The representativeness of the Arquivos Brasileiros de Cardiologia for Brazilian Cardiology Science

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The front page of the Arquivos Brasileiros de Cardiologia (Brazilian Archives of Cardiology) discloses an objective view of the current representativeness of the journal¹:

“With over 60 years of existence, the Arquivos Brasileiros de Cardiologia (Arq Bras Cardiol) is the official scientific publication of Brazilian Society of Cardiology (BSC), serving as the main channel for the dissemination of Brazilian scientific research on cardiovascular sciences. Published in two languages and indexed in major international databases (ISI Web of Science; Cumulated Index Medicus — MEDLINE; EMBASE; SCOPUS; SCIELO and LILACS), Arquivos Brasileiros de Cardiologia has an average impact factor of 1.1, according to Thompson Reuters. This rating puts our journal at a level that is similar to most journals indexed in ISI Web of Science in the field of Cardiology.”

Considering the historical and academic significance of the Arquivos Brasileiros de Cardiologia, since its indexing in MEDLINE that started in 1950, some authors have assumed the hypothesis that the analysis of publications in the last 60 years could reflect the changing trends of heart disease in Brazil. The existence of an epidemiological link between cardiac diseases that are prevalent in Brazil and the publications of the Arquivos has been suggested. This evidence, associated with planning, publications and guideline updates, leaves no doubt about its crucial importance for Brazilian Cardiology²,³.

Regarding the evaluation of its impact, the announcement of the Arquivos’ first Impact Factor by the Journal of Citation Report of Thomson Reuters occurred in 2010. Since then, the values of this bibliometric index, documented by the Web of Science database of the Institute for Scientific Information (ISI), have confirmed the degree of scientific relevance and the scope of studies carried out in Brazil, as well as those performed in international centers that have been published in our journal. The ratings place the Arquivos at the same level of approximately 30% of international journals indexed in the ISI database in the field of Cardiology. The Arquivos Brasileiros de Cardiologia currently occupies position 95 among 125 journals listed by ISI with a positive impact factor in the field of cardiovascular diseases in 2014. Among these publications, only five have an impact factor greater than ten (4%); 17 (13.6%) between 5.04 and 7.44; 47 (37.6%) between 2.044 and 4.918; 35 (28%) between 1.965 and 1.018 and; 21 (16.8%) with an impact factor of 0.011 and 0.912.

Individual analysis of the Arquivos by Web of Science currently discloses the following numbers: 3,383 indexed publications, with 2,509 original and review articles. Since 2003, these articles have received 7,365 citations (Figure 1), corresponding to a mean rate of 2.64 citations per article and an H index of 25. The number of self-citations was 1,482, accounting for only 26.2% of the total. Among the ten most cited papers, the majority corresponds to guidelines and epidemiological data⁴-¹⁰. It is worth mentioning the presence of a single article on basic sciences¹. The interesting thing is that these articles are not totally dependent on national citations.

The relevance of the Arquivos Brasileiros de Cardiologia for Brazilian cardiology science can also be assessed through its position as the main vehicle for the dissemination of national research at international level. Of 1,581 original articles published by Brazilian authors and institutions between 2010 and 2012 in journals indexed in the Web of Science database, it is noteworthy the fact that 27% were published in the Arquivos, whereas 43% of these articles were published by journals with a higher impact factor, located at the upper strata of the CAPES Qualis classification (Figure 2).

Aiming to improve the quality of publications, the Editorial Board of the journal has adopted a certain degree of academic prioritization. Currently, 60% of the articles published in the Arquivos originate from academic studies at post-graduate level. Although greater receptivity has been observed from Post-Graduate Programs in Cardiology, unfortunately this decision has not reflected the positive variation of the Impact Factor in recent years, leading to the suggestion that the Brazilian academic community has not prioritized the Arquivos Brasileiros de Cardiologia as an option to have their best works published. However, we believe that this trend can be reversed, being one of the motivations of this editorial, seeking to encourage post-graduate programs to give higher priority to the Archives. Finally, there is a clear need for greater participation in the area of Basic Science and applied research in Cardiology, as well as the publication of a greater number of controlled clinical trials and meta-analyses in our journal.

Keywords
Periodicals as Topic; Journal Impact Factor; Portals for Scientific Journals; Bibliometrics.

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Figure 1 – Number of original and review articles published and number of citations obtained by the same articles in the Web of Science database during the analyzed period.

Figure 2 – Percentage of original and review articles published by Brazilian authors and institutions, according to the Qualis-CAPES classification. ABC: Brazilian Archives of Cardiology.
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