Essays

What should we do about predatory publishing?

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Abstract: 'Predatory' publishing covers a wide range of journals with different characteristics. Society and scientists should not accept deceitful practices in science. Neither should we accept anything less than excellence from publishing houses. Therefore, we should take three measures: first, form committees for each research field to keep track of journals and publishers; second, create a forum where scientists can share their experiences of predatory journals; third, develop software to help scientists and officials spot references to predatory journals in papers and in applications for funding, promotions, or positions.

Keywords: Predatory publishing; predatory journals; peer review

For the last few years, so-called predatory publishing has gained attention from the academic community. 1-3 This notion mostly refers to open access journals that publish in order to make money without any real concerns over scientific quality or the service provided for authors and their institutions, thereby threatening science by undermining its very communication system. 4 As Reynolds says, such journals basically arise because a market opportunity exists: "The ease of internet publishing, government mandates, library support for open access, selectivity by mainstream publishers and growing numbers of scholars worldwide with pressure to publish have provided a strong market for publishing opportunities." Although the designation predatory has been criticized by some scholars, 5-8 the term has caught on. Predatory publishing covers a wide range of problems, however.

On one side, there are rogue actors who hijack renowned journal titles (making a fully-fledged copy of a journal) or just pretend to be a real journal in order to deceive researchers and take their money.^{2,9} These are the clearest examples of deceitful journals (or publishers). Journals can arguably fall into this deceptive category even if they do finally publish a submitted paper, by having, for example

- false addresses
- false journal titles (claiming to be European or International although they are not)
- false statements about indexing or impact factors
- false statements about performing rigorous peer review
- false claims about who is on their editorial boards
- hidden charges for publishing or additional services.

On the other side, we find journals of low quality that nevertheless might be (more or less) honest in what they do. The quality is questionable as they might, for example

- fail to give information on editors, policies, archiving etc
- have too few editors
- be too inexperienced or have insufficient knowledge to run a journal properly
- have lousy websites
- spam scientists with offers to publish with them
- not care much about academic integrity.

The notion of predatory journals arguably covers a wide range of journals with different characteristics when it comes to deceitful intent and the scope of bad practices. What is common to them all is their low quality. The line between having an issue with quality and being predatory in the sense described here is a fine one. Sometimes established journals also have issues with quality and the quality of some small scholarly journals can be compromised by limited resources for their operations. It might therefore be better to point out some of the quality issues without categorizing the journal as being predatory; rather reserving that designation for journals whose lack of quality presents a serious problem for the scientific record and community.

What should we do?

What we should do about predatory journals depends on where they are on the continuum described in the previous section. To deal with deceptive journals, we should use the legal means available to try and stop their deceptive acts or their infringement of intellectual property (IP) rights. This route was taken by the US Federal Trade Commission, which issued a complaint against the infamous OMICS International for deceiving their consumers (that is, the researchers who try to publish with them). Rogue publishers who have used titles very similar to those of well-established journals have also provoked legal action, for example, The American Association of Neurological Surgeons took the Austin Publishing Group to court for IP infringement.

However, convincingly showing that a predatory journal is deceitful can be difficult. Bad intent is hard to prove, and court cases take a prohibitively long time and run up high costs. A victory in court also fails to improve overall quality. We are still left with a large number of more or less low-quality journals to deal with. Science is a high-quality activity that depends on such things as reproducibility, traceability, longevity, and clarity of message. Consequently, low-quality publications that are not indexed, properly peer reviewed, and shun issues of accountability and research integrity, are not suitable for the scientific endeavour. They are simply bad for science and should not therefore be

chosen as a means for scientific dissemination.¹² So what should we do about them?

To date, the main response has been to create lists of 'good' or 'bad' journals (so-called white- and blacklists). Unfortunately, low-quality journals easily find their way into various reputable lists. I have, for example, without success tried to get Publons – a website that promotes peer review recognition – to stop including peer reviewers' claims for reviews in well-known predatory journals, as these reviews might be false or not worthy of being recognized. Titles from predatory publishers also show up in various indexing services such as SCOPUS, Ulrich's, EBSCO, and Google Scholar.¹³ On the other hand, the Directory of Open Access Journals (DOAJ) undertook a thorough filtering process and excluded many hundreds of journals, ⁵ so improvements can sometimes be made.

Blacklists, of which one (previously) run by Jeffrey Beall is the most well known, have their problems too. If run by a single person, they can easily be discredited. Also, it is hard for a small operation to check the many thousands of predatory journals. Lastly, they can easily become victims of counter-charges and litigation for slandering, etc. All these might be reasons why Beall shut down his blog and lists in early 2017. It seems a private firm, Cabell's International, intends to run a similar list but, unfortunately, only accessible by pay-per-view. As such, even if of high quality (which remains to be seen, of course) its use will be limited. It

There are some obvious things we should do. In a longer perspective, we need to rethink our use of impact factors, focus on numbers of publications, economic incentives for publishing, etc, that is, all those social and institutional practices in science that created the drive for fast and efficient publishing in the first place.16 For the present, we should increase efforts to educate scientists about predatory practices. The information provided to them should be empirical, derived from a thorough examination of these practices. A website, Think, Check, Submit (http:// thinkchecksubmit.org/), is a welcome example of an effort to educate scientists by encouraging them to use the checklist on the site. While research is increasingly being undertaken (a small sample of which is found in the reference list), more is needed and more funding needs to be allocated. In addition to increased information activities and research, I suggest three additional measures that should be taken if we want to achieve more significant changes in a reasonable time span (first proposed together with Gert Helgesson¹²).

First, each research field should establish a committee of scholars to keep track of possibly deceitful journals and those whose quality is too poor for endorsement by the scientific community. This would ensure that it is scientists with knowledge of the research field that make judgements on quality and that the burden of the work is carried by more than one person. Skilled teachers, researchers, librarians, and editors of journals in the field could all qualify for membership. Such a committee would draw authority from the knowledge and experience members bring to the task and from forming a consensus decision. To practise what I teach – a challenge an ethicist gets now and then – I started

a blog together with my colleague Gert Helgesson. It aims to list the low-quality journals active in our own fields of medical ethics, bioethics, and research ethics, as well as to provide a guide to the best journals.¹⁷ We are assisted by a few select scholars working in these fields, who act as anonymous reviewers, as well as by PhD students, who help out with evaluating the journals listed as part of a class on research integrity. Some other research faculties have formed committees doing similar work, but there should be many more.

Secondly, there should be a forum where scientists can share their experiences of predatory journals with the wider scientific community. Preferably, the forum would be supported by major funding agencies and scholarly organizations (such as the National Institutes of Health (NIH), Office of Research Integrity (ORI), All European Academies, and The Wellcome Trust, to mention a few examples). At present, reports are scattered on blogs, social media, and so on. The Stop Predatory Journals website (https://predatoryjournals.com/) is such a location. It is an anonymous activist replacement for Beall's lists that invites you to send views and experiences. Sadly, no response is forthcoming when you send in material (just my experience, of course), nor is there any exchange of views on the website. We badly need a wiki or something similar, with proper support, which could be added to and discussed by anyone interested in the topic.

Thirdly, scientists need help to spot references to articles published in predatory journals because such articles are not a suitable basis for subsequent research. Similarly, those working in academic organizations need to scrutinize applications for funding, promotions, or positions to ensure the CVs that underpin them are legitimate. If they are not, the individuals found to be involved in predatory activities (that is, systematically engaging in predatory publishing as authors, reviewers, editors or, indeed, publishers) should not be given the position, promotion, or funding. (It should be noted that predatory conferences are as big a problem as publishing: this recommendation applies to the participation in such activities as well.) Accordingly, we need software that checks for such use of predatory journals. I am currently working with one software company to make this a reality and hope to see results in the near future. The idea is that a plagiarism checker also runs all references to journals against a list of possible predatory journals. It then alerts the person using the software whenever a match is found. The journal found should then be investigated more thoroughly in order to determine its predatory status.

Predatory publishing should not be dismissed as a problem just for the gullible or for low-status universities; it affects many stakeholders, including top-ranking institutions, ^{18–19} and can bring about 'pollution' of our societal and political landscape, thus seriously undermining trust in science and truth. ²⁰ Society and scientists should not accept deceitful practices in science, and neither should we as scientists accept anything less than excellence from businesses selling publishing services to us. If we cannot have excellence, we are better off doing it ourselves.

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