

# Cardiac Rehabilitation: The emerging role of home-based approaches and telemedicine

Samer Ellahham



## ABSTRACT

Outpatient cardiac rehabilitation programs provide supervised exercise training in addition to secondary prevention interventions. They are designed to speed recovery from acute cardiovascular events, benefit chronic patients and to improve quality of life. Alternative approaches to the delivery of supervised cardiac rehabilitation include home-based programs, disease management and lifestyle health coaching interventions, and other internet-based case management systems. The effectiveness of home-based programs was evaluated in several randomized trials. There was no evidence of a difference in mortality, reinfarction, revascularization, cardiac-associated hospitalization, or exercise capacity between the two modes of intervention. Other alternatives include community-based group programs and the use of telemedicine. Use of mobile health technologies may further expand cardiac rehabilitation availability. Telehealth exercise cardiac rehabilitation appears to be at least as effective as center-based cardiac rehabilitation in improving modifiable cardiovascular risk factors and functional capacity. It identifies the option of telehealth and the technologic advances to provide more comprehensive, responsive, and interactive interventions for individuals for whom center-based rehabilitation is not feasible. The attractiveness of telemedicine models is the potential to improve participation of patients in structured with its short term and long-term benefits.

## BIOGRAPHY

Samer Ellahham is a Senior Cardiovascular Consultant at The Cleveland Clinic Foundation, Abu Dhabi, UAE.

## PUBLICATIONS

Dote K, Sato H, Tateishi H, et al. [Myocardial stunning due to simultaneous multivessel coronary spasms: a review of 5 cases]. J Cardiol 1991; 21:203.

Tsuchihashi K, Ueshima K, Uchida T, et al. Transient left ventricular apical ballooning without coronary artery stenosis: a novel heart syndrome mimicking acute myocardial infarction. Angina Pectoris-Myocardial Infarction Investigations in Japan. J Am Coll Cardiol 2001; 38:11.

Dec GW. Recognition of the apical ballooning syndrome in the United States. Circulation 2005; 111:388. Aurigemma GP, Tighe DA. Echocardiography and reversible left ventricular dysfunction. Am J Med 2006; 119:18.

Gianni M, Dentali F, Grandi AM, et al. Apical ballooning syndrome or takotsubo cardiomyopathy: a systematic review. Eur Heart J 2006; 27:1523.



Global World Heart Congress, Edinburgh, Scotland, June 16-17, 2020

The Cleveland Clinic Foundation, UAE

Citation: Samer Ellahham: Cardiac Rehabilitation: The emerging role of home-based approaches and telemedicine, Heart Congress 2020, Global World Heart Congress, Edinburgh, Scotland, June 16-17, 2020, 06