

Predatory journals

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April 2019 was the cruellest month for predatory publishing. There was a big splash in international news headlines when the Federal Trade Commission (FTC) of the United States announced that it had won a \$50 million verdict against a Hyderabad-based publisher and its owner. FTC had filed its complaint in 2016 “to halt the deceptive practices carried out by a network of interconnected companies.”¹ The said publisher, which has been described by its critics as the ‘evil empire’ of predatory publishing, was adjudged to have indulged in ‘deceptive business practices’.² It publishes 785 titles generating over \$50M in annual revenues.³ According to an earlier study published in 2015 in the journal *BMC Medicine*, 27% of predatory journal publishers are based in India and about 35% of authors in such journals are from Indian institutions. Experts found that only 112 out of randomly selected (11.1%) 1009 journals from the University Grants Commission’s (UGC) approved list were not predatory in nature.⁴ The researchers had expressed genuine cause for concern that the UGC’s approved list of 5699 journals might have a large majority of predatory journals.⁵ Following this report, UGC has removed 4,305 spurious journals from a list of some 30,000 publications used for weighing academic performance.⁶ A major international journalistic investigation, published in 2018 in multiple media outlets, estimated that the number of papers put out by 5 major predatory publishers had tripled in 5 years since 2013 – to about 175,000 articles.⁷ Put in another way, the number of publications put out by the top predatory publishers tripled since 2013 and involved some 400,000 scientists.⁸ Using Beall’s list, Bo-Christer Björk, an information scientist at the Hanken School of Economics in Helsinki, estimated that the number of articles published in questionable journals had ballooned from about 53,000 a year in 2010 to more than 400,000 in 2018.⁹ These facts

and figures are a disquieting reminder for the necessity of the Indian authors to be particularly aware of the phenomenon of predatory publishing practices.

Before we proceed further, let us review some of the terminologies [Box 1].¹⁰ A clear understanding of the various terms are needed for proper appreciation of the depth and extent of the problems. Predatory publishing has been on the radar for quite a while now, but we have perhaps finally reached a point where the damage being done to the credibility of research may be enough to move the stakeholders involved—universities, funders, publishers, in short, the world of scholarly publishing as a whole—to finally take some action.¹¹

How do dermatologists fare as far as knowledge and awareness of predatory publishing is concerned? A pan-Austrian survey conducted among 286 dermatologists confirms that majority of dermatologists were not familiar with predatory journals. This was particularly the case for physicians in training and in the early stages of their career – exactly the group who are the target of the predators.¹²

Most of the times, authors—mostly inexperienced, gullible and novice authors—get ensnared by these publications, bedazzled by their claim of a mind boggling ‘impact factor’ (which by the way has no value and, in all probability, concocted) and a too good to be true guarantee of acceptance within three days. Most of the times, there is no upfront mention of article processing charges. But an independent investigation on Indian predatory journals shows that the “charge” or “fee” ranges from \$30-\$1,800 per piece or article.¹³ The global average estimate is \$500-\$1000 per publication.¹⁴ Once the author realizes that (s) he has to fork out serious money and asks to withdraw, the fun begins. Usually, an immediate letter of acceptance arrives in the

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Box 1: Glossary of terms

Predatory publications: The entities that prey on academicians for financial profit via article processing charges for open access articles, without meeting scholarly publishing standards

Pseudo-journals: Journals that despite being published by legitimate publishers exist solely for marketing purposes; do not provide peer review sufficient to identify “fake” papers; and other questionable practices

Hijacked journals: A journal is hijacked by creation of a counterfeit website that mimics the website of a legitimate journal for the purpose of soliciting submissions and collecting author fees from authors who believe they are sending their work to the legitimate journal

author’s mailbox followed soon by the proof. Pleas for withdrawal are countered with a demand for withdrawal fees, promising to set one back by something like \$500. Correcting the proof and sending it back opens the floodgates of harassment that is generally semi-permanent in nature, following the hapless author till (s)he dies of old age, or else, till the publisher plonks out of the web space, something that is known to happen with dubious publishing organizations. One cannot submit the paper unless one first gets rid of the stalker publisher. Publication in such a journal is an indelible blot on one’s academic record. To make matters worse, the journals have misleading names. Hypothetically speaking, *Dismal Dermatology* may be a legitimate, respectable journal, but *Dismal Dermatological Sciences* would be a predator. By the way, let me make our readers aware here that IJDVL had gained enough fame to deserve a deceptive doppelganger called IJDV, published from China, some time back. More disturbingly, recently an Indian entity named the *International Journal of Dermatology, Venereology and Leprosy Sciences* (IJDVLS) has also hit the market, complete with a mindboggling journal impact factor and all.

A spin-off of these shoddy operations is organizing ‘predatory’ conferences, where anyone can ‘speak’ on ‘anything’, albeit for a fee.¹⁵ Anything means absolutely anything – such as the abstract on phlogiston theory of combustion in a chemistry conference in 2018, that had been described in 1667 and debunked by the 18th century.¹⁶

Another good camouflage tactic employed by these publishers is having some well-known names in the editorial or advisory boards. Sometimes, it is vanity and ego. Other times, these unfortunate individuals might not even be aware that their names are misused in this fashion.¹⁷ The journals try to keep up with the times as well, maintaining the technological edge. So we have predatory science journals posting videos that are a new revenue stream for them. Here, fees range from \$1,500 to \$4,200, as opposed to a few hundred for a written document.¹⁸

The following are the basic criteria for identifying predatory publications:

1. Charging exorbitant rates for publication of articles in conjunction with a lack of peer-review or editorial oversight
2. Notifying authors of fees only after acceptance
3. Targeting scholars through mass-email spamming in attempts to get them to publish or serve on editorial boards
4. Quick acceptance of low-quality papers, including hoax papers
5. Listing scholars as members of editorial boards without their permission or not allowing them to resign
6. Listing fake scholars as members of editorial boards or authors
7. Copying the visual design and language of the marketing materials and websites of legitimate, established journals
8. Fraudulent or improper use of international standard serial numbers (ISSNs)
9. Giving false information about the location of the publishing operation
10. Fake, non-existent, or misrepresented impact factors.¹⁹

Jeffrey Beall, an academic librarian at the University of Colorado, Denver, first started a directory based more or less on these criteria. He categorized journals and publishers into potential, probable or possible predators. He termed this as “black list”. Its obverse, the “white list”, also came into existence, tabulating the publishers who are supposedly safe, respectable and good. Beall’s list attracted many criticisms and controversies, not the least for being West-centric and biased in favour of subscription-only publications. Another criticism worth noting is that the terms “black list” and “white list” and their usage reinforces, perpetuates and legitimizes racist thinking and culture.²⁰ Beall’s list shut down in 5 years in January 2017 after being mired in controversies and under threat of law suits. Copies of the website are still found on the net.²¹

A gross defect of Beall’s list was equating open access journals with predatory publications. Actually, there is some direct motivation for open-access journals to indulge in predatory practices, as the authors are usually the major payers and money-earners for the journals, unless these are subsidized by some other source. If the authors pay, there is an incentive to provide an author service that may not be good for science (e.g. publishing without peer review, that is, quality control). This is the slippery slope to predation. It can only be prevented by doing away with the author payment model. This can be possible when the association subsidizes the journal in case of an association-owned journal or when the journal earns substantially through commercial advertisements, or both (the example can be the very model through which this journal operates). Thus, painting all open access journals with the same black brush renders the list open to valid criticism. Another related bias is reflected in the overt notion held widely that small scholarly journals from small developing countries are predatory.

These errors were pointed out in a methodical survey undertaken on predatory journals.²² Another study demonstrated the subjective nature of Beall's criteria by applying his criteria to both open access and closed access journals to demonstrate that traditional peer-reviewed journals too could be considered predatory. Many of these journals are considered as top-tier publications in the field.²³

A new list, Cabell's, took its place in 2017 itself, seeking to create a more rigorous and consistent version. Let us cite a statistic to understand the dimensions of the problem: Cabell's blacklist currently includes almost 12,000 journals – and its list of titles under consideration for inclusion in the blacklist comes to over a thousand more.²⁴ Governments have also stepped in to create their own blacklists. We have already mentioned India's chequered attempts in this regard. China is also contemplating on having a national blacklist.²⁵

Perceptions of what the term “predatory” means vary widely. An established journal regularly canvasses authors to become a “fellow” of the journal, for a fee, and promises “fast sympathetic peer review and rapid publication of accepted articles”. There has been some criticism in a medical editor's group that this would be tantamount to predatory activity. A critic has panned all established publishers as predatory, some being only bigger than others. The author argues that closed access journals that charge fees from readers for permitting access to articles have an equally unethical publishing model where they capitalize on the free intellectual labour provided by the authors and reviewers and research funded by others.²⁶ Viewed in this light, such journals reveal not the dark side of the open access movement, but the dark side of academic knowledge production itself.

Such lack of objectivity regarding the operational definition of predatory journals permeates the black lists and white lists too. A comparison of two black lists (Beall's and Cabell's) and two white lists (Directory of Open Access Journals, DOAJ and Cabell's) confirm that there is overlap between journals and publishers included in black lists and white lists.²⁷ The two are not as distinct from each other as black and white should be – black lists and white lists differ in their criteria for quality and the weight given to different dimensions of quality. Aspects that are central but difficult to verify receive insufficient attention, making these in reality different shades of grey.

There is no reason to believe that all who publish in predatory journals do so unwittingly. The business model would crumble if it were so. There are a significant number of deliberate preys as well. Why does one publish deliberately in predatory journals? The standard view is that mainly researchers from low-ranked universities in developing countries publish in predatory journals, as exemplified by a recent coverage on the subject in the *University World News*.²⁸ Nigeria, India, Pakistan and China have been identified as the main

patrons of the fake journals. In 2010, UGC, India's higher education regulator, introduced the Academic Performance Indicators, in which it made research compulsory for teachers across all kinds of higher education institutions, including teaching-focussed colleges, for career advancement. At around the same time, the erstwhile Medical Council of India too introduced publication parameters for appointment and promotion of teachers in the medical colleges. The insistence on research from all teachers without consideration of, among other things, infrastructural deficits (poor libraries and non-existent research labs) at the majority of institutions and poor knowledge and skills for research among most teachers, was a hare-brained idea. With research and publishing made compulsory in such an atmosphere, a large number of teachers take the only available option, which is publishing in fake journals.

The notion that fake publishing is a developing world problem, however, has been challenged by qualitative studies undertaken in universities in the West that revealed that experienced researchers from the developed world do publish in predatory journals, and mainly for the same reasons as do researchers from developing countries: Lack of awareness, speed and ease of the publication process, and a chance to get published work rejected elsewhere.²⁹ A recent study led by a group of journalists and data experts and facilitated by the International Consortium of Investigative Journalists (ICIJ) found that hundreds of thousands of researchers worldwide have published in alleged predatory journals in recent years. Among them are researchers from renowned research institutes and universities, employees of federal authorities, even a Nobel laureate.³⁰ The study had analysed 175,000 scientific articles published by 5 of the world's largest pseudo-scientific platforms including the Hyderabad-based Indian publisher referred to earlier and the Turkey-based World Academy of Science, Engineering and Technology, or WASET.³¹ According to one estimate, more than 6% of America's academic papers appear in deceptive journals.³² Among those published in these fake academic journals are works of hundreds of researchers from Ivy League universities like Harvard, Yale and Stanford.³³ More than 5,000 German scientists have published papers in pseudoscientific journals, according to reporting undertaken by German public broadcasters NDR and WDR together with the *Süddeutsche Zeitung Magazin* and additional national and international media outlets.³⁴ In fact, there are well-founded allegations that academic institutions in the West are complicit with predatory publishing. In recent times, a tenured Canadian professor had to face persecution for his research on predatory publications in which he had used his colleagues as data set.³⁵ Jeffrey Beall also cited “intense pressure” from his employer to be behind his decision to close down his list, although his supervisor and institution later denied this.³⁶

Another big group among the willing patrons of predatory publishers are commercial entities, for reasons that are

obvious. A very recent example is provided by the Juul Laboratories, which dominates the US e-cigarette market. The company promoted a study claiming that one of its products “dramatically” cuts adult smokers’ cigarette consumption. However, experts cast doubt on the quality of the study, warning that it was published in a predatory journal.³⁷

On a regular basis, stories on how researchers publish fake articles and fake proposals in fake journals and spam conferences circulate in the social media platforms.³⁸ In 2013, the famous article of John Bohannon appeared in *Science* with an evidently fictitious manuscript made up in style of a scientific original, but immediately recognizable as fake material. It was however sent to 304 open-access journals and got accepted by 157.³⁹ The story of how Mazières and Kohler managed to get an article containing nothing but an almost endless repetition of the sentence “Get me off your fucking mailing list” in the “International Journal of Advanced Computer Technology” is a classic.⁴⁰ So is the story about Anna O. Szust who sent 120 applications for an editorial position to predatory journals mentioned in Beall’s list. Dr. O. Szust also sent 120 applications each to journals with proven integrity (having an official impact factor and mentioned in the Journal Citation Report, JCR) and 120 legitimate open access journals, being indexed in the Directory of Open Access Journals (DOAJ). Anna O. Szust listed no significant scientific qualifications in her cover letter. Nevertheless, one-third of the predatory journals wrote back to Szust, offering her the position.⁴¹ In Polish, the word “oszust” means “fraud.” In fact, Dr. O. Szust was not a real person, but an invention by four Polish social psychologists in order to shed light on the sloppy editorial procedures of predatory journals.⁴² By the way, none of the 120 journals with acceptable level of editorial standards accepted the fictitious scientist. Last but not least, there is the story of the 2 journalists who submitted a fictitious proposal called, ‘The Biomechanics of How Pigs Fly’ for a conference and got it accepted.⁴³

One of the more pernicious criminal activities of the predators is journal hijacking. A hijacked journal is a legitimate scientific journal that offers print-only version, for which a bogus website is created by a malicious third party fake publisher for the purpose of fraudulently offering research scientists the chance to rapidly publish their paper online with publication fee. In the last few years, more than 100 such hijacked journals have been observed.⁴⁴ In a new spin, this form of business is sought to be mainstreamed by organized groups, such as one explicitly named as “Journals Mafia”, which solicits journals openly offering up to \$10,000 a month. For example, one mail to a director of EMBO went like this: “If your journal does not bring you joy no longer, we will buy it.”⁴⁵ A variant of such parasitic predatory activities is sending forged acceptance letters on behalf of reputed, established journals. This scam seems to be taking hold in certain parts of the world. Over the last 5 years, just

one society having such a journal has become aware of as many as 7 such fake acceptance letters.⁴⁶

How to get rid of the scourge? Mentors play a key role here. They must teach, by their own examples, that it does matter what and where to publish and that nurturing, as well as tarnishing, the scientific reputation is in one’s own hands.⁴⁷ Organizations like INASP (originally, the “International Network for the Availability of Scientific Publications”) also play a role in teaching and helping authors through their AuthorAID programme, etc.⁴⁸ Respectable publications, such as ours, recommend researchers to utilize the services of Think.Check.Submit. (<http://thinkchecksubmit.org>) which “helps researchers identify trusted journals for their research”, in part by providing a checklist for authors to consider when choosing a journal to submit to.⁴⁹

However, awareness can only do so much. There must also be institutional checks to rein in the business. The Plan S, that has been mooted by a coalition of national funders, joined by the European Commission and the European Research Council, to make open access publishing mandatory for recipients of their agencies’ research funding acknowledges this by pledging to support initiatives that establish robust quality criteria for open access publishing, such as the DOAJ and the Directory of Open Access Books (DOAB).⁵⁰

Institutional steps must be well thought out. Otherwise, these may do more harm than good. For example, the MCI had come up with certain recommendations regarding publications for assessment of eligibility for appointment and promotion of teachers in medical colleges, first in 2015 and then in 2017 by means of an amendment. Quite rightly, MCI recommends publications in indexed journals to be eligible for consideration. However, in 2017, in a half-hearted manner, it failed to mention the names of the indices for this purpose, thus implying that the 2015 list would be followed for this purpose. The problem was that the 2015 list contained certain indices that happily incorporated many predatory journals and pseudojournals.⁵¹

To conclude, predatory publishing is a hydra-headed monster that is not easy to kill. The predatory activities emanate directly as fallout of the patently unfair, highly profit-oriented publication models in vogue that not only charge punishingly either the authors or the readers, but also live off parasitically on unpaid labour and skill of innumerable reviewers and editors. Predatory publication is therefore a scourge that is not going to be wished away anytime soon. The only doable thing for the non-predatory journals is to spread awareness.

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