

# WHAT AUTHORS NEED TO KNOW ABOUT ERRATA, EXPRESSIONS OF CONCERN, AND RETRACTIONS

## Authors

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How serious is an erratum, expression of concern, or a retraction? They should all be avoided as they do not reflect well on your research if it needs to be corrected or a statement is issued that calls your article's integrity into question. Publishers have a responsibility to correct the publication record when required, but you will not be surprised to read that they and the editors of a journal want to avoid publishing an article with mistakes or fraudulent research and having to write an erratum, expression of concern, or retraction. This article describes each of these publication notices and points to the resources of the Committee on Publication Ethics (COPE) for further reading.<sup>1,2</sup>

Publication of any of these notices is not taken lightly, and verification will be sought by the publisher of the journal. Verification involves the corresponding author unless he or she is not contactable. Verification may be as simple as an author confirming that a mistake was made in the paper to a full investigation conducted by the author's institution or employer to explore whether the research is fraudulent. Correspondence on the concerns raised on a paper is dealt with as confidentially as possible. This involves only those people who can assist in the resolution of a claim and can recommend whether a notice is warranted.

How do each of these errata, expressions of concern, and retractions arise? They are usually the result of a request from the author or observation from a reviewer, editorial board member, another journal, a publisher, an employer, funder of research, a reader or "whistle blower," or a comparison of content using plagiarism software.

A notice is considered if the article is published and publically accessible. A published article can include a version that has appeared online in its final form, or a prior version before a final version is published in an issue. For articles that are not yet in a final version, an erratum is unlikely to be required because important changes could be incorporated before the final version is published. An expression of concern or retraction can still be applied to articles that have appeared online irrespective of whether it is a final version or not, as the article has been published and the publisher is required to correct the publication record.

Each notice is published in the same way and appears in the print (when there is one) and online versions of the journal. A reference citation to the original publication will be included, and in the electronic world it is just a click away from the original article. The convenient electronic linking of articles also occurs in databases such as PubMed ([www.nlm.nih.gov/pubs/factsheets/errata.html](http://www.nlm.nih.gov/pubs/factsheets/errata.html)). The person who is reading the article online has a distinct advantage over the print reader, who may be reading the original article without knowledge of the notices published in later issues.

As a general principle, the original article is not changed to accommodate the change in the erratum, or removed in the case of an expression of concern or retraction. This is in line with the International Association of Scientific, Technical & Medical Publishers' (STM) guidelines,<sup>3</sup> and the publisher is alerting readers to a correction in the publishing record and not changing the publishing history, either in print or online. There are exceptions to this approach, such as when there is an inappropriate violation of privacy, errors that would pose a significant risk to health to the public, and defamatory comments; in these cases, an explanation would be given.<sup>3</sup> Generally, the only change that would happen to the original publication is when a retraction is published, and this only happens in the electronic version—a single version of the article remains in the form of a PDF, which is watermarked to indicate to the reader that the article has been retracted.

So let us take these notices in turn.

**Erratum.** Sometimes listed as a “corrigendum” instead of “erratum,” these terms indicate when the mistake originates from the author. An erratum is used to simply correct a small but important mistake or omission that does not alter the conclusion of the paper. The erratum is a result of an honest error, but it does not excuse or invite post-publication corrections because not all corrections will be considered if they are not of sufficient importance. For example, the misspelling of an insignificant word or correcting an error in a reference list does not count.

The journal should be notified of any important corrections as quickly as possible so an erratum can be prepared and published soon after the original publication date. Common errors, whether introduced by authors or during typesetting, include mistakes in numbers in a table or labelling of an illustration legend, reagent and drug concentrations or other values such as parameter ranges used in grouping of results or patients in arms of a clinical trial, and missing authors. Author names are sometimes corrected, but not to make them consistent with how that author has been cited previously on PubMed or other indices. The latter can be avoided if each author takes responsibility for checking how his or her name appears on the title page of the submitted paper. Check before submitting how the journal displays authors' names so those working in journal production can readily identify first and last names. Authors

sometimes approach the publisher for a correction because their last and first names have been reversed in the listing of an issue on a website or in a database such as PubMed. This may not need an erratum because it could be a result of how the information has been labelled electronically—resupply of a correctly labelled metadata to the indexers may be all that is needed and will be prompted by author contact.

More significant and comprehensive changes may warrant publication of a “letter to the editor” that explains the impact on the message of the paper in more detail, although sometimes this can be incorporated into an errata note.

**Expression of concern.** This is used to raise awareness to readers that an article may be unreliable. It may be a precursor to a full retraction, but not always. An expression of concern should only be published if an unresolved, ongoing investigation is occurring or if the evidence is inconclusive. An editor does not want to raise doubts about the integrity of an article needlessly and will weigh the impact of the concern (e.g., if it had clinical implications), confidentiality, and the need of journal readers to know. This note will give brief details of the area of concern.

**Retraction.** Articles are retracted because the results of a study are unreliable as a result of misconduct, fraudulent research, or honest error, which means the conclusions of the paper are invalidated. It is also appropriate action for redundant articles that have been published before without permission and acknowledgement of prior or simultaneous publication, and research that is subsequently deemed to be unethical.

The retraction will give the reason why an article has been retracted. There has to be a reason for a retraction and it is not an author-instigated action, although the author may request it.

Suspicious are raised when an author approaches a journal to retract an article without a reason. For example, authors cannot expect a retraction of an article because they are in the difficult situation of having their article published by two journals; submitting work to two journals simultaneously is bad practice and unethical. This type of duplicate publication may actually result in a double retraction!

Expressions of concern and retractions may require input from employers of authors or those who have the authority to conduct an investigation on behalf of the editor and provide a recommendation. More institutions, organizations, and companies now have appointed Ethics Committees that will consider these allegations. Editors will often follow the COPE flowcharts to work through the more common types of suspected misconduct.<sup>4</sup> In cases where a retraction was made without Ethical Committee

involvement, the editor may choose to inform the author's employers or funders of the study directly.

### ***Conclusion***

Our editors respond to any suggestions of scientific misconduct or to convincing evidence that the main substance or conclusions of a published manuscript is erroneous, usually through consultation with the author. This may require the publication of a formal retraction or correction. An expression of concern may be published by the editor while an investigation into alleged misconduct or publication of erroneous data is ongoing.

Authors who wish to enquire about publication of a correction for their article, or who have serious concern about an article that they believe may warrant retraction, should directly contact the journal editorial office.

Publishers, editors, and authors should avoid blemishing journals and their own article publication record by having either errata, expressions of concern, or retractions associated with a work. An erratum is far less serious of the three notices, but an inconvenience for the reader in that the correction is detached from the original publication despite the advent of electronic linkage. It is in the interest of all authors to avoid these errors, and the more damaging notices for their and their co-authors reputations in the eyes of their peer group, employers, and funders.

### **FURTHER READING**

1. Committee on Publication Ethics. Guidelines. <http://publicationethics.org/resources/guidelines>. Accessed 15 December 2015
2. Committee on Publication Ethics. Retraction guidelines. [http://publicationethics.org/files/retraction%20guidelines\\_0.pdf](http://publicationethics.org/files/retraction%20guidelines_0.pdf)
3. International Association of Scientific, Technical & Medical Publishers. Preserving the record of science. <http://www.stm-assoc.org/documents/#type=Guidelines>
4. Committee on Publication Ethics. COPE Flowcharts. <http://publicationethics.org/resources/flowcharts>