

## Avoiding predatory publishing for early-career ophthalmologists

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This article aims at analyzing the impact of predatory publishing in ophthalmology, criteria to identify a legitimate journal, red flags of a predatory journal, sources, and checkpoints available before publishing scientific work in a standard ophthalmology journal. A retrospective review was performed and a list of suspected Ophthalmology predatory journals was extracted through four major so-called blacklists: Beall's, Cabell's, Manca's, and Strinzel's list. This list of journals was then cross-referenced with the UGC CARE and vetted whitelist of vision science journals to remove the legitimate journals. Moreover, as all the predatory journals are supposed to be open access, all possible types of open-access journals on the Scimago webpage were also searched. A gross estimate in terms of publication cost was searched for, and a list of authentic links to find out a legitimate journal was prepared. Additionally, the methodology by which these predatory journals penetrate legitimate indexes such as PubMed was also evaluated. A total of 51 ophthalmology predatory journals were enlisted. Thirty-eight out of 124 Ophthalmology journals listed on Scimago were open access, and the cost of publishing in predatory journals ranged from USD50–500, which is substantially lower than that in legitimate journals (USD 50–3000). A total of 13 open-access platforms exist, with 10 characteristic red flags to identify a predatory journal. These journals have penetrated legitimate indexes such as PubMed by similar-sounding names to the legitimate journals and have published articles with external funding, which needs indexing. Predatory publishing impacts the quality of research in every field, including Ophthalmology, and must be discouraged.

**Key words:** Predatory journals, predatory publishing, PubMed, Scimago

Due to continuing advances in medical research, publishing in a peer-reviewed scientific journal has become important to get academic repute.<sup>[1]</sup> Clinical work pressure and hardships in time management make one submit in a predatory journal without recognizing the ill effects.<sup>[2]</sup> Many of us have not heard of terms such as “predatory publishing”<sup>[3]</sup> and “predatory journal.”<sup>[4]</sup> Predatory publishing can be simply defined as actively soliciting publication without undergoing a legitimate peer-review process in exchange for money, usually in a nonindexed journal.<sup>[5]</sup> The concept of predatory publishing stems from open access and quick publication. It simply means research published at no costs – the articles are free to view, read, download, print, copy, and disseminate.<sup>[6,7]</sup> “Predatory open access” is a term coined by Beall.<sup>[7]</sup> Their modus operandi is usually achieved through daily unrestrained invitations and solicitations of spam mails in the inbox of an author, academic clinician, or researcher.<sup>[8]</sup> These publishers have utilized the concept of open access to the core for their benefit and simultaneously have compromised the research and publication ethics by affecting the integrity and dignity of early-career academicians by providing them short-term laurels.<sup>[8]</sup> These journals lack legal and quality checks, single- or double-blinded peer-review process, promise

rapid publications within a week, offer direct submissions through emails, or have substandard “submission portals” and charge hefty amounts (usually in dollars). Unfortunately, ophthalmology is also becoming a big market for these publishers but still, the number of fake journals and articles in ophthalmology and vision-related journals is comparatively less.<sup>[6]</sup> A previous article listed more than 100 predatory journals related to neurology alone.<sup>[9]</sup> Authors must be suspicious and careful while submitting their manuscripts in journals with unfamiliar names, similar-sounding name journals, unheard publisher names, journals promising expedited publications with a nominal fee, mails referring to their previously published work, or inviting authors for editorial board membership.<sup>[10]</sup> Every research done on ethical and honest grounds deserves a detailed, unbiased peer-review by senior experts in the field with potential comments to improve the quality of the final manuscript before publication to raise the impact, citation, and respect of journal as compared to predatory sister journals.<sup>[11]</sup> Bakri *et al.*<sup>[12]</sup> highlighted around 15 potential predatory ophthalmology journals based on solicited emails received by the authors. Natarajan *et al.*<sup>[6]</sup> highlighted six ophthalmology predatory journals based on a previous report. Le *et al.*<sup>[11]</sup> mentioned as many as 42 ophthalmology and vision research predatory journals based on the red flags available.

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In this article, after a detailed literature review, we aim to describe the total approximate number of ophthalmology predatory journals available online, approximate article processing charges (APC), the criteria to identify an authentic journal and red flags of predatory journals, the blacklist and whitelist available, and the open-access archives. As per the detailed literature review, none of the previous articles in ophthalmology has given a holistic and deep insight into predatory publishing with all the characteristics mentioned above. We believe this article will be a potential source of help to all the young and established ophthalmic researchers and academic clinicians as a source to refer before submitting a research manuscript to any journal.

## Methods

The analysis adhered to the Declaration of Helsinki. The analysis does not involve any patient data; hence, it was exempted from institutional review board consent and approval. We retrospectively analyzed four major blacklists—the Beall's,<sup>[13]</sup> Manca's,<sup>[9]</sup> Cabell's,<sup>[14]</sup> and Strinzel's<sup>[15]</sup> blacklist—for Ophthalmology predatory journals using the keywords: Ophthalmology, Ophthalmic Surgery, Ophthalmology and Vision, Ophthalmic Science, International Ophthalmology, and Open Ophthalmology. The recent articles published in these journals, editorial board members, context language, article processing charges (APC) location credentials, indexing, active solicitation methods in the form of WhatsApp™ numbers, and noninstitutional or non-journal affiliated emails (e.g., gmail.com or yahoo.com), which are considered markers of predatory journals, were checked for. The journals with all these listed characteristics were collected [Table 1]. This list of journals was then cross-checked with the available whitelists namely UGC CARE<sup>[16]</sup> and Vetted List<sup>[17]</sup> of vision science journals to remove the potential legitimate journals [Table 2]. All possible types of predatory open-access journals on the Scimago<sup>[18]</sup> webpage were also searched [Table 3]. Further, the gross estimates in terms of article processing or publication costs were also estimated. Additionally, the methods adopted by the predatory journals for penetrating legitimate indexes like PubMed<sup>[19]</sup> were also evaluated.

## Results

Approximately 51 journals were enlisted as ophthalmology predatory journals based on the four blacklists. *The journals and publisher names were purposely not defined to avoid any controversies, legal issues, conflicts, to respect the journal's and the publisher's privacy.* All of these journals have 10 characteristic red flags to label them as a predatory journal; these have been listed in Table 1. None of these journals was found on the UGC CARE<sup>[16]</sup> whitelist and Vetted List<sup>[17]</sup> (Whitelist) of Vision Science Journals, thus confirming their predatory nature [Table 2]. When all the clinical ophthalmology and vision-related journals listed at Scimago<sup>[18]</sup> (JAMA Ophthalmology, Ophthalmology, Experimental Eye Research, Eye and Brain, etc.) were searched, a total of 124 journals were listed. Interestingly, when only open-access journals were included, the numbers dropped to just 38. The average open-access fee for the predatory journals was USD 50–500 as compared to legitimate journals with a fee of USD 50–3000. These journals have penetrated legitimate indexes like PubMed<sup>[19]</sup> by similar-sounding names to legitimate

journals. There were as many as 13 types of open-access options increasing the confusion among “whitelist” open-access journals [Table 3]. These journals have published articles with external funding which needs indexing.

## Discussion

Jeffery Beall was the first to coin the term “predatory publishing” in 2012.<sup>[30]</sup> The concept of predatory publishing took stride in 2010, and since then, over the years, it has conquered the world of publication.<sup>[30]</sup> As per the report by Shen *et al.*, there were 800 predatory journals in 2010, which inflated to around 8,000 journals in 2014, and the total number of predatory articles increased from 53,000 to 420,000 during this period.<sup>[31]</sup> Due to the exponential rise in publications in open-access journals and researchers looking for early-career promotion, these predatory journals have found an easy route to infiltrate the market. This has resulted in authors paying a huge amount as APC for publishing in these journals without a genuine review process.<sup>[6]</sup> We have searched the blacklists, Beall's,<sup>[13]</sup> Manca's<sup>[9]</sup> Cabell's,<sup>[14]</sup> and Strinzel's list,<sup>[15]</sup> to cross-check and verify the list of the predatory journals (approximately 51). *We have purposely not mentioned the name of the journals, their webpage, publishers, to avoid any legal issues, conflicts, controversies and to respect the privacy of the journals. This has also been avoided as few of the previous reports also mention overnight retraction of these publishers and journals once their name was highlighted in various reports.* The varied names by which these journals exist are as follows: (a) Predatory Ophthalmology journals (b) Pseudo-Ophthalmology journals (c) Fake Ophthalmology journals (d) Hijacked Ophthalmology journals.

### How predatory journals approach an author

Predatory publishers and journals usually go through the author profiles from various authentic research platforms like PubMed Central,<sup>[25]</sup> Scopus,<sup>[32]</sup> Google Citation Scholar,<sup>[24]</sup> and Research Gate<sup>[33]</sup> and shortlist them for unsolicited mails. The unsolicited mail will usually address the author with the utmost respect with the benefit of immediate publication and open-access article within few days. The APC are mostly hidden. Only experienced authors can recognize this red flag after a lot of scrutiny on their website, which often has a lot of grammatical mistakes. The journals also offer editorial board member positions to authors with a small Curriculum Vitae (CV). Any commitment made for publication or payment of APC through mail remains in the spam folder, which gets automatically deleted within 30 days. Sometimes these journals also ask for extra money on a future date, usually 6 months down the line, saying APC has not been paid and failure to comply may result in legal implications. Predatory publishers engage in deception to exploit authors. The predatory journals usually negotiate with authors for APCs; their APCs are usually not defined in the author's instruction or guidelines, and they do not charge for color images alone. The APCs are usually communicated through the mail starting from a higher amount and if the authors deny paying higher amounts. The APCs are usually negotiated to a lesser amount and hence all their articles have APCs, which help them in easy open access. In this way, despite low APCs for few articles, these journals claim to be open access. In contrast, IJO is a reputed, open-access journal with high impact factor and listing as per Clarivate analysis, which predatory journals lack. The main aim of open access here is the dissemination of quality scientific content across

**Table 1: Criteria to identify legitimate journal and red flags to identify a predatory journal<sup>(12)</sup>**

| Characteristic  | Legitimate Journal - Criteria   | Predatory Journal - Red Flags  |
|---|---|--|
| Language  | Authentic language, no grammatical mistakes, a concise sentence with a crisp explanation of instruction   | Personalized invitation emails in deceiving language often from various specialty, not necessarily linked to one own specialty   |
| Publication approach                                    | Clear instruction regarding submission, peer review, publication, and availability of articles online and in print through the standardized submission portal of the journal website.<br>Authors are required to make an account; the account is verified and then the submission process starts<br>Good-quality articles published with copyright statements | Promise for rapid submission, processing, publication, and online availability of article often through email or ill-developed or substandard submission portal  |
| Indexing  | Indexed in all the authentic and standard indices with ISSN number and DOI number. Most of the standard journals are available in PubMed and Google Scholar citation database, Scopus, Medline, listed in Scimago webpage list, and Journal Citation Reports.   | Indexing in various nonstandard indices<br><br>Deficient in International Standard Serial Number (ISSN) or Digital Object Identifier (DOI) listed with published articles on the journal's website, promotion of various substandard indices<br>Authentic indices like PubMed and Google Scholar missing   |
| Article Processing Charges (APC) or Publication charges | Standard journals with high impact factors usually have no APC. Major journals ask for APC for open access.<br><br>Transparent policy regarding APC usually for color image charges<br>Some authentic journals ask for minimal article submission charges (ASC)   | Direct link for APC often missing on website and email<br><br>Lack of transparency, APC varying from USD50 to 3000 and Multiple emails negotiating APC<br>Some journals agree for free publication in the spam mail which gets deleted after 30 days   |
| Specialties   | Specialty journals maintained by stalwarts in the field<br><br>Never approach an author to expect for review articles and guest editorials<br>High impact factor with citations   | Different specialties approaching different authors in search of monetary benefits   |
| Background Information                                  | Clear and easy to understand journal and author instructions<br><br>Linked to standard publishers like Elsevier, Springer, and MedKnow.<br>Data and bibliometrics available, citations, impact factor, previous prints, downloads, and reads  | Usually associated with local publishers, publisher information, Journal location, editor details, contact address, phone number, address often missing.<br>Journal previous issues are missing, a large number of articles having gross inaccuracies and grammatical errors<br>Fake bibliometric data like impact factor and citations<br>Display of logos mimicking well-established journals  |
| Manuscript Submission                                   | Through authors portal after signing up as an author in journal's webpage database<br>Strict submission guidelines regarding title page, cover letter, manuscript format, and image characteristics with a technical check before editorial and peer-review process.<br>Tables, references, and word limits have rules which need to be followed              | Poorly maintained submission portal with language errors, asking for direct submission through emails.<br>Often glorifying the author's previously published article in a reputed journal and asking for submission on a similar line or a commentary.<br><br>Asking authors to join as an editorial board member with a Curriculum Vitae (CV).<br>Poor quality images post-publication.<br>Lack of proper authors instructions compromising ethical standards<br>Give an option of submission to various journals with a list of associated journals,<br>Expedited review within 3 days |
| Peer-review process                                     | Stringent, Rigorous, and Time-consuming   |  |

*Contd...*

**Table 1: Contd...**

| Characteristic    | Legitimate Journal - Criteria   | Predatory Journal - Red Flags  |
|-------------------|---|--|
|                   | Usually, 3-5 reviewers for major articles with expert comments for authors to shape the article as per journal standards and quality                | Usually, no mistakes are identified in the manuscript  |
|                   | Double-blinded peer review with a final decision by the editor based on reviewers comments  | Approach through WhatsApp or Google Hangouts for changes and processing charges without proper email or authentic communication. |
| Timeline          | From submission to publication, average time taken by major standard journals is 3-4 months   | Expedited review and publication promise within a week.<br>Article availability online immediately post APC submission           |
| Previous editions | Previous issues can be easily surfed.<br><br>10-20-year data of article published online available<br>Open access charges apply for major journals. | Authentic data regarding the previous edition missing, not identified on the website or and search engine.                       |

**Table 2: Sources for identifying a legitimate journal**

| Source   | Link  |
|--|---|
| The Think. Check. Submit. Initiative <sup>[20]</sup>                 | <a href="https://thinkchecksubmit.org/">https://thinkchecksubmit.org/</a>   |
| Directory of Open Access Journals (DOAJ) <sup>[21]</sup>             | <a href="https://doaj.org/">https://doaj.org/</a>   |
| Committee of Publication Ethics (COPE) <sup>[22]</sup>               | <a href="https://publicationethics.org/">https://publicationethics.org/</a>   |
| Open Access Scholarly Publishers Association (OASPA) <sup>[23]</sup> | <a href="https://oaspa.org/">https://oaspa.org/</a>   |
| Cabell's blacklist <sup>[14]</sup>                                   | <a href="https://www2.cabells.com/">https://www2.cabells.com/</a>   |
| Beall's blacklist <sup>[13]</sup>                                    | <a href="https://beallslist.net/">https://beallslist.net/</a>   |
| Strinzel's blacklist <sup>[15]</sup>                                 | <a href="https://mbio.asm.org/content/10/3/e00411-19">https://mbio.asm.org/content/10/3/e00411-19</a>   |
| Google Scholar <sup>[24]</sup>                                       | <a href="https://scholar.google.com/">https://scholar.google.com/</a>   |
| PubMed <sup>[19]</sup>   | <a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a>   |
| PubMed Central <sup>[25]</sup>                                       | <a href="https://www.ncbi.nlm.nih.gov/pmc/">https://www.ncbi.nlm.nih.gov/pmc/</a>   |
| MEDLINE <sup>[26]</sup>  | <a href="https://www.nlm.nih.gov/medline/medline_overview.html">https://www.nlm.nih.gov/medline/medline_overview.html</a>   |
| Scimago List <sup>[18]</sup>   | <a href="https://www.scimagojr.com/journalrank.php?category=2731">https://www.scimagojr.com/journalrank.php?category=2731</a>   |
| Predatory Journals list <sup>[27]</sup>                              | <a href="https://predatoryjournals.com/journals/">https://predatoryjournals.com/journals/</a>   |
| UGC CARE Whitelist <sup>[16]</sup>                                   | <a href="https://www.ugc.ac.in/journallist/">https://www.ugc.ac.in/journallist/</a>   |
| Vetted List (Whitelist) of Vision Science Journals <sup>[17]</sup>   | <a href="http://www.avsl.org/resources/vetted-list-of-vision-science-journals/about/">http://www.avsl.org/resources/vetted-list-of-vision-science-journals/about/</a> |

**Table 3: Types of open access archives<sup>[28,29]</sup>**

| Type of Open access | Description  |
|---------------------|--|
| Gold                | Double-blinded, Peer-reviewed, Open-access journals are freely available on the Internet. Some publishers may charge APC.  |
| Green               | Researchers can self-archive publications in institutional repositories -provide free unlimited online access to self-archived versions of publications based on publishers' discretion. |
| Hybrid or Dual Mode | Both OA and subscription print-based access offered.   |
| Diamond             | Subcategory of Gold open access, article are freely published and are OA   |
| Eprint archive      | Preprint and postprint available in author's OA archive  |
| Abstract            | Only Abstract available as OA  |
| Author fee          | Post author manuscript charges open-access available   |
| Partial Open Access | Only some articles in an edition are open access   |
| Delayed             | OA is available some months down the line  |
| Unqualified         | Immediate OA of full-text article  |
| Per capita          | OA is available based on the per capita income of the country  |
| Libre               | Open license-based articles can be used or shared  |
| Gratis              | Free online available article but reuse is restricted based on copyright reserves  |



the globe. Moreover, the author's guidelines and instructions are predefined with APCs only for color images. Respected journals like IJO do not approach an author for publication claiming to be open access.

#### What motivates authors to submit in a predatory journal

The motivating factors for early-career researchers are expedited publication within a week, inflation of CV, minimal hard work, no peer review, substandard easy submission portal, or submission directly through the mail, WhatsApp, or Google Hangouts, the pressure of respect and recognition within peers, a large number of publications within a short period and hike of research gate impact factor. Some of the professional positions in various institutes and medical colleges also attract young researchers to publish in these journals for career advancements, promotions, and early peer recognition.

#### The ill effects of publishing predatory journals

The publication in predatory journals leads to a distortion of the published scientific literature and the prevalence of low-quality manuscripts online, with a biased or no peer-review process. These also lead to an inflation of errors. The clinicians and researchers sometimes also cite the papers that have been published in predatory journals and discuss controversial and invalid findings in their manuscripts submitted for publications to reputable journals. The predatory journals in most instances are available for free online. This has an unknown but surely harmful effect on medical education, patient knowledge, and belief (as patients also surf the internet in search of information about their disease), and has direct implications on health care and research.

#### How these journals penetrate authentic databases like PubMed

PubMed<sup>[19]</sup> is a free online search engine that shows primarily the MEDLINE<sup>[26]</sup> database of references and abstracts on life sciences and biomedical topics. The United States National Library of Medicine (NLM) at the National Institute of Health (NIH) is responsible for maintaining this database as part of the Entrez system for information retrieval. On the contrary, PubMed Central (PMC)<sup>[25]</sup> is a free digital repository that archives open access to full-text scholarly articles that have been published in life science and biomedical journals. PubMed Central<sup>[25]</sup> is distinct from PubMed.<sup>[19]</sup> Those authors whose study has been funded by NIH or any other secondary funding agency will have to submit their article to PMC and these articles will be available online freely. If a study has been funded by NIH and has been submitted to a predatory journal, this will then be featured on PubMed.<sup>[19]</sup> So, all the publications on PubMed<sup>[19]</sup> must be cross-referenced with MEDLINE<sup>[26]</sup> to consider them genuine.

#### Predatory rate, pseudo impact factor, citation database compromise

##### *Predatory rate*

"Predatory Rate" (PR)<sup>[34]</sup> is a predatory ranking metric proposed by a team of experts and researchers, which is built upon 14 criteria, such as editorial members, peer-review process, publishing, period, announcements, open-access policy, and APC. Each criterion has been given a weightage ranging from 1 to 3, and PR is a continuous value between 0 and 1. When PR equals 0, it excludes a journal from predatory metrics. A PR higher than 0 and lower than 0.22 suggest that

the journal is following predatory norms and cannot be labeled as a whitelist journal. A score of more than 0.22 confirms the predatory nature of the journal.

#### Pseudo impact rate

A predatory journal is not indexed on PubMed or Web of Sciences and Google Scholar; hence, it cannot have an impact factor. It is very easy for a predatory journal to claim a fake impact factor of 10 or 15.<sup>[27]</sup> As we are aware that the topmost legitimate ophthalmology journal "Ophthalmology" has an impact factor of ~12.079, our eyes must light up when these predatory journals claim so high fake IF that never existed.

#### Citation database compromise

The PubMed<sup>[19]</sup> inclusion criteria for any journal are not very stringent. Any newly launched journal can be indexed in less than 2 years if "there is evidence that the management and individuals responsible for editorial quality and operations have adequate experience in comparable positions at other organizations." Predatory journals take advantage of this and use these reputable researcher names, even without their knowledge, and get their journal indexed in PubMed. Hence, before inclusion in PubMed,<sup>[19]</sup> the NLM again will cross-verify the 16 recommendations proposed by the International Committee of Medical Journal Editors, but in the absence or compromise of any assessment from the MEDLINE<sup>[26]</sup> technical selection review committee, NLM does not cross-verify names of the journal from established directories. This is the sole reason why these journals have very familiar mimicking sounding names when compared with established legitimate journals so that they may be mistaken for them and thus are included in PubMed.<sup>[19]</sup>

#### How to overcome the problem of predatory publication

There are some precautionary steps by which predatory publishing can be avoided:

1. The criteria to identify an authentic journal have been listed in Table 1 based on the literature review for the benefit of the authors.
2. The red flags of a predatory journal have been listed in Table 1, which can be a potential help to recognize predatory journals.
3. Jeffery Beall, a librarian from Colorado proposed a whitelist and blacklist way back in 2010 by compiling all unsolicited sham emails over 1 year, which was later replaced by the website [www.predatoryjournals.com](http://www.predatoryjournals.com).<sup>[27]</sup> The UGC CARE<sup>[16]</sup> whitelist and Vetted List<sup>[17]</sup> (Whitelist) of Vision Science Journals are also available as a reference to segregate predatory journals.
4. The Cabell's<sup>[13]</sup> blacklist enlists 12000 predatory journal which is available online as a paid subscription.
5. The verification of indexing of the journals can be done from high-quality legitimate databases, such as PubMed,<sup>[19]</sup> MEDLINE,<sup>[26]</sup> Scimago,<sup>[18]</sup> and Journal Citation Reports.<sup>[35]</sup> There is an international initiative called "Think. Check. Submit." (<http://thinkchecksubmit.org>)<sup>[20]</sup> that is very helpful and provides an important recommendation to all authors [Table 2].
6. Institutional steps must be taken to avoid this problem. MCI took initiatives first in 2015 and then in 2017 by employing an amendment and proposed recommendations regarding publications for assessment of eligibility for appointment and promotion of teachers in medical colleges. MCI

recommends publications in indexed journals to be eligible for consideration.<sup>[36]</sup>

Hence, in a nutshell, only the possible authentic web portals and blacklists have been listed to help researchers take a wise decision before submitting their research manuscript to any journal. Publishing in predatory journals leads to the loss of valuable research work, reduces the quality of the publication, disrespects a researcher among his/her peers, and acts as a hindrance and barrier in career progression. Some journals are even indexed on PubMed, and they have sophisticated web pages and high-quality online presentations. So, to be on the safer side, the authors are advised to refer to whitelists and recheck with blacklists available. The COVID-19 pandemic provided a huge opportunity for research and publication, especially during the lockdown.<sup>[37]</sup> The predatory journals also took it as a window of opportunity to tranquilize juvenile researchers. We also experienced a huge number of spam emails in our inboxes during the pandemic. There are few limitations of our article like retrospective review; an approximate number has been listed because of the overlap of few journals as per various blacklist sources available online. Cabell's<sup>[14]</sup> list is not open access and details of all journals are not provided to avoid any conflict or legal issues. As per detailed literature review, the strengths of this manuscript lies in the fact that this is probably the first ophthalmology article on avoiding predatory publishing with insights on signs to identify an authentic journal, red flags of predatory journals, sources, and checkpoints available before publishing scientific work in a standard journal for early-career ophthalmic clinicians and researchers. These publications must be discouraged, and we as a research society must create awareness about the existence of predatory publishing within ophthalmology.

## Conclusion

Predatory publishing has grown exponentially over the years and is a growing problem across the globe. Early-career academicians and researchers must know these criteria before submitting any manuscript for publication. Although the numbers are less, ophthalmology as a specialty is not immune to predatory publication. Predatory publishing invites disrespect, compromises career opportunities, acts as a hindrance to the academic growth of a clinician, and causes huge efforts and money loss if caution is not taken at the appropriate time. COVID-19 pandemic also acted as raw growth for fertilizing these predatory journals. This article can act as an eye-opener and will benefit all the ophthalmologists interested in research and publication around the world.

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## Conflicts of interest

There are no conflicts of interest.

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