

The Revised Guidelines of the Medical Council of India for Academic Promotions: Need for a Rethink

Rakesh Aggarwal¹, Nithya Gogtay², Rajeev Kumar³, Peush Sahni⁴

Measuring academic achievements is never an easy task. This is particularly so when individuals are assessed for promotions in several fields with differing job descriptions. Assessment by peers is time-consuming and may be prone to bias; thus, objective criteria are required to minimize these concerns.

The Medical Council of India (MCI) has laid down guidelines for appointments and promotions of teachers in medical institutions in India. Among the criteria used for promotions, publication of research is an essential requirement. Though the need for this requirement has been debated, it is believed that the quality of teaching improves when medical teachers are involved in research. Many countries have made it mandatory for their medical faculty to do research; some other countries incentivize the conduct and publication of research. Reports have also lamented that the physician-scientist might become an endangered species.^[1,2] Thus, linking publications with promotions might benefit both the individual and society. The flip side is that the time spent on research might take teachers away from teaching or clinical duties, particularly in under-staffed specialty departments. Further, the quality of research is likely to be poor when the resources and training in research are lacking.^[3] Poor quality may even discredit research as a professional activity. Insistence on a certain amount of published research to maintain teaching credentials may lead to the phenomenon of 'publish or perish'.^[4] Finally, it is important to consider that biomedical research may, at times, be relevant to nonbiomedical journals and criteria for awarding credit to such publications should also be devised.

The MCI requires that the medical faculty engages in research. One measure to achieve this goal is the mandatory 'thesis' for postgraduate (Masters; MD/MS/DNB) and postdoctoral (DM/MCh/DNB) courses. Each student, regardless of specialty, is required to undertake a research study with a faculty member as the guide and often one-to-a-few faculty members from the same or related subjects as co-guides. Apart from providing training in doing research, the thesis is expected to inculcate an appreciation for research methodology and critical analysis. This experience is relevant to students who will become full-time researchers, and is also beneficial to medical practitioners who may never conduct further research but should be able to discern the merits of newer management options for their patients.

The MCI's initial guidelines for promotion to the position of Associate Professor and Professor required publication of at least two research papers by the candidates.^[5] In September 2015, the MCI issued a 'clarification' on what constitutes 'research publications' for promotion of teaching faculty of medical colleges/institutions in India (Box 1).^[6] This 'clarification' raises the following issues.

E-JOURNALS

The new guidelines stipulate that publications in e-journals will not be considered for promotion. This guideline is probably in response to the proliferation of predatory journals, almost exclusively among e-journals, over the past five years. It is worrying that the largest number of authors and publishers seem to be from India.^[7] Predatory publishing is perhaps a manifestation of the 'publish or perish' phenomenon with authors willing to pay for a publication.^[7]

Box 1: Guidelines for counting research publications for promotion of teaching faculty of medical colleges/institutions in India as laid down in an order by Medical Council of India in September 2015

- a. **Index agencies:** Scopus, PubMed, Medline, Embase/Excerpta Medica, Index Medicus and Index Copernicus.
- b. **Types of articles to be considered:** Original research articles and original research papers.
- c. **Criteria for National/International journal:** Published by a National/ International – specialty journal/journal of a national/international society provided it is included in one of the indexes mentioned above.
- d. **Authorship:** First author, second author.
- e. **E-journals:** E-journals not included

The above would also be applicable for 'accepted for publication' papers/articles.

While the MCI's corrective measure is laudable, the definition of 'e-journals' is variable.^[8] We assume that the MCI implies e-journals are those that do not have a print

version. This guideline would exclude many high-quality journals that are published only in the electronic format, e.g. the PLoS group of journals, the Biomed Central (BMC) journals, British Journal of Clinical Pharmacology, and New Zealand Medical Journal. It might also exclude journals that publish papers in a longer e-version and a shorter print version (BMJ). Many believe that 'paper journals' of niche specialties (with limited circulation) may soon cease to appear. Publishing is rapidly shifting to the electronic format and an explosive growth in e-journals is envisaged. Thus, the embargo on all e-journals seems unfair. The main objective of this guideline appears to be to limit predatory publishing and to ensure quality. This can be achieved by insisting on other criteria such as indexing, because reputed indexes are unlikely to include predatory journals.

Indexing

Indexation or inclusion in select databases is an imperfect surrogate for quality. A more direct measure would probably be an assessment of each individual journal by peers. Till such an evaluation is available, we agree with the MCI's requirement that the journal of publication be listed in a recognized database. However, we suggest that the list of databases provided in the MCI's order needs a re-look. For example, Index Copernicus was last updated in 2014.^[9] Some journals listed on this index, and their publishers appear on Beall's list of potentially predatory journals.^[10] In fact, Beall's blog says 'Index Copernicus has no value'.^[11] Although the MCI's order lists Medline and Index Medicus separately, these are actually one database. Similarly, PubMed is not a database but a search engine that searches various databases including Medline and PubMed Central. More important is the omission of Science Citation Index, an important database currently published by Thomson Reuters and of IndMed, a database of Indian medical journals, curated by the Indian Council of Medical Research. We suggest the following list of acceptable databases: Medline, PubMed Central, Science Citation Index, Embase/Excerpta Medica, Scopus and IndMed.

Article types

The MCI guideline states that only 'Original research articles' and 'Original research papers' will be eligible for consideration. The objective here appears to be to include papers with original data and to exclude case-reports and reviews or opinions. However, this guideline is not precise because different journals classify original research variously under these two and some other sections, such as brief communications, short reports, etc. Further, this clause discredits meta-analyses and systematic reviews that involve scientific interpretation of original data. Instead of prescribing specific article-type

labels, the MCI could suggest that the paper should report 'original research data or its interpretation in a meta-analysis or systematic review'.^[12] The guidelines' implication that case reports, reviews and opinion pieces should not carry any value remains debatable since these are an important part of scientific dialogue.

National versus International Journals

The distinction between 'national' and 'international' journals is unclear. The inclusion of words such as 'India' or 'Indian' in the title does not necessarily make a journal of lesser quality. Similarly, the presence of words such as 'international', 'global' or 'world' in a journal's name does not confer it with a higher quality. National journals are in fact more likely to publish research that is relevant to the local population. Again, this discrimination by the MCI appears to be a surrogate marker for quality. Since indexing has already been included as a criterion, the terms 'national' and 'international' have little value. We also suggest that the criterion of society journals be removed as indexation covers the quality requirements. The quality of a number of non-society journals (for example The Lancet) is widely recognized.

Place in Authorship Sequence

Finally, the MCI guideline of limiting credit to only the first two authors of a paper is too restrictive. This guideline seems to be an attempt to weed out the malpractice of gift authorship. Again, the MCI's aim is laudable but the implementation can result in greater harm. The first name in a paper is generally associated with the person who did the maximum work and the last name being that of the supervising senior.^[13] The MCI guideline suggests that other names except the first two on the byline are those of 'guests'.

The research scenario has moved towards collaborative and multidisciplinary projects conducted by large teams. To publish a paper in a high-quality journal, a researcher needs to look at a research problem from diverse aspects (e.g. clinical, laboratory, genetics, and immunology). Hence, good papers often have multiple authors with equal contribution, and all of them deserve equal credit.

The MCI guideline may not only deny credit to all those who have contributed, it may even encourage the practice of denying first authorship, and credit, to junior researchers whose contribution is often the maximum. Experience of many medical editors shows that it is not uncommon to find the senior most author as the first author (even in case reports) due to the premium placed on this position.^[14] Therefore, we suggest that this guideline should be removed, and all the authors of a paper should receive credit for it.

Box 2: Our suggestions

a. Acceptable databases:

Medline, PubMed Central, Science Citation Index, Embase/Excerpta Medica, Scopus and IndMed

b. Types of articles to be considered:

Articles reporting original research data or their interpretation in a meta-analysis or systematic review

c. Authorship:

All authors

We appreciate the MCI's intention to give research its due recognition in academic institutions as well as for streamlining the process of promotion of teachers. Our suggestions to amend the existing guidelines, summarized in Box 2, can help remove ambiguities in the new MCI guidelines. These could also serve as the starting point of a wider consultation on the evaluation of research performance of medical teachers in India.

REFERENCES

1. Rosenberg LE. Physician-scientists - endangered and essential. *Science*. 1999; 283:331-2.
2. Wyngaarden JB. The clinical investigator as an endangered species. *N Engl J Med*. 1979; 301:1254-9.
3. Gitanjali B. Identifying a research topic: The problem is the problem. *Indian J Pharmacol*. 2005; 37:67-8.
4. Colpaert J. The 'publish and perish' syndrome. *Comput Assist Lang Learn*. 2012; 25:383-91.
5. Medical Council of India. Minimum qualifications for teachers in medical institutions regulations, 1998 (Amended up to May 2015) Available at www.mciindia.org/Rules-and-Regulation/TEQ-REGULATIONS-16.05.15.pdf (accessed on 21 Dec 2015).
6. Medical Council of India. Clarification with regard to research publications in the matter of promotion for teaching faculty in a medical college/institution. Available at www.mciindia.org/circulars/Circular-03.09.2015-TEQ-PromotionPublication.pdf (accessed on 8 Dec 2015).
7. Shen C, Bjork BC. 'Predatory' open access: A longitudinal study of article volumes and market characteristics. *BMC Med*. 2015; 13:230.
8. Llewellyn RD, Pellack LJ, Shonrock DD. The use of electronic-only journals in scientific research. *Issues Sci Technol Librariansh*. 2002; 32. doi: 10.5062/F41V5BZM.
9. Index Copernicus International. Available at <http://en.indexcopernicus.com/> (accessed on 1 Dec 2015).
10. Beall's list: Potential, possible, or probable predatory scholarly open-access publishers. Available at <http://scholarlyoa.com/publishers/> (accessed on 20 Dec 2015).
11. Index Copernicus has no value. Available at <http://scholarlyoa.com/2013/11/21/index-copernicus-has-no-value> (accessed on 20 Dec 2015).
12. Bandewar SVS, Pai SA. Regressive trend: MCI's approach to assessment of medical teachers' performance. *Indian J Med Ethics*. 2015; 12:192-5.
13. Zbar A, Frank E. Significance of authorship position: An open-ended international assessment. *Am J Med Sci*. 2011; 341:106-9.
14. Goel A, Kumar S, Mandhani A, Panda A, Kumar R. Authorship

misconduct in a small specialty journal: A retrospective review. Poster presentation at the First WAME International Conference for Medical Journal Editors, 2-4 Oct 2015, New Delhi, India.

¹ Former Editor
Indian Journal of Gastroenterology
² Editor
Journal of Postgraduate Medicine
³ Editor, Indian Journal of Urology
⁴ Editor, The National Medical
Journal of India for the Indian
Association of Medical Journal Editors

CORRESPONDENCE :

¹Peush Sahni,
President, Indian Association of
Medical Journal Editors,
The National Medical
Journal of India,
All India Institute of
Medical Sciences,
New Delhi - 110029, India.
E-mail: india.editors@gmail.com

* The following members of the Indian Association of Medical Journal Editors (IAMJE) endorse this editorial:

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