



EDITORIAL COMMENT

Cardiac rehabilitation in Portugal: The situation in 2013-2014[☆]



Reabilitação cardíaca em Portugal. Ponto da situação em 2013-2014

Miguel Mendes

Serviço de Cardiologia, Hospital de Santa Cruz, Centro Hospitalar de Lisboa Ocidental, Carnaxide, Portugal

Available online 14 November 2016

The article “Cardiac rehabilitation in Portugal: results from the 2013-14 national survey”,¹ by members of the Portuguese Society of Cardiology’s Working Group on Exercise Physiology and Cardiac Rehabilitation, published in this issue of the *Journal*, reports the results of the most recent survey on cardiac rehabilitation (CR) in Portugal. It is an important contribution to Portuguese cardiology, calling attention to an intervention that, although still underused, produces good results and is indeed classified as a class I indication, level of evidence A, in the most recent European guidelines on cardiovascular disease prevention.²

The results of the survey show that there was considerable growth over the previous six years, the number of patients in phase II CR programs nearly tripling (from 638 in 2007 to 1927 in 2013), following the opening of six public and three private centers, which treated 427 and 85 more patients, respectively. There was a significant difference between the mean number of patients treated in phase II

programs in public centers – 165 (minimum 6, maximum 636) – and private centers (minimum 6, maximum 67).

Since the conclusion of the latest survey four more centers have begun offering CR programs in the Lisbon region. Three are in public hospitals (Garcia da Orta in Almada and Pulido Valente and Santa Cruz in Lisbon), offering phase I and phase II programs, while the Center for Cardiovascular Rehabilitation of the University of Lisbon, which opened in May 2016, offers phase III programs.

Despite this significant progress, which is laudable, there is still a long way to go, since in 2013 only 8% of patients with myocardial infarction were referred for CR programs in Portugal, which is well below the 30-50% seen in other European countries.

There are also serious shortcomings in referrals for more recent indications for CR, including heart failure and following percutaneous coronary intervention or cardiac surgery, for which referral rates in Portugal are much lower than in some European countries, the USA and Australia.

There are several reasons for Portugal’s slow progress in CR, including the fact that exercise plays little part in Portuguese culture, which affects both patients and health professionals; a lack of specific training among health workers in the value of exercise in general and cardiac rehabilitation in particular as part of the treatment for various diseases; and a shortage of funds and facilities for CR programs.

DOI of original article:

<http://dx.doi.org/10.1016/j.repce.2016.06.008>

[☆] Please cite this article as: Mendes M. Reabilitação cardíaca em Portugal. Ponto da situação em 2013-2014. Rev Port Cardiol. 2016;35:669–671.

E-mail address: miguel.mendes.md@gmail.com

Although Portuguese cardiology has reached European standards in almost all areas, this is not the case for CR, which is well below European levels.

The small number of centers offering CR in Portugal means that the full potential of the functional improvements that can result from costly interventions such as percutaneous valve replacement, implantation of resynchronization devices and cardiac surgery, as well as the benefits of complex therapeutic regimens like those prescribed for heart failure or following acute coronary syndrome, cannot be realized. It also makes it difficult to implement long-term secondary prevention measures to ensure that the benefits of such interventions will be maintained.³

Besides the limited number of centers offering CR, there is also considerable asymmetry in their geographical distribution, with not a single public center in Minho, Trás-os-Montes, Beiras (including in the university hospitals of Coimbra), Ribatejo, Alentejo or the islands.

Access to CR programs is crucial and there is an urgent need for a geographically balanced network of public centers. Patients tend not to attend programs that require traveling more than 30 km,^{4,5} and motivation, affordability and compatible schedules are also important. Home-based programs may go some way to overcoming these obstacles, possibly using new technologies such as remote monitoring,⁶ to help patients with problems in traveling to and from a CR center.⁷

Patients' motivation needs to be strengthened by their family doctors and cardiologists, who should encourage participation by emphasizing the benefits of the program and pointing out that the disease is related to unhealthy lifestyles that the program can help to modify.

Increasing the availability of CR programs in Portugal will require the creation of teams made up of cardiologists, physiatrists, psychiatrists or psychologists, exercise physiologists, nutritionists, and others. The current training offered in these areas on university courses does not provide sufficient knowledge or experience to work in CR. The Portuguese Societies of Cardiology and of Physical and Rehabilitation Medicine have accordingly been proposing for several years that the Portuguese Order of Physicians establish a qualification for physicians working in CR, to be attributed following demonstration of appropriate theoretical knowledge and an internship of at least six months in a suitable center. This would be a first step to integrating this activity into a subspecialty in cardiovascular prevention and exercise aimed at CR.

Funding of CR programs is another barrier to be overcome. Without adequate funding it will be impossible to increase patient participation, particularly for those in the lower socioeconomic brackets (who probably need it most), or to encourage greater commitment on the part of hospital administrations and physicians. Funding of CR is the responsibility of the Ministry of Health and the national health system for public centers offering phase I or II programs, and of medical subsystems, insurers and patients themselves for private centers offering phase II or III programs and maintenance programs following discharge from a public center. There is currently no convention between the Ministry of Health and private centers; such a convention would go a long way to meeting needs in areas where the services provided by public centers are inadequate.

In addition to the need for greater funding, there needs to be more diversity in funding sources, depending on the program phase and the patient's employment status. The Ministry of Health should (directly or via conventions with private centers) pay the costs of phase I and II programs for all patients except those in employment, whose treatment should be funded by the Social Security system, since it is in the interests of the latter that patients should recover fully and return to work as soon as possible after an acute clinical event. For phase III or maintenance programs, patients themselves – who by this stage should be aware of what they need to do – should take responsibility for their own care and for the costs associated with maintaining a healthy lifestyle.

If CR is to be further developed in Portugal, official bodies must take the lead, recognizing its clinical and economic value and acting in alliance with scientific societies and medical associations. The process of designating a hospital as a referral center in cardiology now includes the requirement that the center offer a CR program, which demonstrates that the Ministry of Health recognizes the value of CR in reinforcing the benefits of the costly specialized interventions performed in these centers.

I believe that the growing awareness of the importance of CR among policy-makers, physicians and patients will soon lead to an increase in the number of programs available for patients with common conditions such as myocardial infarction, as well as those recovering from cardiac surgery, for whom CR provides clinical, economic and social benefits.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Silveira C, Abreu A. Reabilitação Cardíaca em Portugal. Inquérito 2013-2014. *Rev Port Cardiol.* 2016;35:659–68.
2. Piepoli MF, Hoes AW, Agewall S, et al., the Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts). Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). 2016 European guidelines on cardiovascular disease prevention in clinical practice. *Eur Heart J.* 2016;37:2315–81.
3. Ponikowski P, Voors AA, Anker SD, et al., the Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). Developed with the special contribution of the Heart Failure Association (HFA) of the ESC. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J.* 2016;37:2129–200.
4. Conraads VM, Deaton C, Piotrowicz E, et al. Adherence of heart failure patients to exercise: barriers and possible solutions: a position statement of the Study Group on Exercise Training in Heart Failure of the Heart Failure Association of the European Society of Cardiology. *Eur J Heart Fail.* 2012;14:451–8.

5. Dalal HM, Zawada A, Jolly K, et al. Home based versus centre based cardiac rehabilitation: Cochrane systematic review and meta-analysis. *BMJ*. 2010;340:b5631.
6. Beatty AL, Fukuoka Y, Whooley MA. Using mobile technology for cardiac rehabilitation: a review and framework for development and evaluation. *J Am Heart Assoc*. 2013;2:e000568.
7. Graham IM, Stewart M, Hertog MGL. Factors impeding the implementation of cardiovascular prevention guidelines: findings from a survey conducted by the European Society of Cardiology. *Eur J Cardiovasc Prev Rehabil*. 2006;13:839–45.