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PERMANYER

Gac Med Mex. 2016;152:246-8

GACETA MÉDICA DE MÉXICO

OPINION ARTICLE

Reforming the Ross' triangle: new challenges for the medical excellence

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We had to declare our last study as having failed. The purpose was to assess the medical inertia phenomenon[1] in patients with rheumatoid arthritis (RA) of a public sector Rheumatology Department. The design was cross-sectional, medical notes audit-based. Why did it fail? Because we were based on a premise that turned out to be incorrect: that medical notes would be informative according to minimal standards to assess the disease and according to current regulations for medical records. Our premise was plausible when we planned the study: medical notes of a High Specialty Medical Unit that, as such, has clear vocation to privilege teaching, research and care of patients with complex diseases. However, we found another reality: of 597 medical notes reviewed of 199 patients with RA, only 3% met the minimal regulatory requirements, according to the Mexican Official Standard on medical records (NOM-004-SSA3-2012), and only 11% reported data on disease status assessment, according to RA assessment guidelines[2].

We have no explanations for these failures, nor can we generalize them to other rheumatology practices. However, we would like to think that patients did receive high-quality care. Then, why were the notes so poor? We believe that it was out of disregard to regulations and recording of the medical care process. After several seminars and debates, we want to share the main propositional reflections our working team has arrived to.

In 1900, Flexner[3] described what a physician must do to achieve excellence; later, Ross, then Medicine dean of the Johns Hopkins University, conceptualized it in a "synergistic triangle": the key to success of a health institution and excellence in medicine should be the balance between attention (medical care), teaching and research[4]. It is synergistic because research is not an end by itself, but it leads to an improvement in patient care and teaching, hence the citation "Think much, publish little"[5]. The success of institutions such as Johns Hopkins –and we are sure that of many others– is owing to the application of this triangle.

However, practicing medicine with excellence has turned more complex nowadays owing to new challenges, such as, for example, the continuous increase of medical information that that makes it difficult keeping updated; the care of more informed patients with higher expectancies (real or not)[6]; the increasingly lower monetary retribution of the doctor, both owing to

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Date of reception: 15-09-2015
Date of acceptance: 22-10-2015

an increased offer of clinicians[7] and to an increase in the costs of medication and laboratory and imaging tests, although health expenditure in Mexico has grown substantially[7]; changes in retirement plans and pensions, and an increased risk of facing law suits (for example, in 2014, the National Commission for Medical Arbitration [CONAMED – *Comisión Nacional de Arbitraje Médico*] received 17,042 complaints on the medical care process, 72% against the public sector[8]).

These new challenges make it already insufficient for the doctor to only know how to explore the patient or order tests, read medical journals, teach lessons or make research. Thus, Flexner and Ross' concepts for medical excellence would appear already insufficient. In other countries, others have already noticed this[9]; for Mexico, these are still areas of opportunity. Today's physician –and thinking on his/her future– must be willing to expand his/her non-medical knowledge in order to successfully confront these already quotidian difficulties and carry out his/her professional practice with excellence. The synergistic triangle must be reshaped into a synergistic pentacle, adding the legal-regulatory and economic-administrative areas.

For the legal-regulatory area, it is appropriate to start with the axiom *Ignorantia legis neminem excusat* ("Ignorance of law excuses no one"). The physician must know the laws and regulations that may have a punitive or defensive impact on his/her person or professional activity. For example, the information contained in the medical record is an essential source for the physician's professional development, which not only includes the clinical part, but also the teaching, research and epidemiology, as well continuous quality, management and administration, and legal-medical improvement (NOM-004-SSA3-2012). It is also a legal instrument with preconceived evidence character, since it is created prior to the trial with evidential value, should the complaint be filed[10]. Absence or bias of the records may generate towards the physician the presumption of not having granted the right attention to the patient[11]. Moreover, changes in Mexican legislation will allow for patients to have direct access to their records, since the Federal Law of Transparence and Access to Public Information (LF-TAIPG – *Ley Federal de Transparencia y Acceso a la Información Pública*)[12], with higher legal level than the Mexican Official Standard, considers medical record information to be of personal nature and recognizes the holder's full right to accede to it with no justification required. Thus, when the patient has a copy of his/her record, the use given to it can be in favor or against the physician.

There are other essential laws and regulations such as, for example, Constitutional article 123 on Basic Labor Rights, which, together with the Collective Labor Contract, can protect the physician against excesses incurred by some health institutions; or the Law of Reply and Counter-reply in Labor Matters[13], the laws on Objective, Administrative, Legal[14] and State Patrimony[15] Civil Responsibilities, the General Statute of Health (the last reform was published in November 2015[16]), and the Legal Framework of the Medical Act[17], just to mention a few. Similarly, it should be remembered that, before signing any contract, in addition to carefully reading it, one has to learn how to negotiate its contents. Just as Channing, chief editor of what today is the New England Journal of Medicine, said in 1823: "Physicians who lack basic understanding of the law are at frank disadvantage when practicing medicine"[18].

The economical-administrative area is equally important. The physician's professional activity is a business that has to yield a benefit, which has to expand to all stakeholders of the "medical act" construct (the physician, the patient and his/her family and whoever the payer might be). The physician's financial health is threatened by the already addressed external factors, but also by factors inherent to the physician him/herself. Professional excellence can be challenged if a physician does not earn and/or spend adequately. He/she should be familiarized with some basic concepts: budget, fixed costs and variables, saving (10% of monthly income), effect of inflation, use of credit cards and the corresponding total annual cost (CAT – *Costo Anual Total*) or indebtedness (not higher than 40% of monthly income), among others. At least in our group, the majority doesn't know how to spend; for example, two members of our team owe the banks up to nine times what they purchased in spite of already having paid three times the commercial value of their purchases, owing to an inadequate use of their credit cards by paying the "monthly minimum" and ignoring the CAT.

Even if there is a third payer party (e.g., insurance companies), the patient's financial health is a relevant issue. The physician should understand, at least, the concepts of sensitivity, specificity, positive and negative predictive values, effect size, absolute and relative benefits, cost-efficiency, cost-effectiveness and cost-benefit, and the difference between price and cost, for diagnostic and therapeutic plans. It should remain clear that, regardless of whom the payer is, the budget for medical care is not unlimited[19-21]. For example, a 30-year-old female patient with RA, managed with an anti-tumor necrosis factor (anti-TNF) and who has medical insurance

will have to be treated for four decades. When will her insurance premium be exhausted? If she acquired another insurance policy, would this exclude RA owing to "pre-existence"? and then, how would she pay for the anti-TNF? If the physician correctly administers care expenses, we will have more resources. With the necessary resources, attainment of excellence in medical practice is viable.

Current scenario for the physician to be an effective leader in society and on the pathway to excellence has more complexity, which demands acquiring other knowledge and skills. Ross' synergistic triangle, formerly useful but currently anachronistic, must be reshaped into a "pentamer", adding the legal-regulatory and economic-administrative areas. We believe the physician should come out of the circularity of his/her specialty. Medical associations, societies and colleges, including the Mexican College of Rheumatology, will have to take the leadership in order to be the most viable vectors in order for their members to address, understand, learn and practice these new knowledge and skills to their own benefit and, essentially, to the benefit of their patients and the society they are owed to.

References

1. Phillips LS, Branch WT Jr., Cook CB, et al. Clinical inertia. Ann Intern Med. 2001;135(9):825-34.
2. Aletaha D, Neogi T, Silman AJ, et al. 2010 Rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. Arthritis Rheum. 2010;62(9):2569-81.
3. Cooke M, Irby D, Sullivan W, Ludmerer K. American medical education 100 years after the Flexner Report. N Engl J Med. 2006;355(13):1339-44.
4. Ross RS. The synergistic triangle. JAMA. 1989;261(21):3163-4.
5. Flexner A. I remember: the autobiography of Abraham Flexner. Nueva York: Simon and Schuster; 1940.
6. Cassel CK, Reuben DB. Specialization, subspecialization, and subsubspecialization in internal medicine. N Engl J Med. 2011;364(12):1169-73.
7. Organización para la Cooperación y el Desarrollo Económicos (OECD). Health Statistics 2015 - Frequently Requested Data. [Internet] Consultado el 19 de noviembre de 2015. Disponible en: http://www.oecd.org/health/health-systems/Table-of-Content-Metadata-OECD-Health-Statistics-2015.pdf
8. Comisión Nacional de Arbitraje Médico (CONAMED). Informe anual de actividades 2014. [Internet] Consultado el 17 de noviembre de 2015. Disponible en: www.conamed.gob.mx/conocenos/pdf/Informe_Conamed_2014.pdf
9. Khullar D, Chokshi DA, Kocher R, et al. Behavioral economics and physician compensation--promise and challenges. N Engl J Med. 2015;372(24):2281-3.
10. Comisión Nacional de Arbitraje Médico (CONAMED). Legislación sanitaria: el expediente clínico y el consentimiento bajo información. Revista CONAMED, Órgano de Difusión de la Comisión Nacional de Arbitraje Médico. 1997;1(3):18-20.
11. Comisión Nacional de Arbitraje Médico (CONAMED). Legislación sanitaria: el expediente clínico: documento de gran valor en la práctica médica. Revista CONAMED, Órgano de Difusión de la Comisión Nacional de Arbitraje Médico. 1997;1(2):24-7.
12. Ley Federal de Transparencia y Acceso a la Información Pública. [Internet] Consultado el 22 de noviembre de 2015. Disponible en: http://www.diputados.gob.mx/LeyesBiblio/pdf/244_140714.pdf
13. Tercer Tribunal Colegiado en Materia de Trabajo del Cuarto Circuito. La Ley de Réplica y Contrarréplica en Materia Laboral. Semanario Judicial de la Federación y su Gaceta. Tomo XXVII, 2008:1156. [Internet] Consultado el 22 de noviembre de 2015. Disponible en: http://sjf.scjn.gob.mx/SJFSist/Documentos/Tesis/169/169429.pdf
14. Tribunales Colegiados de Circuito. Responsabilidad civil objetiva y reparación por daño moral, no son acciones contradictorias y pueden coexistir válidamente en el mismo procedimiento. Semanario Judicial de la Federación y su Gaceta. Tomo I. 1995:401. [Internet] Consultado el 25 de noviembre de 2015. Disponible en: http://sjf.scjn.gob.mx/SJFSist/Documentos/Tesis/205/205257.pdf
15. Ley Federal de Responsabilidad Patrimonial del Estado. Publicada el 31 de diciembre de 2004 en el Diario Oficial de la Federación. [Internet] Consultado el 25 de noviembre de 2015. Disponible en: http://www.diputados.gob.mx/LeyesBiblio/pdf/LFRPE.pdf
16. Ley General de Salud. Publicada el 12 de noviembre de 2015 en el Diario Oficial de la Federación. [Internet] Consultado el 26 de noviembre de 2015. Disponible en: http://www.diputados.gob.mx/LeyesBiblio/pdf/142_121115.pdf
17. Comisión Nacional de Arbitraje Médico (CONAMED). Régimen Jurídico del Acto Médico. [Internet] Consultado el 20 de noviembre de 2015. Disponible en http://www.conamed.gob.mx/prof_salud/pdf/acto_medico.pdf
18. Channing W. A medico-legal treatise on malpractice and medical evidence: a review. Boston Med Surg J. 1860;62:233-41, 259-65, 300-7.
19. The American Board of Internal Medicine. An initiative of Costs of care. [Internet] Consultado el 20 de noviembre de 2015. Disponible en: http://www.abimfoundation.org/Initiatives/Choosing-Wisely.aspx_
20. Rosenbaum L, Lamas D. Cents and sensitivity--teaching physicians to think about costs. N Engl J Med. 2012;367(2):99-101.
21. Shah N. Physicians' role in protecting patients' financial well-being. Virtual Mentor. 2013;15(2):162-6.