore the long-term effects of lifestyle education programs on patient behaviour, adherence, and readmission rates.

## Recommendations

- Conduct regular planned teaching programs for cardiac patients to improve their awareness about lifestyle modifications and cardiovascular health.
- Integrate lifestyle education sessions into the routine discharge planning for all cardiac patients.
- Use simple language, charts, audiovisual aids, and culturally appropriate materials to make teaching more understandable and effective.
- Encourage family members to attend educational sessions to support patients in adopting lifestyle changes at home.
- Include topics such as healthy diet, regular physical activity, smoking cessation, alcohol reduction, stress management, and medication adherence in the teaching program.
- Train nursing staff to deliver structured lifestyle modification education as part of their routine patient care.
- Evaluate patient knowledge before and after teaching sessions to measure learning and identify areas needing reinforcement.
- Distribute easy-to-read pamphlets or handouts in local languages that summarize key lifestyle tips for heart health.
- Develop follow-up programs, including phone calls or outpatient counseling, to reinforce lifestyle changes after discharge.
- Recommend further studies with larger sample sizes and diverse populations to validate and generalize the findings.

## Conclusion

The present study aimed to evaluate the effectiveness of a planned teaching program on knowledge regarding the impact of lifestyle modification on cardiovascular health among cardiac patients admitted to the cardiac unit of BTCT Hospital, Sagar (M.P.). The findings revealed that the structured educational intervention significantly improved the knowledge levels of participants, as evidenced by the difference between pre-test and post-test scores. This indicates that planned, targeted teaching programs can be an effective strategy in enhancing awareness and motivating patients to adopt healthier lifestyles, which is essential in the prevention and management of cardiovascular diseases. The study underscores the vital role of nurses as educators and advocates in promoting patient-centred care and lifestyle interventions. Overall, the results support the integration of routine patient education into nursing practice to improve cardiovascular health outcomes.

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