

EDITORIAL

Ethical Issues in the Publication of Scientific Articles

Ethics originates from the word “ethikos” in Ancient Greek¹. The word ethikos means “relating to one's character”. Ethics can be defined as an aspect of philosophy that includes “systematizing, defending, and recommending the concepts of right and wrong behaviour”². Ethics attempts to address the issues of human morality by stating the theories of right and wrong, good and evil and vice, justice and crime². The concept of ethics operates in every aspect of life.

Publication ethics are the standards that have been set up to guarantee outstanding scientific papers, public trust in the science of research and appropriate recognition for the innovative work of the authors³. They are the guidelines of behaviours established when any form of scientific papers is to be published. These rules and regulations safeguard the intellectual ideas and prevent the usage of the work of another author without appropriate recognition³. Publication and research ethics involves the act of recognition of the theories of right and wrong conduct in performance of a scientific research experiment. Publications enable the professionals in the same field and the outside community to have current information on new ideas and innovations therefore the knowledge and adherence to ethical guidelines is very paramount when conducting a scientific research.

The process of manuscript preparation consists of setting up of the study design, collection and analysis of the data and writing up of the manuscript and ultimately the submission of the manuscript⁴. In the process of preparation of a manuscript for submission to a scientific journal, there are many unethical habits that authors may employ to ensure the acceptance of their manuscripts. These habits albeit may be deliberate or inadvertent, it is important that authors should have a good knowledge of publication ethics to assist them to submit authentic manuscripts with good ethical practices. Adherence to publication ethics speeds up the publication cycle and increases the chances of acceptance of a manuscript.

The Committee on Publication Ethics (COPE) is an international non-profit organisation for editors and publishers of peer-reviewed journals that provide the “code of conduct” and “best practice guidelines” that define publication ethics and guides editors on how

to deal with issues of research and publication misconduct^{5,6}. The mission of COPE is to educate and support editors, publishers and those involved in publication ethics with the goal of advancing the process of publishing in a direction where ethical practices become the standard^{5,6}.

COPE was established in founded in 1997 by a little assembly of editors of medical journals in the United Kingdom. Currently the membership of COPE is over 13,000 across the globe from all academic endeavours^{6,7}. COPE has linkages with the Council of Science Editors, the European Association of Science Editors, the International Society of Managing and Technical Editors, the World Association of Medical Editor, Open Access Scholarly Publishers Association, Directory of Open Access Journals, STM, and the Association of Learned and Professional Society Publishers^{6,7}. The types of publication misconduct are:

Non adherence to ethical guidelines

It is mandatory that before any research is done by investigators, an ethical approval should be obtained by the investigators. It is particularly important especially when a clinical trial is to be done. Even in cases of manuscripts that involve only the exploration of the case files of participants, an exemption can be obtained from the Ethics review committee. The authors should be aware of the rules and regulations in their respective countries and stick to the rules. The informed consent procedure should be appropriately obtained by the researchers. It is very important stage of any research. The procedure should be fully understood by the participants and there must not be any form of manipulation or coercion. The authors should be ethically compliant by studying the guidelines provided by the International Conference on Harmonization Good Clinical Practice and the tenets of the Declaration of Helsinki.^{9,10}. In some cases, the informed consent procedure should be recorded by audiovisual means. Confidentiality is key to a successful ethical research. The identity of the patient must be protected and all the data must be passworded. In some cases, the editorial board of journals might request for a documented proof of the consent form.

Research fraud

This refers to publications that state results and make conclusions from data that are not produced in the study. It may be in form of data fabrication or data falsification⁸. In data fabrication, no study was done but the researchers just made up the figures. In data falsification, the researcher performed the study but manipulated the data. Statistical analysis can be manipulated; it is important that a journal should have a statistician that can be consulted. Also, in some cases, pictures can be manipulated or modified to deceive reviewers and authors⁸. In cases where the authors and reviewers are suspicious they might demand for the raw data sheets to confirm and alleviate the suspicion⁸.

Plagiarism

This is one of the commonest form of research misconduct⁸. This is the act of using the ideas and the work of other researchers without giving due recognition to them. It might be in the form of copying phrases, sentences from another researcher's work or even from one's work that had been published without citing the source of the information⁸. Plagiarism is the use of a published work in one's own publication without acknowledging the source and presenting it as one's original work. COPE classified plagiarism into two^{5,7}; clear plagiarism where large aspects of another person's work was copied and b) minor copying where short phrases were copied without acknowledging the source. Also, authors should recognize the fact that self-plagiarism can also occur where an author utilizes the same text used in previously published works in freshly submitted manuscripts without citation of a previous work. The use of plagiarism checkers assist editors to detect plagiarism.

Multiple/Simultaneous Submission

This is the act of submitting a manuscript to many scientific journals at the same time for assessment⁸. Authors usually do this in order to increase the chances of acceptance of the article. Also, some submit the article to another journal if there is a delay in the processing of the article. Authors should always wait for a response from the first journal before submitting to another journal. The authors can ask for a withdrawal of the article if they can no longer wait for a decision from the first journal⁸. The act of multiple submissions can cause a lot of harm to the integrity of journals when articles are published in more than one journal. To prevent multiple submissions, journals usually request from the authors to declare that the manuscript has not be

submitted to another journal for assessment. However, it should be noted that if a paper has been submitted for a scientific conference, it can still be submitted for publication in a scientific journal⁸.

Duplication of Publication

This is the act of submission of a new article having the same hypotheses, data, discussion points, and/or conclusions as a previously published manuscript⁸. It is similar to plagiarism, but instead of copying phrases verbatim, the same data, images, and study hypothesis are replicated in another paper⁸.

Improper author contribution/attribution

For good ethical conduct, all the authors that are listed in a publication must have made a significant scientific contribution to the research in the manuscript. The International Committee of Medical Journal Editors (ICMJE) has described three basic criteria that must be met to be qualified as an author¹¹

- "Substantial contribution to the conduct of study including its conception and design, data acquisition, statistical analysis, and interpretation.
- Drafting or revising the article for intellectual content.
- Approval of the final version."

The listing of the orders of the authors usually causes a lot of discontentment amongst the authors⁸. This is not surprising as the listing of authors counts in the scoring of publications for promotion in some universities and the selection for award of grants. It is important that authors should meet to discuss the listing of the order of authorship before the commencement of a study. There are major types of Authorship misconduct^{8,11}.

- Ghost authorship: Ghost authors are people who contribute substantially in the development of the paper but are not given authorship or acknowledgment in the published paper.
- Gift authorship: Gift authors are people who did not make significant contribution to the research but were included in the list of coauthors simply due to an affiliation to an institute where the research was conducted.
- Guest authorship: Guest authorship is usually provided to individuals whose presence as a coauthor significantly improves the chances of acceptance of the manuscript.

Self citation

This is an act of citing one's own published work in subsequent publications even though they are out of context to the research being reported⁸. Many authors do these because the number of times a paper is cited is used to calculate metrics such as G- and H-index, which are used for academic promotions in some institutions⁸.

Conflicts of Interest

The term "conflict of interest (COI) in research" refers to situations in which financial or other personal considerations may compromise, or have the appearance of compromising an investigator's professional judgment in conducting or reporting a research¹². A conflict of interest is a situation in which one's duties and one's self-interest conflict in a way that has a significant chance of corrupting one's perceptions, motivations, actions, passions, values, and/or judgments¹². Having conflicts of interest is not considered unethical, however, failure to disclose such hidden interests severely jeopardize the outcomes reported in the paper^{8,12}. Once disclosed, it is the discretion of the readers to determine the influence of the conflicts of interest on the conclusions of the paper⁸. The ICMJE has produced a common form to show any conflict of interest that has to be signed by every co-author and has to be attached to the manuscript on submission⁸.

Penalties for Publication Misconduct

COPE has recommended the steps to follow immediately any of forms of publication misconduct is detected⁸. The committee advocated that in the first instance, the editorial board should get in touch with the authors and disclose to them about the issue of misconduct. The next stage will depend on the response of the authors⁸. If the authors admit their error, the manuscript is turned down and the headship of the author's organization is notified. In cases of published articles, the authors are given the chance to admit their offence in form of an erratum in the journal⁸.

However, if the misconduct is major, the editor has the right to retract the publication¹³. The authors can be blacklisted by the journal and information is communicated to COPE so that all member journals are notified. If authors deny their misconduct, appropriate actions will be taken according to COPE guidelines.

Conclusion

There is no doubt that there are many forms of publication misconduct that authors can commit on purpose or by mistake. It is therefore very important that authors should be aware of this to save them from embarrassment in the academic community or the public at large.

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