Scholarly publishing landscape has gradually evolved from a print-only publishing system to an open-access online publishing model in the last three decades. However, this shift of increasing popularity and acceptance of open-access has also led to unethical publishing practices, commonly referred to as predatory publishing.\(^1\) Predatory journals and publishers abuse the gold (author-pays) open-access publishing model by making money for their owners-editors, and are characterized by the lack of a proper authentic peer review system.\(^2\) In less than a decade, these journals and publishers have grown from very few in number to more than a thousand.\(^3\) The menace of predatory publishing is widespread affecting authors of almost every field across the globe.\(^2,4\) It is generally assumed that most of the predatory journals and publishers operate from developing countries of Asia and Africa.\(^4,5\) Therefore, it is important to address this topic from a developing country perspective. This editorial is an attempt to create awareness in readership of the Journal of the College of Physicians and Surgeons of Pakistan, particularly Pakistani researchers, about the menace of predatory publishing.

The current point system for recruitment and promotion, and the pressure to publish or perish, helps predatory journals flourish and deceive researchers.\(^6,7\) There are a wide variety of reasons as to why authors choose to publish in predatory journals. These may include quick and easy publication without the hassle of a formal and rigorous peer review leading to promotion and excellence in career, obtaining grants and funding, and to satisfy the ego for an international publication in presumably an "International Journal". In developing countries like Pakistan, where government institutions and authorities do not have clear policies and strict control on the research quality, education, and training of researchers, the situation becomes even worse.\(^7\) As a result, not only early-career and inexperienced researchers get duped by the so-called predatory journals, but also the experienced scholars are also victimized.\(^5\) However, some authors argue that not all researchers are actually the ‘victims’ of the predatory journals because some experienced and published researchers deliberately and repeatedly publish in such journals, creating a symbiotic relationship.\(^8\) These authors cheat the fair system, and in fact, get jobs and promotions through wrong means.

‘Predatory’ is a complex term, and in fact, very loose while considering authors who deliberately publish with these journals. Moreover, between the deceptive predatory journals and legitimate journals with high standards, lie the low-quality, small-scale, open-access journals from the developing world. The term "predatory" erroneously includes these journals, which although do not meet the standards of high-quality publishers, are not necessarily predatory.\(^9-10\) Moreover, given that the reports of unethical practices by established journals from mega-publishers such as Elsevier, Wolters Kluwer, and Sage also exist,\(^11,12\) the term 'predatory' might be inappropriate keeping in view the low-quality, small-scale, open-access legitimate journals from the developing world. In order to address this problem, recently researchers have suggested revisions in the existing terminology and recommended categorizing journals as low-quality legitimate journals and fraudulent or deceptive journals.\(^8\) Deceptive journals are characterized by stating false or misleading information about the quality of manuscripts, ‘a rigorous’ peer review process, editorial board, location, contact details, impact factor or indexing services, and about the costs involved in publishing with them. Such journals accept all submitted papers from a diverse background and pretend to have a formal peer review process. They falsely claim and even display an impact factor, although these journals are too new to have one. They also list either bogus names on the editorial board or include the names of well-known researchers without their permission and knowledge.

Low-quality journals may be further categorized according to the cumulative criteria, and are characterized by practices in ‘gray zone’ such as being too broad in aims and scope, publishing special issues out of the journal's scope, poor quality papers, having poorly managed and outdated websites, indexation in irrelevant agencies, a lack of information about manuscript handling, submission, scientific misconduct (e.g. retraction policy, plagiarism and the pressure to publish or perish, helps predatory journals flourish and deceive researchers.\(^6,7\) There are a wide variety of reasons as to why authors choose to publish in predatory journals. These may include quick and easy publication without the hassle of a formal and rigorous peer review leading to promotion and excellence in career, obtaining grants and funding, and to satisfy the ego for an international publication in presumably an "International Journal". In developing countries like Pakistan, where government institutions and authorities do not have clear policies and strict control on the research quality, education, and training of researchers, the situation becomes even worse.\(^7\) As a result, not only early-career and inexperienced researchers get duped by the so-called predatory journals, but also the experienced scholars are also victimized.\(^5\) However, some authors argue that not all researchers are actually the ‘victims’ of the predatory journals because some experienced and published researchers deliberately and repeatedly publish in such journals, creating a symbiotic relationship.\(^8\) These authors cheat the fair system, and in fact, get jobs and promotions through wrong means.

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etc.), few editors and/or without detailed information about editors, and inviting authors to submit manuscripts with expertise in fields that are clearly outside its scope or authors’ expertise. For example, a journal that does not publish papers about physiotherapy and rehabilitation inviting a senior published physiotherapy researcher to submit a paper.

It is important to understand that although peer review takes time, some manuscript categories such as the letters and opinion pieces may not undergo a formal peer review; but only an editorial review, followed by acceptance and publication. Depending on the availability of the reviewers, journal's turnaround time for peer review, and authors' speed of response to reviewers' comments, some papers may be accepted quickly while others might face a delay. Therefore, a clear understanding of the peer review process is important for authors from developing countries like Pakistan to differentiate between low-quality legitimate journals and deceptive journals.

Several recent papers shed light to create awareness among researchers about the problem of predatory publishing. However, most of the contribution and guidance about this issue comes from developed counties; whereas, Asia and Africa add the least to the topic. Nonetheless, few Asian journals such as the Journal of the Korean Medical Sciences have attempted to create awareness among the scientific community about predatory publishers. There are some recent contributions from Pakistan on the features of predatory publishing, and how to respond to them based on previous schemes for journal classification. This editorial proposes a new way of categorizing journals and we encourage debate using this classification scheme.

There are several ways to avoid fraudulent journals including manual verification of the journal, use of journal selectors (e.g. Journal Author Name Estimator), and other additional resources for journal selection. Authors from developing countries, particularly those from Pakistan, are advised to educate themselves about these resources apart from what we have discussed. The medical education and research departments of medical institutes should be proactive in highlighting this neglected issue. Major stakeholders of the research and publishing in Pakistan including Higher Education Commission, Pakistan Medical and Dental Council, Pakistan Nursing Council, the College of Physicians and Surgeons of Pakistan, Pakistan Association of Medical Editors and others should formulate national guidelines and issue policy statements on predatory publishing. They should clearly denounce this publishing model and warn potential authors to avoid these. It has also been suggested that the papers published in predatory journals should not be cited. Journal editors and organizations concerned with higher education should emphasize education about research and scholarly publishing, which should be up-to-date, and should avoid anything dubious or questionable regarding their ethical standards. Journal editors from Pakistan are recommended to display complete details of the editorial board members, legitimate metrics and indexing agencies, and aim to improve the overall quality of their journals (for example, Science Editing: https://www.escienceediting.org/). Only sincere, collective, and collaborative steps would help achieve this goal as it still largely remains under-recognized as an academic threat in Pakistan. Through this editorial, we offer our support and services to educate Pakistani healthcare professionals, faculties, students and researchers about predatory publishing and scholarly publishing.

REFERENCES