

Open review system: The new trend in scientific reviewing to improve transparency and overcome biasness



Science journalism is very unique, as it is not only based on novelty scoop, but also on rigorously tested experiments. Over the years several formats of scientific publication process have evolved,^[1,2] which have progressively introduced various processes to ensure quality and reliability. Unfortunately all of these process implemented to date are not free from biasness and have led to a serious compromise in quality and reliability of scientific publication, which is slowly moving toward a burgeoning epidemic of infollution.^[1,2] Alarmingly infollution is prevalent across scientific journals of all domains and nature. It is necessary to control this infollution to avoid scientific catastrophe.

While the peer-review system was initially seen as a promising approach; however, it is a highly biased system and doesn't meet the requirement and speed of current generation science journalism. Hence to address this challenge, we are introducing a new process of open review system (ORS) to rehydrate the scientific review process to bring in transparency and unbiased publication [Figure 1]. It is essential to develop such new systems of quality assurance to overcome the limitations of peer-review system and avoid peer-review flaws, two of which are lack of transparency and extensive biasness. The collateral damage of biasness and lack of transparency is extensively evident in science journalism in the form of retracted manuscripts, over-interpreted studies and conclusions not adequately supported by rigorous/valid experiments. All of these can have a serious impact on progression of knowledge and science.

The novel ORS, which we are introducing, is graphically represented in Figure 1. This system will be implemented for the 1st time in our flagship Journal Biology, Engineering, Medicine and Science Reports (www.bemsreports.org). All manuscripts submitted to the journal will be accepted and published online within 48 h, following the declaration of originality, honesty, authenticity and validity (DOHAV) by the authors. The manuscript will be assigned a temporary ID and will be available for anybody to make a comment on all aspects of the manuscript. The DOHAV is also a new concept, which will be an improved and extended version of the currently used copyright form adopted by all journals. We think the authors are the best judges of the rigorousness and authenticity of the work presented and hence, we are imparting this necessary responsibility with the authors by asking them to sign DOHAV before the publication of their manuscript. All manuscript will remain in the ORS process for 4 months (which we believe is an adequate time for the global audience to comment on the manuscript) following, which an editorial decision will be made to either modify the manuscript or accept it for publication with a permanent ID/DOI. We envisage introduction of ORS and DOHAV will have following two major advantages. (1) The delay in manuscripts appearing in the public domain following submission to the journal

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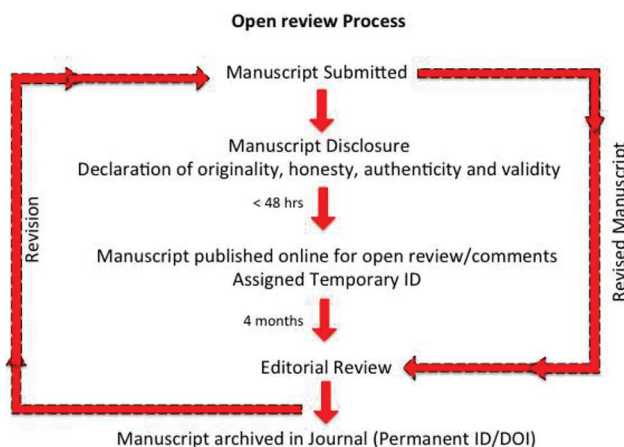


Figure 1: Manuscript publication by open review process: A new paradigm

will be considerably reduced to <48 h. (2) Our system will eliminate the biasness from the review process and increase transparency in science journalism.

In this issue, we bring in some exciting knowledge to our readers. We are observing global migration/mix-up like never before, and this has a significant impact on mental health, which is excellently highlighted in one of the articles on this topic. We have another article on drug induced allergies, which I think is of grave concern globally. The lack of extensive pharmacology knowledge among many clinicians and unwillingness to update this knowledge as part of continuous professional development has led to unscrupulous use of various medicines including antibiotics, which has several undesired collateral effects such as drug-drug interactions, drug-induced allergies and drug resistance. If adequate and timely interventions are not made, we may end up with more problems from the problem solvers. The rigorousness for any scientific study is based on the rigorousness of the methods used. Reflecting this, we have in this issue included a few articles describing novel methods and techniques. We have also included a few articles on genetics, clinical trials, epidemiology and clinical biochemistry in this issue, thus further diversifying the scope of JNSBM for our broad readership audience. Just-like the unscrupulous use of the drug, the abuse of pesticide use is another major concern pandemically to the environment in general and all forms of fauna and flora in the population. Touching this issue is an article reporting pesticide use pattern in a rural district of West Bengal in India. Adulteration in food products is also a major issue concerned to the health. As consumers, we have the right to know what we consume and the product label must clearly describe products actual contents. There have been some serious issues on this topic effecting international trade in the recent times. For instance, the issue of horsemeat in beef products, certain coloring agents use in frizzled drinks and use of unsafe stabilizers in dairy products to name a few. Describing this vital issue on adulteration is an article

on the use of tallow products in cow ghee, which we believe will be valuable in improving consumer awareness. With the depleting natural resources and fossil fuels, extensive research is on-going to identify alternate fuel sources. To this effect, we have an article in this issue reporting microalgae from natural habitats as source of biomass and biodiesel. Although biodiesel has several technical limitations currently, it would be a matter of time and extensive research investment, which will help the mankind to be ready and prepared with such alternatives. In addition to this, we also have several articles on interesting topics such as biomedical waste management, placental changes during gestational hypertension, glass ionomer cements for dental application, bone marrow injection for therapy of tennis elbow, emerging spectrums of opportunistic infections, and dental anxiety to name a few.

In our clinical reports section, we have included interesting clinical cases in the area of benign breast cysts, oral rehabilitation, thalassemia, Hodgkin's lymphoma, amlodipine-induced granuloma, and bilateral septic arthritis of the knee, laparoscopic hemi-nephrectomy and many more. Enjoy reading the issue and gain from the enormous knowledge.

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