

## EDITORIAL

# Predatory journals in anaesthesiology and critical care: what to know and how to avoid pitfalls!

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## Predatory journals: what, how, and why?

*What?* The term ‘predatory journals’ was first used in 2012 by Jeffrey Beall to designate illegitimate scientific journals ran by publishers with purely commercial objectives. These journals were defined in 2019 by a panel of international experts as ‘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, and/or the use of aggressive and indiscriminate solicitation practices’.<sup>1</sup>

*How?* Predatory journals generally share common characteristics: aggressive and persuasive solicitation by emails, low level of transparency, missing or unverifiable details about the publisher, incomplete, an illegitimate or nonexistent editorial board, lack of scientific ethics, poverty of the peer review, authors preferentially coming from certain countries, unspecified costs of processing and often a lack of indexation of articles.<sup>2</sup> Beyond predatory journals, this predatory economic model is increasingly used in the scientific world to publish books or organise predatory conferences.

*Why?* Predatory publishers have an exclusively mercantile objective. They take advantage of the ever-increasing demand for healthcare professionals and researchers to publish, thus exploiting the ‘publish or perish’ system. In France, for example, the quantitative evaluation of both academic doctors and university hospitals relies almost

solely on the SIGAPS system (System of Interrogation, Management and Analysis of Scientific Publications). In addition, the new author-pay model of ‘open access’ journals has democratised publication costs paid directly by authors – who become clients of publishers instead of readers or institutions. Predatory practices are not an epiphenomenon and represent an increasing market, valued at over US\$ 121 million in 2015, and growing rapidly.<sup>3</sup>

## Reasons and risks of publishing in a predatory journal

Authors publishing in predatory journals generally lack information on these practices and do not know their characteristics or the consequences of such publications.<sup>4</sup> These journals exist as they exploit the fears of personal failure that many researchers and academics experience throughout their career: ‘I don’t want to be rejected from another journal’, ‘I will not have enough publications this year’, etc.

Nevertheless, choosing to publish in a predatory journal exposes to several risks:

- (1) Loss of credibility and risk for reputation/promotion. Indeed, not only will articles published in predatory journals potentially fail to be counted in publication record but they might be discounted from it and harm an academic reputation.

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- (2) Subsequent loss of opportunity (to publish in a credible journal).

### Predatory journals in anaesthesiology and critical care medicine: we are not spared

Little is known about the extent and specific impact of predatory journals in anaesthesiology and critical care medicine. Cortegiani *et al.*<sup>4,5</sup> performed an interesting report of predatory journals in our speciality in 2019. Briefly, they used Beall's original list and searched for the adequate keywords (e.g. 'intensive care', 'anaesthesia', 'shock', etc.). They screened each journal's websites and searched for information, such as location of the publisher (confronted with Google Maps 3-dimensional street viewer), article processing charges, database indexation (PubMed, Scopus or Google Scholar), the editorial board members and the presence of an editor-in-chief. They identified 212 predatory journals in anaesthesiology (6 indexed in PubMed) and 86 in critical care medicine (CCM) (3 indexed in PubMed). Some journals reported to be indexed in the Directory of Open Access Journals (DOAJ), the International Committee of Medical Journal Editors (ICMJE) or Google Scholar but had faked this

information. Most of them reported an address in the United States but were deemed unreliable in almost half of the cases. Only 30% reported a name for their editor-in-chief. The median [interquartile range] article processing charge was US\$ 635 [275 to 1005] and US\$ 910 [281 to 1237] in Anaesthesia and CCM, respectively.

Given the impact of the coronavirus infectious disease 19 on publication proliferation, the growing use of preprints, and the sudden spotlight that intensive care medicine received around the globe, it is likely that these data are now already outdated, and that the amount of predatory journals in our speciality has grown exponentially since this publication.<sup>6-8</sup>

### Five tips to avoid falling into the traps

- (1) Discuss with trustworthy colleagues: do they know the journal? Have they published in it before? Do they know any members of the editorial board?
- (2) Avoid responding to unsolicited propositions of publication or reviewing. Phishing emails often come in the form of 'Dear Doctor/Researcher [name of the Journal] is an online open access journal publishing

Fig. 1 Venn diagram of different tools proposed to avoid predatory journals



articles from many countries in the field of [insert field]. It is indexed in [insert database] and has an Impact Factor of [number]’ or ‘Dear Doctor/Researcher, here is a great opportunity to exchange your knowledge by publishing your articles in the new issue of [name of the Journal]. We have gone through your article [your article name] and we would be delighted to invite you to submit your article by clicking on this link’;

- (3) Follow the ‘Think, Check, Submit’ campaign and only choose journals that follow the editorial process best practices: is it possible to contact the journal editing board? Is the peer review process clearly presented? Cost might exist for publication but *never* for submission. Also take some time to read past issues of the journal.<sup>9</sup>
- (4) Choose only journals indexed in recognised databases: MEDLINE with PubMed, Web of science, Journal of Citation Reports, CINAHL (Cumulative Index to Nursing and Allied Health Literature) or DOAJ for Open Access Journals.
- (5) Use white lists provided by reliable institutions such as universities or international academic groups such as the International Committee of Medical Journal Editors (ICMJE) (Fig. 1).<sup>10,11</sup>

### If it is free, then you are the product

Even though the sentence ‘If it is free, then you are the product’ is correct for major for-profit companies (including academic publishers), it must not be blindly applied to every open access science journal. Many have recently decided to move towards open access, meaning to provide free online access to scholarly peer-reviewed articles. Open access profoundly alters the economic model of most medical journals but is nevertheless being adopted by an increasing number of journals who see in it an opportunity to widen their reach to a greater number of people. The *European Journal of Anaesthesiology* is no exception, and has adopted such a model called the collaborative open access model, where reviewers will benefit from reduced publication fees if they publish in the journal.<sup>12</sup> We can only congratulate this kind of initiative as we believe open access should be promoted for readers to benefit from a large accessible knowledge without compromising on high-quality unbiased peer-review.

### Conclusion

Anaesthesiology and Intensive Care Medicine literature is not spared by the scourge of predatory journals. Euro-

pean authors involved in peri-operative medicine should be aware of this phenomenon. We have tried in this editorial to provide tools for authors to help them in their publishing processes and encourage them not to stop blindly if they see an open access model.

Fighting the spread of predatory journals and preventing misleading science in the field of peri-operative medicine and anaesthesiology are important goals for research, for the education of young physicians and for the promotion of the quality of science. Many specialist groups can intervene in raising awareness, such as universities, research organisations, scientific societies, ethics committees and legitimate scientific publishers. Only a co-ordinated response will make success in fighting this problem possible.<sup>5</sup>

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