

New challenges for latin american scientific medical journals: academia or business

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In the last 100 years, medical journal publishing has progressed from printed yearbooks in medicine to monthly journals, and in modern days, to digital online open-access journals. In general, once a manuscript has been validated by expert peer-reviewers, journals serve to proclaim new discoveries to the scientific community and general public. Also, as in any other field of science, contributions made in the field of medicine may be published in the official journal of a medical association. Consequently, the journal's content and quality mirrors the professional profile and effort of the association's membership. Proof of this reflection is the high impact factor of journals such as the Journal of the American Medical Association or the New England Journal of Medicine, which are supported by contributions made by medical scientists. Nonetheless, this mainly occurs in countries with a consolidated scientific tradition and a higher socio-economic, political, and educational background.

On the other hand, in this era of globalization, a transition from exclusive international journals towards the establishment of regional medical journals has

occurred. As a result, from the once predominant American journals, the European and Asian countries have developed domestic or regional journals, and to a lesser extent those from Latin America are emerging. Alongside, a new paradigm in modern scientific medicine has given way to the era of genomic medicine¹. This new paradigm is no longer a dream in the future. Presently, it has had a substantial impact on the study of populations, particularly among those with genetic heterogeneity, which is the basis for individualized medicine. Latin America has a rich cultural history and biodiversity. Its population is comprised by a genetic admixture of Caucasian, Amerindian, and African ancestries. These features have created a unique population that deserves to be studied on how we respond to pharmacological therapy (pharmacogenetics), diet (genomic nutrition), and our susceptibility to disease (natural outcome), all of which are the result of the interaction between genetic and environmental risk factors²⁻⁵. Therefore, it gives us the opportunity to investigate and produce academic material based on the features of our population, which may be

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relevant for publishing, and even of consolidating the regional journals of Latin America.

Unfortunately, Latin America's medical education and professional updating (state of the art) in medical issues mainly relies on the scientific literature that reference population groups quite different from our own. Even though the main underlying physiopathological mechanisms may be similar, other determinants such as genetics and environment may greatly contrast among populations. For this reason, the Latin American medical societies should contribute more to original research and the development of solid medical knowledge based on the features of each respective population. However, the question is why have most Latin American journals not reached consolidation? Here are some points of view that may be worth analyzing comprehensively.

ATTITUDES AND EMOTIONS

Many are the attitudes and emotions that characterize the Latin American health professional. One, in general, is that he/she believes himself/herself as the finest professional in the country and that his/her country is the greatest compared to others. However, this attitude significantly contrasts with the weak evidence found in the electronic media, and also, because only a few Latin American countries have indexed medical journals, and most of them have low impact factors. Currently, by using a novel bibliometric parameter known as the *h* index, the quantification of an individual's scientific research output can be evaluated and divulged^{6,7}. This strategy allows us to evaluate ourselves objectively in a more global context within and between countries and to moderate pretension and self-importance.

POOR ACADEMIC AND SCIENTIFIC DEVELOPMENT OF MEDICAL SOCIETIES

There was a time when it was sufficient to be head of the department, director of a medical school or health institution to attest that one was a "real"

medical doctor, but without evidence of a substantial scientific research output with international impact⁸⁻¹⁰. Again, the electronic media is disclosing this situation. Thus, if there is no generation of new knowledge, the scientific research output is low, and without scientific productivity, the national medical journals cannot advance to the international level.

THE ISSUE OF FINANCING

There is the belief that the continuance or strength of a medical journal exclusively depends on funding. This argument is questionable because the major problem lies in the fact that there is (i) a poor or null collaboration of the medical professionals with original articles, and, (ii) envy and negative attitudes that are supported mostly by emotional, political, and non-academic aspects. On the other hand, the internal costs of publishing any scientific-academic journal, such as paying the editor in chief, editorial staff (for editing, graphics, production, and distribution) and peer-reviewers, is usually funded by membership dues, institutional subscription fees, and advertising. However, under no circumstances, should we consider a scientific journal as a lucrative business. The boundary between academia and business should always be delimited.

Given the above situation, government institutions should support the growth of their national scientific journals. However, despite the efforts of some organizations, most of them prefer to support only the high quality or formally indexed journals when it is required at the start or during consolidation. Hence, the result is not to support these non-indexed journals, and therefore, those who are active researchers do not consider submitting to these journals. Breaking this vicious cycle requires cohesion of the medical society's and health institution's members, a change in attitude from criticism to contributions and collaborations, and something even easier could be to trust the scientific members of each respective medical society.

On the other hand, one resolution to this circumstance that does not require funding is to promote

through the national organization of researchers in Mexico (Sistema Nacional de Investigadores, SNI) that the articles published in the domestic scientific journals be taken into account, even if they are not indexed yet. By this manner, these peer-reviewed articles could eventually be cited, improving the impact factor of the national medical journals.

THE INFLUENCE OF THE PHARMACEUTICAL INDUSTRY IN MEDICAL TRAINING THROUGH ITS SPEAKERS AND ACADEMIC "TOURISM"

The pharmaceutical industry has created a medical culture by contracting speakers, sponsoring their symposiums and talks among the medical associations. Also, the Latin American medical doctor has accepted to be funded by the pharmaceutical industry and finds himself/herself at ease being academically updated, but not expecting to contribute to their country with new knowledge. We need to evaluate the negative impact this situation may have created on the outlook of the Latin American medical societies.

We also need to rethink on how to achieve an improved academic-industry relationship. Medical societies need to commit and question themselves about these relationships. They should encourage the disclosure of the conflict of interest that may exist in their speakers in regards to the pharmaceutical industry sponsoring. Furthermore, the Latin American countries should not only be a market for pre-launching clinical phase trials of new drugs.

THE INSTABILITY OF HIGHER EDUCATION INSTITUTIONS AND THEIR AUTHORITIES

The head authorities in the health institutions and medical societies' presidents are usually of short

duration since they may last from one to three years in office. This situation along with the discontinuation of long-term programs and the numerous changes in governmental policies hinders the stability and development of scientific-academic planning and programming, as well as the consolidation of high-quality medical journals.

Unfortunately, this situation has led to the decline, and in some cases, the closing of the official journals representing the academic institutions/medical societies even if they had achieved a certain degree of consolidation or prestige. A poor scientific culture and negative attitude could be the root of the non-consolidation of these medical journals. This point could be resolved by a proposal or change in attitude, and if the problem is cultural, a cultural revolution is needed in our countries.

In conclusion, despite these disadvantages, the journal of the Mexican Society of Endocrinology and Nutrition has reached the following achievements in the last three years:

- Volume 20, Number 4, 2012 and Vol. 21, Numbers 1-4, 2013 were issued in 2013 (ISSN: 0188-9796).
- In 2014, the new title of our journal, Mexican Journal of Endocrinology, Metabolism & Nutrition (ISSN: 2339-9643) was launched to avoid confusion with a homonymous journal circulating on the Internet¹¹.
- During 2014, Numbers 1-4 were posted on time.
- In 2015, as part of the internationalization policy¹², we have published the last three numbers in the English language.

We are at the start of a new era attained by those who have involved themselves in this effort and that also believe in themselves, in the medical society, in the journal, and their country.

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