Invited Editorial

The missed chance you'll never regret: a predator journal's invitation

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Abbreviations

APC - article processing charge,
A&HCI - Arts and Humanities Citation Index,
EMBase - Excerpta Medica dataBASE,
ESCI - Emerging Sources Citation Index
SCIE - Science Citation Index Expanded
SSCI - Social Sciences Citation Index

You will learn at your own expense that in the long journey of life you will encounter many masks and few faces

Luigi Pirandello

A predatory journal can be defined, as reported by Jeffrey Beall, inventor of this term, as a profit-committed organization, which demands fees to authors in order for them to have their articles published in a fast way and without the risk of rejection (1-10). Predatory journals are sometimes fake journals carrying a very high risk of deceiving young researchers and, if not, do not often provide an efficient peer-review process and a well-organized editorial board thus are not taken in consideration by plenty of scientific communities (1-10). Why is this phenomenon spreading? Why do researchers offer their attention to predatory journals? It is worth to analyze this issue for several reasons.

Nowadays it seems that the race between scholars, especially young ones, to reach a higher and higher H-index, has translated into attaining more publications in order to be cited and build a broader CV; this happens especially in some fields like cardiovascular medicine where there is a big diffusion of the *publish or perish culture* (3,4). This often proves paradoxical because predatory journals offer wide visibility to articles when in reality they are poorly, if not at all, indexed and do not possess any impact factor, therefore submerging the work, the time and the ideas of researchers. This very often leads to fraudulent attitudes, such as misconduct in research or collaboration with predatory journals (1, 3, 4, 10).

While some decades before it was, difficult to gather scientific articles and knowledge's, today we are facing the opposite situation: the spread of the internet and open access (OA) journals are putting in question a large part of scientific production (1, 10). This has many drawbacks: firstly, incorrect but easily accessible information can be delivered to any internet user in the world. Secondly, there is a matter of time. Search engines are full of medical literature that cannot be fully assessed, even for a single specific topic, because of thousands of articles reporting the same information over and over or in an incorrect way. A realistic research field should be provided with contents being fully corrected and processed by journals' reviewers, as they take the responsibility to enrich pre-existing knowledge with valuable new data or opinions. This is especially true for cardiovascular medicine.

It seems that many scholars try to work on the same topic but then the total work production is reduced to hundreds of useless research pieces that do not contribute to any scientific advancement.

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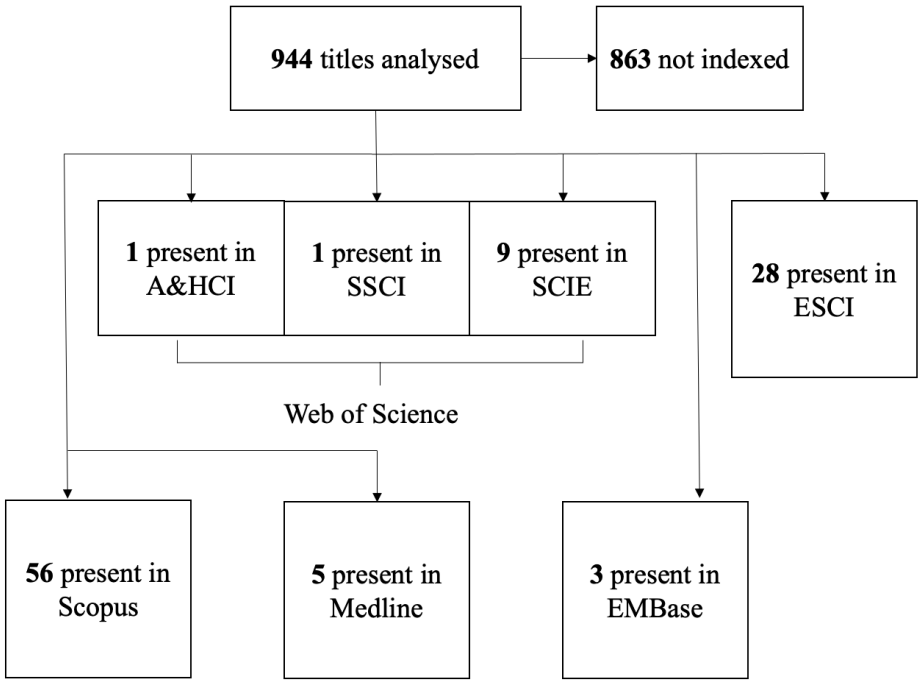

Figure 1. A recent analysis of Beall's list predatory journals has shown their presence in major scientific databases. Of 944 titles analysed, 863 were not indexed at all but 11 journals were present in Web of Science, 28 were present in ESCI, 56 were present in Scopus, 5 were present in Medline and 3 were present in EMBase (11) (re-published under SS BY license terms from ref. 11).

A&HCI - Arts and Humanities Citation Index, EMBase - Excerpta Medica database, ESCI- Emerging Sources Citation Index, SCIE - Science Citation Index Expanded, SSCI - Social Sciences Citation Index

Which are the most critical issues raised by predatory publications? Peer-review process, first of all, is quite always weak or absent, with all consequences related (1,10). When peer-review process is present, original and valid ideas may be stolen by predatory reviewers (10). This is possible because very frequently predatory journals are made by their own editors with the aim of receiving weak visibility (they are not present on Web of Science, Scopus, PubMed, DOAJ) and another consequence is that predatory articles cannot be evaluated, for example, for doctoral thesis and other selection processes (1-10). Thus, the risk is that a legitimate research may be wasted, stolen or even lost (another issue is that predatory journals lack an efficient archiving system) (10). Considering also that no statement for conflicts of interests is required by predatory journals, all these described issues raise a lot of ethical issues: we all know that milestones in scientific research should be integrity and honesty (4). Furthermore, a great opportunity for all scientific community was the introduction of OA journals and, given the act, that predatory journals pretend to be OA, all this movement is now suffering (10).Which are the features characterizing predatory journals and how do they manage to cheat young and old researchers? They are able in doing it; in fact, sometimes it is difficult to distinguish the grey zone between a predatory and a non-predatory journal (2). Usually, predatory editors use strong adjectives and names (such as international, global, European society) to lure readers. Furthermore, they give a description of their journal, which is typically presented as a multidisciplinary and versatile journal (1-10).

The typical situation consists of a researcher receiving an email from a predatory editor, asking for papers to be submitted (1-10). During the first career steps, it is easy that a researcher's mail address ends up in a large mailing list and finds themself subscribed to hundreds of journals without any willing to.

On a predatory journal’s homepage usually there is a fake logo of the Committee on Publication Ethics (COPE), a fake bibliometric indicator; furthermore a fake presence on Web of Science and Pubmed is reported (1-10), even though some of them have actually gathered access to subject databases and bibliographic citation ones (Fig. 1) (11).

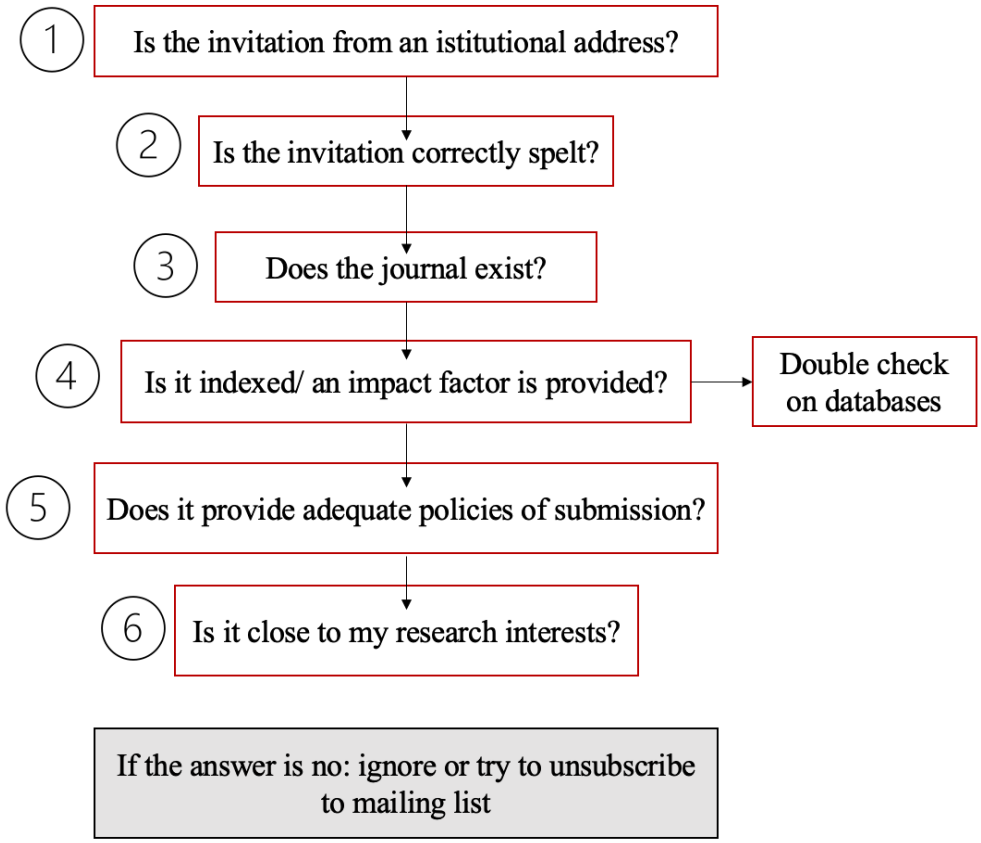

Figure 2. Proposed algorithm to evaluate a predator's invitation. It is possible to double check on major scientific databases the presence of the journal. If the answer to the questions is mostly no, the mail invitation should be ignored or, better, the unsubscription process from the mailing list should be carried on.

Editors of predatory journals do not usually use institutional emails, rather they use non-professional address domains such as gmail and yahoo (1-10). They do not provide information regarding manuscript handling nor do they provide comprehensive authors instructions, reporting incorrectly spelt texts and coarse websites layouts. Predatory editors do not only look for papers, rather they also pretend to organize fake conferences in which the unlucky researcher is promised to be speaker/moderator (10). Papers submission and conferences participation is obviously under a conspicuous fee, identifying with the APC, namely article processing charge.

There are other aspects to consider, though. Developing countries are those where scientific misconducts and retractions are more present (3, 7), and on this background the adjunction of predatory journals, very widespread, is further limiting their scientific growth. The recent Covid-19 pandemic has brought the need for a fast sharing of data and articles, and it has been observed, maybe for this reason, an increase in predatory publications and predatory invitations after the pandemics start (9).

Predatory journals can have devastating consequences on the medical field. Young researchers can see their articles being wasted and, if surprised in publishing for a predatory journal, they may even be fired (1, 10). Research funds may be also lost for paying predatory journals. Fake scientific news may be given and both patients and doctors may be reached by them: this could be a real threat for patients healthcare. Over the years some initiatives have been developed to stop this phenomenon, for example, Beall had created a list of predatory journals which was then removed in 2017 (10). Also the "Think? Check. Submit." Approach is very interesting: it consists in tips for young researchers about how to choose the journal to submit their work to (10). This is a crucial point: a great weapon against predatory journals must be researchers' awareness about the phenomenon. Awareness could be reached, for example, by implementing academic curricula on scientific research and methodology (1, 8, 10, 12). Moreover, albeit the significant differences among predatory editors' behavior, several algorithms can be elaborated to ensure an efficient evaluation of a predatory invitation (Fig. 2).

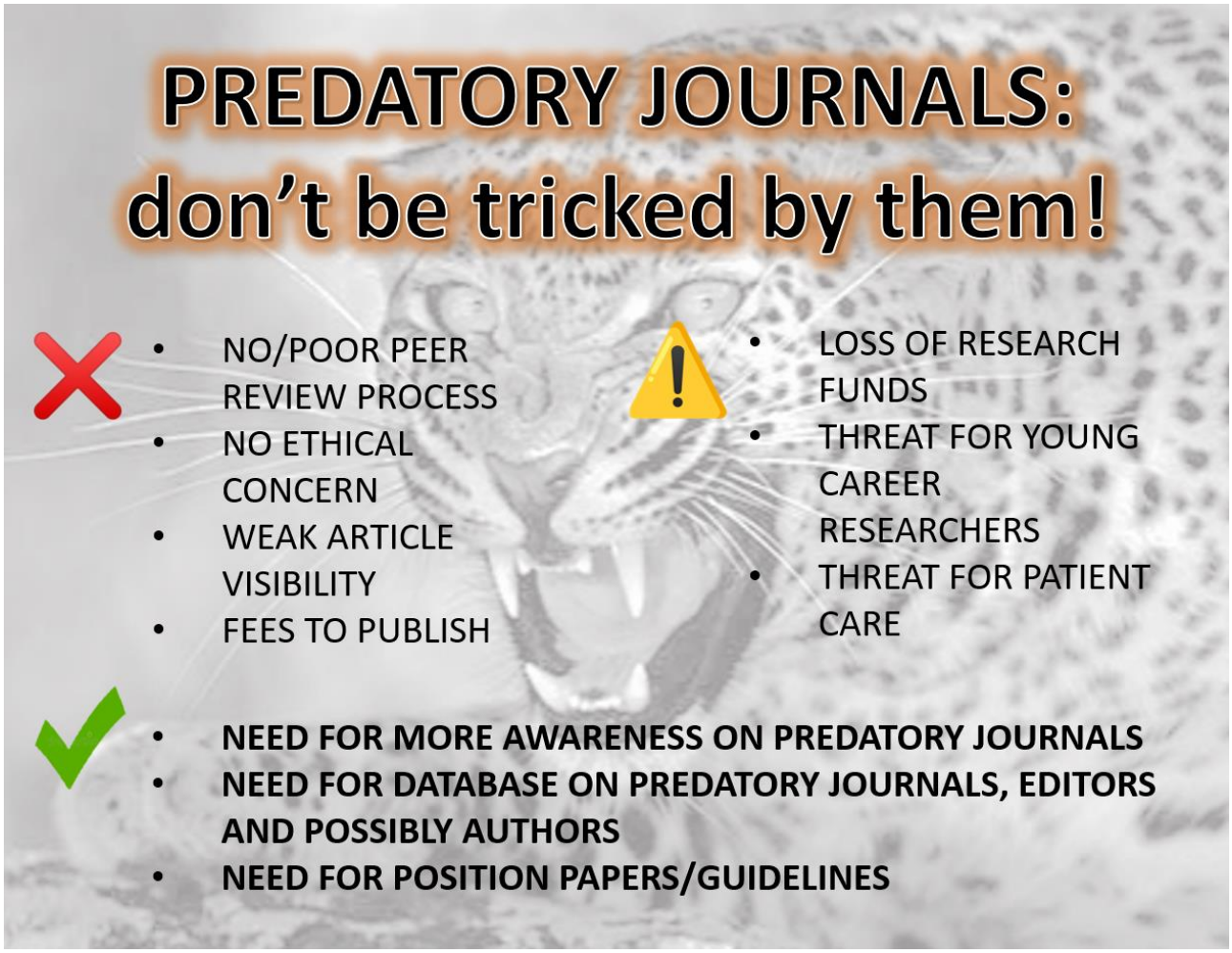

Figure 3. Summary of key features of predatory publishing strategies, risks, and potential remedies

In conclusion, an international database of predatory journals, including also predatory journal editors, and possibly authors, could be a great tool if continuously implemented and coupled with target measures (6) (Fig. 3). In particular, it would be useful for principal scientific societies to elaborate their own position papers and guidelines, and involve institutional bodies in this phenomenon counteraction.

Peer-review: internal
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Marine flowers, Burgen place, Tarbagatai mountain, Urdjar region, Abai oblast, Kazakhstan. Photography by Yerssin Zhunusov, Almaty, Kazakhstan