



EDITORIAL COMMENT

Therapeutic adherence: The elephant in the room[☆]

Adesão terapêutica – o elefante na sala

António Miguel Ferreira



Serviço de Cardiologia, Hospital de Santa Cruz, CHLC, Carnaxide, Portugal

Available online 22 April 2018

Hypertension is recognized as one of the most important risk factors for cardiovascular disease and its complications.^{1,2} Despite the use of increasingly effective antihypertensive drugs and growing societal awareness of its consequences, a significant proportion of the population still have uncontrolled hypertension. Among the various reasons for this, nonadherence to drug therapy is a major issue. This problem usually receives little attention in medical publications and meetings, but must be addressed if we wish to reduce the burden of cardiovascular disease in society. The evidence is clear and warrants attention: around half of patients stop taking long-term cardiovascular medication within a year of being prescribed, and those who do not follow their treatment regimen have worse quality of life, more hospitalizations, and more cardiovascular events.³ Those who think that poor therapeutic adherence has a positive side, such as money saved on medications, are mistaken: this potential saving is largely offset by substantial increases in direct and indirect costs, including for hospitalizations and procedures, with the result that in some countries poor therapeutic adherence is estimated to account for 3–10% of total healthcare costs.⁴

Given the importance of this factor in combating cardiovascular disease, it is astonishing how little research has been carried out on the subject.

Improving therapeutic nonadherence requires understanding of the extent, causes, and mechanisms of this complex phenomenon. In this task, challenges arise immediately

in the way that the scale of the problem is assessed. Unfortunately, clinicians' knowledge of whether a given patient is taking the prescribed medication appears to amount to little more than a coin toss.^{5,6} The ability to measure therapeutic adherence objectively is therefore a prerequisite for assessing the impact of any intervention. There are various direct and indirect ways to assess therapeutic adherence. Direct methods include observation of the patient taking the drug, measuring blood levels of the drug or its metabolites, and measurement of biomarkers. However, such direct methods are clearly impractical for routine clinical use. Indirect methods include questionnaires, self-reporting, pill counts, rates of prescription refills and electronic medication monitors, among others.⁷ Their ease of use, speed and low cost make questionnaires some of the most commonly used tools for studying adherence to therapy, although they may be biased by patients' tendency to overstate their own compliance.

It is against this background that an article by Cabral et al. on this question is published in this issue of the *Journal*.⁸ The authors have translated the 8-item Morisky Medication Adherence Scale into European Portuguese and validated it in a population of 472 medicated hypertensive patients who were surveyed at nine community pharmacies and one public hospital. The European Portuguese version of this scale has a similar structure to the original scale and has good psychometric properties, and is thus validated for clinical and research use in this country. The authors are to be commended for providing Portuguese clinicians and researchers with a helpful tool to measure therapeutic adherence.

Incidentally, they also give us an idea of the scale of the challenge that we are facing: 28% of patients revealed

[☆] Please cite this article as: Ferreira AM. Adesão terapêutica – o elefante na sala. Rev Port Cardiol. 2018;37:297–303.

E-mail address: miguelferreira.md@sapo.pt

low adherence, 38% moderate adherence, and only 34% reported high adherence to antihypertensive treatment. If these numbers are truly representative of the situation in Portugal, it may well be said that we are facing an elephant in the room: an obvious problem that no-one is mentioning. Let the article by Cabral et al. serve as a stimulus, since this subject deserves greater attention from us all.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Yusuf S, Hawken S, Ounpuu S, et al. Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *Lancet*. 2004;364:937–52.
2. O'Donnell MJ, Xavier D, Liu L, et al. Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study. *Lancet*. 2010;376:112–23.
3. Ho PM, Bryson CL, Rumsfeld JS. Medication adherence: its importance in cardiovascular outcomes. *Circulation*. 2009;119:3028–35.
4. Iuga AO, McGuire MJ. Adherence and health care costs. *Risk Manag Healthc Policy*. 2014;7:35–44.
5. Turner BJ, Hecht FM. Improving on a coin toss to predict patient adherence to medications. *Ann Intern Med*. 2001;134:1004–6.
6. Zeller A, Taegtmeier A, Martina B, et al. Physicians' ability to predict patients' adherence to antihypertensive medication in primary care. *Hypertens Res*. 2008;31:1765–71.
7. Osterberg L, Blaschke T. Adherence to medication. *N Engl J Med*. 2005;353:487–97.
8. Cabral A, Moura-Ramos M, Castel-Branco M, et al. Cross-cultural adaptation and validation of a European Portuguese version of the 8-item Morisky medication adherence scale. *Rev Port Cardiol*. 2018;37:297–303.