

How scientific journals in physiotherapy may help fixing regional asymmetries

Como periódicos científicos em fisioterapia podem auxiliar a tratar as assimetrias regionais

Katia Nunes Sá¹, Cristiane Maria Carvalho Costa Dias²

¹BAHIANA - School of Medicine and Public Health. ORCID: 0000-0002-0255-4379. katia.sa@bahiana.edu.br
²BAHIANA - School of Medicine and Public Health. ORCID: 0000-0003-1944-3154. cmccdias@bahiana.edu.br

With the development of the information and communication sciences in the last decades, the speed with which the dissemination of scientific knowledge has increased substantially¹. This process has been driving the contemporary health sciences to the development of clinical practices based on scientific evidence, to a greater accuracy of the diagnosis and better results of the applied behaviors².

Historically, physiotherapy, whose practitioners only a century ago were still confused with massage therapists and sex workers³, did not fit recognition as science by common sense. Perhaps because of this brand, physiotherapists have struggled hard to be recognized for their scientific knowledge of the treatment of movement dysfunctions, although many still do not know deeply what true evidence-based practice means⁴. Less than 50 years ago, it was regulated in Brazil as a high-level health profession and its development was predominantly empirical, only being promoted as a science from the creation of the first master's degree in 1996⁵. Despite the short time of creation of the Brazilian post-graduate program in the field is increasingly qualified and recognized by other health professionals worldwide^{3,4}.

However, the metrics established by the Coordination of Improvement of Higher Level Personnel (CAPES) have been inducing movements on the part of the researchers that hinder the visibility of research results⁶. To achieve the required points for accreditation and re-accreditation in post-graduate programs, permanent physical therapists can not publish in specific Portuguese-language journals that are more visible to physiotherapists and the Brazilian population. They publish the findings of their researches in medical journals and related areas for the long time of existence and, therefore, their high impact factor⁷. Of the 42 journals in the topic of physiotherapy and rehabilitation of the first quartile that appear in the SJR ranking with impact factor above 0.786 (access on 01/29/2018 available at <http://www.scimagojr.com/journalrank.php?category=3612>), 20 are North American, 18 are English, 2 are Australian, 1 is Italian and 1 is Turkish. Of the 169 ranked, the American Journal of Sports Medicine occupies the top of the ranking with an impact factor of 3.375 and the Brazilian Journal of Physiotherapy ranks 70th with an impact factor of 0.521.

The small number of indexed journals that allow Professors to score in the metrics of the CAPES Qualis system, the conflicts of interest involved with the evaluation process of the articles (competition among research groups, vanity of researchers, greater chance of citation and possibility of gains direct or indirect linkages with publications)¹ and the increasing costs of publications make it significantly difficult for research results to reach the target audience⁸. For this reason, the society that ultimately funds research, does not have access to the results of all scientific research conducted. In addition, many predatory scientific journals and journals take advantage of the goals set by science regulatory bodies to harass researchers to publish in their journals that often disappear from circulation in the second or third volume⁹. In this scenario, it is becoming more difficult than the population involved as participants in the studies, as input and equipment financiers, and the researchers themselves have access to knowledge¹⁰.

With rejection rates around 80%, translation and publication costs averaging \$ 2,000 per article and without adequate funding¹, existing qualifying journals can not meet the demands of dissemination of the knowledge produced in physiotherapy. These data demonstrate that the research in published physiotherapy corresponds to 20% of what is submitted by an elite that obtains funding for publication, segregating research done by those who do not have the same resources. This does not mean that there are no qualified surveys conducted in educational and research institutions in poorer regions but rather that the results of these surveys can not be made public.

In spite of the real need to create new journals, evaluators of indexing systems (LILACS, SciELO and Pubmed), citation rankings (SJR and Citefactor) and the Qualis System (CAPES) progressively increase the requirements in order to reach the international standard and ensure the development and quality of publications^{5,6}. For this reason, it is becoming increasingly difficult for a new journal to develop in this scenario¹¹. The few journals in physiotherapy indexed in the different bases should unite to cooperate among themselves, not to break the principles of scientific integrity¹², but so that the profession as a common end may develop even more and that the world can know the reports of

studies done in less privileged regions suffering from specific health problems. Only in this way can one begin to treat the regional asymmetries of science in physiotherapy in Brazil and in the world.

References

1. Packer AL. Os periódicos brasileiros e a comunicação da pesquisa nacional. *Rev USP*. 2011;89:26-61. doi: [10.11606/issn.2316-9036.v0i89p26-61](https://doi.org/10.11606/issn.2316-9036.v0i89p26-61)
2. Brownson RC, Baker EA, Deshpande AD, Gillespie KN. *Evidence-Based Public Health*. 3.ed. Montreal: Oxford; 2017.
3. Peseta T, Fortune T, Jones A, Barradell S, Kennedy-Jones M. Returning history to the educational formation of health professionals in Australia. *Teaching in Higher Education*. 23(1):17-29, 2017. doi: [10.1080/13562517.2017.1340267](https://doi.org/10.1080/13562517.2017.1340267)
4. Silva TM, Costa LCM, Costa LOP. Evidence-Based Practice: a survey regarding behavior, knowledge, skills, resources, opinions and perceived barriers of Brazilian physical therapists from São Paulo state. *Braz J Phys Ther*. 19(4):294-303. doi: [10.1590/bjpt-rbf.2014.0102](https://doi.org/10.1590/bjpt-rbf.2014.0102)
5. Cavalcante CCL, Rodrigues ARS, Dadalto TV, da Silva EB. Evolução científica da fisioterapia em 40 anos de profissão. *Fisioter Mov*. 2011;24(3):513-22. doi: [10.1590/S0103-51502011000300016](https://doi.org/10.1590/S0103-51502011000300016)
6. Nigro CA, Ferraz RRN, Quoniam L, Alves WAL, Messias LRR. Prestação de contas anual e quadrienal à Capes por um programa de pós-graduação stricto sensu em engenharia de produção: utilização da ferramenta computacional Scriptlattes-Scriptscupira. *Prisma.Com*. 2015; 29:3-26.
7. Paci M, Landi N, Briganti G, Lombardi B. Factors associated with citation rate of randomised controlled trials in physiotherapy. *Arch Physiother*. 2015;5:9. doi: [10.1186/s40945-015-0009-6](https://doi.org/10.1186/s40945-015-0009-6)
8. Van Noorden R. The true cost of science publication. *Nature*. 2013, 495(7442):426-429. doi: [10.1038/495426a](https://doi.org/10.1038/495426a)
9. Manca A, Martinez G, Cugusi L, Dragone D, Mercurio G, Deriu F. Predatory open access in rehabilitation. *Arch Phys Med Rehabil*. 2017;98(5):1051-6. doi: [10.1016/j.apmr.2017.01.002](https://doi.org/10.1016/j.apmr.2017.01.002)
10. Kellner AWA. Editors of Brazilian journals – a hard life that is getting harder! *An Acad Bras Cienc*. 2017;89(1):1-2. doi: [10.1590/0001-37652017891](https://doi.org/10.1590/0001-37652017891)

11. Sá KN, Dias CMCC, Segundo JDB. Critérios para a consolidação de um periódico de pesquisa científica em fisioterapia. Rev Pesq Fisio. 2016;6(3):317-340. doi: [10.17267/2238-2704rpf.v6i3.1028](https://doi.org/10.17267/2238-2704rpf.v6i3.1028)

12. Vasconcelos SMR, Sorenson MM, Watanabe EH, Foguel D, Palácios M. Brazilian Science and Research Integrity: Where are We? What Next? An Acad Bras Cienc. 2015; 87(2): 1259-1269. doi: [10.1590/0001-3765201520150165](https://doi.org/10.1590/0001-3765201520150165)