Globalization has left its mark on the 21st century. One of the many ways of defining globalization is as the integration of information, communication, and economy on a worldwide scale, with a direct influence on all levels of higher education. In this manner, the internationalization of postgraduation may be seen as a response to globalization, taking shape in the form of programs and policies put in place by academic institutions and governments in order to increase student and faculty exchanges and to stimulate and strengthen partnerships in research, among other actions. Universities and research centers have, in fact, been practicing these actions for a long time, but they have expanded significantly, particularly during this century.

Various studies\(^1\)\(^-\)\(^3\) have repeatedly shown that collaborative research that involves authors from multiple institutions and/or countries have an identifiably greater impact than research involving only one group or institution. In Brazil, the internationalization of postgraduation has been highly valued by the Coordination for the Improvement of Higher Education Personnel (CAPES), generating immense efforts on the part of postgraduate programs (PGPs) to achieve the goals defined. In a study conducted with PGPs ranked 6 or 7 by CAPES, Ramos\(^1\) observed that internationalization in these PGP encompasses everything from international mobility, international cooperation networks, academic output (international publications, international co-authorships, presentation of academic work in international scientific conferences and meetings), to access to resources through the sharing of research facilities and international funding.

In Brazilian PGP, the most popular internationalization strategies were international mobility of faculty, researchers, and students and international research collaboration, implemented mainly through international cooperation agreements. This study, nevertheless, detected inequalities between institutions in the provision of adequate conditions for internationalization. The availability of financial resources, the existence of regulatory frameworks, and organizational support were considered important requisites for achieving this goal.\(^1\)

Thus, due to the demands of CAPES, the need to internationalize has led to an institutional “race” between PGP in search of partners, with or without government support, and often in a competitive manner. The strategies adopted by each institution vary in accordance with their “scope” (based on professors and researchers’ contacts or previously established partnerships) and their level of resources and complexity capable of influencing international visibility and competitiveness. This “academic entrepreneurship”\(^2\) may or may not be considered positive, given that more well known institutions often have a head start in the competition for funds, to the detriment of other academic centers. The existence of national policies that support internationalization, including the publication of national journals, is extremely important, as can be seen in the example of countries that have successfully invested in this form of support.\(^1\)

In order to meet the demands imposed by CAPES, PGP and medical societies are faced with the challenge of making joint efforts to provide all academic institutions with access to opportunities and to allow the scientific output that originates from these PGP to be disseminated by their national and international peers. In this context, the Brazilian Society of Cardiology (SBC) has held “Postgraduate Meetings in Cardiovascular Sciences.” The theme of the fourth meeting, in 2018, was “The Internationalization of Brazilian Postgraduate Programs.”

During this meeting, the international guest speaker Professor Fausto J. Pinto, the Director of the Faculty of Medicine of the University of Lisbon, spoke about partnerships between European and Brazilian universities and announced the signing of a recent agreement between the Portuguese institution and the Federal University of Rio Janeiro’s School of Medicine for the bilateral recognition of diplomas.

**Keywords**

- Scientifics Periodicals/internationalization; International Cooperation; Researcher Performance Evaluation System; Journal Impact Factor; Databases, Bibliographics; Citation Databases

**Mailing Address**: Gláucia Maria Moraes de Oliveira – Programa de Pós-Graduação em Cardiologia da Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, RJ – Brazil

**E-mail**: glauciam@cardiol.br, glauciamoraesoliveira@gmail.com

**UNIVERSIDADE FEDERAL DO RIO DE JANEIRO**

**Address**: Universidade Federal do Rio de Janeiro – R. Prof. Rodolpho P. Rocco, 255 – Bairro do Pinheiros – Bloco C1 – São Cristóvão, 21941-913, Rio de Janeiro, RJ – Brazil

**E-mail**: glauciam@cardiol.br, glauciamoraesoliveira@gmail.com

Manuscript received September 22, 2018, accepted September 25, 2018

**DOI**: 10.5935/abc.20180212

**DOI**: 10.5935/abc.20180212

**DOI**: 10.5935/abc.20180212
and dual degrees. He emphasized the importance of reinforcing contacts between universities in Brazil and Europe, especially in Portugal, in order to make the dissemination and adaptation of existing models possible by establishing a network of Portuguese-language medical schools as an element to facilitate exchange, in addition to the creation of an “Erasmus-like” program for the Community of Portuguese Language Countries (CPLP).

The visibility of national research is another important aspect of internationalization. It is of the utmost importance to disseminate research carried out by the Brazilian scientific community in the area of cardiovascular disease (CVD), which is recognized as the leading cause of mortality in Brazil and worldwide. The SBC has two journals indexed in SciELO: the Arquivos Brasileiros de Cardiologia (ABC Cardiol) and the International Journal of Cardiovascular Sciences. The ABC Cardiol, which is indexed in the main databases, including ISI Web of Science, Index Medicus, MEDLINE, PubMed Central, EMBASE, Scopus, SciELO and LILACS, obtained an Impact Factor (IF) of 1.318 from Journal Citation Reports (JCR), as well as a B2 rating from the CAPES Qualis System in its most recent evaluation.4

The ABC Cardiol is Latin America’s main journal for the publication of research in the area of Cardiology and Cardiovascular Sciences and it has an important and increasing degree of internationalization, as more than 20% of its articles are of international origin. It is worth emphasizing that Portuguese language countries (PLCs) have access to the bilingual version of the ABC Cardiol, which is published in all Lusophone countries by the Portal of the Federation of Cardiology Societies of Portuguese Language Countries (http://www.fsclp.org), representing approximately 245 million people. In PLCs, the large differences, related mainly to socioeconomic conditions, in the relative impact of CVD burden are noteworthy.5 The highest quality of scientific output published in the ABC Cardiol continues to originate from Brazilian postgraduate programs, which are increasingly exposed, in the meanwhile, to international competition to find publishing space in the ABC Cardiol, added to the lower incentive to publish in this journal as a direct result of its current CAPES ranking. It is also very important to valorize the publication of science and knowledge, which are public goods, in open science journals such as the ABC Cardiol and other journals in the SciELO network.

CAPES values the social involvement of PGPs, with the objective of promoting improvements in the population’s living conditions. However, Brazilian studies focusing on populations with peculiar socioeconomic characteristics rarely receive the interest of the international community; their dissemination would need to be driven by CAPES’ evaluation system in order to strengthen a national exchange network that included PLCs. The innovative scientific contributions that result from PGPs and their mission for civil society are also worth highlighting. In this sense, it would be desirable for this regulatory agency to create a system, mediated by Qualis, for valuing the leading journal in the fight against the CVD epidemic in a manner that makes it possible to share successful experiences in fighting CVD with these countries.

An unprecedented academic revolution is taking place in higher education, leading to a real need for the internationalization of PGPs. Internationalization offers new opportunities for study and research that are limited neither by national boundaries nor by boundaries to knowledge. However, “internationalization is not a goal in itself, but rather a means to accomplish improvements in teaching, research, and innovation,”6 as well as to promote the development of a more just and equitable society through improvements in the living conditions of the population; this, upon final analysis, is the main objective of research undertaken by PGPs. The recognition of national research must also occur ethically and meritocratically through the valuing of the means responsible for its dissemination. The growth of Brazilian journals will have to be the fruit of intellectual investment on the part of researchers who produce quality science and internationalization through international partnerships, as well as stimulation and valorization through better rankings in CAPES’ evaluation system.

Author contributions

conception and design of the research: Oliveira GMM; acquisition of data and analysis and interpretation of the data: Oliveira GMM, Lorenzo AD; writing of the manuscript and critical revision of the manuscript for intellectual contente: Oliveira GMM, Lorenzo AD, Colombo FMC, Sternick EB, Brandão AA, Kaiser SE, Quadros AS, Kalil RAK, Scaramello CBV, Hajjar LA.

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Sources of Funding

There were no external funding sources for this study.

Study Association

This study is not associated with any thesis or dissertation work.
References

1. Ramos MY. Internacionalização da pós-graduação no Brasil: lógica e mecanismos. Educ Pesqui. 2018;44:e161579. [Cited in 2018 21 ago] disponível em: http://dx.doi.org/10.1590/S1517-9702201706161579

2. Wadhwani, RD, Galvez-Behar G., Mercelis J, Guagnini, A. Academic entrepreneurship and institutional change in historical perspective. Management & Organizational History. 2017; 12(3), 175–198. doi:10.1080/17449359.2017.1359903.

3. Altbach P, Reisberg L, Rumbley L, UNESCO. Trends in Global Higher Education: Tracking an Academic Revolution: a report prepared for the UNESCO 2009. World Conference on Higher Education. 2009. Paris (France)

4. Rochitte CE. Novo fator de impacto dos Arquivos Brasileiros de Cardiologia (ABC Cardiol) - 1,318 - Uma conquista da SBC para nossa comunidade científica. Arq Bras Cardiol. 2018; 111(1):1-3.

5. Nascimento BR, Brant LCC, Oliveira GMM, Malachias MVB, Reis GMA, Teixeira RA, et al. Cardiovascular disease epidemiology in Portuguese-speaking countries: data from the Global Burden of Disease, 1990 to 2016. Arq Bras Cardiol. 2018;110(6):500-11.

6. Yeravdekar VR, Tiwari G. Internationalization of Higher Education and its Impact on Enhancing Corporate Competitiveness and Comparative Skill Formation. Procedia - Social and Behavioral Sciences. 2014; 157, 203-9