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Editorial

Publish first, retract later. Is it time for introspection?

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Retraction of a scholarly article has long been considered an important self regulatory and corrective measure where there have been serious research flaws, error or publication misconduct. Retraction of a published article is a complex and time consuming process and often poses ethical and legal challenges for the journal editors and publishers. The last decade has witnessed a considerable and progressive increase in the instances of retraction of published articles.^{1–4} Although increased retractions can be interpreted to be indicative of retrospective academic oversight by progressive and alert authors/journal editors and publishers, the same may also be interpreted as a reflection of mere increase in scientific misdemeanour which was missed before publishing such an article. Particularly disturbing are instances of mass retractions reported in the recent past because of massive peer review fraud.^{5,6}

Certain questions arise at this juncture: Is retraction of a flawed article a definitive solution to the problem being faced by academia? Is the number of retractions commensurate with the large volume of scientific literature in the modern era of quantity and business interest rather than quality? Are authors/editors/publishers intent on retracting articles just to protect scientific integrity? What can be done to nip the root cause in the bud? This editorial envisages a look into various aspects of retraction of scholarly publications for the benefit of readers of this journal.

Retraction of articles published in Medline had begun as early as 1970s. Since then, the number of retractions have been steadily rising with a definite acceleration from the year 2000.^{2,3,7} Although the latest figure is not known, it can be safely assumed that the number of retractions is steadily rising. Increasing instances of retractions can be viewed in two ways: Firstly, it can be argued that widespread online visibility

of published literature has made it possible to detect flawed research/suspect articles with relative ease as compared to the past. Articles published today are subject to more scrutiny and criticism than ever before due to the penetration of the World Wide Web. Secondly, it may also be argued that because of an inherent tendency among many authors/editors/publishers to publish more articles in a given time particularly when there is an issue of academic progression/revenue generation as the case may be, quality is bound to take a back seat. Besides, the reported cases of retractions are only those where a major irregularity has been detected and the concerned author/editor/publisher has decided to retract the affected publication. This may represent just the tip of the iceberg. There would be many more such published articles which are inherently flawed and or have major and purposeful academic misdeeds especially in this era of Publish and Flourish. Compromised peer review, peer review ring etc are the phrases which were possibly unheard of two decades ago. High impact journals and publishers even give an illusion of being epitomes of research and publication integrity by retracting a large number of flawed articles published by them from time to time. This issue appears to be both perplexing and intriguing, first articles are published in haste, with nary a thought to quality, then these articles are retracted, maybe in a 'holier than thou' approach to publication ethics. Unfortunately, by then the damage has already been done, as the flawed articles have been circulated worldwide and may have caused immense harm to the scientific community and mankind. Besides, who knows, whatever has come to limelight may only represent a small proportion of the total burden in the current scenario. Who will police all that is uploaded in the scientific media every day? Whose responsibility is it anyway to prevent occurrence of

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such misdemeanour at the first place rather than do damage control?

An article can be retracted by the concerned author, journal editor, publisher, authors' institutions, funding agency and so on. It is interesting to note that retractions issued by authors constitute substantial numbers ranging from 28% to 63%.^{1,8} One might wonder, if authors were so conscientious in retracting their own articles then why did they publish such flawed articles in the first place? Secondly, do authors retract their articles under some kind of duress, or in response to concerns from readers/peers? Whatever may be the reason, a flawed manuscript should ideally not merit publication under any circumstance. Ethics in scientific publishing warrant that authors must be made accountable for presenting flawed research to the scientific community.

Publication misconduct in various forms (e.g. compromised peer review, plagiarism, data manipulation, etc.) has been reported to be the most common reason for retraction of published articles accounting for 28–76% of cases.^{1,2,4,8,9} Clearly, authors and to a great extent even journal editors need to be held responsible for such misdemeanours. The process of rigorous vetting of articles and obtaining of peer reviews is an editorial mandate. Though unpalatable to believe, peer review can be rigged, as has been reported in the recent past.^{4–6} This happens if any particular journal does not have enough reviewers in their pool and thus rely solely on reviewer recommendations provided by the authors having their own malicious intent. The scientific community at large has expectations from reputable journals, and should not be let down by editors entrusted with this onerous burden of assuring scientific integrity.

Retracting articles at a later date due to discovery of peer review fraud does not absolve the journal/publisher of their responsibilities. Similarly, today, detection of most textual plagiarism is not difficult if the editors/publisher so desire, as all that is required is a paid subscription to a robust online plagiarism detection tool. Therefore, it is not acceptable for any author/journal editor/publisher to retract an article for publication misconduct which could have been avoided altogether a priori.

The process of retraction of an article often involves participation of a large number of stake holders (ranging from authors, authors institution, funding agency if any, editors, publishers and so on), depending on the type of error/misdeed. Depending on journal policy, final retraction of an article may take anything from 26 to 46 months.² Non-cooperation from any of the stakeholders may result in further delay in final retraction. Such prolonged and inherent delay in retracting an article is another cause for concern, as the flawed article continues to be visible (with all its potential adverse impact on the credibility of the scientific community) without any

stigmas attached to it. Even after an article is retracted, the retraction notice is often ambiguous and inconsistent in its clarity as per existing ethical guidelines.^{2,10}

A worrisome development in this context is the emergence and mushrooming of journals and publishers with suspect academic credentials (predatory journals/publishers) who are ready to publish any article with a sham peer review, at a cost. Such journals/publishers are likely to add documents to the already large repository of scientific information, without a modicum of scientific integrity. It is highly unlikely that these journals/publishers would retract any article as their basic principle of operations is based on revenue generation rather than scientific intellectual growth.

The growing numbers of retractions thus, are indeed a matter of concern, for all healthcare professionals. The scientific community needs to be aware of the gravity of the menace of scientific misdemeanour and needs to be conscientious in implementation of measures to prevent occurrence by efforts from all stake holders, in order to preserve scientific integrity and credibility.

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