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RESEARCH PUBLISHING

How to avoid being duped by predatory journals

Some journals capitalise on researchers' and clinicians' need for publications by luring them in with flattering emails, only to subject them to poor editing practices and threatening invoices. The best way to avoid this is to learn to spot the warning signs, writes **Eva Amsen**

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There are tens of thousands of academic journals, with new ones appearing all the time, creating a complicated landscape of many potential homes for every article. "Unfortunately, because it's so big and confusing, predatory journals have taken advantage of this system," says Dominic Mitchell, operations manager at the Directory of Open Access Journals (DOAJ) and current chair of the Open Access Scholarly Publishers Association, a trade association of open access journal and book publishers.

"A predatory publication is one that is deceptive in some way; where the publishers are not transparent about what they're doing," explains Katherine Stephan, research support librarian at Liverpool John Moores University.

In 2019 a US court ordered OMICS Publishing Group to pay \$50.1m to the Federal Trade Commission for misleading researchers.¹ The court found that OMICS engaged in numerous deceptive practices. Often authors were not told about publishing fees until after their articles were accepted. Those who then asked for their articles to be withdrawn were frequently refused.

And this is just the tip of an iceberg of bad publishing practices. Keeping track of the deception is difficult—partly because there is no hard line between what's considered predatory and what's not. But publishing experts are trying to make sense of it and help researchers make informed choices.

A spectrum of bad practices

In 2019 an international panel of publishers, librarians, researchers, and others agreed a general definition of predatory publishing: "Predatory journals and publishers are entities that prioritise self-interest at the expense of scholarship and are characterised by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, or the use of aggressive and indiscriminate solicitation practices."²

The definition emphasises the many different behaviours that could be considered "predatory" and that few journals will show all of them at once.

"Researchers often see this as a binary—a publisher is either predatory or not," says David Moher, director of the Centre for Journalology at Ottawa Hospital Research Institute, and co-organiser of the panel that set the definition. "But, as in most things in life, there's a spectrum," he says. At the extreme of the spectrum are publishers that add researchers' names to articles or editorial boards without their knowledge, or place fake impact factors on their websites. At the other end are those that may not have any intention to mislead, but whose editorial processes might have moved away from best practices. Regardless of intent, any lack of quality control creates risks for both authors and readers of scientific articles.

When you read a journal article, you usually can't see how scrupulous the editing and peer review process was. At first glance, articles with mistakes, oversights, or even made-up data can be difficult to differentiate from any other article, and researchers and clinicians are at risk of unintentionally amplifying unvetted data.

For authors, a journal's lack of editorial processes may become clear once a paper comes back from peer review with no comments, or when editors introduce errors into the paper. At that point it may, however, be too late to withdraw the submission, and the author risks being stuck with a publication that does not reflect the quality of their work.

"People from all walks of life end up having papers in predatory journals," says Moher (see box). Some of them might be under pressure to publish quickly and a call for submissions can arrive at just the right time. Recognising the sign of a predatory email can prevent people from being lured into a publication they may regret.

Flattering, desperate emails

Peter Gøtzsche, epidemiologist and director of the Institute for Scientific Freedom in Copenhagen, receives so many unsolicited requests for articles that he decided to analyse these emails for a month. "The emails are always flattering," he says, "and they say that they are in a desperate situation." Emails will ask for urgent submissions, and cite the recipient's own work and praise their qualities as a researcher.

Gøtzsche collected many of these examples in a preprint.³ A few weeks later, he found another email in his inbox, this time urging him to submit this very preprint—the one about predatory emails—to a predatory journal.⁴

Blocking senders doesn't help. Gøtzsche noticed that one publisher was using email addresses from dozens of different web domains to bypass filters. The best course of action is to ignore such emails completely. But Sam Shuster, emeritus professor of dermatology at Newcastle University, decided to reply to some of the emails he received, just to see what would happen. "They were anxious to get a paper to fill the journal," he says. But when he feigned interest and replied, it quickly became clear that what they really wanted was his money rather than his research papers.⁵

Shuster and Gøtzsche knew that the emails they so regularly received were predatory tactics. "They're easily detected," says Shuster.

"It virtually never happens that I am invited by a decent journal to write something," explains Gøtzsche. And when it does happen, it's for an editorial or opinion piece, never for a research article. Moher agrees, "It is very rare for a legitimate journal to write to you and ask for a paper."

However, Theodora Bloom, executive editor of *The BMJ*, disagrees: "It is absolutely not uncommon for journals (including some published by BMJ) to call for papers or call for contributions to special issues. Editors also frequently approach researchers whose work is of interest to encourage them to submit relevant work to their journal."

So, an email requesting urgent submissions may not be a clear red flag, but there are other signs that such an email isn't genuine. Excessive praise and poor grammar are examples given by Schuster.

Some predatory journals may mention editors that have no idea that their name is being used to recruit articles. "I remind people regularly to check Google that they haven't become an editor of a suspicious journal," says Moher.

This happened to Shuster, who discovered that he is named as editor of a journal published by Longdom. It even published an editorial in his name that he didn't write. "It's awful," he says. Shuster tried unsuccessfully to get the editorial and his profile removed by contacting the journal and publisher Longdom through a formal letter. Longdom did not respond to *The BMJ*'s request for comment.

The limitations of lists and databases

Researchers and librarians have sometimes checked whether publishers they hadn't heard of were included in "Beall's list." This list was curated by librarian Jeffrey Beall, who also coined the term "predatory publisher," but he stopped updating it in 2017.⁶ There are newer websites that do similar lists, but Mitchell and Stephan are cautious about relying on them.

"Lists like that have a danger of being extremely subjective," Mitchell says. Whoever curates the list decides which publications are labelled as predatory. "Lists are also biased towards higher income countries and to English language publications," adds Stephan. That means that many predatory journals from other places and in other languages will be missed.

A less biased, but also imperfect, method is to do the opposite and check whether a journal is included in a database that requires publishers to adhere to some level of editorial practices, such as DOAJ, Medline, or Scopus.

"It's like the *Yellow Pages* of open access journals," says Mitchell about DOAJ. "It's a way for people to find an approved journal that they know somebody has looked at and reviewed." However, DOAJ only includes open access journals, so it's not an exhaustive list.

Biomedical journals are also not automatically above board if they appear in PubMed.

"If research is publicly funded and there's an article from it, there is a back channel for predatory publishers to get themselves into PubMed," says Moher. Any papers that were supported by grants from funders with an open access requirement can be uploaded to PubMedCentral, which will get them indexed in PubMed, regardless of the journal. $^7\,$

Learning to spot the signs

Instead of relying on lists of journals, Mitchell recommends researchers learn what to look for when submitting a paper.

Mitchell and Stephan are both committee members of Think. Check. Submit, an initiative set up by several international scholarly publishing associations to make researchers more aware of what to look for when submitting to a journal.⁸

"Think. Check. Submit is not trying to say, 'This publisher is bad,' or 'This journal is bad'," says Stephan. "Just that you have to dig a bit deeper." The website offers a checklist researchers can use to assess a journal before they submit. It includes questions such as "Do you or your colleagues know the journal?" "Is it clear what fees will be charged?" and "Is the journal clear about the type of peer review it uses?"

Asking questions like this will help researchers to recognise when a journal might be concealing information about their process. "It all comes back to transparency," says Stephan.

Moher's Centre for Journalology is developing a tool that will help researchers evaluate the transparency of different publishers.⁹ Meanwhile, the group also provides other resources and advice for people who are concerned or unsure about journals' predatory tactics.

"It's not a black and white matter," he says. "It's based on thinking about the behaviours and actions of publishers."

Whether to submit to a journal or not is up to every individual researcher (and their coauthors). But understanding the hallmarks of predatory publishers and knowing the risks of submitting to them is the best way to avoid being misled.

Non-standard impact factors, poor editing, and persistent threats—two researchers reveal their experiences

It can happen to anyone. Samantha Brooks, reader in cognitive neuroscience at Liverpool John Moores University, was dealing with a family illness when she submitted a paper in response to an email from what turned out to be a predatory journal. "They caught me at a difficult time," she says. "It was embarrassing because I normally notice these things."

Steven Lim, infectious disease specialist at Hospital Raja Permaisuri Bainun in Malaysia, says that he was "young and naïve" when in 2016 he responded to a predatory email. After a brief peer review process, Lim's paper went through an editing process during which data went missing and tables were badly formatted. "I had to make multiple requests for corrections," he says.

Neither author was told about publication fees when they submitted, but then invoices arrived. By now, Brooks realised that the journal in her case, published by OMICS, was not using a standard impact factor. A request for article withdrawal was not acted on, but her fee was waived. Despite this, she continued to get emails asking for money, some threatening legal action. OMICS did not respond to *The BMJ*'s request for comment.

Lim started getting invoices from the publisher of his article in his case in 2020, four years after his article was published. "I was dubious about the situation as I had no dealings with the publishers themselves, and then I found out that they had a chequered history," says Lim, who also tried unsuccessfully to withdraw his article.

Brooks and Lim both got support from their respective institutes and research organisations and were advised to ignore the threatening emails. Their experiences were stressful, however, and their articles are still out there, in journals they regret submitting to. I have read and understood BMJ policy on declaration of interests and declare the following: EA was employed at publishers the Company of Biologists (2010-13) and F1000Research (2013-16). EA has carried out occasional freelance work for online or news sections for publishers ACS, Hindawi, PNAS, and Springer Nature. EA did not contribute to editorial selection of any manuscripts for these publishers.

- Dyer O. US consumer agency wins \$50m order against predatory publisher OMICS. *BM*/2019;365:. doi: 10.1136/bmj.11639 pmid: 30952626
- 2 Grudniewicz A, Moher D, Cobey KD, etal. Predatory journals: no definition, no defence. *Nature* 2019;576:-2. doi: 10.1038/d41586-019-03759-y pmid: 31827288
- ³ Gøtzsche PC. Review of invitations to publish in predatory scientific journals. SocArXiv 2023. [Preprint] doi: 10.31235/osf.io/jdgpxosf.io/jdgpx
- 4 Gøtzsche PC. Predatory journal "invites" me to submit my preprint manuscript about invitations to publish in predatory journals. Institute for Scientific Freedom. 2023. www.scientificfreedom.dk/2023/06/02/predatory-journal-invites-me-to-submit-my-preprint-manuscript-about-invitations-to-publish-in-predatory-journals
- 5 Shuster S. Predatory pirate journals and what we can do about them. BMJ Opinion. 2021. https://blogs.bmj.com/bmj/2021/11/05/sam-shuster-predatory-pirate-journals-and-what-we-cando-about-them
- 6 Beall J. What I learned from predatory publishers. Biochem Med (Zagreb) 2017;27:-8. doi: 10.11613/BM.2017.029 pmid: 28694718
- 7 Manca A, Cugusi L, Cortegiani A, Ingoglia G, Moher D, Deriu F. Predatory journals enter biomedical databases through public funding. *BMJ* 2020;371:. doi: 10.1136/bmj.m4265 pmid: 33293265
- 8 Think. Check. Submit. https://thinkchecksubmit.org
- 9 Centre for Journalology. Journal transparency tool. https://ohri.ca/journalology/oss-journal-transparency.