

Predatory Publishing: The Downside of Open Access Publishing

Satyabrata Garanayak

Abstract

The proliferation of the internet, digital publishing, communication technology and competition among different publishing houses has led to swift changes in the publishing industry. Open access has become another great movement in the community of publishing as well as for academic scholars. The initiative of open-access is for free access of information without any barriers. But today, this unrestricted barrier-free access is the leading cause of predatory publishing. These fraudulent publishing firms main focus is to extract money from authors by guaranteeing publishing of article in peer-review journals. It is a very critical issue in the research community and affects the moral of publishing. These journal publications are creating an unwanted noise in the publishing sphere and one can't determine which is real and which is fake. It's very difficult to differentiate. The reason behind these problems is not the publishers alone; many academic researchers are also to be blamed for creating such type of challenges. Authors should avoid this type of publishing firm for his/her research. These sham publishing companies spread over a very large scale and without any controlling steps it could be a very serious situation in the near future. This paper highlights the predatory publishing concept, its growth, main reason behind growing and what are the precautions that must be followed to control this fraud.

Keywords: Article Processing Charges (APCs), Open Access, Predatory Publishing

1. Introduction

Do you receive any e-mails for research articles? Heard about call for paper/submission of papers from social media or any other sources? Could you accept your paper within 2-3 weeks? Could these publishing companies demanding any fees after the acceptance of manuscript through article processing charges? As an academician I think you face this type of situation. This is the symptoms of predatory publishers, because most of the reputed journals do not follow this type of conditions. Predatory publishers/journals often used the high-sounding

term (Beall, 2013; Rahman et. al., 2014). The synonymous title (Beall, 2013) as in the reputed journals such as International Journal of..., Global Journal of..., World Journal of..., American Journal of..., African Journal of..., European Journal of..., Asian Journal of..., and Indian Journal of...etc. used to attract authors to pretend as legitimate. They use spam email to solicit article submissions, and many give false information about their headquarters locations, claiming to be based in London or New York but in reality they are South Asian or West African countries (Beall, 2013). Often these journals claim they have high standard of peer-review editorial board and impact factors (Beall, 2013) but they really do not, and there are different individual companies that supply fake impact factors to such



journals. There is huge competition among publishers. The more papers they accept, the more money they earn (Beall, 2013). Overall, predatory publishers are not transparent about where they are based, who the owners are, and what other publishers they are associated with. The main focus of these counterfeit publishing houses is to try and deceive authors and readers to earn their revenue through huge publication processing fee without following any kind of standard peer-review. These types of publishing firms are growing rapidly and are a critical issue for developing countries like India, Pakistan, Bangladesh, Nigeria etc. (Beall, 2013; Bohannon, 2013) where poor quality papers are published in large number every year. This type of fraud publishing practice has a negative impact towards academic publishing. Researchers, academicians, and scientists need to be aware of these publishers and fake journals and should try to avoid falling into their traps. This is one of the barriers of future high-quality research communication.

2. Background of the Study

Growing phenomenon of counterfeit publishers/journals is a critical issue to academic scholarly publishing. According to the father of predatory publishing, Jeffrey Beall, hoax journals are threatening the integrity of real science by neglecting peer review. He suggested that academic institutions should stop the quantity of published articles as a measure of academic performance (API); researchers/scientists should not cite articles from predatory journals and educational library databases should exclude metadata for such publications (Beall, 2016). Another thing is, reputed scholarly databases such as Scopus and Thomson Reuters Web of Science need to raise the bar for acceptance,

eliminating journals and publishers that use flawed peer-review practices. Sometimes long time duration of peer-review, high rejection rate of reputed journals frustrates the authors and they intentionally trust the gold OA of predatory publishing. Alexandra Elbakyan, the founder of Sci-Hub, a science graduate student from Kazakhstan, frustrated with the high cost of research papers behind paywalls created Sci-Hub in 2011 (Bohannon, 2016). Sci-Hub has been highly controversial, lauded by parts of the scientific and academic communities and rebuked by a number of publishers. The renowned publisher Elsevier filed a legal complaint against Sci-Hub alleging copyright infringement (Bohannon, 2016). In 2015, Sci-Hub was found guilty and the website was shut down in December 2016, but interestingly there is still plenty of interest among people in Sci-Hub's service. The site hosted more than 51 million academic papers and received millions of visitors every month (Ernesto, 2016). This is a very dangerous situation not only nationally but also globally. India is home to a thriving community of predatory journals: outlets that masquerade as legitimate scientific publications but publish papers with little or no peer review while charging authors a hefty fee (Pulla, 2016). She found that many of poor papers in predatory journals are coming from top Indian research institutions. In 2015, a team reported in BMC Medicine that out of a selection of 262 authors published in predatory journals, 35% were Indian. Krishnaswamy Vijayraghavan, the secretary of India's Department of Biotechnology (DBT), professor and former director of the National Centre for Biological Sciences (NCBS) said, 'The fundamental problem is an ecosystem that values where you publish and how many papers you publish rather than what you publish. That needs to be changed'. He also said, 'Biology, in general,

has become awful, in that people are chasing the metrics, if you chase these surrogate markers of success instead of science; problem is serious'. Another experiment in between September 2015 to February 2016 to check the status of predatory journals published in India (Seethapathy, et. al, 2016). They randomly choose 3300 papers by first-time Indian authors from 350 journals and downloaded it irrespective of any academic discipline. These journals are retrieved from Beall's list of scholarly open-access blog (<https://scholarlyoa.com/>). The report gave, more than half of the papers (i.e. about 51%) were by authors from government-run and private colleges, 18% papers are from private universities/institutes, 15% from state universities, 3% from central universities and 2% from companies & industries. But interestingly about 11% of papers, they found, were from India's leading government research bodies, including 17% from ICAR, 15% from CSIR, 11% from NIT and 9% from IIT; rest are from other national institutes. They analyzed another interesting factor: academic discipline coverage/subject and academic position of corresponding authors. Life sciences (37%) and Medicine (25%) are the subjects that have maximum predatory publishing i.e. above half (61%) of all disciplines. Most of the academic authors such as faculty/scientist/professors (45%), PhD candidates (32%) and Post-doctoral Researchers & others (23%) is the main consumer/producer of fraud publishing. In this survey, 90% authors considered research publication as an achievement and 73% authors thought it as an academic pressure to publish research articles for job securities and promotions. Over a decade ago, open-access scientific journals have increased into a global industry, driven by author publication fees rather than traditional subscriptions.

3. Open Access (OA)

Initiative of OA becomes an attractive model for authors, researchers, scientists and students. The main motive was accessibility and visibility of scholarly work without any barriers (Suber, 2012). The OA model might account for 50% of the scholarly journal articles between 2017 and 2021, and 90% of articles by, as early as, 2020 (Lewis, 2012). The history of OA can be divided into three major periods (Laakso, et. al. 2011): the pioneering years (1993-1999), the innovation years (2000-2004), and the consolidation years (2005-2009). The three important public statements i.e. the Budapest Open Access Initiative (BOAI, Feb. 2002), the Bethesda Statement on Open Access Publishing (BOAP, June 2003), and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (BOAK, Oct. 2003) were the concept of OA (Suber, 2012). The main intention of these statements was unrestricted access to scholarly research i.e. for scholarly journal articles. But many times, these barrier-free accesses create a scope for predatory publishing. Reputed and well-known journals/publishers reviewed articles through a proper standard peer-review and followed publication ethics. Predatory publishers don't follow any type of review committee. The sole aim of these publishers is to make profit by extracting money from authors through APCs. Their article processing fees typically aren't disclosed until after an article has been accepted and the authors have signed a copyright agreement granting the publisher all rights. This ensures two results: first, the author's work is essentially held hostage, published only upon payment of the processing fee. Second, because of the sham peer-review, once published, the article will lack all scholarly credibility.

4. What is Predatory Publishing?

The term Predatory Publisher first coined by Jeffrey Beall in 2010 (Beall, 2013), Associate Professor and Scholarly Initiative Librarian, Auraria Library, University of Colorado Denver, USA. 'Predatory open-access publishers are those that unprofessionally exploit the author-pays model of publishing (Gold OA) for their own profit. These publishers typically have a low article acceptance threshold, with a false-front or non-existent peer review process. They use deception to appear legitimate, entrapping researchers into submitting their work and then charging them to publish it' (Beall, 2012).

Beall offers some criteria for determining whether a publisher or journal is legitimate or predatory. Beall published his first list of predatory publishers on his old blog in 2010 (Beall, 2013), but it drew no attention publicly. In 2011, he published a second list of predatory publishers that garnered much attention (Beall, 2013). Later, in early 2012, he improved his old blog and changed its name to Scholarly Open Access (<http://scholarlyoa.com>) (Beall, 2012) that included a list of predatory publishers and journals, and the list has had over one thousand entries (till the end of 2016). Apart from that, some misleading metrics (Beall, 2013a) and hijack journals (Beall, 2013b) were included after 2013. In his blog he divided these publishing firms into two groups: one is a list of publishers (Beall, 2012a) and the other is a list of Stand-alone journals (Beall, 2012b). His popular controversial blog about potential, possible, or probable predatory scholarly OA publishers/journal disappeared in January 15, 2017 without any reason (Chawla, 2017).

5. Why Predatory Publishing?

Many of researchers depend upon the OA scientific journal for their research work, notes and research paper writing. Most of them don't have knowledge of the fact that the journal they used for their educational purpose is legitimate or not. Many times open access is misused with knowledge by the young generation authors & researchers for academic career development. So it depends upon the client psychology as publishing firm spreads its business model. The growing phenomenon of hoax publishing is a very problematic situation affecting real research. We can't blame this situation on publishers alone; researchers/authors are also responsible for creating such types of complications. There are some of the important reasons in which authors would choose to publish papers in sham journal. These are:

5.1. Avoid Peer Review Process Intentionally

In academic publishing, peer review methods are employed to maintain standards of quality, improve performance, and provide credibility of research publication. The peer-review is mostly used in evaluating academic journals by more than one person of similar competence to the producers of the research work. It constitutes a form of self-regulation by qualified members of a profession within the relevant field. Reputed journals are high standard bearers of peer-review committee. They follow the ethics of publishing and accept good quality research papers; whereas in counterfeit journals, there is little to no peer-reviewing process (Beall, 2013). Sometimes many of the academicians and researchers frustrated with the long time peer-review process and low acceptance rate of reputed journals intentionally trust the pay-to-publish model

for their promotion, salary hike and tenure. This is the main reason of the growth fake publishing.

5.2. High Acceptance Rate

The time lapse between the submission and the acceptance decision of reputed journals is a very long process. Where as in predatory journals, the process of acceptance is very short (maximum period is within 2-4 weeks) and acceptance rate is 100% (Beall, 2013; Bohannon, 2013). This is another cause of growing predatory publishing. For example, the journal of Applied Psychology is a monthly, peer-reviewed academic journal published by the American Psychological Association, indexed by PsycINFO had a rejection rate of 81% in 2011 (Drugas, 2012). On another side, PLOS-ONE is a scientific journal published by PLOS (Public Library of Science) since 2006. This journal follows pay-to-publish model and published nearly 70% of submitted manuscripts. It means rejection rate of this journal is 30%. PLOS ONE remains the world's largest journal by number of paper published (about 22,000 paper published in 2016 i.e. 60 papers accepted in a day).

5.3. Pressure to Publish

There has been, for a considerable time pressure on academics to have their research published in scientific journals. The term Publish or Perish originated in USA in 1927, is a phrase coined to describe the pressure in academia to rapidly and continually publish academic work to sustain or further one's career (Neill, 2008). Publishing a paper in peer-review journal increases the professional growth, reputation, promotion, salary hike and tenure for authors. So they focus on the quantity of publication of research paper and are least worried

about the quality (Pulla, 2016). In many cases, when a researcher submits a paper to a leading journal, it takes times to review. Reviewer again request for revisions and these could result in a considerable amount of additional work. It takes many months or even in some cases more than one year and more. To avoid long time lag and pressure of academic institutions, researchers and many young authors prefer pay-to-publish OA model to publish research work easily.

5.4. Business Model

Internet and different communication technologies changed the publishing industry considerably. Easy availability of e-resources has reduced the high cost of printed publication. Competition to publish paper between authors for their career growth, promotion and tenure within low time, resulted in many small unknown publishers in the market. These publishing companies have spread their domain and their main focus is to extract money from authors to publish articles within a short period of time. This type of pay-to-publish business model will pollute the publishing world entirely in the near future (Beall, 2013).

6. Growth of Predatory Publishing 2011-2017 (According to Beall's List):

In the given Table-1 the growth of sham journal has an exponential rate. When Beall analyzed in 2011-2012 the number of publishers were 18. But between 2016 and Jan 14 2017 it reached one thousand fifty five. Unbelievable!! In the case of stand-alone journals, the number was 126 in 2012-13 and reached 1294. Hijacked journals and misleading metrics entered into the publishing sphere in 2014-15 and multiplied to 115 and 53 respectively

Table :1

Duration	No. of Publishers	No. of Standard-alone Journals	No. of Hijacked Journals	No. of Misleading Metrics Firm
2010-2011	18	-	-	-
2011-2012	23	-	-	-
2012-2013	225	126	-	-
2013-2014	477	303	-	-
2014-2015	693	507	30	26
2015-2016	923	882	101	28
2016-2017 (Jan 14)	1155	1294	115	53

7. Precaution to be followed before Submitting Research Paper

Publishing research article in the right journal will raise professional profile and help in the progress of one's career. The number of predatory journals is growing at around 4% annually and mostly thousands of e-journals are in the end of 2016 (Beall, 2012). How can we be sure that which journal is the right journal for our research? Follow the check list (Think, Check & Submit, 2015) to make sure and choose trusted journals for research. Some of the following points we must remember before submitting research article.

- ❖ Are the articles in the journal indexed in reputable database i.e. Scopus, SciFinder, PubMed, EBSCO, ProQuest, arXiv, Web of Science, etc?
- ❖ Verify if the journal is associated with OA Scholarly Publishers association (OASPA) and follow the Committee on Publication Ethics (COPE).

- ❖ Review the journal's scope. Most questionable journals have broad (Multidisciplinary) messages that they will publish articles on nearly any topic and different interdisciplinary field.
- ❖ Visit the journal's website. Some publishers' sites appears professionally created and managed, however on closer inspection, it may reveal poor design, or typographical or grammatical-errors that would not appear on a reputable publisher's/ journals site.
- ❖ Evaluate the quality of the articles previously published.
- ❖ Check if the publisher has a large fleet of journals that contain very little content. Sometimes some journals hide their back issues and frequency of publication is haphazardly in archived list.
- ❖ Check that the publisher/journal provides full, verifiable contact information on the journal site. Be cautious of publishers that only provide web contact forms (i.e. Email).

- ❖ Check if the peer-review policy is clearly described or not? Corrupt publishers promise a quick peer-review turnaround. The peer-review process used by reputed journals can take several months; sometimes it is more than six months. But these fraudulent publishers takes little peer-review i.e. maximum 2-4 weeks; either they rush the process or they do not conduct any peer-review at all.
- ❖ Check the names of editorial board members of the journal, and verify that are they experts in the field.
- ❖ See that the journal charges any publication fees/ Article processing charge? Be sure what these fees are and when it will be charged? Can they hide their publication fees? Legitimate journal publishers make this information easy to find on their website.
- ❖ Contact colleagues, experts, and librarian to get additional guidance.
- ❖ Use common sense: if something appears fraud, avoid it.

8. Conclusion

The motivation of predatory publishers/journals is profit making. Their main target is academic researchers who are building their professional career. Other targets include those who publish paper due to academic pressure, promotion, salary hike and tenure. In both of the cases, many of the authors blindly publish articles and they increase the quantity of material and are not bothered about quality. This is not only an issue in developing countries like India, Nigeria, and Bangladesh etc. but in the whole wide world. It can be eliminated only when authors are made aware about these

publishing propagandas. Universities, Institutions and Research organizations should not pressure the researcher to trade quantity for API instead of quality, not to run the fake metrics and respect the real science and research. So why should we waste our valuable time, money and work to publish paper that has no importance for our career. Our motto should be to produce quality paper in small packets as compared to least-credible quantity in large. In 10 January 2017, University Grants Commission (UGC notice) published list of approved journals for publishing research paper for academic promotion (Academic Performance Indicators, API), recruitment etc. (Pathak, 2017). This is a good step for the UGC to somehow control predatory publishing. Beall's list of predatory publishers and journals are controversial most of the time. Some publishers have threatened to sue him. Others have complained its transparency; but the initiative of Beall's list to blacklist journals/publishers towards scholarly communication is outstanding.

References

1. Suber, P. (2012). Open access. MIT Press, Chapter 1, pp. 4
2. Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489, pp. 179
3. Beall, J. (2012). Growth of Predatory Publishing 2011-2017. Retrieved from: <https://scholarlyoa.com>
4. Beall, J. (2012). Predatory publishing. *The Scientist Magazine*. Retrieved from: <http://www.the-scientist.com/?articles.view/articleNo/32426/title/Predatory-Publishing/>
5. Beall, J. (2012). Scholarly open access: critical analysis of scholarly open-access publishing. Retrieved from: <https://scholarlyoa.com>

6. Beall, J. (2012a). Potential, possible, or probable predatory scholarly open-access publishers. Retrieved from: <https://web.archive.org/web/20170111172306/https://scholarlyoa.com/publishers/>
7. Beall, J. (2012b). Potential, possible, or probable predatory scholarly open-access journals. Retrieved from: <https://web.archive.org/web/20170111172309/https://scholarlyoa.com/individual-journals/>
8. Laakso, M., Welling, P., Bukvova, H., Nyman, L., Bjork, B-C. & Hedlund, T. (2011). The development of open access journal publishing from 1993 to 2009. *PLoS ONE*, 6(6), e20961. Retrieved from: <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0020961&type=printable>
9. Beall, J. (2013). Medical publishing triage-chronicling predatory open access publishers. *Annals of Medicine and Surgery*, 2(2), pp. 47-49
10. Bohannon, J. (2013). Who's afraid of peer review? *Science*, 342(6154), pp. 60-65. Doi: 10.1126/science.342.6154.60
11. Beall, J. (2013). Predatory publishing is just one of the consequences of gold open access. *Learned Publishing*, 26(2), pp. 79-84. Doi: 10.1087/20130203
12. Beall, J. (2013a). Scholarly open access | Misleading Metrics. Retrieved from: <https://web.archive.org/web/20170111172311/https://scholarlyoa.com/other-pages/misleading-metrics/>
13. Beall, J. (2013b). Scholarly open access | Hijacked Journals. Retrieved from: <https://web.archive.org/web/20170111172313/https://scholarlyoa.com/other-pages/hijacked-journals/>
14. Rahman, J., Dexters, N. and Engels, T.C. (2014). Predatory open access journals in a performance-based funding model: common journals in Beall's list and in the VABB-SHW. Report of the Gezaghebbende Panel. Expertisecentrum Onderzoek en Ontwikkelingsmonitoring- Centre for R&D Monitoring, Antwerpen, pp. 1-23
15. Chawla, D.S. (2017). Mystery as controversial list of predatory publishers disappears. *The Science News*. Retrieved from: <http://www.sciencemag.org/news/2017/01/mystery-controversial-list-predatory-publishers-disappears>
16. Budapest Open Access Initiative (2002). Retrieved from: <http://www.budapestopenaccessinitiative.org/read>
17. Bethesda Statement on Open Access Publishing (2003). Retrieved from: <http://legacy.earlham.edu/~peters/fos/bethesda.htm>
18. Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003). Retrieved from: <https://openaccess.mpg.de/Berlin-Declaration>
19. Beall, J. (2016). Ban predators from the scientific record. *Nature*, 534, pp. 326. doi: 10.1038/534326a
20. Bohannon, J. (2016). The frustrated science student behind Sci-Hub. *Science*, 352(6285), pp. 511. doi: 10.1126/science.352.6285.511
21. Ernesto (2016). Elsevier complaint shuts down Sci-Hub domain name. Retrieved from: [https://](https://web.archive.org/web/20170111172313/https://scholarlyoa.com/other-pages/hijacked-journals/)

- torrentfreak.com/elsevier-complaint-shuts-down-sci-hub-domain-name-160504/
22. Pulla, P. (2016). Predatory publishers gain foothold in Indian academia's upper echelon. *Science*. doi: 10.1126/science.aal0526
23. Seethapathy, G.S., Kumar, J.U.S., & Hareesha, A.S. (2016). India's scientific publication in predatory journals: need for regulating quality of Indian science and education. *Current Science*, 111(11), 1759-1764. doi: 10.18520/cs/v111/i11/1759-1764
24. Bohannon, J. (2013). Who's afraid of peer review? *Science*. 342(6154), pp. 60-65. doi: 10.1126/science.342.6154.60
25. Lewis, D.W. (2012). The inevitability of open access. *College & Research Libraries*, 73(5), pp. 493-506. doi: 10.5860/crl-299
26. Drugas, M. (2012). On peer review systems and journals acceptance rate. *Romanian Journal of School Psychology*, 5(10), pp. 107-114
27. Neill, U.S. (2008). Publish or perish, but at what cost? *Journal of Clinical Investigation*, 118(7), pp. 2368-2368. doi: 10.1172/JCI36371
28. Think, Check & submit (2015). Retrieved from <http://thinkchecksubmit.org/>
29. Pathak, V. (2017). UGC list journals for granting academic points. *The Hindu*. Retrieved from: <http://www.thehindu.com/news/national/UGC-lists-journals-for-granting-academic-points/article17029900.ece>
30. Notice@UGC (2017). Published on 11/01/2017. UGC approved list of journals for the purpose of career advancement scheme and direct

recruitment of teachers and other academic staff as required under the UGC. Retrieved from: http://www.ugc.ac.in/ugc_notices.aspx?id=1604

Bibliographies

1. Solomon, D.J. and Bjork, B-C (2012). A study of open access journals using article processing charges. *Journal of the American Society for Information Science and Technology*, 63(8), pp. 1485-1495. doi: 10.1002/asi.22673
2. Butler, D. (2013). Sham journals scam authors, *Nature News*, 495, pp. 421-422. doi: 10.1038/495421a
3. Xia, J. (2015). Predatory journals and their article publishing charges. *Learned Publishing*, 28(1), pp. 69-74. doi: 10.1087/20150111
4. Shen, C. and Bjork, B-C. (2015). Predatory open access: a longitudinal study of article volumes and market characteristics. *BMC Medicine*. DOI: 10.1186/s12916-015-0469-2.

About Author

Satyabrata Garanayak, Research Scholar, Department of Library and Information Science, Pondicherry University, Puducherry
Email- satya75pu@gmail.com