The cycle of trust in health care: the role of scientific journals

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The context of this editorial

Recently, I underwent two procedures under general anesthesia. In both cases, fentanyl was administered —a drug currently at the center of a public health safety crisis in Argentina— due to a production-related issue (under ongoing investigation) that has resulted in infections and secondary fatalities. In this scenario of uncertainty, I chose to place my trust in my physician just as many others do when this medication is required for various procedures. However, initial trust must be continually reaffirmed in order to be sustained. This could be described as a "cycle of trust in healthcare," which may be strengthened or eroded depending on events.

Why address this in our journal's editorial? Because it brings us to reflect on key concepts that underscore the value of research methodology and evidence-based medicine, especially at a time when artificial intelligence does not always have all the answers.

Direct and indirect trust

In the practice of medicine, there is a fundamental, implicit, and primary premise: trust. The patient trusts their physician. They trust the medications prescribed and the devices used. In doing so, they place trust in the knowledge their physician has acquired and continues to update.

There is also indirect trust in the regulatory systems that evaluate and approve medical products and processes.

This trust is continuously tested through expectations of results, answers, and solutions. To meet these demands, medicine is practiced with knowledge and experience, but above all, with scientific evidence. It is this evidence that enables physicians to make the best possible decisions, mitigate risks, and inform patients about the available options, including the advantages and disadvantages of the recommended course of action.

But what constitutes scientific evidence and what does not?

In simple terms, scientific evidence is concrete, reliable medical information used to guide clinical decision-making. Traditionally, medical knowledge was built and stored in textbooks. While these still hold value, today new knowledge first appears in scientific journals, publications developed within editorial management systems that rely on expert peer review to assess the content eventually accepted for publication. This process involves evaluating how authors have applied the scientific method and determining the potential contribution of their work to the broader community.

In this way, a published article represents, at a given time, a minimum threshold of expert acceptance sufficient for validation. Once published, however, an article remains permanently open to confirmation or refutation.

A social media post by a renowned physician, a YouTube video recommending a surgical technique by an "influencer" surgeon, an article in a widely read digital media outlet, or even a piece published in a well-known academic institution's journal that lacks peer review, none of these constitute scientific evidence.

Using such information to make medical decisions lacks both scientific-academic backing and legal support. While the world is changing —and artificial intelligence may increasingly assist us in refining these processes— peer review remains, to this day, the most robust system we have for validating information and building trustworthy knowledge.

The relevance of Argentine and Latin American scientific journals

Sometimes, the most relevant evidence for our local context is not indexed in PubMed. A clear and timely example is the 2024 article by Prieto and colleagues, published in the Argentine journal *Actualizaciones en SIDA e Infectología*, a publication of Fundación Huésped and the Argentine Society of Infectology[1].

In that paper, peer-reviewed and accepted through an editorial process, the authors reported contamination of dexamethasone ampoules produced by the same pharmaceutical company that manufactures fentanyl.

There is often a tendency to undervalue scientific articles written in Spanish or published in Argentine or Latin American journals. However, we must recognize and challenge these biases. Thanks to the work of Dr. Prieto and her team who: (1) observed unexpected events in their clinical practice; (2) analyzed their own cases and conducted independent, non-commercial research; (3) identified the cause behind an adverse pharmaceutical event; and (4) submitted their findings for peer review and publication, the medical community was alerted to what has now become critical early evidence of the ongoing fentanyl issue.

The importance of independent research as a core component of medical practice

Accessing information about our own population should not be a matter of "belief," but rather of verification and validation. Within the cycle of trust, as physicians, we "trust" health authorities and scientific publications, while also applying critical reading to detect bias and assess levels of evidence. In our daily practice, when we observe results consistent with what others have reported, we contribute to a positive feedback

loop that reinforces this trust and allows us to move forward.

But what happens when we encounter unexpected results? Or how can we truly understand how our population responds to a certain intervention if we do not conduct research?

We may have a good sense of how and why certain things happen, but ideally, we should take a step further by conducting research to confirm, refute, and ultimately validate those insights, thereby generating information that could be highly valuable to our peer community.

To achieve this, we must embrace our role as independent physician-researchers. As I wrote in the March 2022 editorial[2], conducting and publishing research is excellent training for any physician. But I would like to emphasize that its benefits extend far beyond personal development, it directly serves our patients and, at times, the entire community, as exemplified by the publication from Prieto and colleagues[1].

The role of *OCE* in the current context

OCE serves as a custodian of the scientific method and evidence-based medicine, with the goal of being a reliable source of information on vision sciences—particularly within Latin America, but also with global relevance. For this reason, we evaluate both clinical and experimental content in all materials related to vision, supported by a diverse and robust network of international peer reviewers.

Each issue of *OCE* constitutes a trustworthy foundation of scientific evidence. I conclude with the conviction that all of our published articles will be incorporated into artificial intelligence systems, making them available to answer questions posed by anyone. However, if the one asking is you—a medical professional— always verify the original source of information. Your patients trust that you will.

References

1. Prieto MF, Yasenzaniro P, Chas P, Bellati N, Yoya N, Jourdan A, Montenegro A, Gauna E, Jacinto A. Brote de *Ralstonia mannitolilytica* en inmunodeprimidos asociado a contaminación de un fármaco. *Actualizaciones en SIDA e Infectología (ASEI)* 2024; 32(115): 18-25. doi: 10.52226/revista.v32i115.305.

2. Torres RM. Investigar y publicar: buena gimnasia para un médico. *Oftalmol Clin Exp* 2022; 15(1): e1-e3. https://doi.org/10.70313/2718.7446.v15.n1.117