

## Publish or perish: Where are we heading?

Frequent publication is one of the few powerful methods at scholar's disposal to demonstrate academic talent to peers. Successful publication of research brings attention to scholars and their institutions. This in turn may bring in more funding for the institute and also ensure an individual's progress through their field. Academic institutions and university frequently use the number of publication to an individual's credit as the measure of competency. Administrators are increasingly using this as the criteria during recruitments. Scholars, who publish infrequently or who focus on activities that does not result in publications like instructing undergraduates, may find themselves out of contentions for many teaching positions. It is due to these reasons that there is an immense pressure to publish. The phrase "Publish or perish" initially coined by Coolidge<sup>[1]</sup> in 1932 is now becoming a harsh reality.

The emphasis on publishing has decreased the value of the resulting scholarship as scholar must spend time scrambling to publish whatever they can manage, rather than spend time developing significant research agenda. The pressure to publish-or-perish also detracts from the time and effort professors can devote to teaching undergraduate and post-graduates. The rewards for exceptional teaching rarely match the rewards for exceptional research, which encourages faculty to favor the latter whenever they conflict. Many universities do not focus on teaching ability when they hire new faculty and simply look at the publications list.<sup>[2]</sup> This single-minded focus on the professor-as-researcher may cause faculty to neglect or be unable to perform some other responsibilities.

This pressure to increase the number of publications has led to unethical practices and waste full research. The increase in the number of publications has led to the growth of many new journals. In 2006 alone, approximately 1.3 million peer reviewed scientific articles were published, aided by a large rise in the number of available scientific journals from 16,000 in 2001 to 23,750 by 2006.<sup>[3]</sup> The increasing scientific articles have fuelled the demand for new journal. There is a ridiculous proliferation of scientific journals of all kind. Every other day we see a new journal cropping up. So the question arises, are we heading in the right direction? The acceptance and appreciation of a publication is frequently gauged by citation index. Only 45% of the articles published in 4500 top scientific journals are



*"Surely you were aware when you accepted the position, Professor, that it was publish or perish."*

cited within the first 5 years of publication, a figure which appears to be dropping steadily.<sup>[4]</sup> Only 42% of the papers receive more than one citation, 5-25% of these are self-citation by the authors or journals.<sup>[5]</sup> Majority of the publications still goes uncited. This means that neither they are appreciated by the peers nor they are of any importance to the industry or patient. Research is essential to carry science forward. Its importance in improving patient care cannot be denied. However, equally important is the fact that the research done actually benefits patient, physician and community at large. Most of the published research works are done just to improve the curriculum vitae (CV) of the researcher and they do not find any merit in practical terms. A thought must be spared by the researchers for the quality of research being carried out. "Publish or perish" is now becoming the way of life. It is race to get more and more publications to one's credit. The current trend is forcing scientists to create publishable research. This is giving rise to fraudulent researches. Fraud research may corrupt scientific medical literature and ultimately harm our patients.

The increasing number of publication have led to rise in unethical practices, dubious research practices such as salami slicing, plagiarism, duplicate publication, fraud, ghost authors etc. Fraud is defined as fabrication or falsification in performing or reporting research results. No one could forget the famous fraud of Piltdown man. In this forgery, the lower jawbone of an orangutan combined with the skull of a fully modern man and touted as the discovery of the missing link postulated as the intermediary in the evolution of hominids from apes. The skull was found in a gravel

pit at Piltown in England by Charles Dawson in 1912. It was only in 1953, almost 40 years later, that it was exposed as a forgery.<sup>[6]</sup>

Another type of unethical practice is salami slicing. In Salami slicing, same research is split into many fragments and published. Some researchers counter this by saying that sometimes the research are too big that they have to be split, so as to publish it in a single article.<sup>[7]</sup> Another dubious practice is of duplicate publication. In this researchers publish the same material in different journal with different key words, captions and co-author variation on each occasion, thus making it difficult for plagiarism software to detect them. This is mostly done in order to give a boost to their CV. Recently I myself encountered a manuscript sent for review by Oman Medical Journal. Reading the manuscript produced the feeling of déjà vu. A search on the internet revealed that the authors already published the manuscript in journal of research in medical sciences.<sup>[8]</sup> The reviewers have very important job in ensuring that such fraudulent behavior is detected. The editorial board has so many articles to look at one moment, and they rely heavily on their reviewers on this issue. If published, subsequent retraction of these fraudulent articles by the journal is costly for the journal and also puts a dent in the reputation of the journal. The journals should ensure that such authors are debarred from publishing in the scientific journals for a certain period of time. In the west, such retractions may lead to loss of job of the individual and may also be barred from receiving federal receiving research funds. It is high time that we follow the example of west and modify over rules for publication frauds. The basic ethical principles of every scientist are intellectual honesty, which must be present in all stages of scientific work: From a hypothesis, through the appropriate choice of research methodology, analysis and interpretation of the results, including their publication.<sup>[9,10]</sup>

It is frequent to find that the head of departments and senior professors are producing a dozen publications in a year. This means that the person have conceived idea, submitted protocol, got Institutional review board clearance, done the research, wrote the paper and published it every month. It is virtually impossible for a human being to do this. Being a professor/consultant sometimes automatically implies that whatever papers goes for publication from their department will bear their name. But this is unethical practice and should be discouraged at all levels. As International Committee of Medical Journal editors and Journal of Research in Medical Sciences authorship criteria states that "each authors must contribute a significant segment for being eligible for authorship." They may find it difficult to swallow but being a consultant or professor does not give them a right

to become an author, if they have not contributed in the research.

There are so many other types of fraud, too numerous to be discussed in this editorial. The frequency with which such unethical practices and fraud are occurring is increasing and poses a threat to reputation of scientific community at large.

In conclusion, publication is a fact of life and vital to growth of science and career progression. Administrators and universities increasingly look at the publications to one's credit during recruitment of faculty/researchers. This has led to a relentless pressure to publish at all costs in order to increase the number of publications on one's CV. This not only led to an increase of low quality publications but also led to increase in unethical practices and publication fraud is also showing an increasing trend. Urgent steps are necessary to stop this phenomenon. There should be more dominant attitude toward medical education rather than research and publication thirst, especially in third world countries. It is true that publications are a stepping stone for one's career, but it should not be done at the expense of medical education of your students. Universities may state that teaching is the most important category on which tenure and recruitment is based, but the truth is that we cannot measure it. We are very adept, however at measuring publications so insufficient publications is almost always the reason that someone is denied tenure. Publishing has now become not just optional but obligatory. In consequence, scientists suffer constant pressure to publish new work frequently and spend considerable time writing papers. Universities and administrators should curb these practices. Equal importance should be given to education of students.

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