

### Endocrinología, Diabetes y Nutrición



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### **EDITORIAL**

# Recognising the work of reviewers to improve scientific publications<sup>☆</sup>



## Reconocer el trabajo de los revisores para mejorar las publicaciones científicas

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Peer review consists of the critical evaluation of a manuscript by experts in the relevant field who are unaffiliated with either the working group submitting the manuscript or the publisher. These experts advise the editors on whether the paper should be published or not, based on its interest and quality, and propose changes to improve the manuscript. In recent decades, it has prevailed as an essential quality criterion for a scientific publication to be accepted and respected by the rest of the scientific community. 1 This has come about because the same scientific community assumes the reviewers' work will be rigorous, disinterested and independent, seeking to select the best research papers for a given publication and, wherever possible, improve the quality and clarity of those papers. In other words, the peer review process is fundamentally based on trust among scientists.

However, the number of scientific journals and articles submitted for publication has increased to such an extent in recent years that editors find it difficult to have enough reviewers to evaluate all the papers they receive and main-

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tain both the quality of the evaluations and response times. Endocrinología, Diabetes y Nutrición is no exception.

In a large-scale survey of reviewers from different disciplines promoted by Elsevier, most reviewers (86%) indicated that they enjoy doing this task and would continue doing it.<sup>2</sup> However, that study was conducted more than ten years ago, so reviewers' attitudes could be different now. Reviewing is stimulating for researchers, as it allows them to keep up to date with what is being researched in their area (know the results of the work of other groups before publication!); familiarise with other approaches (those of the authors, but also those of the co-reviewers); improve their skills, both for proposing their own research projects and for writing the texts that will in turn be reviewed by others; develop their critical abilities; and build their network of professional contacts with editors and other researchers. However, it is quite time-consuming (more than six hours in 35% of cases in the medical field, according to the above survey, with most reviewers evaluating three to 10 papers per year). Time is a resource that almost no researcher has a surplus of these days. Half of the reviewers with more than five years of experience also regularly work for five or more publications.3

Anyone who has submitted articles to peer-reviewed journals also knows that the review can sometimes be very superficial, with a few generic comments. However, on other occasions it can be very extensive and detailed, evaluating

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the originality and importance of the main idea; proposing a form of presentation that is clearer for the reader; analysing in depth which aspects of the manuscript can be improved, whether the results are clinically significant in addition to statistically significant, whether the literature review was exhaustive, whether the statements attributed to the references can really be deduced from them, and whether the conclusions are supported by the results; and, finally, suggesting improvements that can give a real boost to the end result. The journal will greatly improve the quality of its publications and its prestige if it chooses reviewer of the latter type. However, these more thorough reviewers are not rewarded in any way (except perhaps with a larger number of new requests for collaboration).

Scientific publishers are responsible for finding a sufficient number of disinterested, objective reviewers with up-to-date knowledge in the areas covered by each publication. If they also want to have a broad perspective and be representative of the entire scientific community, they must find diverse reviewers in terms of age, sex, regions and interests. Naturally, however, all journals and publishers prefer to turn to those people with the most knowledge and experience on a certain topic and who write the best review reports, and that can lead to these experts being overwhelmed.

Another phenomenon that has made editorial work in the field of science more difficult is that of so-called "predatory journals". These are journals that lower the quality threshold for publishing scientific articles, do not follow the recommendations of good editorial practices and charge all the costs of the editorial process to the authors or their institutions.<sup>4,5</sup> In order to appear to meet the standards of quality scientific literature, many claim they are peerreviewed publications. To cover those bases, they flood our emails, not only with requests for contributions to their publications, but also with invitations to review, even though their areas of interest are far removed from ours. I can make that statement without fear of exaggeration, as I constantly receive invitations to review work, not only from all medical specialisations, but even from disciplines as remote from my field of knowledge as electronic engineering and oceanography. They may be able to attract some less experienced reviewers this way, but this then makes it difficult for more scientifically rigorous publications to acquire new reviewers.

Some journals are trying to modernise the peer review process. One proposal is to make the process absolutely transparent by revealing the identities of the author and the reviewer to each other, thereby aiming to achieve more honest and constructive rather than aggressive reviews that promote scientific debate between author and reviewer. This proposal includes publishing the reviewer's reports along with the final article so that the reviewer also receives recognition for his or her work.<sup>6,7</sup> This method also has its detractors, as personal relationships interfere could with objective evaluation, some could use it to delay publications by direct competitors or young reviewers might feel that they lack the authority to openly criticise the works of prestigious researchers or think that this may negatively affect their research career. Others, such as PlosOne, ask reviewers not to consider the importance of the main idea of the paper or its interest and only to judge the technical

quality, leaving the impact of the article to be determined by the number of readers and their opinions.

What can we do to maintain the peer review system, without wearing out the researchers who regularly act as reviewers? The possibility of remunerating the task is debated, as it could undermine confidence among researchers and cast doubt on their impartiality and transparency, and would undoubtedly render access to scientific publications more expensive. Efforts to publish the affiliation of the reviewers along with the authors of the reviewed work are also not welcome, as most reviewers prefer to remain anonymous. 1,2 Publishers tend to offer free access to some of their publications in exchange. That, however, carries less value today, as many institutions guarantee their researchers access to a wide range of literature resources, or discounts for publishing. They have also improved their efforts to make the work of reviewers visible with initiatives such as Peer Review Week, in which they organise training activities and discussion forums on the peer review process aimed at reviewers and researchers; the publication of an annual letter of appreciation that often includes the list of reviewers having contributed that year; the awarding of prizes or public recognition to those they consider to be their best reviewers; and certification accrediting the reviews made. Although few initiatives have assessed the quality of the review reports issued, it could be assumed that there is a correlation between a larger number of invitations to review and a higher review quality.

However, as we consider this task essential, the scientific community should also show its appreciation. The subject is rarely discussed in the scientific literature or in courses or conferences. It would be good for all of us to remember from time to time that we are part of a community, that we like our manuscripts to be reviewed fairly and quickly, that we want to read articles of the highest levels of quality and clarity in order to continue our training and remain up to date, and that we therefore have an ethical responsibility to further the advancement of knowledge by making disinterested contributions as reviewers. We could also improve the quality of reviews, for the benefit of all, by dedicating some of our time to training activities focused on critical review. Both strategies would encourage new generations of researchers to join the body of existing reviewers, thus ensuring the sustainability of the system. The most reasonable incentive probably consists of valuing review on a curriculum vitae in selecting individuals for teaching, healthcare and research positions and awarding research grants. However, progress is slow in this regard. Many journals provide reviewers with some sort of certificate or accreditation, but not all do. Open Researcher and Contributor ID (ORCID) allows review activity to be recorded, but most publications still do not record the reviewer's ORCID identifier. The standardised curriculum vitae of the Fundación Española para la Ciencia y la Tecnología [Spanish Foundation for Science and Technology] (FECYT) lacks a specific section for review. Some universities and researchfunding agencies value it, but others do not. What is likely needed is an open public debate on the subject to identify other ways to provide incentives for this important mission and show good reviewers the respect they deserve.

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