



EDITORIAL COMMENT

Fighting mortality from cardiovascular disease: A challenge to society[☆]



Lutar contra a mortalidade por doenças cardiovasculares: um desafio para a sociedade!

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Despite the progress of recent years, cardiovascular disease is still the leading cause of death throughout Europe, including Portugal.^{1,2}

In recent decades there has been a progressive reduction in mortality from cardiovascular disease, the reasons for which include preventive measures and legislation such as smoking bans, healthier lifestyles, campaigns and actions by medical and health organizations, advances in the treatment of acute coronary syndromes and stroke, and the implementation of programs designed to improve access to specialized health care.^{3,4}

This issue of the *Journal* contains two articles by Miguel Soares-Oliveira and colleagues presenting the results of the implementation in Portugal of an acute stroke emergency response system and of a national automated external defibrillator (AED) program.

The first article, produced in collaboration with the Stroke Group of the North Regional Health Administration, entitled “Implementation of a regional system for the

emergency care of acute ischemic stroke: Initial results”, presents the initial results of the implementation of a fast-track acute stroke emergency care system (“*Via Verde do AVC*”) in the North region, from its beginning in 2005 and over the following four years.⁵ The increasing numbers of stroke patients (now nearly 50%) with access to specialized treatment units and receiving thrombolytic therapy is undoubtedly one reason for the progressive decrease in mortality over the same period.⁶ There is still a long way to go in terms of optimizing patients’ access to specialized health centers, shortening the time between symptom onset and beginning of thrombolysis, for which it is necessary to implement dedicated clinical pathways within institutions, as well as to raise public awareness of the signs and symptoms of stroke.⁷

However, data on the Portuguese National Program for Cerebrovascular Disease recently published by the Directorate-General for Health reveal continuing and significant asymmetries in the percentage of admissions through the *Via Verde* fast-track stroke system in different regions, with the greatest progress in recent years being achieved in the Central region and the Algarve.⁶ These deficiencies in access to more specialized health care need to be remedied as soon as possible in order to ensure equitable and universal provision of health care in Portugal.

The second article, by Miguel Soares-Oliveira and Raquel Ramos, entitled “Implementation of a national automated external defibrillator program in Portugal”,⁸ describes the

DOIs of original articles:

<http://dx.doi.org/10.1016/j.repce.2013.10.049>,

<http://dx.doi.org/10.1016/j.repce.2013.11.009>

[☆] Please cite this article as: Morais C. Lutar contra a mortalidade por doenças cardiovasculares: um desafio para a sociedade! Rev Port Cardiol. 2014;33:337–338.

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development and implementation of an AED program within the Emergency Medical Service System that makes these devices available for use in public places.

Although the results have been generally positive, the AED program has at times been subject to excessive centralization, over-control and legislative inflexibility, which has made its large-scale implementation in public places more difficult.

It is of course desirable to maintain rigorous auditing to assess the outcomes of use of AEDs, to publicize the effects on mortality and sequelae, and to propose improvements in the chain of survival that always underlies such programs. Nevertheless, such auditing should not hinder the greater involvement of individuals and public and private entities.

There should accordingly be greater emphasis on teaching the public basic life support measures via organizations such as schools, local associations, and universities of the third age. Financial and other types of incentives should be established for companies and societies, state and non-state, which decide on their own initiative to participate in the program by acquiring AEDs and placing them prominently in busy places.⁹

Experience in other countries, such as in the region of Brescia, Italy, have shown that a strategy of placing AEDs in public places with large concentrations of people, to be used by volunteers with minimal training or even laypersons, is safe and associated with better survival of victims of cardiac arrest.¹⁰

To achieve the goal of further reducing mortality and morbidity from cardiovascular disease, it is necessary to adopt innovative and efficient strategies. We need a more informed public that is willing to become involved, and to this end scientific societies, health professionals and patients all need to be mobilized.¹¹ Patients' associations, under the guidance of physicians and in partnership with other medical personnel, can play a crucial role in raising the awareness of society in general and policy-makers, and encouraging them to pay greater attention to cerebrovascular and cardiovascular disease.¹² Emphasis should be placed on initiatives that increase the general population's knowledge of the underlying causes of sudden death and its association with cardiac arrhythmias. Finally, legislation should be passed to foster the development of community programs that promote immediate provision of basic life support by bystanders to victims of cardiac arrest and the most rapid possible access to defibrillation.¹³

References

1. Pagidipati NJ, Gaziano TA. Estimating deaths from cardiovascular disease: a review of global methodologies of mortality measurement. *Circulation*. 2013;127:749–56.
2. Mortalidade por Doenças Cardiovasculares em Portugal. Pordata 2014.
3. Redon J, Olsen MH, Cooper RS, et al. Stroke mortality and trends from 1990 to 2006 in 39 countries from Europe and Central Asia: implications for control of high blood pressure. *Eur Heart J*. 2011;32:1424–31.
4. Kinlay S. Changes in stroke epidemiology, prevention, and treatment. *Circulation*. 2011;124:e494–6.
5. Soares-Oliveira M, Grupo de AVC da ARS do Norte, Araújo F. Implementação de um sistema regional de resposta emergente ao acidente vascular cerebral. Primeiros resultados. *Rev Port Cardiol*. 2014;33.
6. Portugal. Doenças Cérebro-Cardiovasculares em Números. Direção Geral de Saúde. 2013.
7. Porter ME, Teisberg EO. Redefining health care. Creating value-based competition on results. Harvard Business School Press; 2006. p. 405–7.
8. Soares-Oliveira M, Ramos R. Implementação do Programa Nacional de Desfibrilhação Automática Externa em Portugal. *Rev Port Cardiol*. 2014;33.
9. Priori S, Bossaert L, Chamberlain, et al. ESC-ERC recommendations for the use of automated external defibrillators (AEDs) in Europe. *Eur Heart J*. 2004;25:437–45.
10. Cappato R, Curnis A, Marzollo, et al. Prospective assessment of integrating the existing emergency medical system with automated external defibrillators fully operated by volunteers and laypersons for out-of-hospital cardiac arrest: the Brescia Early Defibrillation Study (BEDS). *Eur Heart J*. 2006;27:553–61.
11. Nieuwlaet R, Schwalm JD, Khatih R, Yusuf S. Why are we failing to implement effective therapies in cardiovascular disease? *Eur Heart J*. 2013;34:1262–9.
12. Lobban T, Camm J. Patient associations as stakeholders: a valuable partner for facilitating access to therapy. *Europace*. 2011;13 Suppl. 2:21–4.
13. Aufderheide T, Hazinski MF, Nichol G. AHA policy recommendations. Community lay rescuer automated external defibrillation programs. Key state legislative components and implementation strategies: a summary of a decade of experience for healthcare providers, policymakers, legislators, employers, and community leaders from the American Heart Association Emergency Cardiovascular Care Committee, Council on Clinical Cardiology, and Office of State Advocacy. *Circulation*. 2006;113:1260–70.