

The «Guidelines disease» («guidemania»)

«El mal de los lineamientos» («lineamientomanía»)

Eduardo Meaney*

A spectre is haunting the world: the spectre of the clinical guidelines (CG). It could be very difficult to estimate exactly how many CGs swarm the contemporary medical literature, but probably there are thousands of guides available worldwide expressing the opinion of numerous medical associations, consensus conferences, academic institutions and government health ministries, about almost every topic, wide or diminutive, of modern medicine. Usually, CGs are written by a panel of experts (self, governmental or peer appointed) who review systematically the attainable clinical data, weighing the statistic relevance of each piece of evidence, and finally producing a text aimed to support the best scientific-based clinical care.^{1,2} The recommendations of these expert documents have different weight according to the size and quality of the found evidence, mainly derived from a set of controlled, superbly designed and well-conducted clinical trials. However, not rarely, given the scarcity of solid experimental evidence in some areas, recommendations are simply the wise and expert (but finally personal) viewpoint of medical opinion leaders.¹ It is understandable that the process of generate a sound and useful GC is complicate, costly and time-consuming. For that reason is very unfortunate that GCs are in general short-lived, because the technological spiral and the impetuous and accelerated evolution of medicine, destroy rapidly many established paradigms, reforming and remaking concepts, fundaments, and manners of doing things. To worsen over the issue, publication of a CG is rarely useful by itself.³ The implementation of the recommendations needs a wide publicity, in order to change positively behavior patterns and mores of physicians and patients.⁴ In addition, sometimes, CGs are written in a sort of

sibylline language that confuse or drive crazy readers and consultants. And then, one guide contradicts the other, adding confusion to a situation already chaotic.

The concept of CG is closely linked to the approach to medical practice known as evidence-based medicine (or better said, both terms are the same).⁵ In the long road followed by medicine since the remote era of our forefathers the shamans to present times, always have existed a persistent effort to transform a somehow empirical profession into a more rigorous discipline, based in the scientific method. Evidence-based medicine has rapidly evolved from a simple form to teach medicine to a wider concept involving the building of scientifically based guides and policies, in order to help everybody (practitioners, patients, administrators, politicians, and economists) to make the better decisions to solve medical problems. So, CG are designed to lay the foundation of a more scientific and less empirical medical practice, to uniform diagnostic, preventive and therapeutic practices, to improve care quality, doing more efficient and less costly medical procedures. However, the sacred paradigm of evidence-based medicine has been recently shaken up. Trisha Greenhalgh,⁶ for example, points out, among other criticisms, that the quality of the evidence can be stained by vested interests (for example, the participation of pharmaceutical industry), that the information and clinical recommendations are so voluminous that are unmanageable for the ordinary physician, that should decide between take care of his patients or consume a lot of time reading and consulting countless guidelines. Being an «average medicine», the evidence-based approach puts statistic before the patient, and ignore that statistically significance may be of marginal benefit in clinical medicine.

* Editor in Chief of the
*Revista Mexicana de
Cardiología*.

Because medicine is a superstructure depending of the richness and characteristics of the social and political arrangement, it is logical that the soundest clinical evidences are generated mainly by industrialized nations (US, Canada, European Union, Australia, Japan, and the like). And in consequence, the CGs elaborated in these nations are the ones with greater influence in the rest of the planet. Many GCs produced in less influential nations or wider geographic areas (like Latin America), unable to generate the greater, expensive and complicated controlled studies, which are the foundation of the evidence-based medicine, are just half ashamed copycats, and many of them bad and coarse imitations. In medicine and science, as in technology and industrial production, the richest countries go ahead while the underdeveloped and impoverished nations fall behind.

Several problems surge from this situation affecting the applicability and usefulness of CGs. It has to be taken into account that the studies that ground the CGs developed in the first world, involved populations that do not always represent the people of the «merging economies of the third world. For example, it is now clearly evident that in Mexico, a truly an ethnic melting pot, our people are completely different to European or US inhabitants (and even have striking contrasts with the populations of other Latin America countries). For genetic reasons our population is more susceptible to have abdominal obesity, metabolic syndrome, diabetes mellitus, lipid triad, hypoalphalipoproteinemia,^{7,8} etc., than other populations, even from our same geographic region. Then, one can ask if the first Framingham Risk Score aimed to estimate the 10-year cardiovascular risk based in the WASP (white, Anglo-Saxon, protestant) dwellers of New England is remotely applicable to Mexicans.⁹ In a second attempt, since 2013, the duet formed by the American College of Cardiology (ACC) and the American Heart Association (AHA), based on the updated cholesterol guidelines, recommend the use of a Pooled Cohort Equations to estimate the 10-year absolute risk for atherosclerotic cardiovascular disease (ASCVD) in primary prevention.¹⁰ The cohort is composed by white and black US American people, of both genders. Curiously,

«Hispanics» (whatever that racist and wrong term means) are not considered in the analysis, even if they reached in recent years more than 55 million people (17.4% of the whole US population). The direct conclusion is that the new ACC/AHA risk estimation have to be used, according with the norms of evidence, only in the ethnic groups who were considered in the institutional cohorts used to compose the equations, or in other human ethnic groups after a validation study. But in Mexico, the supporters, tooth and nail, of foreign guidelines (known as «guide maniacs»), are trying to modify, in the same sense as the US American cardiovascular duet, our national recommendations on lipids in primary prevention. How can it be possible that we exclude hypoalphalipoproteinemia (which affects more than 60% of our population), and hypertriglyceridemia (affecting one third to the half of Mexico inhabitants), and abdominal obesity (which ravage 70% of urban individuals) in risk analysis?^{7,8} Everyone involved in bringing care to institutional patients in our country knows that lipid triad is more important even than LDL hypercholesterolemia as a direct cause of myocardial infarction.¹¹

But, the «guide maniacs» have reasonable arguments favoring the «cocacolonization» of our national medical thought. Right or wrong, US Americans have data, and for that reason they are entitled to make recommendations, more or less applicable to their own people.¹² Certainly, this is not a matter of intellectual «imperialism»; because our neighbors do not give a dime if we follow or not the recommendations they produce. No, it is a matter of our mental underdevelopment and laziness, it is a matter of the inefficacy and backwardness of our health and social security governmental institutions, and it is a matter of the apathy of our independent academic institutions (academies and national medical associations). As our Irish colleague Marie Therese Cooney¹³ recently stated: «Survey data support the provision of simpler systems of risk estimation and management, and these are now emerging. Some of these do not require laboratory tests. Electronic risk estimation, preferably automated and linked to the patient's electronic record, is evolving.» That means that it is in our hands, at relatively low cost, the possibility of generate

«survey data» to create our national CGs and risk estimation systems, based in the peculiar characteristics of our population, instead of shamelessly copy foreign experiences, implementing extralogically recommendations out of our context. This national effort will demand the participation of the health state institutions and the multiple cardiovascular associations that exist in the country. The cardiovascular societies and associations that have chosen this Journal as a common frontbencher may propose to the Federal government, through the Alianza por un corazón saludable (Alliance for a healthy heart) the setting up of this program. It is certainly a hard enterprise, but badly needed.

REFERENCES

1. Embree J. Writing clinical guidelines with evidence-based medicine. *Can J Infect Dis.* 2000; 11: 289-290.
2. Atkins D, Best D, Briss PA, Eccles M, Falck-Ytter Y, Flottorp S; GRADE Working Group. Grading quality of evidence and strength of recommendations. *BMJ.* 2004; 328: 1490.
3. Feder G, Eccles M, Grol R, Griffiths C, Grimshaw J. Using clinical guidelines. *BMJ.* 1999; 318: 728-730.
4. Scalzitti DA. Evidence-based guidelines: application to clinical practice. *Phys Ther.* 2001; 81: 1622-1628.
5. Evidence-Based Medicine Working Group. Evidence based medicine. A new approach to teaching the practice of medicine. *JAMA.* 1992; 268: 2420-2425.
6. Greenhalgh T, Howick J, Maskrey N, Evidence Based Medicine Renaissance Group. Evidence based medicine: a movement in crisis? *BMJ.* 2014; 348: g3725.
7. Meaney A, Ceballos-Reyes G, Gutiérrez-Salmeán G, Samaniego-Méndez V, Vela-Huerta A, Alcocer L et al. Cardiovascular risk factors in a Mexican middle-class urban population. The Lindavista Study. Baseline data. *Arch Cardiol Mex.* 2013; 83: 249-256.
8. Fanghänel-Salmón G, Gutiérrez-Salmeán G, Samaniego V, Meaney A, Sánchez-Reyes L, Navarrete U et al. Obesity phenotypes in urban middle-class cohorts. The PRIT-Lindavista merging evidence in Mexico: the OPUS-PROME study. *Nutr Hosp.* 2015; 32: 182-188.
9. Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Executive summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *JAMA.* 2001; 285: 2486-2497.
10. Stone NJ, Robinson J, Lichtenstein AH, et al; 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2013; 63: 2889-2934.
11. Estrada-García T, Meaney A, López-Hernández D, Meaney E, Sánchez-Hernández O, Rodríguez-Arellano E et al. Hypertension and lipid triad are the most attributable risks for myocardial infarction in a middle class urban Mexican population. *Nutr&Metabol.* 2013; 63: 1343.
12. Wong ND, Moran AE. The U.S. prevention of cardiovascular disease guidelines and implications for implementation in LMIC. *Glob Heart.* 2014; 9: 445-455.
13. Cooney MT, Dudina A, D'Agostino R, Graham IM. Cardiovascular risk-estimation systems in primary prevention: do they differ? Do they make a difference? Can we see the future? *Circulation.* 2010; 122: 300-310.

Correspondence to:

Eduardo Meaney, MD, PhD

Laboratorio de Investigación Integral
Cardiometabólica,
Sección de Estudios de Postgrado e
Investigación,
Escuela Superior de Medicina del Instituto
Politécnico Nacional.
Plan de San Luis y Díaz Mirón s/n,
Col. Casco de Santo Tomás,
Del. Miguel Hidalgo, 11340, México, D.F.
Phone: (52) (55) 57296300, ext. 62820
E-mail: lalitimini@prodigy.net.mx

www.medigraphic.org.mx