

# Enhancing the quality of scientific research

## Valorizando a qualidade da pesquisa científica

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he creation of a number of bibliometric indices to assess the scientific production, extremely important fact in an attempt to measure and value the hard work of scientists, separating the chaff from the wheat, has been undermined in recent times. The search for studies published in journals with higher impact, especially according to the criteria of the Impact Factor (IF) adopted and published by the ISI Journal Citation Report (JCR), the index most used as a parameter, eventually caused an imbalance, often distorting the basic purpose of making public the results of research and its benefits.

In Brazil, Qualis, whose criteria for classification of scientific journals, along with the assessment of postgraduation programs, leads the researchers to publish their studies in journals with high IFs.

Most of them from abroad, since the CAPES requires that the researchers have at least one publication in journals at the highest level (A1) whose impact is close to 4.00.

Only way to maintain or improve their personal position and the institution to which they are bound.

The Brazilian journal with the highest rate is now the Brazilian Journal of Psychiatry with IF of 1.856, far from the levels required by CAPES.

## **DORA**

In an attempt to improve the way in which the production of scientific research is assessed by funding agencies and academic institutions, editors and publishers of scientific journals gathered during the Annual Meeting of the American Society for Cell Biology, held in December 2012 in San Francisco, USA, prepared a document, the San Francisco Declaration on Research Assessment, known by the acronym DORA [1].

The document emphasizes that the Impact Factor was created as a tool to help librarians to identify journals that could be acquired and not to measure the quality of scientific research in an article. From this, a review is performed on the limitations to its use, for example, the possibility of being misused, and the lack of transparency in relation to the data used to calculate the IF.

The following document has some recommendations that should be followed by agencies, institutions, publishers, companies that provide metrics and researchers. Among the guidelines to publishers, we must emphasize the significantly reduction in emphasis on the impact factor of journals (not just from the ISI, but also the SCImago, Eigenfactor, H index, etc.) as a promotional tool; encouragement in responsible practices of authorship and provision of information about the specific contributions of each author, and encouragement of the primary literature citation (original articles) instead of review articles in order to give credit to the group that first reported a finding.

The Brazilian Journal of Cardiovascular Surgery (BJCVS) supports the content of DORA as well as other initiatives to promote the dissemination of good quality scientific research. More than the number of citation the value of an article is in its content. It should be written clearly and has their results reproducible.

I reaffirm the importance of bibliometric indices and the Editorial Board of BJCVS is making every effort to reveter the fall of our IF, which not just occured with BJCVS, but almost all Brazilian journals. The few who improved such index did so in small scale. Our struggle is that these indicators are not the only ways to assess a journal. We can not compare, for example, a cardiovascular surgery journal with general, as the Lancet, IF of 39,060, Science, IF of 31,027, British Medical Journal, IF of 17,215, because they embrace publications and citations of all specialties.

For a comparison I mention the Annals of Thoracic Surgery's IF of 3454 and the European Journal of Cardio-Thoracic Surgery of 2674. None have achieved the level of excellence required by CAPES.

#### Authorship

Since the last edition, the information on the participation of each of the authors in articles is obligatory, and that has to be inserted in the submission process [2]. In addition to DORA, this practice is also encouraged by the International Committee of Medical Journal Editors (ICMJE), which even entered one more item in the criteria for authorship: "Agree to be responsible for all aspects of the study in ensuring that the issues on the accuracy or integrity of any part of the study were properly investigated and resolved." This issue is so important that was the subject of an editorial published in the prestigious journal Lancet, of August 31, 2013 [3].

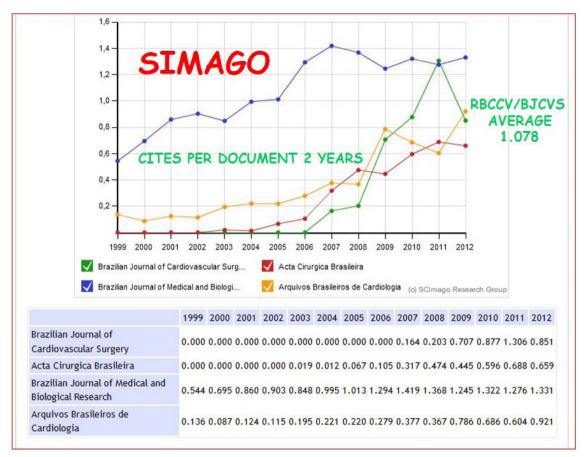


Fig. 1 - Chart showing the evolution of BJCVS, Acta Cirúrgica Brasileira, Arquivos Brasileiros de Cardiologia and Brazilian Journal of Medical and Biological Research in Scimago

Authors of studies submitted to BJCVS prior to that determination will be required to provide this information when the item is approved.

#### **APPs**

We are finalizing the development of Applications (APP), which can be downloaded for free on iPhones, iPads (using iOS system) and smartphones and tablets (which use Android system) and will provide access to the complete contents of BJCVS. Thus, we will provide more options for accessing our journal and, consequently, increasing its visibility.

#### English

Starting with this edition, the titles of all articles will be written first in English and then in Portuguese, in that order. The intention is to encourage and facilitate the access of those who access the electronic version on the websites www. bjcvs.org and www.rbccv.org.br in more than 100 countries that read us every day.

Also when accessing our site, the English version will be opened. To switch to the Portuguese, a simply click on the icon with the stylized Brazilian flag in the top of the page will be enough.

Thus, we can further increase the number of hits. In July this year, only in the journal's website there were over 123 thousand hits, a daily average of more than 3,960 hits (Fig. 1). On the SciELO's website (www.scielo.br/rbccv), there were more than 38 thousand hits to articles, a daily average of 1,250 hits, totaling over 5,200 articles read per day!

#### Clinical trial

For this, we will maintain the strict criteria in the assessment of studies and also keeping the BJCVS as a discussion forum. On page 412, a letter from Dr. José Maria Pereira de Godoy, questions the criteria that define the phases of a clinical trial. As the subject is controversial, I sent a copy to some experts, who kindly agreed to discuss the matter. The debate does not end on this issue and all those who wish to contribute can submit their

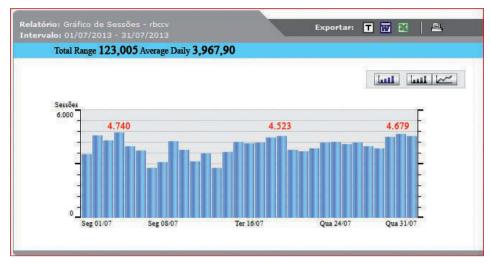


Fig. 2 - Graph with hits to BJCVS during the month of July 2013. The average is almost 4,000l hits

text to Letter to the Editor to be published in the next issues.

I take this opportunity to ask all those who are registered, either as an author or reviewer, for them to check their data and, if necessary, to update them, so that they can receive the information during the submission and review of the study, avoiding delays that may affect the processing of manuscripts.

### **CME**

Items available for testing by the Continuing Medical Education (CME) are: "Minimally invasive redo mitral valve surgery without aortic crossclamp" (pág. 325), "Effects of reprocessing on chemical and morphological properties of guide wires used in angioplasty" (pág. 331), "Risk factors for prolonged hospital stays after isolated coronary artery bypass grafting" (pág. 353), "Unstable angina does not increase mortality in coronary artery bypass graft surgery" (pág. 391).

Unfortunately, the education system has not been used in the way it deserves. I ask all colleagues to encourage team members and residents to perform testing, a feature that is found in few high-level journas, being ours the pioneer in Brazil.

My warmest regards and have an excellent reading!

Somingo & Braile

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## REFERENCES

- The San Francisco Declaration on Research Assessment (DORA) [Accessed: August 29, 2013]. Available at: http://am.ascb.org/dora/
- Braile DM. Autoria no artigo científico: definindo o papel de cada um. Rev Bras Cir Cardiovasc. 2013;28(2):I-II.
- 3. Authorship and accountability. Lancet. 2013;382(9894):744.