




Integrity and credibility: twin terms of scientific research

Lisura e credibilidade: termos irmanados da pesquisa científica

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With the appearance of the COVID-19 pandemic, science gains a leading role on the world stage. The scientific community has become even more demanding for the presentation of results in a short time. This need for performance is now used as a justification by some scientists to neglect some assumptions of the scientific method, thus putting scientific credibility at risk. However, unfortunately this questioning is not new. Douglas Altman in his editorial published by JAMA [1], already called attention to the low scientific quality of articles published in medical journals. Currently, in the scientific field, we are experiencing, beyond an epidemic of the virus, an epidemic of information, where it is produced on a large scale and at high speed, often without complying with due methodological rigor, a fact that compromises the veracity of the information, and contributes to a deficient scientific ecosystem and, consequently, with low credibility.

An important part of this complicated ecosystem is scientific journals, which are the vehicle responsible for legitimizing and disseminating the results of research. The exponential appearance of new journals, as well as their practices for evaluating articles, has been criticized, as they reinforce the spread of low-quality information. To reveal the bad practices that hinder the scientific process, many researchers in the world have used cunning means to test the integrity of several journals. Recently, an anonymous group mimicked the production of a scientific article related to COVID-19 and submitted it to one of the OMICS Group magazines. The absence of a peer review resulted in the publication of a scientific satire that united elements of Geek culture with messages of accusation to the group's predatory practices, in the body of the article itself [2].

Facts like these foster an environment of mistrust and generate a negative wave that culminates in the discrediting of what scientists have tried so hard to tackle in centuries of science - the idea that the scientific process is reliable. The disrespect for integrity that thrives among authors and magazines emanates thoughts of discredit in the public that believes in evidence-based

health. It is a blow to one of the main pillars on which the research is based: scientific honesty.

For such practices to be banned from our spectrum, it is necessary that authors and journals (this includes all those who directly participate in the constitution of one - maintaining entities, administrators, editors and reviewers) are not silent on this reality and are aware of their role.

The researcher's choices have a strong influence on the perpetuation of predatory magazines. The need for publication, whether due to the status, remuneration or requirements of graduate programs, often incites this behavior. However, we must not give in to such pressures. We have a moral duty to excel in the quality of what we publish, avoiding the ruse that "the more the better!". It is true that we can all make this mistake unconsciously, since we often do not know the diversity of existing magazines. A good way to avoid this is to evaluate how the article review process occurs.

Considering this spectrum, the strengthening of peer review is one of the amalgams of the consolidation of integrity in science that must be valued. However, something that should be fruitful by the authors, as it demonstrates the necessary respect for a product of such great effort, is sometimes misinterpreted. The detailed review of each section of the article and the scientific and intellectual content contained therein, only dignifies the article produced by the authors. Even the rejection of a work demonstrates an evaluative screen that protects those who produce and consume science. However, the policy employed in predatory magazines has tainted what should be viewed with complete deference. The policy that is based on the money-production dyad ("Take it from here") should be extinguished from the scientific community. For this, it is necessary that editors, reviewers and authors cultivate a science devoid of vested and personal interests.

We know the need for financial resources for scientific journals to be maintained. Especially in Brazil, there are few public resources for so many scientific journals and most of the time it is necessary that the journals themselves raise these resources through evaluation and publication fees. However, it is not permissible that this is what guides the publication, but, rather, the quality of scientific production. In this process, we understand that the most Herculean work to be done is that of the reviewers, who most of the time do not receive it and are underrated.

In this line of thought, the *Revista Brasileira de Fisiologia do Exercício* has sought to improve the process of evaluating the scientific articles received. We know that this process is not simple as it involves a series of requirements that range from the qualification of reviewers, editors and administrative staff. In addition, the time required to conduct an assessment is long, as it involves critical reading, plagiarism verification, veracity of information, updating on the corresponding literature and, finally, issuing a qualified opinion. As direct participants in the maintenance of the *Revista Brasileira de Fisiologia do Exercício*, we know that it is difficult to find researchers trained and willing to participate as reviewers of scientific articles, and for that reason, during the year 2020 we had some meetings to align the evaluation processes and qualification of our editorial board. We will be in 2021 trying to trim our edges and working on the maintenance of a magazine that is seen by the scientific community with smoothness and quality. It is a long and painful path, but we will strive for that.

May 2021, reserve us better days.

Potential conflict of interest

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