Journal of Physiotherapy 72 (2026) 1–5

Journal of PHYSIOTHERAPY

journal homepage: www.elsevier.com/locate/jphys

Editorial

Why are predatory journals still winning?

Lucas HCC Santos [a,b], Bruno T Saragiotto [a,c], Rafael Z Pinto [c,d], Paulo HS Pelicioni [e,f], Mark R Elkins [g]

[a] Masters and Doctoral Programs in Physical Therapy, Universidade Cidade de São Paulo, São Paulo, Brazil; [b] Motion Analysis Laboratory, Universidade Cidade de São Paulo, São Paulo, Brazil; [c] Discipline of Physiotherapy, Graduate School of Health, University of Technology Sydney, Sydney, Australia; [d] Department of Physical Therapy, Universidade Federal de Minas Gerais, Minas Gerais, Brazil; [e] School of Health Sciences, University of New South Wales, Sydney, Australia; [f] Neuroscience Research Australia, University of New South Wales, Sydney, Australia; [g] Faculty of Medicine and Health, University of Sydney, Sydney, Australia

Scientific research plays a pivotal role in generating trustworthy evidence to guide healthcare decisions and policy development. However, the responsibility extends beyond producing data. Studies must meet methodological benchmarks, adhere to their pre-specified protocols, undergo independent peer review and be interpreted appropriately. The growing presence of predatory journals is concerning because they put at risk all those advantages of a proper editorial review process. This Editorial reviews what predatory journals are and the problems they cause; examines how and why they are growing; and proposes strategies to combat them.

Predatory journals: peer review or illusion?

A widely cited study[1] proposed the following definition of predatory journals:

> *Predatory journals and publishers are entities that prioritise self-interest over academic knowledge and are characterised by false or misleading information, deviation from best editorial and publishing practices, lack of transparency and/or the use of aggressive and indiscriminate solicitation practices.*

The definition of predatory journals[1] becomes strikingly relevant when we examine real-world examples. In 2005, a bizarre (and funny) manuscript was written and circulated as a joke. The manuscript was titled 'Get me off your f***ing mailing list' and the authors repeated the title in all lines, paragraphs and figures. In 2014, another author submitted it to the *International Journal of Advanced Computer Technology*,[2] expecting that editors would open, read and reject it. Surprisingly, the paper was accepted immediately and a $150 publication fee was requested. There was no peer review or editorial oversight — just an open door for anything, as long as the authors paid the required fee. How did such a paper get accepted? The answer lies in the alarming expansion of predatory journals, which operate primarily for profit.

Predatory journals do not exclusively publish fraudulent studies. Some may originate from well-intentioned authors, especially those working in low-resource settings or under institutional pressure to publish.[3] Nevertheless, articles from predatory journals have occasionally been included in systematic reviews.[4] In the physiotherapy field, the proportion of conclusive Cochrane reviews remains limited,[5] and the inclusion of unreliable sources may contribute to inconclusive findings. This further complicates efforts by researchers, clinicians and policymakers to distinguish reliable evidence from misinformation.[4]

The full range of harms from these journals is listed in Box 1. These harms compromise the quality and trustworthiness of the research that clinicians rely on to inform decision-making. Beyond the challenges of identifying unreliable sources (eg, predatory journals or flawed articles), there is also the issue of how to respond once flawed or misleading research has been identified — a process often addressed through retractions.

Box 1. Ways in which predatory journals harm scientific credibility and public trust.

Inadequate or absent peer review
Articles may be published without meaningful scrutiny, allowing flawed, unethical or even fabricated research to enter the scientific literature.[17]

Little to no editorial oversight
There is often no genuine editorial process to ensure accuracy, coherence or compliance with journal scope or reporting standards.[11]

Misleading indexing claims and journal metrics
Predatory journals often claim to be indexed in major databases or fabricate impact factors to appear reputable, misleading authors and readers.[18]

Exploitation of authors through fees
Authors are frequently charged high article processing charges with no guarantee of quality or discoverability, often under false pretences of open access legitimacy.[10]

Lack of long-term preservation and archiving
Articles may not be reliably stored in digital repositories, meaning the research could disappear, especially if the journal or website vanishes.[19]

Retractions only work if there is editorial rigour

Retraction is a crucial mechanism for maintaining the integrity of evidence in clinical practice and preserving the credibility of the literature. Editors and authors should not shy away from issuing retractions when warranted; on the contrary, doing so should be viewed as a mark of integrity and responsibility. Retractions may become necessary for various reasons, from honest errors and authorship disputes through to plagiarism and data fabrication. Regardless of the cause, their consequences for the scientific literature can be substantial. A recent analysis of retracted trials found that, even 12 months after retraction, 89% of systematic reviews citing one of those trials had not been corrected to reflect the retraction (ie, no notification was added to indicate a possible change in results).[6] Furthermore, around half of the systematic reviews that cited retracted trial(s) would change if the retracted

https://doi.org/10.1016/j.jphys.2025.11.012

data were removed,[6] suggesting that the invalidated information influenced decision-making.

Retractions can only correct the scientific record when flawed studies are formally withdrawn and publicly flagged. An additional and more insidious threat arises from studies published in predatory journals. These journals typically lack rigorous peer review and editorial processes, and once published, problematic studies in these venues are rarely scrutinised, let alone retracted.[7] This makes them harder to detect and allows unreliable findings to persist in the literature, unchallenged.

The publication of flawed studies in predatory journals follows a concerning trajectory. As illustrated in Figure 1, this pipeline begins with researchers, whether well-intentioned or misinformed, and continues through journals that lack editorial rigour and accept submissions indiscriminately. The final stage is the persistence of unreliable findings in the literature, often without retraction, which can mislead clinicians and distort evidence-based practice. Based on this, it has been recommended that authors, publishers and other institutions implement strategies to minimise the risk of citing retracted publications;[8] some examples are presented in Box 2.

Box 2. Initiatives developed to mitigate the impact of retracted studies.

Retractions Australia
A platform to identify retracted papers was developed by Neuroscience Research Australia, called Retractions Australia (https://retractions.au/).
Filter – retracted publications
The identification of retracted papers was also incorporated in Cochrane, which has a goal to identify retracted papers indexed in CENTRAL (https://www.cochrane.org/news/cochrane-launches-new-feature-identify-retracted-publications).
Cochrane Handbook
The Cochrane Handbook for Interventions recommends that authors examine retraction notices during the selection process when conducting a systematic review (Chapter 4, item 4.4.6).[15]

The rise of predatory journals and who pays the price

The number of predatory journals has grown rapidly since around 2012.[9] Between 2010 and 2014, an estimated 6,200 new active journals were launched.[10] By 2014, almost 12,000 journals had been identified as predatory, with approximately 8,000 publishing at least one article by that year.[10] This expansion was accompanied by a sharp rise in their total publications: nearly 420,000 articles were disseminated through predatory journals in 2014 alone.[10] Many of these published papers may never be used to understand a pathology or to implement a clinical intervention; meanwhile, the journals keep making money while failing to provide legitimate peer review.[11]

'Open access' refers to the free availability and distribution of the study in an online format, which promotes visibility and equity — particularly if the open access is subsidised by institutions, libraries or foundations. However, in many cases, it is supported through fees charged to authors upon manuscript acceptance. In terms of market value, the open access publishing market is around US$74 million.[10] Predatory journals or publishers exploit the open access model by prioritising profit over quality control[12] and publishing research without proper peer review or editorial revision.

Unfortunately, many studies published in predatory journals are sponsored by publicly funded institutions, such as the US National Institutes of Health,[11] and most research foundations receive money from citizens to sponsor researchers. Thus, the problem is not just about low-quality research, but it is about the erosion of trust in scientific publishing. As predatory journals continue to thrive, the burden falls on researchers, institutions and policymakers to safeguard the credibility of scientific literature. Without urgent intervention, the line between rigorous science and fraudulent publishing will continue to blur, putting evidence-based practice at risk.

Why do predatory journals persist?

The research community has been considering predatory journals for some time. A search of PubMed found that the first studies with 'predatory journal' or 'predatory journals' in any field were published in 2014, with substantial and sustained focus on the topic since 2017 (Figure 2). In total, 642 results were found. Figure 3 presents a timeline of efforts to expose and combat predatory journals. Despite these initiatives, predatory journals continue to thrive, contaminating the scientific record with unreliable content. Their persistence may be attributed to several factors, as discussed below.

Ongoing demand for rapid publication

Many researchers, particularly early-career scientists or those based at under-resourced institutions, face intense pressure to publish, making them more susceptible to misleading invitations and deceptive practices.

Limited oversight mechanisms

The digital nature of these journals, often hosted on transient websites with minimal regulation, enables them to rebrand or relocate quickly when exposed. Their adaptability, combined with aggressive solicitation tactics, contributes to their resilience.

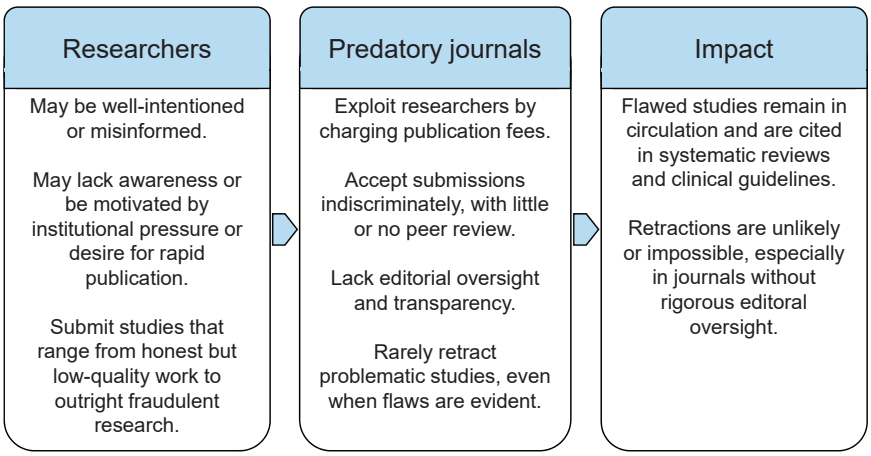

Figure 1. Three-stage pipeline showing how flawed studies enter and persist in scientific literature: starting with researchers, moving through predatory journals that publish indiscriminately, and ending with the lasting impact of unreliable findings on clinical decision-making and scientific credibility.

Lack of global coordination

The absence of universally accepted criteria for defining, identifying and characterising predatory journals hampers regulatory efforts. While some databases and institutions have implemented exclusion lists, others continue to index unreliable publications, resulting in inconsistencies that undermine collective action.

Their continued existence underscores the urgent need for further coordinated action. Here we summarise five proposed strategies that the scientific community could consider to combat predatory journals and their impacts.

Strategy 1: Educating and alerting researchers, clinicians and policymakers

Predatory journals frequently send an overwhelming number of unsolicited invitations to researchers, encouraging manuscript submissions.[13] In general, the invitations include a personalised greeting honouring the invitee.[13] Unfortunately, some researchers may be misled by these strategies, particularly when faced with publishing pressure or lacking mentorship. A recent study investigating motivations for journal selection found that authors submitted to such journals for diverse reasons, including: difficulty publishing elsewhere due to prior rejections, recommendations from colleagues, needing to publish as part of a degree requirement, and (often superficial) perceptions of journal quality, such as familiarity with the journal name or affiliation with editors from recognised institutions.[3]

A Canadian study found that 12% of applicants for a plastic surgery residency program had published in a predatory journal.[14] If we extrapolate this finding to all areas of healthcare, it is easy to see why so many studies are published in predatory journals. This illustrates how important it is for researchers, clinicians and policymakers to know about and avoid predatory journals. It is important to note that the classification of journals as predatory is not always clear-cut. While some journals exhibit obvious predatory practices, others occupy a more ambiguous space, making reliable identification tools essential. Box 3 presents resources to help identify predatory journals and avoid having them influence decision-making.

Strategy 2: Excluding or flagging unreliable sources in systematic reviews

Predatory journals represent a persistent threat to evidence-based practice, particularly when their studies are included in high-impact syntheses such as systematic reviews with meta-analyses. Cochrane reviews, for example, may include articles from such journals,[4] and the Cochrane Handbook for Systematic Reviews of Interventions (Chapter 4, item 4.4.6) recommends that studies should not be excluded solely based on the journal in which they appear.[15]

An approach to safeguard evidence synthesis is the complete exclusion of studies published in predatory journals. This strategy prioritises methodological reliability and aims to prevent the integration of potentially flawed or unverified findings in systematic reviews. We acknowledge that some valid studies may be inadvertently published in predatory journals, often by researchers unaware of the journal's nature. Nonetheless, the responsibility for scientific integrity begins at the level of editorial oversight and peer review. Journals lacking such processes undermine trust in their published content and compromise the reliability of the broader evidence base.

As an alternative or complementary strategy, systematic review authors could adopt a transparent reporting item: 'possibly unreliable source'. Rather than removing studies outright, authors would assess the publishing journal of each included study and disclose those suspected to be from predatory journals. This strategy promotes accountability while allowing flexibility in the appraisal of evidence. To support this strategy, a new tool called INSPECT-SR (INveStigating ProblEmatic Clinical Trials in Systematic Reviews)[16] has been developed to help reviewers identify and report problematic sources. Protocols and methods sections could include this item explicitly, encouraging reviewers to investigate the credibility of each journal, document the presence of studies from questionable sources and report how inclusion of these studies affects outcomes and confidence in the findings.

Strategy 3: Tracking and replacing references to predatory journals

Legitimate journals could verify whether submitted papers have cited any studies published in a predatory journal. This process would increase the workload of the editorial team and add a little to the review time, but it might be facilitated by an artificial intelligence tool. Alternatively, peer reviewers recommending acceptance of a manuscript could be requested to indicate whether any cited reference was published in a predatory journal. Given that peer reviewers volunteer their time, it is important to consider whether added responsibilities might discourage future participation. When publications from predatory journals are identified, the authors could be asked to replace these references and revise the text; this would increase the reliability of the information, reduce the visibility of predatory journals and reduce the number of citations they receive.

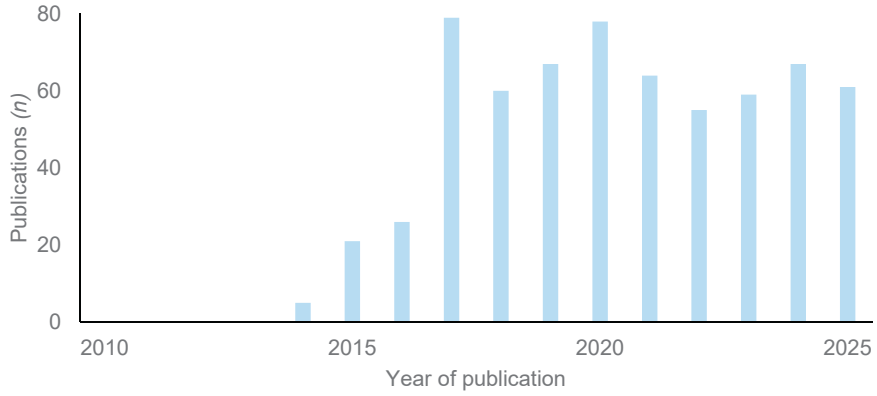

Figure 2. Number of studies indexed on PubMed discussing predatory journals, graphed by publication year, based on a search on 1 August 2025.

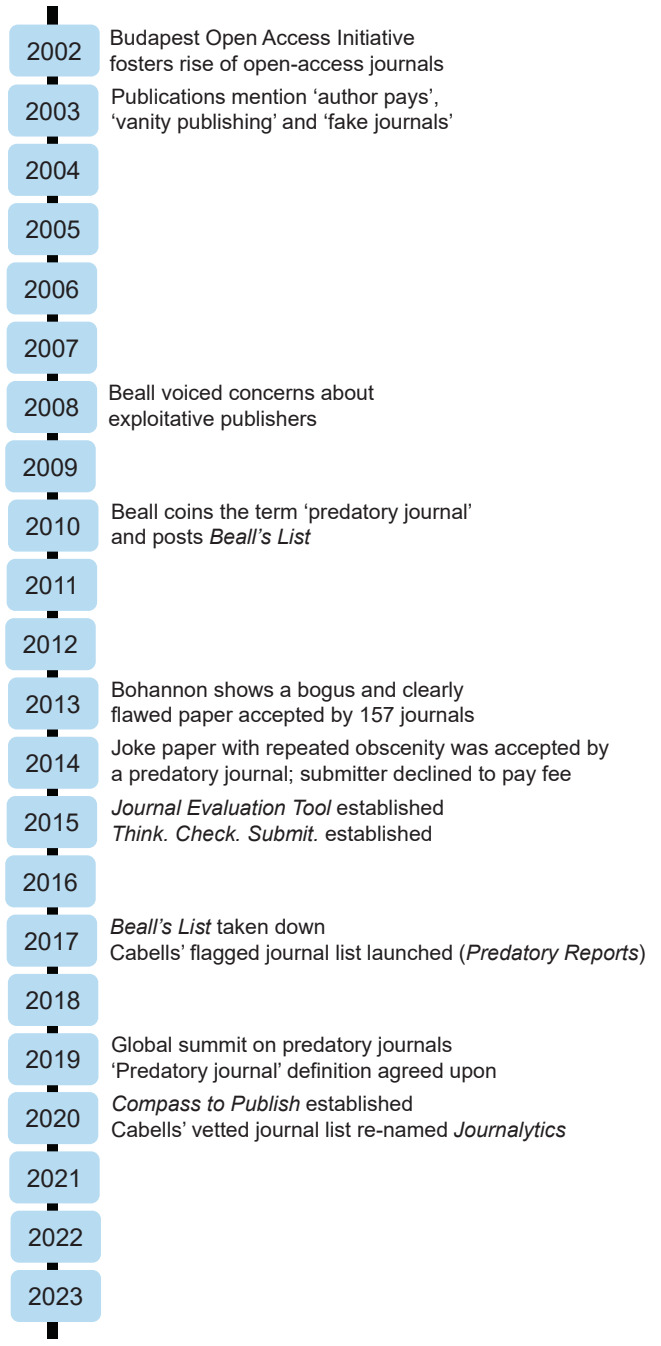

Figure 3. A timeline of efforts to expose and combat predatory journals, highlighting the persistence of the problem.

Strategy 4: Filtering predatory content from research databases

Several databases index various types of evidence that are of key interest to physiotherapists, for example: the Physiotherapy Evidence Database (PEDro), the Diagnostic Test Accuracy (DiTA) database, the Rehabilitation Measures Database (RMD), the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) database and the Patient-Reported Outcome and Quality of Life Instruments Database (PROQOLID). Database managers could implement screening mechanisms to identify and exclude articles published in predatory journals. For instance, they could use the approaches outlined in Box 3 to eliminate indexing of publications arising from predatory journals. Implementing such screening procedures would inevitably demand additional resources and coordination. Such actions could decrease predatory journals' visibility and citation rates, discourage future submissions, and reduce associated publication fees, thereby diminishing their academic influence and long-term viability.

Box 3. Resources to help identify and avoid predatory journals.

Beall's list
A clear and accessible method for identifying potentially predatory journals is available on Beall's List website (beallslist.net), which applies Beall's criteria.
Journal Evaluation Tool
Journal Evaluation Tool is a rating system that anybody may use to assess a journal's reliability (digitalcommons.lmu.edu/librarian_pubs/40).
Cabells Journalytics
Cabells offers two initiatives: Journalytics and Predatory Reports (cabells.com). These tools actively monitor journals based on editorial transparency, peer review practices, publication fees and ethical standards. Journals are evaluated against structured criteria to determine whether they meet acceptable publishing norms or exhibit predatory behaviour.
Think. Check. Submit.
The Think. Check. Submit. initiative (thinkchecksubmit.org) assists in identifying reputable journals and publishers for submitting research studies.
Compass to Publish
A free online tool to help the community determine the degree of authenticity of journals (services.lib.uliege.be/compass-to-publish/).

Strategy 5: Justifying journal choice to funders

To reduce the risk of public funds being used to support publications in predatory journals, funding agencies could require authors to justify their choice of journal when submitting studies. This justification could be part of grant reporting, reimbursement requests or institutional review processes.

By enforcing transparency and accountability in journal selection, funders would encourage researchers to prioritise reputable venues and discourage submissions to journals with questionable practices. This strategy complements existing efforts to raise awareness about predatory publishing and aligns financial oversight with research integrity. Naturally, this approach would increase the workload for researchers and for the administrative processes involved in grant management; however, it could significantly improve the responsible use of public resources.

To operationalise this strategy, funding agencies could include journal justification requirements in their calls for proposals and suggest reliable sources for journal verification (as described in Box 3). Additionally, when the funding period ends and researchers submit their final reports, agencies should assess the publication venue and question the choice if the study appears in a predatory journal.

Conclusion

While predatory journals may occasionally contain legitimate research, their overall practices lack transparency, editorial rigour and scientific integrity. Their continued existence, often driven by profit over quality, raises concerns about the reliability of the studies they publish and the influence these publications may exert on legitimate scientific discourse and decision-making. The strategies proposed throughout this editorial aim to reduce the integration of such publications into evidence-based frameworks. These include: educating and alerting researchers, clinicians and policymakers; excluding and flagging unreliable sources in systematic reviews; tracking and replacing references to predatory journals; filtering predatory content from research databases; and justifying journal choice to funders. If widely implemented, these measures could gradually diminish the visibility and credibility of predatory journals and foster a more robust, trustworthy landscape for scientific communication.

Ethics approval: Not applicable.
Competing interests: Nil.
Source(s) of support: Nil.
Acknowledgements: This study was supported by São Paulo Research Foundation (FAPESP) grants (number: 2022/14200-0 and 2024/06357-2).

Data availability: The data will be made available upon reasonable request to the corresponding author.

Correspondence: Lucas HCC Santos, Masters & Doctoral Programs in Physical Therapy, Universidade Cidade de São Paulo, São Paulo, Brazil. Email: santoslhcc@gmail.com

References

1. Grudniewicz A, et al. *Nature*. 2019;576:210–212.
2. Mazières D, Kohler E. https://www.scs.stanford.edu/~dm/home/papers/remove.pdf
3. Cobey KD, et al. *BMJ Open*. 2019;9:e026516.
4. Boulos L, et al. *J Clin Epidemiol*. 2022;152:316–325.
5. Freire A, et al. *Braz J Phys Ther*. 2025;29:101190.
6. Avenell A, et al. *Account Res*. 2024;31:14–37.
7. Xu SB, et al. *Account Res*. 2024:1–27.
8. Bakker C, et al. *BMJ Evid Based Med*. 2024;29:121–126.
9. Butler D. *Nature*. 2013;495:433–435.
10. Shen C, Bjork BC. *BMC Med*. 2015;13:230.
11. Moher D, et al. *Nature*. 2017;549:23–25.
12. Beall J. *Nature*. 2012;489:179.
13. Moher D, Srivastava A. *BMC Med*. 2015;13:180.
14. Keeler A, et al. *Plast Surg*. 2024:22925503241300336.
15. Higgins JPTTJ, et al. https://www.cochrane.org/authors/handbooks-and-manuals/handbook/current
16. Wilkinson J, et al. *J Clin Epidemiol*. 2025;184:111824.
17. Harvey HB, et al. *Acad Med*. 2017;92:150–151.
18. Forero DA, et al. *Ann Global Health*. 2018.
19. Laakso M, et al. *PLoS One*. 2011;6:e20961.