MEDICAL PUBLISHING IN THE 21ST CENTURY: WHY WE NEED TO GO BACK

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ABSTRACT

Editorials are a means for authors to communicate, congratulate, critique and state their own opinion of emerging and worrying trends in their field. In the following article, some aspects of both the positive and the negative sides of modern medical publishing will be discussed with regard to changes over the course of history, since its primary conception to present days. A wider focus will be set on the changes different types of manuscripts have undergone from past to present, such as Editorials, Technical reports, Case reports, Original articles and Reviews. Modern-day worrying trends, such as publishing time and the dubious process of editorial and peer review and rejection as well as article database services and the modern-day irrelevance of the impact factor, together with its harmful effects on medical publishing as a whole are discussed. All aspects of the latter are based on the author's personal experience and observations. *Scr Sci Med.* 2017;49(4):86-88

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To the Editor and Readers, the current roadblocks of medical publishing in the 21st century and its great shortcomings are drastic, when compared to those of prior centuries.

Medical journals were established as bulletins to accommodate the advances in medical science in the late 17th and early 18th century, publishing short reports on procedures, conditions and practices, a great number of which have been forever embedded in medicine and associated with the name of the publishing authors. These short reports were not re-

viewed and were published as submitted, as soon as possible. Globalization of publishing has since led to the increase of journals, allowing for a much wider scope of narrow field journals, with contrasting classical, Open Access (OA) and a predatory model (1). Herein lies a problem with medical publishing with the current trend for a multidisciplinary approach on the background of extreme segregation of fields and topics, further underlined by the contrasting models. In most cases, this leads to related fields completely incompetent in terms of one-another's advances. OA implied that articles would be published fast and free for all to read, for a fee from the author. Even so, more articles are published outside the OA model, as authors deny paying further on an already expensive research or have run out of income. Predatory journals operate under the OA model, but articles undergo no review whatsoever and are not indexed, whilst claiming to be.

The editor and peer review process has become both the most important and the most dubious part of medical publishing. Peer reviews have been implemented with reason and play a pivotal role in medi-

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cal publishing when conducted properly. Each manuscript must undergo editor review to be forwarded to the proper peer reviewers. However, the process often ends with editorial rejection, based on the journal already having enough articles to fill its next issue. The selection of reviewers by the editor is another source of controversy. Peer review, especially in high impact factor (IF) journals has become the reason for rejection. The rejection rate of manuscripts by high ranking journals is always going to be higher than the number of accepted manuscripts. Peer reviews, however, should not only reject submissions but also state reasons and suggest improvements. A rejection without proper peer review has become the norm and numerous articles receive just a single 'no', rather than a peer review stating the problems and suggestions for quality improvement. Stating your institution name in the title, if it is well-known, helps a lot, whilst it may damage your chances if that is not the case. Even if this is not the case, journals often conduct a background check on the publishing author. This has further led to renowned authors' articles being published in a lot shorter timeframe, when compared to relative nobodies. Furthermore, based on the peer reviews, if the article receives such, the author, if renowned, may decide to not respond to them and based on the editor's decision still be published. Trying to evade this, a new type of journal has emerged - the mega-journal (1). These journals publish on all medical topics with fast peer reviews and publication, if the article is methodologically sound.

Editorials/letters to the editor/commentaries are short communications originally intended for authors to state their opinion, critique, congratulate and compare one another or state emerging trends in their fields of work. Today many journals are wary of publishing these type of articles, as they often express too much critique to published articles. This leads to severe postponing of their publication, if accepted. Many journals now have obligatory peer reviews for such manuscripts. This makes it further difficult for proper letters to come out, as they are often reviewed by the author addressed in the letter, who in the case of being attacked and called out on misconducts will deny the letter publication.

Technical reports/technical notes/How I do it have faded into obscurity. Not only medical procedures, but also instruments and approaches to treat-

ment have become known as the name of the author that published them. A great number of professionals use personalized modifications of the same method and training on the process is often based on word of mouth by superiors, rather than a study of the detailed layout by the original author.

Case reports, one of the more conservative manuscript types, have undergone the least change over the years. However, an increasing number of journals are no longer publishing case reports. Original articles are dominated by norms introduced in the past, still dictating the process of publication. Multicenter trials were introduced in the past so that studies can accumulate a greater number of patients and protocols would be carried out in the same fashion. Today, however, protocols are highly standardized and often small centers collaborate with one another and accumulate less patients than single-center studies of larger institutions. The results in both single and multicenter trials in modern day unsurprisingly yield the same overall results. However, multicenter trials are published in higher ranking journals, due to the stereotypical disregard of single-center trials.

Review articles have also undergone a limited change. However, instead of a classical review of a topic they take the form of a very narrow report, focusing only on certain aspects of the problem, citing at times more than 200 sources, which could not be used to produce and support a comprehensive manuscript if correctly analyzed, due to great contradictions between them.

Impact factor has become the basis of rejecting, whilst claiming to relate to quality (2). Blind citing has become the norm and often an article is cited because of its author, or because of it already being cited in other articles. PLoS and other recent mega-journals proved that volume and quality yield a constant depending on the field and IF is irrelevant in some respects (1). This problem is further underlined with small institutional journals having the same impact factor as larger international journals.

The time from submission to publication is often prolonged (3). In some cases, especially with retrospective articles, data collection and analysis together with writing the manuscript account for less time than the time from submission to publication.

This prolongation of the publishing process often leads to two articles on the same topic, developed in the same timeframe being published with a long time span between them, or conversely, articles developed within different timeframes being published at nearly identical time lags (4,5).

In conclusion, due to these shortcomings, although capable, a lot of medical doctors do not pursue a career in publishing. They instead practice the way their peers do and only consider word of mouth by their seniors as a valid source of information. A great number of articles are incomprehensive to the general peer, whilst groundbreaking articles from the previous century and beyond that have forever changed medicine, would have never been published today under the current conditions.

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