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CARDIAC REHABILITATION THERAPY

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Abstract

Cardiac rehabilitation (CR) is an essential part o in preventing recurrent cardiovascular events, demonstrating clear advantages in lowering death rates, decreasing rehospitalization, and enhancing physical performance and overall well-being. It includes supervised exercise, education, risk factor management, and psychosocial support. The main purpose is to promote recovery, prevent complications, and encourage a heart-healthy lifestyle. It is indicated for patients after myocardial infarction, cardiac surgery, and heart failure. The program consists of 4 Phases that initiated during hospitalization and continued for lifelong adherence to heart healthy behaviours. Nurses play a vital role in assessment, patient education, monitoring progress, providing emotional support, and promoting adherence to lifestyle modifications.

Introduction

Cardiac rehabilitation is a comprehensive and medically supervised program aimed at promoting recovery and improving the overall health status of individuals with cardiovascular disease through structured exercise, patient education, and lifestyle modification [1]. It helps patients restore physical function, adopt heart-healthy behaviours, and manage risk factors such as hypertension, smoking, and obesity. In addition, CR plays a vital role in secondary prevention by reducing morbidity, preventing recurrent cardiac events, and improving quality of life [2].in India, it is estimated that there is approximately one CR spot available for every 360 patients with ischemic heart disease, and millions of additional rehabilitation spaces are required annually to meet the growing needs. [3]

Definition

According to WHO, **Cardiac rehabilitation** (**CR**) is defined as "the sum of activity and interventions required to ensure the best possible physical, mental, and social conditions so that patients with chronic or post-acute cardiovascular disease may, by their own efforts, preserve or resume their proper place in society and lead an active life".[4]

Purposes of Cardiac rehabilitation therapy

1. Enhancement of physical strength and capacity :A primary Objective of cardiac Rehabilitation is to improve the patient's physical capacity and muscular strength through the structured and individualised exercise programme This includes aerobic and resistant training according to the patient's clinical condition and their tolerance.

2. Effective symptom Management

Cardiac rehabilitation focuses on enabling patients to manage common symptoms such as chest Discomfort, dyspnoea and fatigue. Patients are guided in the use of techniques including controlled breathing exercises relaxation methods and energy conservation strategies. This help in reducing Symptom burden and improving activity tolerance.

3. Prevention of recurrent cardiac events

The Prevention of Risk of future cardiovascular events is achieved through comprehensive education and continuous support for lifestyle modification and effective management of Comorbid conditions.

4. Promotion of psychological well being

Cardiac rehabilitation also focuses on the psychological impact of cardiovascular disease by providing emotional support and counselling to manage stress, anxiety and depression. This holistic approach enhances mental well-being improves coping abilities and promotes better quality of life.

5. Promoting overall health

Cardiac rehabilitation is a comprehensive patient centred programme that deals with the physical, psychological and emotional needs of individual with the cardiovascular diseases, promoting optimal recovery and improved quality of life. [5]

Indications of cardiac rehabilitation therapy

1. Myocardial infarction

Cardiac rehabilitation facilitates recovery by improving functional capacity, enhancing exercise tolerance and reducing the risk of recurrent events.

2. Coronary artery bypass graft surgery

It helps in postoperative recovery by restoring physical strength and enabling a safe return to daily activities.

3.Percutaneous Coronary Intervention (PCI):

Cardiac rehabilitation aids in stabilizing patients, minimizing complications, and promoting sustained lifestyle modifications.

4.Stable Angina Pectoris:

It helps to reduce the frequency and severity of anginal episodes while improving exercise capacity.

5. Chronic Heart Failure:

In stable patients, CR enhances functional ability, alleviates symptoms such as dyspnoea and fatigue, and improves quality of life.

6. Heart Valve Surgery:

Rehabilitation assists in regaining strength and optimizing cardiovascular performance following valve repair or replacement.

7. Cardiomyopathy:

Structured rehabilitation supports symptom control and improves overall cardiac efficiency.

8. Peripheral Arterial Disease:

Exercise-based interventions improve circulation, reduce claudication pain, and enhance walking capacity.

9. Heart Transplantation:

Cardiac rehabilitation promotes gradual recovery, improves endurance, and supports adaptation to post-transplant lifestyle changes. [6]

Phases of cardiac rehabilitation therapy

Phase I : In-patient rehabilitation

- Medical monitoring: it involves continuous assessment of patient's clinical condition including vital signs such as heart rate and rhythm, respiratory rate, oxygen saturation and blood pressure along with observation of symptoms.
- Early ambulation: patients are encouraged to initiate gradual physical activities to improve circulation and to prevent complications.
- Patient Education: It includes providing essential information about patient's health condition, treatment procedure, medication adherence, modification of lifestyle and early identification of warning signs to prevent complications.
- Psychological support: it focuses on addressing the emotional and psychological needs of the patients. this helps patients to manage stress and anxiety by improving their coping abilities.

Phase II: Early out-patient rehabilitation

This phase initiated soon after hospital discharge and extends for 3-6 months

- Patients are encouraged for walking, cycling and exercises under the supervision of health care professionals
- Regular monitor of risk factors and individualized guidance is provided through lifestyle changes and medication to control the risk factors
- Implementation of relaxation techniques like meditation, yoga and other techniques are advised to follow for management of stress and enhance mental health.

Phase III: Maintenance rehabilitation

This phase begins after the completion of outpatient program which aiming to sustain the earlier progress and supporting long term healthy lifestyle habits.[7]

Activities

- Encouraging the patient to adhere to consistent physical exercise such as walking, jogging independently or in groups.

- Regular consultation with health care professional to track the health and modification in medication regimen.
- Engaging oneself in structured community-based exercise and wellness programme.

Phase IV: long term prevention and management

This phase signifies the ongoing commitment to preserving the cardiovascular health by preventing future cardiac events as patient assumes full responsibility for their cardiac health.

Activities

- Patients are regularly monitoring their vital signs and monitoring the progress and significant changes.
- Engaging in routine physical activities, aiming for a minimum of 150 minutes of moderate exercise per week.
- Patients should attend regular follow up and stay informed about heart health.
- Maintaining supportive relationships for encouragement and accountability. .[7]

Nurses' role in cardiac rehabilitation program

Patient Assessment: Evaluate physical, psychological, and functional status before and during rehabilitation.

Clinical Monitoring: Monitor vital signs, symptoms, and patient tolerance to exercise and treatment.[8]

Health Education: Provide information on heart disease, medications, lifestyle changes, and self-care practices.

Exercise Guidance: Assist and supervise patients in performing safe and effective exercise programs.

Risk Reduction: Support modification of risk factors such as smoking, poor diet, inactivity, hypertension, and diabetes.[9]

Medication Supervision: Ensure adherence to treatment and observe for side effects or complications.

Emotional Support: Offer counselling support to address stress, anxiety, and depression. [8]

Conclusion

Cardiac rehabilitation is a vital component of comprehensive cardiovascular care that supports patients in their physical recovery, psychological well-being, and long-term lifestyle modification. It plays a significant role in improving functional capacity, reducing risk factors, and preventing recurrent cardiac events. The active involvement of nurses enhances the effectiveness of rehabilitation through continuous monitoring, education, and emotional support. Overall, cardiac rehabilitation contributes to improved quality of life and better clinical outcomes in patients with cardiovascular disease.

Reference

1. Mayo Clinic. Cardiac rehabilitation. Available from: https://www.mayoclinic.org/tests-procedures/cardiac-rehabilitation/about/pac- 20385192

2. Anderson L, Oldridge N, Thompson DR, et al. Exercise-based cardiac rehabilitation for coronary heart disease. J Am Coll Cardiol. 2016;67(1):1–12. https://www.jacc.org/doi/10.1016/j.jacc.2015.10.044

3. Babu AS, Turk-Adawi K, Supervia M, et al. Cardiac rehabilitation in India: Global audit results. Global Heart. 2020;15(1):28. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC7218762/

4. Wikipedia contributors. Cardiac rehabilitation [Internet]. Wikipedia, The Free Encyclopedia; 2026 [cited 2026 Apr 27]. Available from: https://www.bing.com/ck/a?!&&p=a1ec45ae8ea0ce452752f79ba22cfc074b41a8a82fef409aa88f74fa3f2b963dJmltdHM9MTc3NzI0ODAwMA&ptn=3&ver=2&hsh=4&fclid=0f5109ef-17e6-6234-0086-1a0b164b6343&u=a1aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnL3dpa2kvQ2FyZGlhY19yZWhhYmlsaXRhdGlvbg&ntb=1

5. Rahman MT. From Heartbeat to Healing: A Comprehensive Guide to Cardiac Rehabilitation. 1st ed. Dhaka: Dr. T. Rahman Cardiac Care Foundation; 2023. ISBN: 978-984-35-4358-5. Available from : https://share.google/pVAXJMU3TZBce7frx

6. Piepoli MF, Corrà U, Benzer W, Bjarnason-Wehrens B, Dendale P, Gaita D, et al. Secondary prevention through cardiac rehabilitation: from knowledge to implementation. Eur Heart J. 2010;31(16):1967–1976. Available from: https://academic.oup.com/eurheartj/articleabstract/31/16/1967/433769?redirectedFrom=fulltext

7. Infotech M. The 4 phases of cardiac rehabilitation: A comprehensive guide [Internet]. Dr. Cynthia. Dr. Cynthia Thaik - Holistic Healing Heart Center; 2024 [cited 2026 May 6]. Available from: https://drcynthia.com/blog/the-4-phases-of-cardiac-rehabilitation-a-comprehensive-guide/

8. Balady GJ, Ades PA, Bittner VA, Franklin BA, Gordon NF, Thomas RJ, et al. Referral, enrollment, and delivery of cardiac rehabilitation programs. Circulation. 2011;124(25):2951–2960. Available from: https://www.ahajournals.org/doi/10.1161/CIR.0b013e31823b21e2

9. British Heart Foundation. Cardiac rehabilitation [Internet]. London: British Heart Foundation; 2023 [cited 2026 Apr 30]. Available from: https://www.bhf.org.uk/informationsupport/support/cardiac-rehabilitation%E2%81%A0