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Editorial

Author recognition, impact factor, relevance, and the meaning of publishing

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The ability to produce knowledge and to solve problems is considered a necessary condition for real national self-determination and for conducting one's own affairs and fulfilling one's destiny[1]. It has been stated that the strengthening of science has additional benefits for every nation and for the world as a whole, because of the various threats we face today[2,3]. Worldwide, over US$100 billion is invested every year to support biomedical research; this results in an estimated 1 million research publications per year[4]. However, the public funding of research is correlated only modestly with the world's disease burden[4,5].

An efficient system of research should address health problems of importance to populations and the interventions and outcomes considered important by patients and clinicians. Research progress depends on the dissemination of results; journal articles are currently the most effective tool we have to share them. A relevant study should address a substantial clinical or public health question as explicitly as possible and produce findings likely to have an effect on how other researchers think about the question[6]. Over the past few decades, Brazil has enjoyed a significant increase in scientific productivity. Brazilian authorities have made a substantial effort to formally and systematically evaluate our graduate programs, decisively influencing their evolution. These graduate programs have contributed to the education of most of the highly qualified investigators and university lecturers, and to the production of relevant knowledge in this country[1]. Remarkably, Brazilian science is concentrated in a small number of institutions. Since these centers are mainly governmental, science is essentially supported by government funds[7].

Although scientific research is clearly increasing in volume in Brazil, some authors emphasize the need to enhance the conception, design, analysis, and reporting of studies that address questions relevant to our patients and our society[8,9]. Context is crucial to deciding which interventions are effective in specific populations because the effect — and therefore the impact — of some interventions could differ according to the setting[5]. Ethnic bias within the leading general medical journals constitutes a problem that subverts efforts to promote equity in global health[10]. The tendency of editors to publish research results based on study characteristics rather than quality indicators has been considered a manuscript selection bias[11]. Some authors have suggested a lower recognition of the scientific merit of research from less advanced countries in spite of the fact that, in many cases, the work was published in English in a prestigious scientific journal[12,13].

Sound articles, particularly those considered to be only of "regional interest" in the areas of tropical medicine and public health, are often not accepted in foreign journals. Many times, extremely important information is not properly disseminated because it is not considered "universal science"[8].

One of the characteristics of the modern world is a notable increase in competitiveness in all areas. The Brazilian scientific community is highly influenced by the impact factor ratings of the journals in which their work is published[8]. Important funding decisions are frequently based on these estimated impact factors. The impact factor (particularly, the use made of it in many cases) constitutes a limitation or a condition for authors and scientific journals, under which both are obliged to adopt decisions guided, in many cases, more by the rankings than by objective, scientific criteria[13].

A discrepancy between the scarcity of funds and the need for publications has also been reported. This pressure to publish seems to lead to an exaggerated degree of competitiveness and also propagates a cultural distortion in which scientometrics prevails over knowledge[7]. This scenario may possibly be blurring the desirable development of a socially committed and relevant academic environment.

Increasingly, the quality of research of academics and research institutions is being judged by how frequently their published work is cited by others. Citation rates and H factors are now making or breaking researchers' careers and influencing funding[14]. Although this proposal for a more objective assessment of research quality should be aised, the potential for systematic bias still exists[14]. Moreover, this policy has had several negative effects with respect to national scientific publications, here and elsewhere. It has also had an influence on researchers' adoption of publication strategies often guided by criteria concerning academic profitability[13]. It is essential

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that when using citation rates to make decisions about funding, employment, or promotion of researchers, the possible effect of inclusion criteria of the databases used is taken fully into account. Otherwise, the neglected tropical diseases will become even more neglected[14].

Both editors of the main Brazilian medical journals and the National Program for Human Training in High Education (CAPES) representative have recently agreed that valuing Brazilian journals is important for scientific growth and development in Brazil[15].

Good scientists think beyond competition and vanity. The vicious cycle by which Brazilian journals have come to be despised by the main producers of science in Brazil must be broken. While working to improve Brazilian scientific journals, their editorial boards should be aware of the importance of adopting quality patterns that progressively contribute to increasing national and international acceptability and visibility. Furthermore, it is crucial that the leading members of the scientific community steadily adopt the best domestic scientific journals as valid complementary options for publication of relevant research results[16]. Finding ways to make national publications more easily accessible remains an important goal for the global "invisible college", the so-called process of creating networks and collaborating in science[17].

National research and valuation agencies, for their part, should encourage policies that help researchers overcome linguistic barriers to scientific communication and increase the impact of their national journals and of the science generated in their countries. They should also adequately evaluate the scope and implications of the use of bibliometric indicators instead of simply applying them indiscriminately[13]. Additionally, and not least important, government agencies, especially CAPES and the National Council for the Development of Science and Technology (CNPq), should provide support for the adequate management of financial resources and qualitative classification of the journals[15]. We need to find mechanisms to ensure that good scientific output from our graduate system, especially in the health sciences, is at least partly published in national journals with good editorial standards, without prejudice about the recognition of its quality and relevance on the part of governmental agencies. Sound and pertinent papers submitted to Brazilian journals by well-qualified graduate programs and senior graduate academic advisors should deserve proper recognition by government agencies according to their relevance and scientific quality[15].

Scientific tradition requires time to mature. Countries like Brazil, where scientific activity is relatively recent, are at risk of compromising their full development and sovereignty if they neglect their scientific independence[18].

Although it is important for a country to have a means of assessing how scientific activity conducted locally compares to that of the rest of the world, neither do all disciplines, and within them specialties, have the same requirements for "internationality", nor can the quality of the papers published be measured by the same set of parameters. Domestic journals constitute a central component of the establishment of an academic research system with a relative degree of autonomy[16].

Promoting the growth and improvement of Brazilian health science publications is in our hands: members of editorial boards, reviewers, junior and senior scientists, graduate advisors, readers, and members of the Brazilian scientific community selected to serve on the CNPq and CAPES advisory boards. In the current context of medical publishing, we must assume the great responsibility to present an accurate picture of the medical, scientific, and public health research addressing the problems of those living in developing countries or in poverty.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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