

Disrupting predatory journals

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The 'publish or perish' race among researchers force at least some of them to opt for quick outlets for publication, making them fall into the trap of predatory journals. With a strong base and history of research institutions and journals, the present study explores grooming a reasonable number of quality journals in India to tackle the menace of predatory publishing. The data presented are collected from different sources to work out the approximate minimum number of quality journals that can be strengthened using state-of-the-art technology solutions as well as internationally competitive journal editorial, review and publishing procedures. It is difficult to deal with the commercial interests of predatory publishers through academic safeguards alone. However, their negative impact can be contained through a set of action plans by various stakeholders, such as sensitizing authors about the perils of predatory publishing, training new authors about the nuances of academic publishing to facilitate their manuscripts getting accepted in good journals, strengthening Indian journals to publish more quality papers, etc.

Keywords: Credible scholarly publishing, honest researchers, negative impact, potential authors, predatory journals.

JEFFREY BEALL, University of Colorado, Denver, USA coined the term 'predatory publishers' in 2010, to hint that 'they trick honest researchers'¹. He² noticed such publishers who use the gold (author pays) open access (OA) model maximizing revenue and sacrificing the vital peer review, and listed these from 2012 to 2017. Kurt³ made distinctions between legitimate OA journals and predatory OA journals; for example, the former are usually affiliated with a society or institution; have dedicated editors, editorial staff and peer reviewers with requisite expertise; share and explain publication fees; are usually indexed by scholarly databases and outline the scope of publication for the benefit of potential authors³. A list of resources on predatory journals is maintained by the University Grants Commission (UGC) Cell for Journal Analysis, Savitribai Phule Pune University, Maharashtra, India⁴.

The 'UGC (Minimum Standards and Procedure for Award of M.Phil./Ph.D. Degrees) Regulations, 2016' stipulated Ph.D. scholars must publish at least one research paper in a refereed journal before submission of their thesis⁵. Similarly the 'UGC Regulations on Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges' prescribed the minimum number of papers in journals for direct recruitment and for career advancement⁶. Two, 7 and 10 research papers in journals were stipulated for direct recruitment for

Assistant Professor, Associate Professor and Professor respectively. The same during the assessment period prescribed for career advancement promotion to the next level are: 1 publication from academic level 10 to level 11, 3 publications from level 11 to level 12, 3 (out of total 7) publications from level 12 to level 13A, 3 (out of total 10) publications from level 13A to level 14, and 10 publications from level 14 to level 15. All these hint for a 'publish or perish' race among researchers, scientists, professionals and teachers, sometimes forcing at least some of them to opt for quick outlets for publication, thus falling into the trap of predatory publishers. UGC has already prescribed a two-credit course on 'Research and publications ethics'⁷ compulsory for all Ph.D. students for pre-registration coursework. It is heartening to note that one of the topics covered in the course is to sensitize new researchers about predatory journals. With a strong base and history of research institutions and journals, the present study explores how to groom a reasonable number of quality journals in the country to tackle the menace of predatory publishing.

Research and publications on the rise

There is an increase in the number of universities, colleges, private educational institutions, national institutions and research laboratories in India to effectively fulfil the teaching-learning aspirations of the public. With enhanced research funding and with numerous researchers across the world, many more papers are being published⁸. According to Gastfriend⁹, 90% of all scientists that ever lived are currently alive.

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The scampering for more publications by several aspirants in the limited outlets of Indian journals and premier journals from the developed countries restricts the publication of good quality papers. Predatory publishers and journals woo authors by quick publication with editorial responsibilities, entrusting for special issues, mails complementing publications and scholarship, unsolicited requests for reviewing papers, etc. Some researchers reported being flattered when they received an e-mail invitation to publish their work³. Also, a few researchers publish papers of quality in predatory journals due of ignorance.

Predatory journals

The latest available Beall's list for 2017 contains 1155/1294 potential, possible or probable predatory scholarly OA publishers/journals, 53 companies that 'calculate' and publish counterfeit impact factors and 115 journals counterfeiting websites of genuine journals¹⁰. Though predatory journals keep customers content by publishing manuscripts rejected by the top publishers, thus catering both to authors needing easy publishing outlets and sketchy entrepreneurs wanting easy money, their perils according to Beall^{1,2} are:

- Money preferred over business/research/publishing ethics.
- Strong conflict of interest for peer review because rejection cuts revenue.
- Gold (author pays) OA does not sustain quality.
- Abandons integrity in publishing.
- Threat to science, research, academic evaluation and scholarly communication.
- Use of spam e-mail to solicit submissions.
- Gives false locations.
- Claims fake 'impact factors'.
- States false coverage in abstracting and indexing services.
- Papers held as 'hostage' for 'ransom' of publishing/withdrawal fee.
- Mega journals with broad scope accept many papers for more revenue.
- Pollutes science, arresting the cumulative nature of research.

The label 'predatory' is illogical and can be replaced by 'low quality journals' as an 'obligate symbiosis' is witnessed between journals and writers in reciprocal alliance for mutual benefit¹¹. There has been a rise in 'predatory' journals of questionable integrity and low academic standards³. Other names to denote predatory journals are in vogue such as illegitimate journals¹², deceptive journals¹³ (deceiving authors, readers and institutions), dark journals¹⁴ and journals in bad faith¹⁵.

Why predatory journals are still attractive to some authors is a bewildering question needing close scrutiny.

Such journals try to capitalize on the pressure researchers feel to publish³. Nearly 57% researchers are unaware of predatory journals, but 40% recognize predatory OA publishing and 90% have paid for article processing charges¹⁶. Scholars from low- or middle-income nations who fall prey to such journals often lack the resources and guidance that researchers in developed nations have³. Beall² cautions the extent to which researchers who publish in predatory journals defend them. When the system (sponsors, institutions and accrediting bodies) recognizes low-quality publications, expecting scholars to refrain is in fact counterproductive¹¹. The reasons for publishing in predatory journals include: social identity threat (alienation from reputed scholarly teams, nationality, religious issues, English skills and editorial bias), unawareness (or the system credits such publishing), high pressure (frequent publication required for tenure and promotion; inclined to publish rapidly bypassing peer review), and lack of research proficiency (limited knowledge of research methodologies, ethics and writing skills)³.

Janodia¹⁷ suggested simple steps to identify predatory journals such as disguised title, doubtful credentials of the editorial board, coupling of unrelated papers, violation of instructions to authors as well as typographical and grammatical errors in published articles, clandestinely levying charges, guaranteeing fast turnaround time and absence of contact address. Clark¹⁸ proposed a five-point plan to contain predatory journals: avoiding journals and publishers in Beall's blacklist; checking the journal, if open access in the Directory of Open Access Journals (DOAJ); verifying that the publisher is a member of the Committee on Publication Ethics (COPE), the International Association of Scientific, Technical and Medical Publishers (STM), or the Open Access Scholarly Publishers Association (OASPA); ascertaining coverage in reputed indexing databases and compliance to best practices of revealing e-mail, postal address, working telephone number of the journal and its staff, submission fee and publication charges. The 'Think. Check. Submit. Initiative' helps researchers identify trusted journals and publishers for their research¹⁹. The strengthening and streamlining of Indian journals of quality would provide viable outlets saving many researchers from the trap of predatory publishers.

Journals published in India

Sharma²⁰ points out the problems of Asian journals (more than a quarter from India). Many journals do not appear on time; combine issues and volumes; use poor printing paper; senseless writing in poor sentences with no link between paragraphs; editors desperate to publish articles without reviewing or editing or proofreading; absence of marketing attracting small circulation; journals launched without proper planning, finances and marketing leading

to premature termination of many and majority of the editors are part-time without any proper help thus constraining operations. Many problems of Indian journals are self-created due to the processes and perspectives in which they operate. Numerous colleges, universities and research institutions in the country bring out low-quality journals for professional recognition and positive evaluation by NAAC¹¹.

The scornful attitude of many senior 'experts' and their blind faith in the impact factor (IF) have contributed to enrichment of 'international' journals through the 'export' of quality publications, leaving Indian journals in a poor state²¹. It appears that there is also the problem of 'citation hiding', where the authors do not cite what they read, especially papers from Indian journals. The 'Look West' policy is invading the citation space, which further deteriorates the quality and visibility of Indian journals. Every researcher has to give preference to citing suitable references from Indian journals to ensure a level playing field and provide the much needed visibility to these journals. Two journals (one published without break from 1962 to 2008)²² edited by a leading scientist which covered over a quarter of papers from India abstracted in the international abstracting source Library & Information Science Abstracts (LISA), abruptly stopped publication after his sudden demise. The same is the case with many other good journals started by spirited individuals. Many such editors, who are luminaries in their chosen fields, want to serve the discipline through good-quality journals till their last breath, failing to make a suitable succession plan and thus doing more harm than good to the journals they nurture for so long.

There is an urgent need to have good international recognition of research/review journals published in India²³. To encourage this, Chaddha and Lakhota²³ have recommended that no agency should seek separate listing of research publications in 'national' and 'international journals' for any assessment purpose. They have further proposed 'assessment of an individual's research contributions based on what is published rather than where it is published'. Another recommendation is to grant papers published in established Indian journals special attention during any assessment, if their citation significantly exceeds the average citation rate of the journals.

Identifying and strengthening Indian journals

Established scientists in India must engage with Indian journals by publishing as well as reviewing and, must not directly or indirectly penalize, irrespective of the quality of work, those who publish in them²⁴. There are some journals with better peer-reviews and no page charges such as the *Journal of the Bombay Natural History Society*, one of India's oldest science journals since 1886, which has no IF owing to poor marketing and low circulation¹¹.

A checklist for identifying and strengthening Indian journals for minimizing the impact of predatory journals should examine the following:

- (1) Sponsoring body: Institution/university/college/association/society/non-profit private.
- (2) Number of years of publication: At least 5–10 years of continuous publishing history.
- (3) Subject area: One of the areas of aggressive research pursued in India's institutions.
- (4) Language: English and any language²⁵ listed in the 8th Schedule of the Constitution.
- (5) Diversity of persons involved in editorial boards and authors. If they are from different institutions, states and countries, it indicates more transparency and less bias in the operation of the journal²⁶.
- (6) The *h*-index of the journal or the number of citations received for articles published in it.
- (7) Indexing in reputed national and international sources.

The number of journals published from India assigned ISSN numbers by the Indian ISSN Centre at the National Science Library²⁷, National Institute of Science Communication and Information Resources (NISCAIR), New Delhi from 1986 to 2018 is 23,459. There is a spurt in the ISSN numbers assigned after 2008 by the Centre, though the essence of ISSN is to 'uniquely identify a serial', it is 'not an indicator of quality'²⁸. The standard numbering systems, ISBN and ISSN for books and serials respectively, were evolved to effectively deal with identifying unique items by trade entities and for helping in the acquisition systems of libraries. Why UGC considered these numbers, ISBN and ISSN, vouching in no way for the quality of content as indicators of quality is bewildering. It will be in the interest to the academic and research fraternity that ISSN has been removed from the Academic Performance Indicator (API) criteria²⁸. The same holds true for ISBN.

Table 1 presents an approximate estimate of the journals published in India to minimize the devastating impact of predatory journals and predatory publishers^{29–41}. The data presented are collected from different sources to work out the approximate minimum number of quality journals that can be strengthened using state-of-the-art technology solutions as well as internationally competitive journal editorial, review and publishing procedures. Journals listed under serial nos 1–6 and 10–13 (3311 journals in total) in Table 1 are all reputed journals. Barring a few, the problems is that limited number of papers is currently being published in these journals. There is scope for increasing the number of papers published in each issue and for enhancing the frequency of publication. Also, most of these journals still deal with print format, though only some provide free electronic access. Nobody reads a journal issue in its entirety and shifting to an electronic-only format is the first step to augment the

Table 1. Assessing the potential of Indian journals to counter predatory journals

Sl. no.	Publisher/aggregator/other	Number of journals	Reference
1	Council of Scientific and Industrial Research (CSIR)	19	29
2	Indian Academy of Sciences (IASc)	13	30
3	Indian National Science Academy (INSA)	3	31
4	National Academy of Sciences (Allahabad)	3	32
5	Institution of Engineers (India) (IE(I))	5	33
6	Defence Scientific Information and Documentation Centre (DESIDOC)	3	34
7	Indian social science journals covered in the Institute for Studies in Industrial Development (ISID) database	252	35
8	Indian journals portal	332	36
9	ISSNs assigned in India for specific words in the title	'International' – 6154; 'India or Indian' – 1727; 'Bulletin' – 282; 'University' – 241; 'Society' – 239; 'College' – 126; 'Institute' – 112; 'Association' – 106; 'Academy' – 75; 'Reports' – 70; 'Transactions' – 56; 'Proceedings' – 43; 'Department' – 40; 'School' – 29	37
10	UGC Consortium for Academic and Research Ethics (CARE) journal list for group I	1292 (sciences – 292, social sciences – 301, arts and humanities – 362, multidisciplinary – 47 and Indian languages – 290) (according to the search on 12 October 2021)	38
11	Science and technology journals covered in international indexing and abstracting databases	1169	39
12	Journals from India in SCImago Journal and Country Rank	482	40
13	Open access journals published from India covered in Directory of Open Access Journals (DOAJ)	322	41

frequency as well as the number of papers the journals include in one issue with the present costs. This also requires extending the panel of reviewers to deal with peer reviewing extra papers received for publication. The print format may be continued only for those journals with many subscribers insisting for the same.

For the journals listed under serial nos 7–9 in Table 1, close scrutiny is required to identify good journals from the not-so-good ones. The experience and expertise of the UGC CARE initiative would help in this exercise. Preference must be given to those journals published by non-commercial entities such as institutions, societies and associations. There is no good estimate of journals published by such entities in the country. The journals under serial no. 9 with the title words 'Bulletin', 'University', 'Society', 'College', 'Institute', 'Association', 'Academy', 'Reports', 'Transactions', 'Proceedings', 'Department' and 'School' add to 1419 journals. Let us take 50% of the journals with title words 'India or Indian' as of quality, short-listing another 863 journals. Out of journals with the word 'international' in its name, consider at least 10% as quality journals, the number of such journals is 615. Suppose 50% of journals under serial no. 7 (126) and 25% of under serial no. 8 (83) are of good quality, this yields another 209 journals. Thus, a base of 5134 journals (6417 minus 20% to avoid duplication in the different lists considered in Table 1) can be identified for grooming to counter the negative impact of predatory journals, which is almost a quarter of the approximate total number of journals currently published in India.

Support through Open Journal System and funding

The format of publication shall be electronic only considering the decades of positive engagement of researchers with electronic journals. The INFLIBNET Centre has developed the Open Journal System (OJS) to facilitate hosting electronic version of journals in OA mode handling the processes of submission, peer-review, editing, layout design and publishing, with a view to host electronic version of print journals currently published by universities and institutions as well as to start new ones⁴². UGC may support the INFLIBNET Centre with additional resources and staff to strengthen this endeavour. Though the editorial operations can be handled without much computer expertise through OJS, senior editors may co-opt junior professionals as assistant editors and research scholars or office staff as editorial assistants, if required.

Additionally, the journal hosts, institutions, associations and societies entrusted with the editorial responsibilities must be funded by research councils and agencies engaged in supporting research. Chakraborty *et al.*⁴³ proposed that the Government of India should earmark funds for upgrading and supporting Indian journals on a long-term basis to improve their infrastructure, attractiveness, visibility and efficiency of the editorial process. They need such support to augment the editorial staff to an optimal level, improve the editorial office infrastructure and get good software for processing of submissions. The American Physical Society started the *Physical Review*

Letters series of journals to facilitate a fast channel for reporting new research results in brief. Such journals are not available in India. There is a rush among researchers and new professionals needing quick publication for the sake of fulfilling the requirements of the research degree or for meeting the eligibility of the jobs advertised. Mid-career researchers also need publications at frequent intervals for selection and promotion. There may be special sections in journals to handle such quick publishing needs. The excessive rush for publications can be effectively met only by strengthening existing journals and launching new ones. Institutions may be encouraged to start journals in specialized areas with aggressive research activity, instead of the present trend of A–Z subject journals published by some institutions.

The base of 5134 journals may provide an opportunity for fast handling of papers by research scholars, research associates, early-career teachers and scientists, as they are easily lured by predators. More journals could be identified over a period of time when the fruits of this exercise are visible to the authors, reviewers, editors and publishers. Journals need to identify experts from different regions and ethnicities of the country to give a diverse face to the editorial board with options for periodic changes in the members. A diverse editorial board will help establish an inclusive peer-review process, accommodating authors from different backgrounds and cultures²⁶. The objective of handling more papers and its peer review puts a toll largely on researchers in the country. UGC may hence consider assigning API points for reviewing papers and editorial responsibilities of quality journals to attract and sustain talent in these areas⁴⁴.

Conclusion

The might of predatory publishers is strong to discontinue a valuable tool such as Beall's list. There is an urgent need to develop a mechanism to identify the quality of articles published by the respective institutions and researchers¹⁶. It may also be useful to have a committee or body that authorizes the work to be published in a specific journal³. Editors of Indian journals need to follow the best practices adopted by their international counterparts in handling the various operations right from receiving a paper till its publication⁴⁴.

It is not easy to curtail or deal with the commercial interests of predatory publishers through academic safeguards alone. However, their negative impact can be contained to a certain extent through a set of action plans by authors, institutions, funding agencies and publishers, such as sensitizing authors about the perils of predatory publishing, training new authors about the nuances of academic publishing so that their manuscripts get accepted in good journals, strengthening Indian journals to publish more quality papers, etc. Grooming at least a

quarter of the Indian journals to international quality offering multiple alternative publication channels to authors who fall easy prey to predatory publishers is the first pragmatic step in that direction. Similar initiatives by other developing countries in Asia, Africa and the Americas (excluding North America) whose researchers are more prone to the trap of predatory publishers will no doubt generate sufficient collective strength to effectively contain the wrath of predatory publishing sooner than later.

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