

A Perspective on Bibliometric Analysis Papers in the Field of Dentistry

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Dentistry journals has mushroomed tremendously over the past few years. Consequently, with a considerable number of articles that contain both low- and high-quality evidence, it is cumbersome for researchers, academicians, and students to narrow their search for a feasible number of high-grade articles. The number of citations received by an article may be used to assess the influence of a given research work in a specific field. Furthermore, the citation count affects several individual author and journal metrics. The examples encompass the *h* index, the journal impact factor (IF), the SJR, the source normalized impact per paper (SNIP), among others.

In 2001, Yang published the first bibliometric analysis in dentistry.¹ Since then, bibliometric methods have been used in various fields of dentistry. A comprehensive literature search with the strings "Bibliometric analysis" and "Dentistry" in Scopus database was performed, and 58 articles were retrieved on numerous topics allied to dentistry inclusive of forensic odontology, pediatric dentistry, implantology, and endodontics. The number of bibliometric analyses has reached its maximum in 2019 considering data since 2016. The most common analysis is of the journals. In the present search strategy we discerned such analysis on *Prosthodontic Journal*, *Iranian Journal of Dentistry*, *Armed Forces Medical College Journal*, *Journal of Clinical and Diagnostic Research* and the rest. This displays the journey of performance of a particular journal in terms of quality. Moreover, if done on distinct topics, it will provide an insight into the propensity of articles in that journal. Though this may not contribute substantially to the scientific value, it aids the journals or publishers to contrivance the credibility of the journal to that field.

The other often-observed analysis in the field of dentistry is of countries. To date, such analysis has involved developing countries like Cuba, Spain, Iran, Ireland, Saudi Arabia and others. There is still scope for other countries for such kind of analysis. This engenders cognizance of quality of research on a particular topic in that country. It not only accolades the authors who have been influential in the generation of knowledge in that country but also succors the government agencies to discern the current scenario on specific topics. It has been noted that majority of articles are focused on one country. However, readers would be more interested in knowing the country-wise comparative scenario on a particular topic. Comparative country-wise analysis should not be undertaken on a region-specific issue as this might lead to biased results. For example, oral submucous fibrosis and tuberculosis are prevalent in Asian countries, and thus bibliometrics in these countries are likely to exhibit increased publications.

The third common type, probably more relevant to researchers, is subject- and topic-wise analysis. Literature search revealed a handful of subject-wise bibliometric analyses, inclusive of oral submucous fibrosis,² cone beam computed tomography,³ ameloblastoma,⁴ oral cancer,⁵ traumatic dental injuries,⁶ and the like.

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Currently, in scientometry only Web of Science and Scopus databases have provision for extraction of citation-related matrix. Literature analyses have shown that they can either be used alone or together (for comparative analysis). Google Scholar does not have a standard and robust procedure for indexing journals yet. Also, the citation matrix is of substandard quality and might not represent the best scientific papers in the literature. Hence it cannot be used for such analysis. PubMed, an authentic database, also does not render the citation-related analysis of articles. We thus believe that Scopus and Web of Science are appurtenant for bibliometrics.

One of the potential limitations of bibliometric analysis is that the citation count is sensitive to time. Additionally, it is worth noting that, through the snowball effect, authors are inclined to cite a publication that is already abundantly cited rather than re-analyzing its content and quality.⁷ Bibliometrics not only provides a historical prospective on scientific evolution but also evinces trends of key topics and clinical practice for further research. We believe that there is a dire need for more bibliometric analysis in the literature and it can be considered as an authentic source of quality research publications. It would be intriguing to review whether open access publications vs publication in a subscription-only journal supplant the existing citation count.

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