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EDITORIAL

Selecting a Journal for Publication: Should Impact Factor be the Primary Criterion to Consider?

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"The virtues of science are skepticism and independence of thought."

Walter Gilbert

The first scientific journal published with peer review was the "Philosophical Transactions of the Royal Society of London," published by the Royal Society of London in 1665. The journal was founded by Henry Oldenburg, who was the first secretary of the Royal Society.[1] Peer review was a significant advancement in scientific method, as it involves the evaluation of articles by independent experts invited by the journal's editorial board, ensuring that they are reviewed before publication. The goal of peer review is to assess whether that the articles are of high quality and the presented information is accurate, easily interpretable, and reliable.[2]

Every scientist is confronted with the decision of choosing the most suitable venue to submit their findings for publication. For this purpose, authors tend to look for journals with greater visibility to ensure that their research will be widely recognized and will have a positive impact on their academic careers.[2] Among the various factors considered when deciding the best journal for publication, the Impact Factor (IF) is considered one of the most important. The IF was created by Eugene Garfield, the founder of the Institute for Scientific Information (ISI), in 1955.[3] The IF reflects the influence of a scientific journal by calculating the ratio of the number of citations received by a journal in a year to the number of articles published by the journal in the previous two years.[4] In general, the more frequently an article from a journal is cited by other scientists, the more important it is to the scientific community, and the more relevant the journal is.[2] Thus the IF helps scientists and other professionals dealing with scientific information to assess the importance of a scientific journal... A higher IF generally indicates that articles from a particular journal are cited more frequently, indicating its greater influence within the scientific community.[4]

The IF can positively or negatively impact the prestige of a journal. Also, the IF may be used by institutions and funding agencies to assess the quality of research produced by the authors ... However, it is pertinent to note that despite its wide dissemination and acceptance, the IF should not be evaluated alone as it may not fully reflect the quality of research.[5-8] In addition, the IF may privilege more popular areas of research, while ignoring innovative and emerging fields (Table 1).

The International Journal of Cardiovascular Science (IJCS) reached an important milestone in achieving its first IF. After being indexed in Scopus in 2022, the IJCS has received recognition from Scimago Journal Rank (SJR, 2022) with an IF of 0.131 (Q4).[9] The SJR is a measure developed by the Scimago Lab to evaluate the influence and impact of scientific journals.[9] The SJR calculates not only the number of citations received by each article, but also the importance of the journals that made these citations.[10] The IJCS achieved an index of 0.131 in SJR,[11] which demonstrates its growing influence in academia. SJR evaluates the importance of the sources that cite the journal, providing a more refined measure of the impact of the published research. Therefore, an SJR of 0.131 indicates that the journal has been cited by relevant sources, indicating its contribution to the advancement of knowledge in cardiology.

Keywords

Journal selection; Publication criteria; Impact factor; Scientific rigor; Scholarly publishing

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Table 1 – Positive and negative aspects of the IF

Positive aspects of the IF	Positive aspects of the IF
Is a simple and easy-to-understand measure	Is an index that may be manipulated
Allows comparison of scientific journals in the same field and in different areas of research	Does not take into account the quality of articles published individually
Can assess the influence of a scientific journal over time	Too simplistic assessment of the influence of a scientific journal
Helps with the visibility of a scientific article	Does not consider the social impact of an article
	Is not a measure of the quality of an article, but of the journal. A poor-quality article may be published in a journal with a high IF
	Is a limited measure for journals fields that are not very popular due to the smaller number of publications in the area

Source: Adapted from Nóbrega, 2013.[6]

Another important metric is the CiteScore. This score highlights the average number of citations per article over three years.[12] It is a metric that quantifies the impact of a journal based on the number of citations received, providing an objective view of the relevance and reach of published research.[12] For the IJCS in 2022, the CiteScore was based on the number of citations that the journal received from 2019 to 2022, considering five types of peer-reviewed documents (articles, reviews, conference papers, data articles, and book chapters).[11] The score was then divided by the number of peer-reviewed documents indexed in Scopus and published in the same four years.[12] The IJCS achieved a CiteScore score of 0.5 in 2021, which suggests that, on average, for every two articles published in the period, one article was cited, indicating how IJCS has been contributing to the dissemination of knowledge.

Editorial members of the IJCS will not diminish the importance of the IF and other metrics whereas we actively work to ensure that IJCS maintains high quality and increases the visibility of its. With the aim of increasing the influence and consequently its IF, we have taken the following measures:

1. Publish high-quality articles: The essence of scientific quality is a well-designed study, with standardized and reproducible methods, clear results, and consistent conclusions. We have encouraged researchers to publish original and innovative articles in various areas of cardiovascular sciences at IJCS and the results have been remarkable.

2. Attract high-level reviewers: Reviewers play an important role in ensuring the quality of the articles published in a journal. Through specific calls we were able to attract high-level reviewers from all over Latin America, specialists in different areas of cardiology and with a history of publishing articles in high-IF journals.

3. Promote and increase the visibility of the IJCS: Members of the ICJS editorial board have actively participated in conferences and scientific events, promoted the journal in social media and included the journal in many scientific journal databases. In addition to being indexed in SCOPUS, Lilacs, DOAJ, and BIREME, IJCS has been recently indexed in Redalyc, from the Autonomous University of Mexico State (UAEMEX). Redalyc promotes access to journals published in Latin American countries, the Caribbean, Spain, and Portugal, thereby contributing to the IJCS internationalization.

In conclusion, the IF is an important measure of the influence of a scientific journal, but it is not the only criterion to be considered when choosing the journal to submit an article or to evaluate the quality of an article. Other important factors include the importance of the journal to the research area, the social impact of the article and journal to the field, the quality of articles published in that journal, and the journal's reputation among the scientific community. The IJCS recognizes the importance of the IF, but will always seek to increase its visibility considering other factors involved in the quality and principles of scientific integrity.

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