

Current challenges on the generation and dissemination of scientific evidence in health and how to translate it to health decision-making

Los retos actuales en la generación y la difusión de la evidencia científica en salud y su impacto eficiente en la toma de decisiones hacia la población

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Today more than ever, Mexico and the world face an urgent need to generate scientific evidence of the highest quality that can be expeditiously transferred to efficient decision-making. Due to the globalization phenomenon, health problems faced by nations can no longer be seen as isolated phenomena, but that which begins today in one region of the planet sooner rather than later will be reflected on the rest of the nations, which is why the generation and dissemination of knowledge have become fundamental tools for improving health decisions.

It is imperative that health professionals, regardless of our training and area of development, share the culture of knowledge generation in an efficient and transdisciplinary manner, to build decision-making models that allow us establishing prevention, early identification, and comprehensive therapeutic and rehabilitative approach strategies. In the same way and importance, the need to establish reliable strategies to disseminate the generated knowledge becomes urgent, coupled with the need to have strategies for its easy understanding, acceptance, and incorporation by the different sectors of our society.

Since its creation in August 1933, the *Cirugía y Cirujanos* journal has highly efficiently carried out its relevant mission of being the scientific dissemination

publication of the Mexican Academy of Surgery, a consultative body of the Federal Government on health and social policy matters, and advisor to the General Health Council of Mexico. Thanks to the extraordinary contribution of all our authors, the relevant role of its editors and reviewers, and the judicious leadership of the distinguished presidents of our Academy, the journal has positioned itself as one of the best science dissemination publications in the national and Latin American field. The great effort of each one of them has brought the journal to be included in various bibliographic indexes, such as Index Medicus, Excerpta Medica, and Latin American Index of Scientific Journals, among others.

However, as the world of health sciences evolves, science dissemination publications need to reinvent, transform themselves, and thus confront the challenges of the third millennium. Medicine and translational research¹ in health sciences have emerged as new paradigms that force the generation of other models of knowledge and their dissemination, which allow us, through tools such as big data² and data mining, to consider innovative integration strategies to identify the new profiles of health and disease, and thus anticipate the needs of the population³.

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The generation of efficient decision-making models in health (TEDiS) not only in the field of surgery but also in the multiple branches of health sciences, has been constituting a fundamental pillar of development and dissemination of knowledge, which is why, beyond the publication of traditional models of science dissemination and even beyond evidence-based consensus, systematic reviews with meta-analysis and network meta-analyses⁴, clinical practice guidelines, critical paths, and mapping of processes and of optimal patient care (patient/process mapping) have been established throughout the world as new paradigms of efficient knowledge dissemination⁵.

This way, and with full support of the current board of directors of our beloved Mexican Academy of Surgery, we have been entrusted with the task of facing a great challenge: not only maintaining the quality and trajectory that thus far our journal has achieved but also bringing it to face the challenges of the aforementioned new models.

It is a privilege to inform you that, as of this issue, the journal has a new editor-in-chief, Dr. Sergio Sobrino Cossío, gastroenterologist, with a subspecialty in endoscopy and a Master's degree in Medical Sciences. Dr. Sobrino has around 200 scientific publications and extensive clinical, research, and scientific editing experience. I am sure that with Dr. Sobrino's great vision and leadership, we will be able to provide continuity to the successful trajectory of the journal and face new challenges. Shoulder to shoulder with Dr. Sobrino, the journal has, as associate editors, the support and vision of doctors Virgilio Lima Gómez, Eduardo Esteban Montalvo Jave, and the writer of this text. Virgilio is a renowned ophthalmologist, retinal subspecialist, Doctor of Research in Medicine, with around 150 publications and recipient of the National Research Award in 2008. Eduardo is a great specialist in general surgery, with a Master's degree in Hospital Administration, PhD in

Biomedical Sciences and Post-doctorate in Transplantation and Digestive Cancer, among many other achievements. In my case, in addition to being a pediatrician, with a subspecialty in pediatric emergency medicine, I have a Master's and Doctorate in Medical Sciences, and a Master's degree in Senior Business Management, in addition to having been director of research at the National Institute of Pediatrics and the National Institute of Perinatology; I have around 100 scientific publications, some 2000 citations and an h-index of 24.

Considering the aforementioned challenges, we have started a reengineering of processes, with the implementation of a process for evaluating publication proposals in adherence to current needs, and an invitation to reviewers who are experts in research methodology, evidence-based medicine, and development of systematic reviews and clinical practice guidelines to join our staff standing out.

To all our authors, readers, critics, editors, and reviewers, we thank you in advance for giving us the opportunity to contribute to the maintenance of the quality of the journal and for allowing us to walk by your side to continue strengthening the process of efficient generation of high-quality knowledge and development of efficient decision-making models in health sciences.

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