

Cardiovascular rehabilitation (and physical therapy) in Brazil

Although some reports on the benefits of physical activity and exercise for patients with cardiovascular diseases can be found in the international literature since the 18th century, it was only from the middle of the last century that some studies have began to show a more suitable relationship from a scientific point of view. Also, at that time, a proposal for organization of cardiovascular rehabilitation (CVR)¹ programs was presented, which formed the basis for the development of what is known today in the different parts of the world. However, the great development of these programs occurred between the decades of 1960 and 1970, when the physiopathological bases of some cardiovascular diseases were better established and important concepts of the exercise physiology and procedures of physical evaluation and training were developed.

In Brazil², the first CVR programs emerged in the late 1960's and early 1970, with the first units established in Rio de Janeiro, São Paulo and Belo Horizonte. At that time, the programs took care mostly of patients in the recovery phase of myocardial infarction or in the postoperative period of cardiac surgery, specially the revascularization of the myocardium, still in its beginning. More recently, patients with other clinical and surgical conditions (valvular heart diseases, peripheral vasculopathies, cardiomyopathies, chronic heart failure...) have been benefited by CVR programs that, in general, have as main focus the prescribed physical exercise, guided and supervised by specialists. Around here, as in other countries, the physical therapists occupy a prominent position on the team and are usually the main professionals responsible for interventions related to physical exercise, particularly in phases I and II, as well as for patients with moderate or high risk.

According to the World Health Organization³, the CVR is characterized as a process based on the

sum of activities and interventions required to promote favorable changes considering the cardiovascular risk factors, as well as to ensure the best possible physical, mental and social conditions, so that the patients with chronic or post-acute cardiovascular diseases may, by their own efforts, resume or maintain as normal a place as possible in the community and have an active life.

Thus, we can perceive that programs must be structured on the basis of some principles, such as: multi-professional and interdisciplinary team, approach with multiple focuses (exercise and physical activity, control of risk factors, occupational guidance, sexual counseling, education, among others), and promotion of autonomy.

However, although there are a number of benefits related to participation in the CVR programs⁴, only a small portion of patients with indication has access to CVR, whether in developed countries or in moderate or low level of development⁵. This is a situation of great concern, considering that approximately one-third of the deaths in the world is related to cardiovascular diseases, especially ischemic heart and brain diseases.

Thus, in addition to the preventive approach, which must be strongly encouraged, there is the need to increase the number of programs available to the population, as well as to facilitate and expand the access of patients, improve the unconventional methods and develop complementary strategies of CVR, especially in developing countries, such as Brazil. To this end, the International Council of Cardiovascular Prevention and Rehabilitation (ICCPR)* recently proposed a simpler approach to the conduction of CVR programs⁶. About 30 associations from various parts of the world, such as the Brazilian Association of Cardiorespiratory Physical Therapy and Physical Therapy in Intense Therapy (Assobrafir – Associação Brasileira de

^{*} Available from: http://globalcardiacrehab.com.

Fisioterapia Cardiorrespiratória e Fisioterapia em Terapia Intensiva), support the initiatives of this Council and develop support activities in their countries so strategies may occur in the shortest time and with the highest quality possible.

Among the actions held by the Assobrafir** in recent years, we can emphasize the effort developed for the professional specialty of Cardiovascular Physical Therapist to be recognized by the Brazilian Federal Council of Physical Therapy and Occupational Therapy (Coffito - Conselho Federal de Fisioterapia e Terapia Ocupacional) in 20157 and the support to the conduction of events with this theme, such as the 1st Brazilian Congress of Cardiovascular Physical Therapy (I Congresso Brasileiro de Fisioterapia Cardiovascular), during the 18th International Symposium of Cardiorespiratory Physical Therapy and Physical Therapy in Intensive Therapy (XVIII Simpósio Internacional de Fisioterapia Cardiorrespiratória e Fisioterapia em Terapia Intensiva), in Belo Horizonte, which was attended by the current president of the ICCPR, in addition to other international and national guests.

In addition, events are held annually in all 25 regional representations of Assobrafir, always with the inclusion of themes related to physical therapy and cardiovascular rehabilitation, as well as with the possibility of presentation of the results of

scientific papers. In this way, the Assobrafir has been contributed to the production, diffusion and scientific dissemination, to the representation and appreciation of professionals dedicated to the specialty and to the institutional relationships with other associations and councils aiming the improvement of the physical therapy and cardiovascular rehabilitation.

Finally, it is worth emphasizing that, due to the great care and research quality, the Brazilian physical therapy has been contributed to the progress of cardiovascular rehabilitation, with recognition at the international level. Thus, I would like to encourage the colleagues and academics of the physical therapy milieu to continue developing their studies and the health care practice of excellence in this field of knowledge, so we can provide the best experience for patients. With this, it is certain that the cardiovascular physical therapists will achieve the deserved social and professional appreciation.

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REFERENCES

- 1. Hellerstein, HK, Ford AB. Rehabilitation of the cardiac patient. JAMA. 1957;164(3):225-231.
- Godoy M, editor. I Consenso Nacional de Reabilitação Cardiovascular: fase crônica. Arq Bras Cardiol. 1997;69(4):267-91.
- 3. World Health Organization. Rehabilitation after cardiovascular disease, with special emphasis on developing countries: report of a WHO expert committee. World Health Organ Tech Rep Ser. 1993;831:1-122.
- 4. Anderson L, Taylor RS. Cardiac rehabilitation for people with heart disease: an overview of Cochrane systematic reviews. Cochrane Database Syst Rev. 2014 dez;(12):[9 p.].

- Babu AS, Lopez-Jimenez F, Thomas RJ, Isaranuwatchai W, Herdy AH, Hoch JS, et al. Advocacy for outpatient cardiac rehabilitation globally. BMC Health Services Research. 2016;16:[9 p.]. doi: 10.1186/s12913-016-1658-1
- 6. Grace SL, Turk-Adawi KI, Contractor A, Afrey A, Campbell N, Derman W, et al. Cardiac rehabilitation delivery model for low-resource settings. Heart. 2016;102(18):1449–55.
- 7. Conselho Federal de Fisioterapia e Terapia Ocupacional. Resolução nº 454, de 25 de abril de 2015. Reconhece e disciplina a Especialidade Profissional de Fisioterapia Cardiovascular [Internet]. Diário Oficial da União. Brasília, DF; 2015 maio 14 [citado em 2018 fev 9]. Seção 1, n. 90, p. 96-7. Disponível em: https://goo.gl/9dZMJC.

^{**} Available from: http://assobrafir.com.br.