

Combating predatory journals and conferences

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Predatory journals, whose sole objective is to earn money from hapless authors, have become a matter of concern¹⁻³. Attempts by scholarly societies and institutions to curb this menace⁴⁻⁷ led them to evolve and avoid detection⁸⁻¹⁰. Many such unethical journals, variously named in the absence of common criteria, even gained 'legitimacy' through listing in standard journal indexing databases¹¹⁻¹⁵. Such seriously unethical publishing practices adversely affect the general public's faith in research itself. To create wider awareness about this menace and promote good research publication ethics, the Inter Academy Partnership (IAP) recently published a report on 'Combating predatory academic journals and conferences'¹⁶. Important recommendations in the report and their relevance to scientific publishing in India are discussed here.

What should be done in India in the context of the IAP report

A significant proportion of predatory journals and articles have come out of India^{2,3}. The diversity of underlying issues makes combating predatory publications in India a challenging task. Researchers in India work under greatly varying conditions of infrastructure, funding, depth of research activity and competence. These differences are comparable empirically with those between the developed, developing and underdeveloped countries. Consequently, it is nearly impossible to develop one common set of actions to curb predatory publication practices. Some broad issues that require serious and urgent attention of researchers and regulatory bodies are considered below.

Spectrum of predatory publications and conferences

The IAP report appropriately describes the predatory practices as a spectrum of dynamic behaviours ranging from clearly fraudulent and deceitful to questionable and unethical ones, with varying degrees of unacceptable to low-quality, but well-intentioned practices in the middle (Figure 1). The report provides identifiable markers for each part of the spectrum to prevent

prospective authors from getting trapped in predatory practices.

In the absence of a common set of features and definitions, the early attempts in India to develop 'white' and 'black' lists of journals for safe use by the authors have not only failed, but added to the confusion^{5,16,17}. Currently, UGC-CARE in India maintains a dynamic list of acceptable and unacceptable research journals in various disciplines (<https://ugccare.unipune.ac.in/apps1/home/index>). Universities and higher education institutions (HEIs) are eligible to periodically suggest additions or deletions for vetting by UGC-CARE. Adoption of spectral approach of the IAP report by UGC-CARE will provide more effective guidance to the authors. In such a dynamic system, a greater responsibility lies with the individual HEIs to determine the acceptability of a journal for their faculty to publish.

Predatory conferences have also become common, being further boosted by the COVID-19 pandemic. Many conferences, usually designated as international, are organized primarily for financial gains by 'for-profit organizers', through high registration fees. A spectrum of predatory practices in organizing conferences is documented in the IAP report (Figure 2), with high-risk 'fake conferences' at one end of the spectrum. These are not held at all, although the organizers collect fees and 'registered participants' get a 'certificate of participation'. Unfortunately, such predatory conferences have escaped the attention of academic bodies, the Government, funding agencies and other administrators. Urgent sensitization of the stakeholders and action by regulatory authorities is required to curb such predatory conferences.

Culling the drivers of predatory practices

The IAP report identifies three kinds of drivers of predatory practices: (i) pay-to-publish and pay-to-present in a conference; (ii) use metrics for research evaluation, career advancement, ranking of the journals and institutions, and (iii) absence of transparency and competency (reviewers lacking training, capacity and recognition) in the peer-review system.

Curbing monetization and commercialization of research publications

With the increasing volume of research output, the control of research journals largely shifted from not-for-profit publishing by academic institutions, societies and academies to profit-making commercial publishers, who reap unduly high profits without making any investment in knowledge generation. Predatory publication practices are a direct outcome of the greed of commercial publishers. Unduly high article processing charge (APC) and open access charge (OAC) levied by many so called 'high impact factor' journals have widened the gulf between the developed, developing and underdeveloped countries, and within each of them, between better and poorly funded institutions. The IAP report notes a positive correlation between predatory publishing and the number of articles published with open access, although it states 'OA *per se* should not be blamed for the growth of predatory publishers: the principles and benefits of open access publishing are incontrovertible'¹⁶. However, the practice of levying OAC itself had its genesis in monetizing than philanthropic interests of commercial publishers, with major research funders and established researchers tacitly accepting such charges¹⁸. While open access to all research is a must, the high APC and/or OAC levied by many high impact journals is unjustified and appears to border on unethical practices¹⁸. The practice followed by some of these journals to transfer manuscripts rejected by them to their own less-branded journals for publication on collection of APC/OAC is also inappropriate, because payment of APC and/or OAC seems to transform the initially 'unworthy' manuscript to become worthy of publication in the less branded sister journal¹⁸. *Sensu strictu*, this practice is 'predatory', because the authors are primarily lured by the brand name of the original journal.

As suggested in the IAP report, alternatives like the UNESCO-supported Global Alliance of Open Access Scholarly Communication Platforms, Free Journal Network controlled by the scholarly community and over 70% of fully open access journals indexed in the Directory of Open Access Journals (DOAJ) without any APC can help

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avoid APC/OAC. Indian academic journals with good editorial policies but without APC/OAC should also be preferred.

As argued elsewhere¹⁹, sharing soft copies of published articles through e-mails can provide free open access to all. This can make the paywalls created by commercial publishers disappear. Archiving free access preprints also circumvents the commercial paywall.

In agreement with the recommendations by the three National Science Academies in India²⁰, the IAP report suggests ‘Subsidizing non-commercial academic publishing can facilitate more equitable communication of research by redirecting funds currently dedicated to pay-for-access fees to subsidizing academic publishing directly, without profit-making intermediaries’¹⁶. Research publication, being a social res-

possibility, should indeed be a publicly supported not-for-profit activity²¹. The Science Academies need to pursue this matter more vigorously, so that the country has a choice of quality journals in different disciplines without any APC/OAC. In the Indian context, it may be appropriate not to spend public funds towards APC/OAC. The mindset that publications only in ‘branded international’ journals are noticed or are worthy of notice must change because, in the internet era, a good article is available for notice, irrespective of its place of publication.

Publication of journals by the Science Academies in India in partnership with overseas commercial publishers did not improve their ‘visibility’ or stature, although the revenue of the Academies marginally improved. This, however, has entailed loss

of some academic autonomy. The journal content, which is available as full open access at the concerned Academy’s website, remains behind the hefty paywall of the commercial publisher’s website. In this scenario, can the publications by the Academies be really considered as fully open access? It is time that the Academies take full and independent control of their respective journals as recommended earlier^{17,20}. The Academies and the Government of India should ensure enough funds to maintain high-quality editing and publishing. The availability of high-quality journals in the country with no APC/OAC will more than compensate the Government’s investment in making the Academy journals self-sufficient through savings on outflow for the various charges that Indian researchers pay

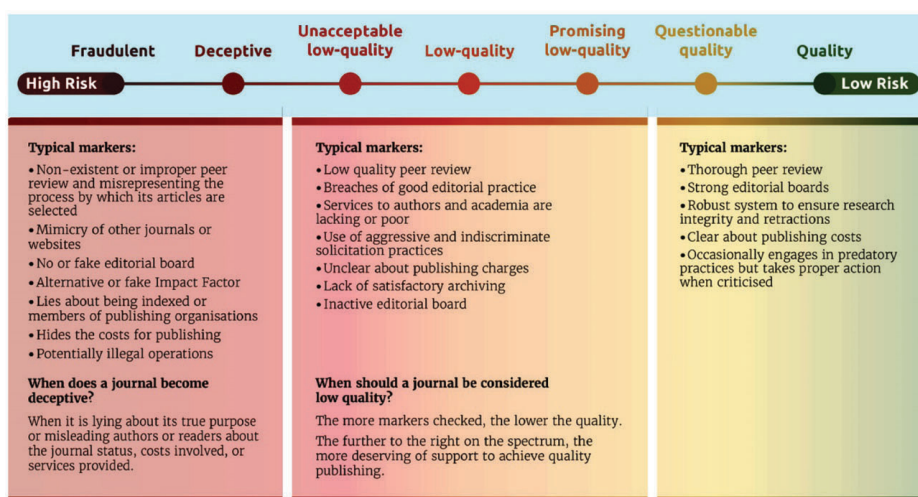


Figure 1. A spectrum of intentional and unintentional deceitful and/or varying low-quality practices characterize avoidable journals (figure reproduced, with permission, from the IAP report¹⁶).

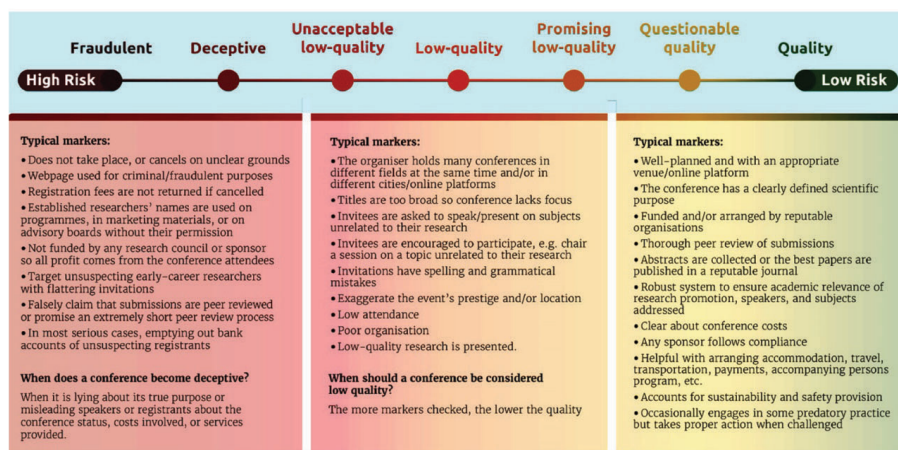


Figure 2. A broad spectrum of intentional and unintentional deceitful and/or varying low-quality practices characterize predatory conferences (figure reproduced, with permission, from the IAP report¹⁶).

for publication in international and high-impact commercial journals.

Minimizing quantitative parameters for evaluation

The IAP report identifies evaluation systems depending upon quantity rather than research quality as ‘a key driver of predatory journals and conferences’, since the bibliometric indicators can be exploited by predatory actors and gamed by some researchers^{16,22}. In fact, a major cause for the magnitude of predatory publication practices in India can be linked to the well-intentioned, but misguided attempts to define a common set of quantitative parameters for evaluation of individuals and institutions¹⁸. The quality of publications and other academic activities of the faculty must also significantly contribute to the assessment. The practice of applying a nearly uniform yardstick for assessing faculty in all disciplines in all the universities and colleges promotes unethical practices. It is unfair to assess faculty in professional disciplines like visual arts, performing arts or healthcare based on the number of research papers authored²³. Some of them may engage in active research and publish scholarly articles, but many others in such fields, despite being good in their profession and in mentoring their disciples, are not research-oriented. Making research publication mandatory for such faculty surely promotes unethical practices.

Many colleges and university departments in the country lack adequate infrastructure even for classroom studies. The competent ones get frustrated by the absence of the minimally required infrastructure and environment conducive for research. Some other faculty appointed in colleges and universities are not competent to undertake meaningful research. Mandating them to publish as many research papers as those working in better-endowed institutions ensures their seeking predatory publishers. Without providing a level playing field, it is unfair to expect every college teacher to publish a certain minimum number of research papers. Teaching capabilities and student outcomes should be the major parameters for their assessment.

Undue emphasis on high impact factor journals erodes the scope for improvement of journals published in India. Many such journals, despite following good editorial and publication policies, are caught in the vicious circle and fail to attract high-quality

submissions²⁴. As discussed above, journals published in India by different academic bodies and following good publication policies should be adequately supported by public funds for establishing competitive infrastructure and self-sufficiency. Also, established researchers must submit some of their original research articles to Indian journals to help improve their stature and quality²⁴.

Some funding agencies in India continue to differentiate between national and international journals and grade research output by journal’s impact factor, although these funding agencies generally agree with the guidelines issued by the Indian National Science Academy that such quantitative parameters should not be the major criteria for assessment²⁵. Distinction between national and international journals should be discontinued, while impact factor-based assessment needs a more balanced approach.

The IAP report notes that the increasing popularity of ranking of universities and HEIs ‘has created perverse incentives for researchers and institutions, not only to turn a blind eye to predatory and unethical practices, but to collude with them’¹⁶. Indeed, the use of quantitative, rather than qualitative parameters for ranking the universities and HEIs is as flawed as the journal impact factor. The pressure to get a higher ranking adversely affects the quality of education imparted to the students. Faculty are under pressure to involve more in research since the outcome of good teaching is marginalized. The performance of alumni must be an important measure for assessing the quality of education imparted by a university or HEI.

Many HEIs, recognized by the Government of India as Institutions of Eminence (IoE), with the promise of a high quantum of grants, pressurize their faculty to publish in greater numbers in journals with impact factor greater than 5. Demand for greater numbers can encourage erosion of ethics, while an emphasis on high impact factors seems to be playing into the hands of unscrupulous mega-publishers, who can manage high impact factors and charge substantially high APC. The rat race for getting into the world’s top 1000 or 500 or 100 ranked HEIs is damaging the core of academic pursuit for which the universities were established in the first place. Good faculty and good administrative support and environment are more important for academic excellence than the gloss of rank obtained by other means.

Improving the peer-review system

The IAP report notes that confidentiality of the peer-review system, considered to be a strength of contemporary scholarly publications, ‘has made it possible for fraudulent or deceitful journals to thrive by practising dubious peer-review processes (lacking rigour, trust and accountability) that go unnoticed, or by omitting them altogether’¹⁶. Most Indian journals follow the ‘single-blind’ peer-review system. It would be to everyone’s advantage if these journals change to open and transparent reviews, and make the reviewers’ comments available on-line for the readers and authors to assess the quality and rigour of the review. This will ensure the quality of the journal following legitimate peer review while exposing predatory journals.

Suggestions that a greater recognition and/or payment for peer review will enhance the quality have their own risks. As the IAP report also notes, these may promote perverse behaviour on the part of the reviewers and publishers.

The reviewer pool within the country should be enlarged through greater involvement of younger faculty. Academies and learned bodies should conduct workshops to train the faculty in good editorial, peer-review and publication practices. These may not affect the predatory publishers, but would certainly improve the journals that are on the low-quality side of the spectrum.

Regional and global efforts to curb predatory practices

The IAP survey notes that while there have been some national/regional efforts, like those in India, China, Switzerland, Latin America, etc. to curb predatory practices, there are only a few global efforts, except by agencies like the Committee on Publication Ethics and DOAJ¹⁶. The IAP report, taking the example of what Latindex²⁶ does at a regional level, suggests that an equivalent of Latindex ‘operating at the global level could help ensure minimum standards of ethics and professionalism among every listed publisher and/or journal title (additional to the ISSN register), as well as promote good editorial practice’¹⁶. It further suggests that bodies like UNESCO or ISSN with a global mandate ‘could oversee this role, drawing on existing infrastructure such as the National ISSN Centers, national or large university libraries and/or information centers’¹⁶. Academies and Government

agencies in India should proactively lead and participate in such global efforts.

Predatory publication practices may perhaps never disappear completely, but their damaging impact on research and the consequent erosion of the public's faith can be minimized by culling the catalysing conditions, and by greater sensitization of stakeholders. Exposing Ph.D. students across the country to research and publication ethics courses provides useful awareness. Such courses should also be compulsory for all HEI students and faculty. The various academies and academic societies should proactively sensitize the academics in their domains about diverse predatory practices, including predatory preprint servers and predatory awards, so that researchers avoid wasting money and time.

Keeping the heat on predatory publishing practices is essential, as also the unjustifiably high profits reaped by established commercial publishing houses.

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