Rev Port Cardiol. 2020;39(1):35–36

Revista Portuguesa de Cardiologia
Portuguese Journal of Cardiology
www.revportcardiol.org

EDITORIAL COMMENT

Preventing premature mortality from cardiovascular disease: A prime goal

Prevenir a mortalidade cardiovascular precoce: um objetivo primordial

José Eduardo Aguiar

Department of Cardiology, Hospital Espírito Santo de Évora, Portugal

Available online 29 March 2020

Cardiovascular disease remains the leading cause of death in Portugal and in most European Union member states, despite significant declines in mortality in recent decades.

The article by Abreu et al. in this issue of the *Journal*[1] analyzes the impact of three health policies, the coronary fast-track system (FTS), the smoking ban and the salt reduction regulation, implemented respectively in 2007, 2008 and 2010, on mortality due to acute coronary syndrome (ACS) in Portugal between 2000 and 2016.

Analysis of the individual policies showed an immediate reduction in ACS event rates with the FTS and the smoking ban, and a non-significant decrease with the salt reduction regulation, although the ability of the study to prove direct associations was limited. Reducing salt intake in 2010 was an important public health strategy, but the results fell short of the effects seen in other countries where much more restrictive measures were imposed.[2] In recognition of this shortfall, an agreement was established in 2018 between the Directorate-General of Health (DGS), the National Health Institute Doutor Ricardo Jorge (INSA), and the Portuguese Association of Bakery, Confectionery and Related Products (ACIP), aiming for a gradual reduction of salt from 1.4 g to 1 g per 100 g of bread by 2021.

The authors point out that by 2009, the health policies implemented were accompanied by a consistent decrease in ACS mortality, but there has since been a slowing of this trend. Contrary to what would be expected, in the analysis by age groups, they did not observe a reduction in mortality due to coronary heart disease (CHD) in those aged under 65 years. This finding is consistent with data from the Portuguese National Program for Cerebrocardiovascular Diseases,[3] which reports unchanged mortality from ischemic heart disease between 2011 and 2015, with an increase in premature mortality before the age of 70 years.

Increases in epidemiological phenomena such as obesity, physical inactivity and diabetes are mainly responsible for the attenuation of the trend. In Portugal, almost half the population are overweight and close to a million adults are obese. Regarding the prevalence of physical inactivity in Portugal, Eurobarometer data (2014) revealed that 72% of Portuguese adults never or rarely exercised or played sports, and only 23% complied with World Health Organization (WHO) recommendations. According to a recent *Lancet* article,[4] more than 1.4 billion adults worldwide are at risk of developing or exacerbating diseases linked to inactivity. Portugal is even worse than the average for high-income countries, with over 40% of adults falling short of recommended levels of healthy physical activity.[4] According to the WHO, the abandonment of the Mediterranean diet associated with the economic crisis in southern European countries has also contributed to the high levels of obesity. It is estimated that diabetes affects 13.3% of the Portuguese population aged 20 to 79, and that 44% of these are unaware of having the disease.[5] According to the DGS, the factors that have contributed most to the total number of healthy life years lost by the Portuguese population are inappropriate diet, high blood pressure and high body mass index.[6]

Changing the recent trend toward early mortality from cardiovascular disease requires comprehensive and multisectoral measures involving policy-makers, public health

E-mail address: joseeduardoaguiar@gmail.com

https://doi.org/10.1016/j.repc.2020.02.003

authorities, medical societies, the medical community and civil society, to implement collective measures to promote physical activity, healthy diet, smoking cessation, and control of risk factors such as hypertension and hypercholesterolemia, and to improve health care access and health literacy in the population.

At the secondary prevention level, strict objectives should be set regarding the control of risk factors.

Wider national primary angioplasty coverage has significantly increased reperfusion rates in ST-elevation myocardial infarction. However, reperfusion times still need to be improved.[7]

Access to cardiac rehabilitation care should be guaranteed. In central European countries, 30-50% of potential candidates are enrolled in rehabilitation programs, much higher levels than in Portugal, where only 10% have such access.

The success of these measures requires a close relationship between hospital and outpatient care, to support behavioral changes and to improve outcomes.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Abreu D, Sousa P, Matias-Dias C, et al. Impact of public health initiatives on acute coronary syndrome fatality rates in Portugal. Rev Port Cardiol. 2020;39:25–32.
2. Polónia J, Martins I, Pinto F, et al. Prevalence, awareness, treatment and control of hypertension and salt intake in Portugal: changes over a decade. The PHYSA study. J Hypertens. 2014;32:1211–21.
3. Direção-Geral da Saúde, Ferreira RC. Programa Nacional para as Doenças Cerebro-cardiovasculares. Documentação de Referência; 2017.
4. Guthold R, Stevens GA, Riley LM, et al. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. Lancet Glob Health. 2018;6:e1077–86.
5. Prevadiab – Sociedade Portuguesa de Diabetologia. Relatório Anual do Observatório Nacional de Diabetes – Edição de 2016.
6. Direção-Geral da Saúde (DGS): A Saúde dos Portugueses – Perspectiva 2015.
7. Timóteo AT, Mimoso J, em nome dos investigadores do Registo Nacional das Síndromes Coronárias Agudas: 15 anos de um registo prospetivo contínuo. Rev Port Cardiol. 2018;37:563–73.