Hlavcheva, Y., Olshevska, O. & Tykhonkova, I.: Predatory Journals vs Scientific Library

Yuliia Hlavcheva¹, Olga Olshevska², Iryna Tykhonkova³

Yuliia Hlavcheva, PhD, 0000-0001-7991-5411, yuliia.hlavcheva@khpi.edu.ua
Olga Olshevska, PhD, 0000-0002-4512-3915, olshevska.olga@gmail.com
Iryna Tykhonkova, PhD, 0000-0003-1115-3742, iryna.tykhonkova@clarivate.com
1-National Technical University "Kharkiv Polytechnic Institute
2-Odesa National University of Technology
3-Clarivate

Introduction. Science is aimed at understanding the world and discovering new technologies for the sustainable development of society and improving people's lives. The output of scientific activity can be evaluated using scientometric indicators and expert assessment. The number and interest of the scientific community in publications (citations) can indicate the quality of scientific research That is why several years ago the Ministry of Education and Sciences of Ukraine modified the requirements for publications in which the results of dissertation research must be published. However, this led to the emergence of a large number of so called «Predatory» journals and publications. Publications in predatory journals lead a loss of results, money, time, and reputation for both a researcher and his or her organization. Librarians can advise scholars on the choice of journals and the preparation of articles.

The **aim of this presentation** is to determine the level of awareness among educators about the phenomenon of predatory journals and to present the experience of academic organizations in combating this phenomenon and promoting the increase of the number of publications by Ukrainian scientists in reputable scientific journals..

Analysis of the current state of the problem of publications in predatory journals

Predatory journals are publications that position themselves as scientific and peer-reviewed, but in fact, their work lacks scientific peer review, and violates publication ethics and academic integrity (Demir, 2018). Predatory publishing is a recent phenomenon.

We can analyze the appearance of this phenomenon by assessing the number of publications on the subject. Until 2013, there were less than 10 articles per year on the topic of predatory journals in the Web of Science Core Collection, and since 2019, more than 60 showing the interest and comprehensive research of this issue (12 march search, WoS CC, topic "predatory journal*", document type article). These publications analyze different types of fraud, their impact on science, changes in the scientific ecosystem are analyzed, and warn against publishing in predatory journals.

Despite a large number of recommendations (Leonard, 2021; Committee on Publication Ethics, 2019, 2022) for authors to identify predatory publications, some scientists still fall prey to predatory journals. As researchers learn to recognize predatory journals, their owners resort to new, more covert approaches to attract a new audience of authors to publish.

There are three main types of fraud characteristic for predatory journals:

- invitations to publish in a journal that has no scientific impact;
- mimicry of a really good journal;

hijacked journal.

A recent analysis of excluded predatory journals from Scopus revealed a significant number of publications by Ukrainian scientists (Nazarovets, 2022). It has a negative impact on scientists' careers and reputations. This may lead some to question the validity and reliability of the research, as well as the quality of the journal in which it was published (Nazarovets, 2022).

Method

In order to determine the level of authors' awareness about predatory journals, a survey was conducted in March-April 2023, they were carried out jointly by Clarivate, the Scientific and Technical Library of NTU "KhPI" and the Scientific and Technical Library of ONTU. Responses were received from 432 respondents.

Results. Breakdown of respondents by category: academic staff - 70,6 %; students - 10,6 %; librarian- 8,16 % others – 10,7 %. The reviewers' answers are presented in the figures 1, 2, 3.



Figure 1. Question 1: Are you familiar with the concept of "predatory" publications?

56 % of the total number of respondents first learned about this concept on their own, 23% - at events and during consultations with Clarivate and the libraries of Odesa National University of Technology and National Technical University "Kharkiv Polytechnic Institute".



Figure 2. Question 2: Where (how) did you first encounter this concept?

An unexpected result was the authors' understanding of the impact of this phenomenon on the academic environment: 2.3% - positive impact; 6.5% - no impact. 80.8% of respondents clearly assess the impact as negative, and 10.4% are hesitant to give a definite answer.

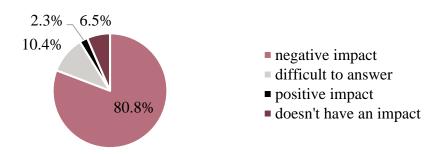


Figure 3. Question 3: How do you evaluate the impact of this phenomenon on the academic environment?

The survey demonstrated significant awareness among educators about the phenomenon of predatory journals. Importantly, a third of those who are aware of this phenomenon obtained information about it at events organized by Clarivate and the libraries of Odesa National University of Technology and National Technical University "Kharkiv Polytechnic Institute".

However, it is concerning that some respondents exhibited a nonchalant attitude towards this issue. Nevertheless, the majority still assesses the impact of this phenomenon unequivocally negatively.

Discussion

It is possible to increase awareness and prevent the practice of publishing in predatory journals by implementing a set of measures. This is a coordinated effort in different directions involving reputable partners to exchange experiences.

Analysis of the current situation allowed us to propose four areas for further work:

- 1. development of digital academic competencies, work with information and analytical systems;
 - 2. research integrity and preparation of quality publications;
- 3. consultation on selecting journals for publication and the formation of an individual publication strategy;
 - 4. developing student and scientists competencies in publishing and academic ethics.

Today, there are about 100,000 journals in the world that claim to be scientific; among theme there are over 10,000 predatory journals. Therefore, a researcher should carefully select their sources of information and the journals where they wish to publish.

This task can be simplified by selecting journals that are approved by reputed bibliographic resources. The best journal for publishing results is one that is trusted and in demand among other scientists researching the same problem. On average, a scientist reads about 200 articles per year, so it is important that your results are included in the circle of journals that are "familiar" to your colleagues. Web of Science (Clarivate) provides a list of trusted journals to the scientific community.

Clarivate has considerable practical experience of cooperation with Ukrainian universities. During 2020-2022, Clarivate held 191 webinars for Ukrainian scientists, including 32 dedicated to the publication process and academic ethics, and the libraries of Odesa National University of Technology and National Technical University "Kharkiv Polytechnic Institute" held a total of 84 scientific and practical seminars on the main areas of an integrated approach to raise awareness of authors and prevent the practice of publishing in predatory publications.

Preparing a quality publication requires the author to fulfill formal and substantive requirements. Libraries can help authors with the formatting of a publication, as they have skills on this topic. The popularization of bibliographic managers (EndNote) allows authors to do this work on their own and save time. At Odessa National University of Technology, separate applications have been created for authors that allow them to create a list in a certain style, such as 4ref.ontu.edu.ua, which is an automated resource, as well as a resource for transliteration translit.ontu.edu.ua or a resource for systematizing scientific profiles s2m.ontu.edu.ua. All of these projects are self-generated resources.

Conclusions.

The phenomenon of predatory journals has a negative impact on the academic environment. Therefore, countering this phenomenon is an important task. A high level of awareness and responsible attitude towards the consequences among scientists and students will contribute to a reduction in the number of publications in predatory journals.

Clarivate and the libraries of Odesa National University of Technology and National Technical University "Kharkiv Polytechnic Institute" plan to continue implementing a complex of measures in this direction. The survey showed that these measures have a positive impact on educators. In 2024, we plan to conduct a similar survey to determine the dynamics and plan further actions.

In Ukraine, in the context of war, the safety and preservation of the physical and psychological health of all participants in the educational and scientific process is a priority in the implementation of any work. Therefore, we consider it promising to combine efforts to provide users with the following basic capabilities:

- 1) independent distance learning of the necessary competencies educational information is freely available at any time from any device;
- 2) mandatory contact with an information specialist (Clarivate, libraries of Odesa National University of Technology and National Technical University "Kharkiv Polytechnic Institute");
- 3) availability of analytical scientific information in reliable sources, such as the Web of Science information and analytical platform.

A complex of measures that combines information, training, assistance, and support will allow researchers to choose quality journals for publication and avoid predatory publications. The proposed approach is example of a good practice that can be implemented in other higher education institutions, taking into account their own specifics.

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