

Home-Based Cardiac Rehabilitation in Patients with Chronic Heart Failure - A Narrative Review

Syeda Humayra ^a, Barani Karikalán ^b, Charles Ganaprakasam ^c,
Yasar Sattar ^d Abd Latiff Mohamed ^e

^{a,e} Faculty of Medicine, University of Cyberjaya, Persiaran Bestari, Cyber 11, 63000
Cyberjaya, Selangor, Malaysia

^b Faculty of Medicine, Perdana University-RCSI, Wisma Chase Perdana, Kuala Lumpur,
Malaysia

^c Department of Educational Psychology and Counselling, University of Malaya, 50603
Kuala Lumpur, Malaysia

^d Division of Internal Medicine, Icahn School of Medicine at Mount Sinai, Queens, NY,
USA

Corresponding Author:

Syeda Humayra, MD, PhD
Faculty of Medicine, University of Cyberjaya
Persiaran Bestari, Cyber 11, 63000 Cyberjaya, Malaysia
Contact number: +60 176553671
Email: syedahumayra@gmail.com

Abstract

Home-based cardiac rehabilitation designs have been introduced in clinical practice to identify the weaknesses in CR services and quantify patients' access and participation. Nonetheless, consistent variations of protocols and its effectiveness in high-risk patients remains sceptical. This narrative review aims to update the current literature on HBCR and highlight its importance in the management of chronic heart failure by addressing: (1) effectiveness of home-based versus centre-based CR; (2) structural components; (3) patient characteristics; (4) health-related factors and outcomes (5) utilisation and cost-effectiveness; (6) prognosis; (7) pros and cons. No evident differences existed in mortality, cardiac events, exercise- capacity, healthcare costs, modifiable risk factors and HRQoL between home-based and centre-based CR; but HBCR had increased programme completion and adherence. HBCR is composed of patient assessment, exercise training, dietary counselling, risk factor management, and psychosocial intervention. Limited evidence of differential effects exists across patient-related outcomes which indicates