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Predatory vs Legitimate Publishing and Its Consequences: A Review

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Abstract: Predatory journals are a global threat. They accept articles for publication without any form of an editorial or peer review process. Predatory publishing is just a wastage of time, money, resources, and efforts. Predatory publishers take publication fees from authors and publish articles easily and quickly even in a week or a couple of days. On the contrary, publishing in a legitimate journal is a difficult task, that demands high-quality research, a lot of time in addressing the reviewers' comments, and thus months or even years in some instances for a paper to be published. Publication of research works in legitimate journals is important for researchers for enhancing their careers and reputation. Publication in a predatory journal creates a negative reputation, therefore such publications should be avoided. The authors should be encouraged to publish their works in legitimate journals which are registered in or member of the World Association of Medical Editors (WAME), Directory of Open Access Journals (DOAJ), Open Access Scholarly Publishers Association (OASPA), International Association of Scientific, Technical & Medical Publishers (STM) and Committee on Publication Ethics (COPE). The universities, research organizations, and funding agencies should make joint efforts to promote only those journals which are indexed in Web of Science, Scopus PsycINFO, and other authentic databases.
Keywords: Authors, career, legitimate journals, predatory journals, publications.

1. Introduction

Nowadays there is a big trouble in the field of academic publishing because of the growing number of unethical publications (Shrestha et al., 2018a). A predatory publisher serves as an opportunistic publishing platform that exploits the academic need to publish and focuses solely on monetary business for those using their services (O'Donnell, 2020). Jeffrey Beall, a scholarly librarian at the

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University of Colorado, first coined the term predatory publishers in Nature in 2012 (Beall, 2012). Since then, the visibility and awareness of predatory journals have increased rapidly. In June 2017, Cabell's International, a scholarly services firm headquartered in Beaumont, Texas, launched a pay-to-view list of predatory journals. At launch, there were 4,000 journals on cabell's list of predatory journals. Today, there are 13,000 journals on the list (Chawla, 2020a). The number of predatory journals and publishers is expanding rapidly and threatens the integrity of scientific research and publishing (Hansoti et al., 2016). With hundreds of predatory journals appearing and disappearing regularly, researchers need to be vigilant in their approach to unfamiliar publishers (Chawla, 2020a). Predatory publishing may happen if the author is unfamiliar with the field of the journal, new to research/publishing in general, feels pressure to publish (for tenure, promotion, and retention considerations), and feels pressure to publish quickly (Saleh, 2020). Researchers in developing countries are more likely to publish in predatory journals (Xia et al., 2015). Young scholars (MS, PhD. candidates) from universities and young researchers from research organizations are trying to publish in predatory journals because of the compulsion to be published in a limited time due to the requirement of their degree, job promotion, etc. They want to publish a large number of papers in a very short period to improve their academic prestige or to increase the impact of their curriculum vitae. Predatory publications have increased since the submission process of co-authors who do not have enough ideas about predatory publishing and the key authors display a lack of concern in selecting appropriate journals. Publishing in high-quality peer-reviewed journals remains the prime metric of success for academicians, especially early career researchers focused on promotion and tenure (Hansoti et al., 2016).

A legitimate journal often clearly lays out how much publication will cost and what this money is being used for in the publication process. Legitimate journals will always ask for payment after acceptance, and their fees are clear and easily available. Many legitimate publishers will not accept articles that have been published before, but predatory publishers easily accept articles published before. The publication of works in a legitimate journal is a difficult task; that demands high-quality research, takes a lot of time in addressing the reviewers' comments, and thus months or even years in some instances for a paper to be published. By publishing research works in predatory journals, researchers make their works illegal, unusable and stigmatized. Funding agencies do not recognize predatory publications and the reputation of researchers may be polluted by untrusted publications. Therefore, the researchers should be aware of the causes and consequences of predatory publications (Shrestha et al., 2018a). Researchers need to choose a reputable, reliable journal that provides rigorous peer review and disseminates their research to a wide audience; and that they can be confident and proud of listing this on their CV (Nobes, 2018). To discourage predatory publications, educational and research institutions should set the rules for publication in the journals that must be indexed in Web of Science, Journal Citation Reports (JCR,

Clarivate Analytics, formerly Thomson-Reuters) or other famous scientific databases such as Scopus, Web of Science, DOAJ, PubMed, and MEDLINE (Shrestha et al., 2020). Local, national, and international regulatory bodies should take stern actions against predatory publications while granting research funds and evaluating the researchers' performance for job promotion and academic degrees (Shrestha, 2020a; Shrestha, 2021). The purpose of this review paper is to create awareness among authors about predatory and legitimate publications and their publishing consequences.

2. Identifying predatory journals

Researchers should learn how to identify predatory journals and stop applying their research output to such disreputable outlets (Shrestha et al.,2018b). Predatory journals take advantage of authors by asking them to publish for a fee without providing peer-review or editing services (Shrestha, 2020b). Predatory publishers make a promise that the articles submitted to journals will be published in a very short period within a week or so. They send spam emails to authors daily, asking them to submit their manuscripts. The publication fee is also not seen publicly on the website. If a journal demands a submission fee before the article is published, it may be a predatory journal. Predatory journals include academics in their editorial team without their permission (Elliott, 2012; Neumann, 2012). Predatory publishers frequently list multiple journals with the same editor-in-chief. Predatory journals' reviewers are often junior researchers from developing countries (Kramer, 2020). They are trying to make the titles of their journals or website names identical to authentic and famous journals (Kolata, 2013). They use terms like International; British, European, American, New, etc. in their journal titles. Predatory publishers establish false contact locations (Elliott, 2012). Often predatory journals claim that their offices are in one country, while contact details will be in another. The links and telephone numbers given on the website do not work. Many predatory publishers claim to be headquartered in the United States, United Kingdom, Canada, or Australia but actually originate from Pakistan, India, or Nigeria (Naidu and Dell, 2019).

Technical -editing errors are noticeable in predatory journals. Predatory journals are lazy in editing and removing mistakes so that they have full of grammatical errors (Mehrpour and Khajavi 2014). They publish several issues per volume and each issue appears to be covered by the number of articles. Predatory journals simply accept submissions, do not, or do less peer review (Stratford 2012). They publish without a peer-review process. Predatory journals claim that they have (Thomson-Reuters) impact factors, Scopus, Web of Science, which pretend to have very good features but can not be found in the real site of credible metrics. The predatory journals often have deceptive and bogus metrics (https://predatoryjournals.com/metrics). The Index Copernicus Value is advertised on their website. Predatory journals also seek to confuse researchers by presenting metric names that are very close to actual metrics. Predatory publishers keep fake metrics on their website including CiteFactor, Global Impact Factor, Journals Impact Factor (JIFACTOR), Science Impact Factor,

Scientific Journal Impact Factor, SCIJOURNAL.ORG (International Scientific Institute), Universal Impact factor, Directory of Journal Quality Factor, and Scientific Indexing Services (SIS).

3. Identifying legitimate journals

Legitimate journals make all efforts to publish scientifically rigorous, evidence-based articles (Habibzadeh, 2017). Elliott (2012) mentioned that the COPE (Committee on Publication Ethics) code of conduct should act as a guideline for determining whether it is a genuine or a false journal. Likewise, the World Association of Medical Editors (WAME), Directory of Open Access Journals (DOAJ), INASP (https://www.inasp.info), and Open Access Scholarly Publishers Association (OASPA) have good transparency principles and protocols to be followed for publication. To be a good journal it must have articles with particular Digital Object Identifiers (DOIs) provided by crossref (https://www.crossref.org), International Standard Serial Number (ISSN), Copyright, and renowned editorial team. It should also have clear usage rights e.g. Creative Commons License (CC by License). DOAJ indexed journals indicate that they meet the criteria of peer review and maintain the basic standards of publishing as required. If the journal is not listed in the DOAJ, it should give rise to doubt in the author's mind and should double-check before the submission of articles (Agrawal, 2020). The National Library of Medicine (NLM) in Bethesda offers access to bibliographic data not only for the journals but also for books, audiovisuals, computer software programs, and electronic resources, among other items. If the NLM Catalog mentions "Not currently indexed for MEDLINE," it means that the journal may be questionable (Agrawal, 2020). The reputed indices are Clarivate Analytics Web of Science, the International Bibliography of the Social Sciences, Scopus, the Norwegian Register for Scientific Journals (Level 2) (Naidu and Dell, 2019). The name of some of the important publishers are Nature, Elsevier, Wiley, Springer Nature, AIMS Press, Informa Healthcare, Cambridge University Press, Wolters Kluwer, Sage Publications, Inderscience, Brill, F1000 Research Ltd, CABI, CSIRO Publishing, Taylor and Francis, Bentham Science, Plos One, Frontiers, PeerJ, MDPI, Universities and Colleges, Registered Societies, Oxford University Press, MIT Press, De Gruyter, BioMed Central, Public Library of Science (PLOS), Emerald publishing, Hindwai, Cell Press and University of Chicago Press. The journals and publishers registered with COPE are genuine. The major reputed websites like INASP, LIBER (Ligue des Bibliothèques Européennes de Recherche– Association of European Research Libraries), Association of Learned and Professional Society Publishers (ALPSP), Scientific Technical Medical Journal (STM), United Kingdom Serials Group (UKSG), and individual publishers, in particular, recommended that the authors review the history of the journal very carefully and then apply for publication of the paper. Think. Check. Submit. website (https://thinkchecksubmit.org) provides helpful guidance. Besides, the Committee on Publication Ethics (COPE), Directory of Open Access Journals (DOAJ), the International Committee of Medical Journal Editors (ICMJE), the Society for Scholarly Publishing (SSP), Open Access

Scholarly Publishers Association (OASPA), the International Association of Scientific, Technical & Medical Publishers (STM), the Association of Learned and Professional Society Publishers (ALPSP), and World Association of Medical Editors (WAME) created the Principles of Transparency and Best Practice in Scholarly Publishing. These criteria help assess a journal.

The positive indicators for a journal or publisher being legitimate are the following (as suggested by Dubinsky, 2020):

- Journal aim and scope is well-defined and clearly stated
- Researchers/practitioners are the primary audiences of the journal
- Editor, editorial board, and reviewer board are recognized experts in the fields
- Journal is published by an established scholarly society or academic institution
- Articles are within the scope of the journal and meet the standards of the discipline
- The publication fees or charges are easily found on the journal web site and clearly explained
- The published articles have DOIs
- The copyright and licensing information are clearly stated. Journal indicates rights for use and re-use of content at article level (e.g., Creative Commons CC BY license)
- Journal has an ISSN (check the validity of the ISSN using ISSN Portal)
- Publisher is a member of Open Access Scholarly Publishers Association
- Journal is registered in UlrichsWeb Global Serials Directory
- Journal is listed in the Directory of Open Access Journals
- Journal is included in legitimate abstracting or indexing services or databases (such as MEDLINE, Scopus, PsycINFO, Web of Science) (Dubinsky, 2020).

4. Negative effects of predatory publishing

The authors have to face a variety of problems if they have published articles in predatory journals. The journals' bad reputation may be extended to the authors, their institutions, or even the entire field or discipline. Predatory or deceptive journals can serve as an outlet for plagiarized material or fabricated results.

Works of authors could disappear if the predatory publisher goes out of business. Nicoll and Chinn (2015) found that if the authors wish to delete their articles from fake journals after publication, they either ask to pay the withdrawal fee or refuse to return the article. It should be remembered that we should never attempt to publish our articles in predatory journals, nor should we quote any articles from predatory journals, as this can undermine the credibility of our paper. It’s going to be worthless for both our carrier and portfolio. Any

funding agency, company, research institution, academic institution, etc. shall assess the research according to its validity and quality (Smith 2006).

Authors should avoid predatory journals because of the following reasons (as suggested by Saleh, 2020);

- Authors' works may be subject to second-rate peer review
- Articles could disappear if the publisher goes out of business
- Predatory journals are not usually indexed in academic databases, thus decreasing the readership and impact of published articles
- Predatory journals may serve as an outlet for plagiarized material or fabricated results
- The bad reputation of journals may be extended to the authors, their institutions, or even the entire field or discipline (Saleh, 2020).

Publishing works in predatory journals include some ethical issues which include misrepresentation of data; lack of editorial and publishing standards and practices; academic deception; research and funding wasted; lack of archived content; and undermining confidence in the research literature (Ferris and Winker, 2017). Papers published in predatory journals get cited much less than those in reputable publications (Chawla, 2020b). The lack of citations to articles in predatory journals could indicate that the harm these publications cause might have been exaggerated, says Bo-Christer Björk, an information systems scientist at the Hanken School of Economics in Helsinki who co-authored the study. "If people don't cite, they probably don't read those articles," he says. "They have very little impact on the research of others" (as cited by Chawla, 2020b). Predatory publishing undermines the credibility of academic research.

Predatory publishing can be a risk for the reputation of researchers in the following ways.

- Loss of credibility of works - publishing in predatory journals can damage credibility and the credibility of authors' research works.
- Loss of control of authors' copyright – predatory journals may ask authors to sign over the copyright of their articles. Authors unable to withdraw their articles if they are published in predatory journals.
- Predatory publishers will exploit the author's profile – predatory publishers will use the author's reputation to enhance the reputation of publishers. Typically adding researcher's name to lists of editors, even if you haven't agreed to be one.
- Lost opportunity - Authors lose the opportunity to publish their research works in a credible journal.

To discourage the growth of predatory publishing, authors should not publish in, or cite articles published in, predatory journals, even if an individual study appears to be credible. If researchers cite articles in scientifically dubious journals, their credibility could suffer as much harm as if they were to be

authors of these publications (Severin and Low, 2019). Institutions should be discouraged from publishing in unethical journals by making the criterion for publishing in legitimate journals indexed in Web of Science's Journal Citation Reports (JCR, Clarivate Analytics, formerly Thomson-Reuters) or other popular scientific databases such as Scopus, DOAJ, STM, PubMed and MEDLINE (Shrestha et al.,2018a).

5. Conclusions

Publishing in legitimate high-quality and peer-reviewed journals is of prime importance for the success of academicians, especially early career researchers focused on promotion and tenure. Publishing in predatory journals not only damages or degrades academic reputations but also consumes energy, money, and research message. Researchers should avoid supporting predatory journals by not publishing their works in them and serving as their editors, reviewers, or on the editorial boards. The authors should therefore ensure that they should publish their papers only in a legitimate journal that meets the highest standards of scientific integrity.

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