



Editorial

The revised guidelines of the Medical Council of India for academic promotions: Need for a rethink[☆]



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 flipside 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 non-biomedical 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 post-doctoral (DM/M Ch/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.

1. 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

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/ExcerptaMedica, 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 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.

[☆] Note: This editorial is being published simultaneously in the *Indian Heart Journal*, *Indian Journal of Anaesthesia*, *Indian Journal of Gastroenterology*, *Indian Journal of Medical Ethics*, *Indian Journal of Medical Microbiology*, *Indian Journal of Occupational and Environmental Medicine*, *Indian Journal of Pathology and Microbiology*, *Indian Journal of Pharmacology*, *Indian Journal of Physiology and Pharmacology*, *Indian Journal of Urology*, *Indian Pediatrics*, *International Journal of Health Research & Medicolegal Practice*, *Journal of Anaesthesiology Clinical Pharmacology*, *Journal of Ayurveda and Integrative Medicine*, *Journal of Clinical and Scientific Research*, *Journal of Conservative Dentistry*, *Journal of Family Medicine and Primary Care*, *Journal of Indian Academy of Forensic Medicine*, *Journal of Mahatma Gandhi Institute of Medical Sciences*, *Journal of Postgraduate Medicine*, *National Journal of Integrated Research in Medicine*, and *The National Medical Journal of India*. It may also be published in forthcoming issues of other journals.

of the 'publish or perish' phenomenon with authors willing to pay for a publication.⁷

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.

2. 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/ExcerptaMedica, Scopus and IndMed.

3. 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.

4. 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

Box 2. Our suggestions

- a. **Acceptable databases:** Medline, PubMed Central, Science Citation Index, Embase/ExcerptaMedica, 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

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.

5. 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.

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.

Appendix

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 Philip Abraham, Former Editor-in-Chief, *Indian Journal of Gastroenterology*
 Amita Aggarwal, Editor, *Indian Journal of Rheumatology*
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 Soumyadeep Bhaumik, Executive Editor, *Journal of Family Medicine and Primary Care*

K.K. Deepak, Executive Editor, *Indian Journal of Physiology and Pharmacology*
 Chetna Desai, Chief Editor, *Indian Journal of Pharmacology*
 Madhu C. Divakar, Editor-in-Chief, *Hygeia: Journal for Drugs and Medicines*
 Apul Goel, Associate Editor, *Indian Journal of Urology*
 V. Gopi Krishna, Editor-in-Chief, *Journal of Conservative Dentistry*
 Anju Grewal, Chief Editor, *Journal of Anaesthesiology Clinical Pharmacology*
 O.P. Gupta, Editor-in-Chief, *Journal of Mahatma Gandhi Institute of Medical Sciences*
 Praveen Iyer, Assistant Editor, *Journal of Postgraduate Medicine*
 Vishakha Jain, Assistant Editor, *Journal of Mahatma Gandhi Institute of Medical Sciences*
 Amar Jesani, Editor, *Indian Journal of Medical Ethics*
 S.M. Kadri, Editor-in-Chief, *Global Journal of Medicine and Public Health*
 Arti Kapil, Editor, *Indian Journal of Medical Microbiology*
 Vishwa Mohan Katoch, Editor, *Indian Journal of Leprosy*
 G.K. Kulkarni, Editor, *Indian Journal of Occupational and Environmental Medicine*
 Adarsh Kumar, Web Editor, *International Journal of Health Research & Medicolegal Practice*
 Santosh Kumar, Associate Editor, *Indian Journal of Urology*
 G.M. Malik, Chief Editor, *JK Practitioner*
 Mohandas K. Mallath, Member, Editorial Board, *ecancermedicalseience*
 Vijay P. Mathur, Former Member, Editorial Board, *Journal of Indian Society of Pedodontics and Preventive Dentistry*
 Sundeep Mishra, Honorary Editor, *Indian Heart Journal*
 Vatsala Misra, Editor-in-Chief, *Indian Journal of Pathology and Microbiology*
 Alladi Mohan, Editor, *Journal of Clinical and Scientific Research*
 Samiran Nundy, Editor, *Current Medicine Research and Practice*
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 Bhushan Patwardhan, Editor-in-Chief, *Journal of Ayurveda and Integrative Medicine*
 Amitabh Prakash, Editor-in-Chief, *Clinical Pharmacokinetics*
 B.S. Ramakrishna, Editor-in-Chief, *Indian Journal of Gastroenterology*
 V. Raveenthiran, Editor, *Journal of Neonatal Surgery*
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^aThe members of the Indian Association of Medical Journal Editors (IAMJE) also endorse this editorial are listed in [Appendix](#).