



EDITORIAL

Jack-in-the- (in-)box: Beware of predatory journals



You open your e-mail in the morning and here they are: your inbox with several emails from journals, most of them Open Access (OA) which, after an over-polite greeting, tell you how happy they are in contacting you, such deserving and outstanding scientist. They cheer your recently published paper as one of the most important scientific happenings of last years and offer to publish your future research. Or they propose you to become a member of their editorial board. Or both. The submitting figure, Editor or contact person of the journal, frequently signs with her/his first name alone or just one initial as last name.

We just briefly described the typical e-mail spam you receive from many e-journals. One should be somewhat naïve to believe the offering most these e-mails deliver. Nevertheless, there are still some young (and not so young) scholars who will indeed consider and accept such invitations in the face of pressure to publish and the struggle to achieve academic recognition, institutional prestige or salary raise. Sometimes, the incoming proposal may seem real and serious, and then one may indulge in giving credence to what they offer, for at first sight, they seem much like other journals. Well, It is open access, and they charge scientists for publishing. Moreover, one may think: better to publish anywhere than to perish with a not-so-great manuscript sleeping in a drawer or hard drive.

The natural question arises, though: where does this avalanche of editorial proposals and invitations come from? A more significant number of those e-mails spamming our inboxes originate from rather unknown journals. Most of them never ever had a printed edition. Some of them may be involved in unfair publishing practices and represent what is called "predatory journals."

What is a "predatory" journal? The word was coined by the University of Colorado librarian Jeffrey Beall to describe OA journals, whose publishing practices exploit open access, deceive authors and perform sub-standard peer-review, among other practices.¹ He published a Blog with a list of "potential, possible or probable predatory scholarly open access journals" (considered a "blacklist") which covered a wide range of fields, from health sciences and chemistry to business and mathematics. The list was posted on the internet in 2012 and suddenly unposted in

January 2017 by Beall himself, who recently disclosed his reasons for giving up his blog.² Although his list may not have been exempt of bias and possible flaws, it was nevertheless a guide, something to look at for advice. Then, how can you identify a possible, predatory journal? Beall and others described common traits in journals' websites indicating a possible predatory behavior³⁻⁵ examples of which can be seen in Table 1. Predatory journals, which some suggest should instead be called *illegitimate publishing entities*⁵ represent a phenomenon which needs to be understood, analyzed and counteracted. A recent paper showed that 79% of "invitations" via e-mail received by authors in one year, originated from journals listed by Beall, and about half of invitations received came from biomedical journals.⁶ Another study calculates the amount of papers published in identified predatory journals, growing from 53,000 in 2010 to an estimated 420,000 in 2015, and the number of journals growing from 1800 to 8000 in the same period.⁷

We will not analyze here if Beall's list or any other similar is right or wrong. We acknowledge the fact that an essential issue (among others) pointed out by critics of predatory journals is their failing of proper peer review practices. Peer review remains a fundamental matter, the cornerstone of scientific publishing. The problem is not open access: the problem is the abuse of open access publishing system by those who may place academy and knowledge far behind a business interest. Let's not forget, however, that to pay to get published is a working scheme with an inherent potential for a conflict of interest.

In 2003 a global index of open access journals was started (Directory of Open Access Journals, DOAJ) to enhance visibility and use of OA. The DOAJ seeks to promote higher standards and good publishing practices and has become a kind of whitelist that provides editorial information about more than 10,000 journals (<https://doaj.org>). The company Cabell's International recently started an internet platform where you may find a whitelist reviewing of ca. 11,000 journals including both subscription and OA, in 18 disciplines (to date medical journals are not reviewed), and a black-list where they analyze defined criteria to spot predatory practices (www.cabells.com). It is a paid service, and some institutions in developing countries may not have thus easy

Table 1 Some criteria indicating you may be dealing with a possible, probable predatory journal. This list was compiled with information published in Refs. 3, 4, 5 and 9, where extended and comprehensive information can be found.

- Journal title is similar to a traditional, well-known journal
- Have frequent grammar, spelling, and syntax errors in its homepage
- Graphics of homepages are of low quality
- Provides insufficient/lack information regarding author fees
- Claim to belong to indexing databases and show false Impact Factor
- The Editorial Board is made up by fake names.
- Use e-mail to submit manuscripts to the editorial office
- Journal refuses withdrawal of a manuscript despite request of author
- Journal name do not reflect adequately its origin
- Has insufficient contact information

access to the listings. Beyond this, their work is much needed and provides insight into the publishing standards of many journals.

Facing new times, we need to meet the challenge: watch our own publishing culture and learn to be discerning about journals where to publish our work. This is most relevant for developing countries, young institutions, and early career scientists. Research supporting/advising bodies usually are clear about where they expect papers to be published if academic recognition, promotion, salary rises and tenure are sought. It is fair to expect institutional recommendations about where to publish or not. Moreover, institutions have already started to issue precise policies, for example, that only journals with an active impact factor listed in Web of Science's Journal Citation Reports (JCR, Clarivate Analytics, formerly Thomson-Reuters) be considered as proof of quality published research. By deciding ourselves where to send our manuscripts, we assume responsibility the same way we account responsible for its contents. For trainees, residents, master and doctoral students, this learning process itself will become a sign of scientific maturity. They may get advice and learn to recognize predatory journals from cited literature, or websites like *Think-Check-Submit* (thinkchecksubmit.org). Research leaders and mentors have a key role in raising awareness on practices and dangers of predatory journals and in the knowledge of tools and practices to avoid it.⁸ In a far-reaching perspective

beyond deceit to authors, predatory publishing poses a threat to science and the medical system: published counterfeit, substandard science may flood medical academia with unnecessary and potentially uncorrected publications⁹ and undermine the impact of real science in public policy, weakening the overall value of legitimate publications.¹⁰

We must be aware of the lures of easy, quick publishing. Otherwise, Jack jumping out from the box, figuratively out from the inbox, can turn into an unpleasant surprise and a source of academic predicament.

References

1. Beall J. Predatory publishers are corrupting open access. *Nature*. 2012;489:179.
2. Beall J. What I learned from predatory Journals. *Biochem Med*. 2017;27:273–8.
3. Roberts J. Predatory Journals: illegitimate publishing and its threat to all readers and authors. *J Sex Med*. 2016;13:1830–3.
4. Laine C, Winker MA. Identifying predatory or pseudo-journals. World Association of Medical Editors; 2017, February 15. <http://www.wame.org/identifying-predatory-or-pseudo-journals>
5. Shamseer L, Moher D. Thirteen ways to spot a "predatory journal" (and why we shouldn't call them that). <https://www.timeshighereducation.com/blog/thirteen-ways-to-spot-a-predatory-journal-and-why-we-shouldnt-call-them-that>.
6. Moher D, Srivastava A. You are invited to submit.... *BMC Med*. 2015;13:180.
7. Shen C, Björk BC. "predatory" Open access: a longitudinal study of article volume and market characteristics. *BMC Med*. 2015;13:230.
8. Clark AM, Thompson DR. Five (bad) reasons to publish your research in predatory journals. *J Adv Nurs*. 2016, <http://dx.doi.org/10.1111/jan.13090>.
9. Johal J, Ward R, Gielecki J, et al. Beware of the Predatory Science Journal: a potential threat to the integrity of Medical Research. *Clin Anat*. 2017;30:767–73.
10. Caplan AL. The problem of publication – pollution denialism. *Mayo Clin Proc*. 2015;90:565–6.

C.E. Medina-De la Garza^{a,*}, M.-C. Koschwitz^b

^a Immunology Department, "Dr. José E González" University Hospital, and Center for Research and Development in Health Sciences, UANL, Monterrey, Mexico

^b Library, Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

* Corresponding author.

E-mail address: [\(C.E. Medina-De la Garza\).](mailto:carlos.medina@uanl.mx)