

Letter to the Editor

Current views and implications of journal impact factor: A key note

DOI: 10.4103/2278-330X.195342

Dear Editor,

As and when we conduct any kind of biomedical research, every one of us wants it to be retrieved across the various corners of the globe by publishing it in the prestigious journal. Furthermore, regular increase in the number of publications is now being used for the evaluation of researcher's research quality and academic excellence. There are a number of journal ranking systems today, but the oldest and the most influential is the journal impact factor (JIF) used as an indicator of the importance of a journal to its field. It was first introduced by Eugene Garfield, the founder of the Institute for Scientific Information which is now owned by

Thomson Reuters (http://www.garfield.library.upenn.edu/papers/isichapter_15centuryofscipub149-160y2001.pdf).^[1]

Researchers, clinicians, librarians, scientists, editors, policy makers, and evaluators use JIF to track the number of citations of a particular article in other works. Although impact factor (IF) is widely used by institutions and clinicians, people have widespread misconception regarding the method for calculating the JIF, its significance and how it can be utilized. The IF of a journal is usually independent to the factors like peer review process and, however, it reflects the average number of citations to articles published in journals, books, thesis, project reports, newspapers, conference/seminar proceedings, documents published in the internet, notes, and any other approved documents (by government-based organization/agency).^[2-4] The rapid introduction of new journals has a major impact on the relocation of articles readership

among authors on a global basis. Most of the times, authors have been seen hunting for quick publication, whereas the publication process is time-consuming. This relative mismatch between the need of speedy publication and the long review time required for journals may often result in articles being redirected to journals having shorter processing time and no JIF; a practice frequently being practiced as an effort to increase in popularity of the newly introduced online journals.^[5] Journals advertise their JIF as a marketing tool to attract authors to submit manuscripts. Nevertheless, it should be used to assess the relative importance of a journal within its coverage and to measure the frequency with which the articles in a journal has been cited in a particular time period.

It is now more appreciable why journals publishing more review articles get the highest IFs. We usually consider that journals with higher IFs are more important than those with lower ones.^[3] According to Eugene Garfield, "Impact simply reflects the ability of the journals and editors to attract the best paper available."^[6-8] Journal, which publishes more review articles, will get maximum IFs. IFs are calculated for those journals that are indexed in the Journal Citation Reports (JCR) of Thomson Reuters (<http://www.thomsonreuters.com/journal-citation-reports/>). IFs can only be calculated after completing the minimum of 3 years of publication. This actually keeps new journals away from their hallmarking with JIF till 3 years. United States National Library of Medicine (PubMed/MEDLINE) also requires minimum 3 years of good

standing for a journal for its inclusion in its database (Indexing). The journal with the highest IF is the one that published the most commonly cited articles over a 2-year period. One straightforward way to increase JIF is by publishing more of review articles which are generally cited more than research reports. Editor may force an author to add spurious self-citations to an article before the journal will agree to publish it. In a given year, the IF of a journal is the average number of citations received per article published in that journal during the two preceding years. IFs are calculated each year by Thomson Scientific for those journals that it indexes, and are published in JCR (http://www.thomsonreuters.com/products_services/science/science_products/a-z/journal_citation_reports/). For example, if a journal has an IF of 3 in 2011, then its papers published in 2009 and 2010 received 3 citations each on average in 2011. The 2011 IFs are actually published in 2012; they cannot be calculated until all of the 2011 publications have been processed by the indexing agency (Thomson Reuters). The IF for the biomedical journals may range up to 20%.^[9]

The calculation of IF for the journal wherein a person has published articles is a contentious issue. JIF should be only one constituent (and not all) of a set of criteria for judging the merit of a published work. Therefore, while submitting a manuscript to a journal, the most important consideration should be the readership and not the IF of the journal.^[10-14]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Iram Zaidi, Shikha Singh, Anju Sinha¹, Ruby Dwivedi²

Department of Pediatric and Preventive Dentistry and ¹Oral Pathology and Microbiology, Shree Bankey Bihari Dental College and Research Centre,

Ghaziabad, Uttar Pradesh, India, ²Department of Oral Pathology and Microbiology, MGS Dental College, Sri Ganganagar, Rajasthan, India
Correspondence: Dr. Iram Zaidi,
 E-mail: dhirk160@gmail.com

References

1. Garfield E. The history and meaning of the journal impact factor. *JAMA* 2006;295:90-3.
2. Chattopadhyay A. How useful is journal impact factor? *Indian J Dent Res* 2009;20:246-8.
3. Mathur VP, Sharma A. Impact factor and other standardized measures of journal citation: A perspective. *Indian J Dent Res* 2009;20:81-5.
4. Garfield E. How can impact factors be improved? *BMJ* 1996;313:411-3.
5. Shanta A, Pradhan AS, Sharma SD. Impact factor of a scientific journal: Is it a measure of quality of research? *J Med Phys* 2013;38: 155-7.
6. Meo SA. Impact factor went on a ventilator: Neither died nor buried. *Saudi J Anaesth* 2013;7:363-4.
7. Jain AK. Impact factor: Measure of quality of research publication. *Indian J Orthop* 2011;45:289-90.
8. Smith R. Commentary: The power of the unrelenting impact factor – Is it a force for good or harm? *Int J Epidemiol* 2006;35:1129-30.
9. Shidham VB, Pitman MB, Demay RM. How to write an article: Preparing a publishable manuscript! *Cytojournal* 2012;9:1.
10. Singh S. Toward more meaningful evaluation of contributions and journals across different specialties: Introducing specialty impact factor. *Indian J Dermatol Venereol Leprol* 2013;79:737-8.
11. Esposito M. The impact factor: Its use, misuse, and significance. *Int J Prosthet Dent* 2011;24:85.
12. Rossner M, Van Epps H, Hill E. Show me the data. *J Cell Biol* 2007;179:1091-2.
13. Bornmann L, Marx W, Gasparyan AY, Kitas GD. Diversity, value and limitations of the journal impact factor and alternative metrics. *Rheumatology International* 2012;32:1861-7.
14. Gasparyan AY. Choosing the Target Journal: Do Authors Need a Comprehensive Approach? *J Korean Med Sci* 2013;28:1117-9.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

How to cite this article: Zaidi I, Singh S, Sinha A, Dwivedi R. Current views and implications of journal impact factor: A key note. *South Asian J Cancer* 2016;5:191.



The Molecular Oncology Society announces the 2nd MOSCON, the society's annual conference. It will be held from 20th to 22nd January 2017 at Ahmedabad. Program Director- Dr. Bhavesh Parekh. For further details please contact Dr. Bhavesh Parekh, Org Secretary (bhaveshdm1@hotmail.com) or Dr. Purvish Parikh (purvish1@gmail.com)