Perception Of Indian Medical Teachers Towards Publication Related Criteria For Academic Promotion In India

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Abstract: Background: This survey study assessed the perception of Indian medical teachers towards publication related academic promotion criteria prescribed by Medical Council of India (MCI). It focused on perception of teachers for indexing agencies/database, articles types, journal types, authorship numbers, drawbacks and suggestions to improve existing criteria. Material and Methods: The survey was conducted from February 2018 to April 2018. A total of 25 item semi-structured pre-validated survey questionnaire was disseminated among faculties as a Google form. Collected responses were analyzed using descriptive statistics. Result: Total 444 medical faculties' responses were evaluated. Majority viewed that current criteria hinders the multidisciplinary research (74.2%), have increased predatory journals (91.0%) and lack the clarity on categorization of international journal (65.8%). Majority viewed to credit 'all authors' than 'first and corresponding authors' (40.5% vs. 5.9%). The faculties perceived PubMed/Medline, PubMed Central and Scopus have higher quality among indexing agencies/databases. Almost half of faculties advocated keeping all major Indexing agencies. Most participants opined to consider original research (98.4%) and meta-analysis (73.9%). The faculties rated equal quality for print and E-journal. The faculties suggested to devise weightage/score based promotion criteria. Conclusion: MCI needs to redefine the academic publication criteria. [Barvalia M Natl J Integr Res Med, 2019; 10(6):77-86]

Key Words: Academic promotion; Authorship; Medical faculty; Academic Medical Centres; Publications; Biomedical research standard

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Introduction: Publication has been considered as an essential requirement for new appointment and promotion of faculties in medical colleges now a day. It was started in July 2009 by Medical Council of India (MCI) with defining of minimum number of publications in indexed/national journal along with teaching experience[1]. Subsequently, MCI defined the publication requirement in December 2009 and November 2010 in regards to authors to be considered and journal of national/representative association[2,3]. In September 2015, more clarification on publication criteria for promotion of teaching faculty of medical colleges in India was issued by MCI[4].

According to this clarification, a scientific manuscript meeting following criteria of indexing agencies (Scopus, PubMed, Medline, Embase/Excerpta Medica, Index Medicus and Index Copernicus), types of articles (Original research articles), published by National/International journal society or subject association, authorship (First and Second author; then, updated as First and Corresponding author) and no E-journals (only print journals) should be considered into the account for promotion of a medical teacher. After this clarification, medical colleges of India started following it while giving new appointment or promotion. MCI must have decided considering publication to promote the research activities and provided the criteria to improve upon quality of research in medical colleges. Mandatory publication for promotion has led to scientific misconduct. The provided criteria have increased the number of publications. However, several issues have been highlighted by many critics. It has raised issues of predatory journals, confrontation between authors, discouragement of multidisciplinary research work, not considering reputed E-journals, no clear cut demarcation between National and International journal, and questionable comparison between two research papers[5-9].

To get idea of what is in the mind of teachers and where the confusion lies, we decided to conduct online survey to evaluate perception of medical teachers of India towards publication related criteria for promotion specifically in context of guideline provided by MCI.

Methods: The present cross-sectional Google form based survey study was conducted after the approval from Institutional Review Board, Government Medical College, Bhavnagar. Electronic consent was obtained from the participating faculty of this survey. The study

protocol was registered in Clinical Trial Registry of India [CTRI/2017/09/009811].

Assessment instrument: A total of 25item semi-structured questionnaire was administered. The survey questionnaire was pre-validated by pilot study using small number of participants. The questionnaire form focused on consent (item 1), academic information (items 2 to 10); attitude of teachers towards academic promotion criteria related to publication (items 11 to 21, 24) and statements related to citation indices (items 22, 23). The suggestions were asked to improve existing promotion criteria through an open ended question (item 25).

Academic information: In academic information, we collected information about demography, qualification, specialty, academic position, teaching experience, number of publication, name of medical college faculty working and whether it is affiliated to Government, private or trust.

Attitude of teachers towards academic promotion criteria: Attitude of teachers for publication as an essential requirement, its impact on quality of teaching, benefit to individual faculty, clinical duties, gift authorship and multidisciplinary work were collected through 5-point Likert agreement scale (strongly disagree, disagree, can't say, agree, strongly agree).

The attitude for the quality of indexing agencies/database of publication (Scopus, PubMed Central, PubMed/Medline, Index Copernicus, Embase/Excerpta Medica, Science citation index, IndMed, Google/Google scholar), types of articles of publication (Meta-analysis/ systematic review, Original research, Review, Short communication, Case report, Editorial, Educational forum, Letter to editor) and types of journals (Print journal, E-journal, National, International, Specialty journal, Journal of a national society, Journal of an international society) were collected through 5 point likert scale (1 for the lowest quality and 5 for highest quality). We collected their opinion about which types of indexing agencies/database of publication, types of articles, types of journals and authorship criteria (number of authorship in article) should be considered in academic promotion criteria. We explored problems medical teachers facing in academic promotion due to present criteria. We also explored drawbacks of the present criteria for considering publication for promotion and which promotion criteria predatory journals are misusing to proliferate.

Citation indices: We collected information about awareness and attitudes towards citation indices in measuring quantity and qualitative impact of publication, and its utility to compare two academicians.

Social media based data collection: The survey was conducted from February2018 to April2018. The survey form was disseminated anonymously among Indian medial teachers through various academic email groups, WhatsApp groups and Facebook. The faculties working in any one of the teaching post (tutor, assistant professor, associate professor, professor, medical superintendent, dean) in medical colleges of India were considered as Indian medical teachers. Their responses were recorded through online Google drive system.

Data analysis: Individual responses of participants were expressed using descriptive statistics. Demographic details, academic information, opinion for about database, article types, journal types and authorship criteria, citation indices and drawbacks were expressed in proportion. 'Strongly disagree and 'disagree' responses were merged as one category and presented. Same was done for 'agree' and 'strongly agree' responses to attitude statements. The Likert scale ratings (1-5) of publication criteria were expressed as median score (interquartile range). Responses to open ended question were analyzed theme wise and they were presented as statements under theme headings. All the statistical analysis was done using Microsoft excel.

Results: Survey questionnaire was sent to approximately 650 medical teachers and 455 teachers responded to survey (Response rate 70%). Out of 455 responses, 11 responses were excluded from analysis as 04 did not give consent, 01 response was from resident doctor, 03 responses were not from India, and 03 responses were from other than medical discipline.

Demographic and academic information of study participants: The maximum respondents

belonged to age group 36-45 years (45.2%), male (58.3%), Western India (51.6%), Government sector (56.3%) and had teaching experience of more 12 years (42.6%). The respondents were uniformly distributed for designation, specialty and number of publications (Table 1).

Table 1: Demographic and general academic information of study participants

Sr. No	Variable	Number (%)
1	**Age group (years)**	
	24-27	01 (0.2)
	28-31	29 (6.5)
	32-35	74 (16.7)
	36-45	201 (45.2)
	46-62	118 (26.6)
	>62	21 (4.7)
2	**Gender**	
	Male	259 (58.3)
	Female	185 (41.7)
3	**Region**	
	West India	229 (51.6)
	South India	105 (23.7)
	North India	50 (11.3)
	Central India	30 (6.8)
	North East India	28 (6.3)
	Not mentioned	02 (0.5)
4	**Sector**	
	Government	250 (56.3)
	Private	127 (28.6)
	Trust	067 (15.1)
5	**Designation**	
	Assistant Professor	128 (28.8)
	Associate Professor	148 (33.3)
	Professor	134 (30.2)
	Dean/MS	008 (1.8)
	Others	026 (5.9)
6	**Specialty**	
	Pre-clinical	144 (32.4)
	Para-clinical	135 (30.4)
	Clinical	165 (37.2)
7	**Experience (years)**	
	<1	003 (0.7)
	1-4	041(9.2)
	5-8	103 (23.2)
	9-12	108 (24.3)
	>12	189 (42.6)
8	**Number of publications**	
	0	011 (2.5)
	1-5	101 (22.8)
	6-10	105 (23.7)
	11-20	113 (25.5)
	>20	114 (25.7)

Agreement of faculties for various statements: Perception of medical teachers towards statements related to publication is shown in table 2. A total of 60.8% faculties agreed that publication should be one of the essential requirements for academic promotion in medical education. More than one-fourth faculties opined that qualitative impact of publications should be considered in promotion. Majority opined (74.2%) that present criteria hinders multidisciplinary work. We observed diverse opinion for time spent on research takes faculties away from teaching or clinical duties.

For perceived quality of publication related factors, PubMed/Medline, PubMed central and Scopus were rated higher than the other indexing agencies. The high ratings were given to meta-analysis/ systematic review, original research and review article in types of publication. The international journal was perceived to have a higher quality than other types of journal. There was no difference in quality perception among print, E-journal, specialty journal, journal of a national Society and journal of an International society. In case of overall factors for publication, indexing agencies/database, types of article, national/International journal and citation indices were rated higher than journal publishing as an E-Journal or print journal and authorship number (Table 3).

Views of faculties' for considering criteria for publication: Views of faculties on what to consider in publication criteria are shown in table 4. The majority faculties opined that PubMed/Medline (87.6%) and PubMed Central (77.5%) should be considered among indexing agencies/databases. Almost half of faculties viewed to consider all major Indexing agencies/databases. Among article types, majority favoured original research (98.4%) and meta-analysis/ systematic review (73.9%). The diverse views were observed for journal types with highest preference of print journal (62.8%) to lowest preference for journal of an International society (48%). Among the authorship criteria, majority opined all authors (40%) should be considered. The less than 10% participants preferred 'first and second authors only' and 'first and corresponding authors' as authorship criteria. Majority opined that there is no clear cut demarcation between National and International Journal. Majority did not suffer in interview (69.4%) because of publication criteria.

Almost 20% faculties faced problem in interview due to publication in a non-subject association journal or multidisciplinary work published in other subject journal. The most participants (91%) felt that present criteria have increased predatory journals. Majority felt that predatory journals have misused the indexing agencies/database and types of journal promotion criteria to proliferate.

Table 2: Agreement of faculties for various statements

Statements	Disagree	Can't say	Agree
The publication of research should be one of the essential requirements for academic promotion in medical education	143 (32.2)	31 (7)	270 (60.8)
The quality of teaching improves when medical teachers are involved in research	142 (32)	50 (11.3)	252 (56.7)
The linking of publications with promotions benefits the individual faculty	145 (32.6)	60 (13.5)	239 (53.9)
The time spent on research takes teachers away from teaching or clinical duties	204 (46)	64 (14.4)	176 (39.6)
Instead of only quantity of publication, its qualitative impact should also be considered.	28 (6.3)	24 (5.4)	392 (88.3)
The current MCI guideline to provide weightage to first and corresponding author prevents gift authorship	145 (32.6)	70 (15.8)	229 (51.6)
The criteria of giving weightage to first and corresponding author hinders the multidisciplinary research work	72 (16.3)	42 (9.5)	330 (74.2)
The citation indices measure the both quantity (number of publication) and quality of research (Impact of research)	76 (17.1)	116 (26.1)	252 (56.8)
Citation indices should be used to measure research impact	62 (14)	93 (21)	289 (65)
The Citation indices provide the equal and transparent comparison between two academicians.	97 (21.9)	138 (31.1)	209 (47)

Values in () are in percentage.

Table 3 Rating given by faculties to various publication factors considered in MCI guidelines

Indexing agencies	
Scopus	4 (1)
PubMed/Medline	5 (1)
PubMed Central	5 (1)
Index Copernicus	3 (2)
Embase/ ExcerptaMedica	3 (1)
Science Citation Index	3 (2)
IndMed	3 (2)
Google/Google scholar	3 (2)
Types of articles	
Meta-analysis/ systematic review	5 (2)
Original Research	5 (1)
Review article	4 (1)
Short communication	3 (1)
Case report	3 (2)
Editorial	3 (2)
Letter to the editor	2 (1)
Educational Forum	3 (2)
Types of Journals	
Print Journal	4 (2)
E-Journal	4 (2)
National Journal	4 (1.25)
International Journal	5 (1)
Specialty Journal	4 (1)
Journal of a National Society	4 (2)
Journal of an International Society	4 (1)
Overall factors considered for publication	
Indexing agencies/database	4 (2)
Types of article	4 (2)
National/International journal	4 (1)
E-Journal/Print Journal	3 (2)
Authorship number	3 (2)
Citation indices	4 (2)

Values are expressed as Median (IQR); 5 is highest & 1 is lowest rating

Table 4 Views of faculties' for considering criteria for publication

S. No.	Criteria	N (%)
1	**Indexing agency to be considered**	
	Scopus	285 (64.2)
	PubMed/Medline	389 (87.6)
	PubMed Central	344 (77.5)
	Index Copernicus	285 (64.2)
	Embase/ ExcerptaMedica	216 (48.6)
	Science Citation Index	199 (44.8)
	IndMed	224 (50.5)
	Google/Google scholar	220 (49.5)
2	**Type of article to be considered**	
	Meta-analysis/ systematic review	328 (73.9)
	Original Research	437 (98.4)
	Review article	276 (62.2)
	Short communication	173 (39)
	Case report	247 (55.6)
	Editorial	127 (28.6)
	Letter to the editor	93 (20.9)
	Educational Forum	141 (31.8)
3	**Type of journal to be considered**	
	Print Journal	279 (62.8)
	E-Journal	212 (47.7)
	National Journal	271 (61)
	International Journal	262 (59)
	Specialty Journal	249 (56.1)
	Journal of a National Society	226 (50.9)
	Journal of an International Society	213 (48)
4	**Authorship criteria to be considered**	
	First author only	19 (4.3)
	First and second authors only	43 (9.7)
	First, second and third authors	41 (9.2)
	First, second and corresponding authors	135 (30.4)
	First and corresponding authors	26 (5.9)
	All authors	180 (40.5)
5	**Demarcation between National and International Journal**	
	The word international in the journal title	37 (8.3)
	Claim of international journal in home page of the journal	56 (12.6)
	Affiliation of the Editor-in-Chief of the journal	73 (16.4)
	Affiliation of the majority of the Editorial Board Members	170 (38.3)
	Country of the print publication of a journal	69 (15.5)
	No clear cut demarcation	216 (48.6)
6	**Suffering in Interview due to**	
	Not having required number of publications	33 (7.4)
	Not fulfilling the authorship criteria	37 (8.3)
	Journal not indexed in recommended indexing agencies/database of publication	47 (10.6)
	Types of articles of publication (e.g, case reports, review article)	46 (10.4)
	Publication was in an online journal	50 (11.3)
	Publication was in a non-subject association journal	57 (12.8)
	Multidisciplinary work was published in some other subject journal	45 (10.1)
	Not having international publication	16 (3.6)
	I did not suffer in interview	308 (69.4)
7	**Drawbacks of present MCI criteria**	
	Considering medical research belong to one particular discipline only	272 (61.3)

	No clarity on publications based on multidisciplinary work	326 (73.4)
	No clarity on categorization of national or international journal	292 (65.8)
	Confrontations between researchers for authorship number	249 (56.1)
	No difference in giving credit to the researcher having publication in high and low impact factor journals	276 (62.2)
	Ignoring citation analysis/indices for comparing two researchers	221(49.8)
8	**Present criteria have increased predatory journals**	
	Yes	404 (91)
	No	040 (9)
9	**Criteria misused by predatory journals to proliferate**	
	Types of journal (International versus national journal)	254 (57.2)
	Types of journal (Print versus electronic)	235 (52.9)
	Indexing agencies/database of publication	293 (66)
	Authorship criteria	175 (39.4)
	Types of article	146 (32.9)

Values in () are in percentage.

Analysis of free comments: Analysis of free comments is presented in table 5. It shows various perceived drawbacks and negative impact of present criteria of promotions. We frequently noticed the view of present criteria do not consider quality of publication, discourages publications (meta-analysis, review articles, case reports) other than original research article, enhances unethical behaviour for publications and hinders multidisciplinary research. Many participants expressed their views to modify the present criteria and suggested alternative weightage/scoring based publication criteria, which includes all indexing agencies, articles types and journals.

Discussion: The present study evaluated the perception of medical teachers towards publication related criteria set by MCI. Our findings suggest that the criterion of research publication for promotion is perceived positively among faculties. However, it requires modification to fulfil the objective of promoting quality research.

Acceptance of publication for promotion: In this study, a majority of medical faculties agreed that the research should be one of the essential requirements for promotion. Apart of from additional time spent for research, majority faculties opined that it improves quality of teaching and benefits individual faculty.

Authorship number: The present authorship criteria of considering first and corresponding authors do not recognize all those who have contributed in research. The multidisciplinary and inter-institutional and intra-institutional collaborative research work seems greatest sufferer of this criterion. The collaborative work highlights the academic productivity of the researcher[10]. In multi-institutional research, contributions from middle number authors are almost similar as author from each institution contributes significantly[11]. Medical research does not belong to a particular discipline most of the time and giving weight age to two researchers for publication affects the team work, as most science is now done as a team. Though the present authorship criterion is perceived to exclude gift authorship, giving weight age to few authors can lead to salami publications in different journals with different first and corresponding authors[12].

As per data from Thomson Reuters, contributions from middle authors are on rise [11]. So, the criterion of giving weight age to first and corresponding author needs a revision. It should be redefined for multi-disciplinary / multi-centric work. The scoring system, which can incorporate all authors, could be an important solution (Table 5).

Indexing: Indexing of the journal is an important from the point of view of its accessibility to a wider audience. The present criteria consider publications in a journal having any one of the indexing agencies: Scopus, PubMed, Medline, Embase/Excerpta Medica, Index Medicus and Index Copernicus. There is need to remove Index Medicus, a print version bibliographic database of biomedical science, from the list as it ceases to

exist from 2004 [13]. Medline is the National Library of Medicine (NLM) journal citation database which provides Medical Subject Headings (MeSH) to articles. PubMed provides MeSH indexed articles, in process articles for MeSH terms, ahead of print articles and National Institutes of Health funded author manuscripts[14]. Both can be considered as one abstracting and indexing agencies. The preferred term should be Medline. The PubMed central, science citation index and IndMed should be added to the list[5]. The prestige of any journal is based on its bibliographic listings (covering of abstracting and indexing services)[15]. The multiple indexation of journals helps to achieve wider audience to the research, improves its citations and overcome the inherent limitations of each one[16,17]. This also reflects in our survey. Though participating faculties rated higher quality for PubMed/Medline and PubMed Central (median score 5), almost half of the faculties were in opinion of keeping all abstracting/indexing agencies. MCI should consider journal indexed with multiple abstracting and indexing services rather than any one, which could address the concern of the Indian Association of Medical Journal Editors over the quality of Index Copernicus [5].

Table 5 Qualitative analysis of free comments

Perceived drawbacks of present promotion criteria based on publications
• Do not consider quality of publication and journal • Discourage other types of article (Meta-analysis/systematic review, review article, case report and book chapters • Do not give weightage to citation indices • Discourage publication in reputed online version journals only • Do not consider teaching abilities, academic achievements, clinical care, administrative efficiency, community services and intellectual properties owned by facilities
Perceived negative impacts of promotion criteria
• Teaching, clinical work and quality of research suffers • Discourages team work for research • Discourages multidisciplinary research • Indian journals have lost the value • Increases unethical behaviour for publications (eg., duplicate publications, multiple publications, plagiarism, data fabrication and falsification) • Increases the growth of paid and/or predatory journals • Junior faculty suffers due to authorship number criteria • Forces to work outside the area of interest to fulfil the target of number of publications
Suggested changes in individual aspects of publication criteria
• Authorship numbers: Consider all authors or redefine authorship numbers to be considered for multidisciplinary/translational and multicentric research • Type of article: Consider original research article, brief reports/short communication, meta-analysis, review articles, case reports • Subject specific journal: Remove such provision or define meaning of subject specific journal considering multidisciplinary and medical education research • Electronic versus print version of journal: Remove this criterion • National vs International journal: Remove such demarcation or define criteria on which journal to be considered as international or demarcate journal based on impact factor • Journal indexation: Consider only Medline/ PubMed indexation and /or remove Index Copernicus
Suggested alternative patterns:
• Make weightage/scoring system based publication criteria with minimum scores to • qualify for the promotion considering following factors: • Authorship number (highest for first author and lowest for last author) • Type of articles (In order of meta-analysis/systematic review, original article, brief reports/short communication, letter to editor/case report) • Indexing database of journal and / or Impact factor of journal

- Article citations
- Use university Grant Commission (UGC) scoring pattern of research
- Promotion criteria to be based on years of experience in academic positions only with relaxation of 1 or 2 years for publications
- Keep promotion exam instead of publications

Expectations of faculties from Medial council of India

- Provide the list of approved journal / list of predatory journal to be avoided/ ensure mechanism to check predatory journal
- Ensure proper research facilities at each institute (e.g, funds, computerised medical records of patients)
- Make compulsory publications as a continuous process irrespective of academic position
- Punishment/deny promotions for plagiarism and other academic dishonesties for publications

Views about non-mandatory publications

- Publication should not be mandatory for all faculties or clinical department faculties or medical background faculties
- Provide incentives to faculties doing research instead of mandatory publications

Types of publication: In case of types of articles, present criteria of considering only original research articles for promotion discourages the other types of publications like meta-analysis, review articles and case reports. The other types of publications are also at most important for medical science to disseminate important information. Though meta-analysis is largely considered as an original research article, journals have policy to publish meta-analysis. Some publish it as review and others as an original research article. Many journals do not specify it in the in the instructions to authors[18]. It should be redefined for meta-analysis/systematic reviews. Case reports represent the scientific observations of a rare event. Despite of limitation of this study design, it opens up the thought process of junior scientists and provides the future research direction for rare diseases[19]. More than 50% teachers gave their views that original research, meta-analysis and systemic review, review article and case report should be considered into the account.MCI should develop scoring system to incorporate different types of publications. The higher weightage can be given to meta-analysis and original research articles and relatively lower weightage to narrative review, case reports and other types of publications.

Types of journals: The demarcation between national and international journal is perceived as a grey area among participating faculties. There is no clarity among faculties on categorization of national or international journal. During interviews and consideration for promotions, this dilemma continues. Moreover, publication in international journal does not ensure quality of publication.MCI should remove this criterion or define the demarcation of national and International journals. Moreover, almost one-fifth of teachers participating in this survey suffered in interview because of criteria of specialty/subject specific journals. The provision of subject specialty journal should be redefined to give credit to all specialty authors in case of multidisciplinary works. The print version of publication does not reflect quality of journal. MCI must have decided not considering E-journals as most of predatory journals are online[5]. Now days, predatory journals are available in print version also. Almost half of the faculties opined that predatory journals have misused these criteria to flourish. Many reputed journals which were available in print and E-version, have been shifted to E-version only. Not considering E-journal omits many reputed journals[5,6]. The purpose of publishing research data in scientific journal is dissemination of information to wider range of audience and that could be better achieved in digital format[20]. By avoiding consideration of E-journal, flourishing of predatory journals could not be avoided. As per suggestions by teachers, MCI should ensure other mechanisms to check on predatory journals and should declare a list of predatory journals to be avoided by the researchers which should be regularly updated (Table 5).

Quality of research and transparent comparison: Nine out of 10 participating faculties believe that instead of only quantity, qualitative impact of publication should also be considered. The present MCI criteria do not consider impact of

research publication and thus, it does not differentiate between two research publications. There is no clear cut solution to ensure quality of journal and publications. Impact factor, which is calculated based on journal's articles are cited in scientific publications in last two years, is considered a reasonable indicator of quality and performance of journals[21,22]. It cannot be totally relied as it does not represent quality of individual article. The impact factor of journal could be influenced by review articles, English language bias, journal self-citation and length of the published articles[22,23]. However, it seems better option than relying on print version or nationality of journal as a quality indicator of journal. It can be included as a part of weightage/scoring system as suggested by some of the respondents. The citation indices can only assess researcher's scientific strength, productivity and impact[22]. The most frequently used citation indices is h-index (number of papers with citation number ≥h) and i-10 index (number of publications having at least 10 citations)[24]. The inclusion of citation indices in promotion criteria should be the long term objective of MCI.

Lastly, there is need to curb the predatory journals, which publish for financial profit without meeting scholarly publishing standards. They promise rapid publication for author fees and frequently send e-mails to solicit manuscript submission. Nine out of 10 participants opined that the present criteria help the predatory journals. Jeffrey Beall, a librarian at University of Colorado, has prepared the extensive list of predatory journals from 2011 to January 2017 [25]. The Beall's list was prepared based on the 'principles of transparency and best practice in scholarly publishing' from World Association of Medical Editors (WAME), Committee on Publication Ethics (COPE), Directory of Open Access Journals (DOAJ)and Open Access Scholarly Publishers Association (OASPA). This list is criticised for not declaring a particular reason for considering each journal as predatory. Beall's list is not updated after January 2017 [26]. In the absence of current reliable source to identify predatory journals, it is utmost important to consider the weightage/score based promotion criteria which can differentiate quality journal and publications.

Conclusion: The participating faculties are receptive for the research publication as an essential requirement for the promotion. There is need to redefine the MCI criteria considering authorship criteria considering multi-disciplinary / multi-centric work. The types of journal should be based on indexation into multiple databases rather than any one agency. The articles types should include meta-analysis and original research articles. The promotion criteria should find place for other types of article like narrative review and case reports with relatively lower weightage. MCI should specify demarcation between international and national journal. The provision of print version journal only should be removed. The weightage/score based promotion criteria can be devised to incorporate opinions of participating faculties and improve the quality of publication of Indian medial teachers.

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