

Cardiac Rehabilitation in Malaysia

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ABDUL LATIF: Cardiac Rehabilitation in Malaysia. Context: In Malaysia, there is increasing trend of cardiovascular (CVS) disease along with other lifestyle related diseases. This has significant effect in contributing to the productivity of the country. Globally, if the situation is not control by adopting a healthier lifestyle, an estimated higher number of morbidity from CVS is anticipated by 2020. **Issues:** Cardiac rehabilitation is an integral component of cardiac management. In Malaysia, to date the delivery of cardiac rehabilitation is not at par with the acute cardiac management. However, the trend is changing of which cardiac rehabilitation is gaining importance and complement cardiac care. University of Malaya Medical Center (UMMC) the premier teaching hospital together with National Heart Institute (NHI), the premier cardiology centre has lead the way in providing the most comprehensive cardiac rehabilitation program in the country. **Conclusion:** Malaysia being a fast developing nation provides the state of art facilities for cardiac disease is also gearing toward a more comprehensive service to improve quality of life for cardiovascular patients by including cardiac rehabilitation program. Hence most hospitals are adopting a more structure and formal cardiac rehabilitation services. (J HK Coll Cardiol 2006;14(Suppl 2):B48-B50)

Cardiac rehabilitation, education, exercise program, support service

摘要

背景：在馬來西亞，心血管疾病和其他與生活方式相關的疾病呈增長趨勢。這對於該國的生產力有著重要的影響。在全球範圍，如果不採用更為健康的生活方式來控制這一現象的話，那麼到2020年預計將有更多的人死於心血管疾病。論點：心臟病復康是心臟病整體治療的一部分。在馬來西亞，至今心臟病的復康治療還未達到急性心臟病的救治。然而這種趨勢正在發生著變化，心臟病復康已越來越重要，並成為治療的補充。馬來西亞大學醫學中心第一教學醫院和國立心臟協會，以及心臟病第一中心在該國引領著心臟病復康的綜合治療計劃。結論：馬來西亞是一個快速成長的國家，為心臟疾病提供了國有的設備資源，以適合綜合治療的需要，通過心臟病復康治療計劃使心血管疾病患者提高生活質量。在大多數醫院都採用了完整正式的心臟病復康治療。

關鍵詞：心臟病復康 教育 運動計劃 支援服務

In Malaysia, cardiovascular disease continues to be the leading cause of mortality. The incidence rate of cardiovascular disease is increasing despite preventive measures and it is the main cause of hospitalizations in government hospital.¹ Malaysia is experiencing rapid

pace of economic development hence has led to changing pattern of disease. Cardiovascular disease, stroke and cancer also known as lifestyle related disease are leading the way. According to World Health Organization (WHO) report, cardiovascular disease ranked as the number one killers in the world claiming estimated 17 million lives annually. WHO estimates that if no action is taken to improve lifestyle and modifying risk factors, by 2020, there will be global increase of cardiovascular diseases and other lifestyle related diseases hence reducing the quality of life, increase morbidity of chronic illness and increase the burden of cost for health care.

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The US Department of Health and Human Services defines cardiac rehabilitation services as comprehensive, long term program involving medical evaluation, exercise prescription, cardiac risk factors modification, education and counseling to limit the physiologic and psychological adverse effect of cardiac illness, to improve function to optimal level, to reduce the risk of sudden death or reinfarction, to control cardiac symptoms, to stabilize or reverse the atherosclerotic process, and to enhance the patient's psychosocial and vocational status.² Provision of these services is physician directed and implemented by a team of healthcare professionals that may include nurses, exercise physiologists, dietitians, health educators, behavioral medicine specialists, and other healthcare professionals. A study done by Cheuk-Man Yu et al in Hong Kong noted, a short-course Cardiac Rehabilitation and Prevention Program (CRPP) was highly cost effective in providing better quality of life (QOL) to patients with recent cardiac event and the improvement of QOL was quick and sustained for at least 2 years after CRPP.³ Many studies, has shown that rehabilitation programs conducted during convalescence improve recovery faster from acute event and encourage patient to adopt better way to healthier lifestyle.

Cardiac rehabilitation program is available in most countries including Malaysia. In Malaysia, cardiac rehabilitation is fast gaining acceptance. The health systems in Malaysia are provided by both public and private organization. Almost all hospitals and medical centers in the country are able to provide acute cardiac service (e.g. invasive cardiology, cardiac surgery). The comprehensiveness of the cardiology service offered varies between organizations. National Heart Institutes (NHI), being the premier cardiology center in the country; provides the best cardiovascular and thoracic care treatment with latest technology breakthrough. Apart from NHI, most tertiary hospitals and general hospitals are also well equipped to provide the most advance treatment in cardiac management. However, in view of cardiac rehabilitation, the provision of such service is not at par with the delivery of acute cardiac care. Not all hospitals whether private and public provide a comprehensive and structured cardiac rehabilitation program for the patient. The delivery of a

comprehensive cardiac rehabilitation program varies according to the institution, availability of medical specialties, allied health staff and the policy of the hospital. Patients may be discharged home to convalesce without any formal rehabilitation given in the form of exercise or education. Hence, any such rehabilitation that may have been given is usually carried out in an ad hoc manner or non existents. Nevertheless in most centers, at least Phase 1 cardiac rehabilitation program are offered for patient after acute cardiac event. Outpatient cardiac rehabilitation program (Phase 2) and community program (Phase 3) are not yet available in most hospital.

In University Malaya Medical Centre (UMMC), the premier teaching hospital in Malaysia, provides the most comprehensive and extensive cardiac rehabilitation program by far. The program is conducted via a multidisciplinary team comprises of rehabilitation physician, cardiologist, occupational therapist, physiotherapist, dietician, nurses, pharmacists and medical social worker. The cardiac rehabilitation program runs both inpatient and outpatient services. The program complements and reinforces the acute medical care. For inpatient service (Phase 1), the goal is for shorter hospital stay and quicker patient recovery. Phase 1 is provided to patients admitted following major cardiac events e.g. acute myocardial infarction, post CABG and cardiac failure. Inpatient education about risk factors modification, dietary control and medication are given. Physical therapy includes mobilization and exercise to prevent deconditioning based on target heart rate is given. Basic activity of daily living is assessed as to reassure patient for safety precautions and energy conservation techniques. Patients are also taught breathing technique and relaxation therapy. Following this patient are discharged to the outpatient rehabilitation program. Outpatient (Phase 2) program start about 2-3 weeks of discharged. A complete medical evaluation and risk stratification is performed before commencement of the program. This program includes exercise prescription, risk factor management, lifestyle changes and reacquisition of full functional activity. A combination of the Western (exercise equipments, protocols) and Eastern styled (religious prayer, Tai Chi) practice is being implemented in the program. The

program follows the recommendations from the WHO Technical report of which cardiac rehabilitation in developing countries that cardiac patients should have access to low cost rehabilitation programs based on light or moderate exercise with minimal equipments.⁴ It is recognized now that low or moderate exercise programs can have the same effectiveness as with high intensity exercise. Criteria for admission to the program includes cardiac patients who have had cardiac events in the past such as: acute myocardial infarctions, cardiac failure, angioplasty, stents, stable angina and cardiac surgery. For the future, the center plan to expand the cardiac rehabilitation program to Phase 3 which is the maintenance phase in the community setting. As for the National Heart Institute, almost similar program are conducted of which begin early on whilst the patient is still in the hospital recuperating (Phase 1), followed by an outpatient, hospital-based program (Phase 2) approximately 2 weeks post event. The program is under close supervision of the cardiologist. Experienced physiotherapist or nurse can be made in charged to coordinate the cardiac rehabilitation program.

In the current trend of healthcare of which a holistic approach must be provided to the patient regardless of diseases, provision of health care cannot stop at rendering acute medical management only. This is because; quality of life is an important aspect in the current dimension and therefore must be addressed.

Following the biopsychosocial model of the International Classifications of functioning, disability and health (ICF) concept, impairment, activity limitation and participation restrictions is not merely a direct consequence of the disease but re affected by contextual factors e.g. personal and environmental.⁵ Hence, cardiac rehabilitation program complements the acute medical treatment to provide better quality of life for patients. Most hospital in Malaysia are adopting and gearing toward achieving this. Hence more centers are planning for a more structured and formalize cardiac rehabilitation program.

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