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Editorial

Rebalancing the rankings: championing equity and quality in neuroscientific publishing

Marcelo M. Valença
Editor-in-Chief
0000-0003-0678-3782

Carolina Martins
Deputy Editor
0000-0002-0197-3520

As an editorial board for a scientific journal dedicated to Neurological Surgery and Human Neuroanatomy, we recognize a troubling trend: valuable scientific findings are too often confined to university theses and not disseminated through scientific publications. This trend is exacerbated by the shift towards open-access models with associated publication fees and the pursuit of elevated impact factors (1, 2), which can sideline important work that may not attract a broad readership but is nonetheless vital to the field.

In the current academic landscape, publication records have become a new form of "currency" for scientists, influencing hiring, contracts, salaries, and grants (3, 4). The quantity and quality of these publications are crucial for academic success, with manuscript quality being a complex but essential aspect, often judged by the journal's prestige (3, 4). The prestige or quality of scientific publications is gauged by the scientific community at the top echelons of leadership. It is based mainly on the impact factors of the journals where the evaluated author's articles are published (3, 5).

In an elegant study, Paulus and colleagues (5) demonstrated that the anticipation of publication elicits an enhanced reward signal within the *nucleus accumbens*, which intensifies with the Journal Impact Factor of the prospective publication venue. Furthermore, there is a positive correlation between this neural response and the individual's personal Journal Impact Factor. This suggests that scientists have internalized the scientific community's emphasis on high-impact publications as a critical component of their reward system.

Case reports, once a staple in scientific literature, are now frequently overlooked due to their lower citation potential, which affects the desired high "impact factor" that leading journals covet. The intense competition for journal space has also raised ethical concerns, particularly regarding the underrepresentation of rare diseases—misnamed as 'orphan' due to their neglect in research, despite their significance. The Journal Impact Factor (JIF) measures usage and citation frequency, not necessarily directly assessing the research's inherent quality (5).

To address these issues, we have reviewed unpublished master's and doctoral theses from the Federal University of Pernambuco, Recife, Brazil. We invited authors to submit their work as monographs to *Neurological Surgery and Anatomy*. After a thorough peer review process, we are pleased to include several of these valuable contributions in our current edition. This initiative is an ethical commitment crucial scientific material that might otherwise remain inaccessible in the archives of a university library.

Our mission is to share comprehensive knowledge across the diverse subspecialties of neurosciences, elevating the field without concealing any subject, even if it may affect the citation numbers and, consequently, the journal's impact factor. To reject the publication of low-citation-potential articles, particularly those on rare diseases, would be unjust and unethical. We must ensure the dissemination of such critical knowledge.

Moreover, allowing the publication of quality research by scientists who cannot afford Article Processing Charges (APC) bridges the gap between researchers in well-funded environments and those in developing countries. Such inclusivity counteracts the 'Matthew Effect,' preventing the concentration of scientific discourse among the already privileged (6, 7). By promoting a more equitable and diverse scientific community, we uphold our responsibility to advance knowledge and understanding in neurosciences for the benefit of all.

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