

## Editorial

# Creating an Impact in the Global Research Surge

Dinesh Kadam<sup>1</sup>

<sup>1</sup>Department of Plastic and Reconstructive Surgery, A J Institute of Medical Sciences and A J Hospital and Research Centre, Mangalore, Karnataka, India

Indian J Plast Surg 2019;52:265–266

In the last decade, there has been a remarkable rise in the research across the world and middle and lower-income countries, accounting for the most substantial growth.<sup>1</sup> According to the National Science Foundation (NSF) of the United States, India stands among the top three in the world ranking in fields of Science & Engineering (S&E), contributing 5.31% of the total research output in 2018, along with China (20.67%) and the United States (16.54%).<sup>2</sup> With an impressive average annual growth of 10.73% between 2008 and 2018, India is among the “fast-growing” in terms of research output, marching ahead of China and the United States. Further, NSF 2018 data shows, between 2003 and 2014, a massive 304% increase in medical articles from India, which is again far ahead of the developed countries. However, the scientific world does not merely recognize the volume alone but by its impact on others by citations. The citation data provide indications of scientific impact or influence by counting how frequently other journal articles reference an article. The S&E publication output in the top 1% of the cited publications from 2006 to 2016 shows doubling India's performance (from 0.33 to 0.70), however, remains lesser to the United States (1.88), European Union (1.30), China (1.12), and Japan (0.88).<sup>3</sup> In this upward trend, there appears to be higher collaborative work with multiple authors and international coauthorship for the research.<sup>4</sup> Contrary to this trend, the research publications in India are still published mainly by domestic authors with less than 20% international collaboration.<sup>5</sup>

## How to Improve the Visibility and the Impact?

The objective of any publication is the dissemination of knowledge to reach the scientific community and make an impact. The impact is visible and measured with various metrics when the article receives citations. For this to

happen, the article's visibility and discoverability on a search engine are paramount.

### Selecting Keywords and Title

Quite often than not, we find keywords provided in the manuscript are of the author's subjective choice than appropriate words. So, what is appropriate and why is it important?

Keywords are phrases or words that are used for indexing an article. Appropriate title and right keywords will significantly impact the chances of getting picked up when searched. This improves not only readership but citation, particularly in systematic reviews that synthesize evidence on a subject.

Generally, journals ask for 6 to 10 keywords to represent the core research matter of an article. The selection of suitable keywords is frequently a neglected part of manuscript preparation and mostly arbitrary. There are some tools available to guide the authors to select the most frequent and appropriate words for the manuscript.

**Medical Subject Headlines (MeSH):** MeSH is a comprehensive controlled vocabulary for indexing journal articles in the life sciences and serves as a thesaurus that facilitates searching.<sup>6</sup> Created and updated by the United States National Library of Medicine (NLM), it is used by the MEDLINE/PubMed article database, the NLM's catalog, and other NLM database.<sup>7</sup> The MeSH vocabulary is regularly updated by subject specialists in various areas. Each year hundreds of new concepts are added, and thousands of modifications are made.

The NLM provides service for MeSH terms for an article by “MeSH on Demand” available through their website free of cost.<sup>8</sup> It identifies and highlights words corresponding to MeSH vocabulary in the submitted text of the manuscript or an abstract. Multiple searches may be required as each upload is limited to 10,000 characters. This also lists similar articles from PubMed relevant to the submitted text. It

### Address for correspondence

Dinesh Kadam, MS, DNB, MCh,  
Department of Plastic and  
Reconstructive Surgery, A J Institute  
of Medical Sciences and A J Hospital  
and Research Centre, Mangalore,  
Karnataka 575004, India  
(e-mail: drkadam@yahoo.co.in).

DOI <https://doi.org/10.1055/s-0039-1701061>  
ISSN 0970-0358.

©2019 Association of Plastic  
Surgeons of India

### License terms



