Handling of Research Misconduct

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Ethical publication and the issues surrounding it continue to increase in significance. So far, we have briefly looked at unethical authorship and plagiarism, and how authors should prepare themselves to avoid the accusations of each.1)2) We now take a look at research misconduct. We frequently come across this term but do we have a full definition of what it means? Are you aware that there is no standard definition for this term, and definitions can vary depending on the country?3) Smith states that it is essential to first be able to define what is research misconduct and what is not, if researchers are to be accused of it, but ‘unfortunately research misconduct has proved resistant to definitions of it’.3)

Research misconduct is defined by the Office of Research Integrity (ORI) of the U.S. Department of Health and Human Services as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.4) The ORI monitors alleged research misconduct by researchers funded by the National Institutes of Health (NIH) and other Public Health Service (PHS) agencies.5) They give the following descriptions: a) fabrication means making up data or results and reporting them; b) falsification means manipulation of research materials, equipment, or processes, or changing or omitting data or results such that research is inaccurately represented; c) plagiarism is using another person’s ideas or works without giving appropriate credit; and d) research misconduct does not include honest error or differences of opinion.4)

As there is no standard definition of research misconduct, the definition can vary depending on the journal, organization, or society and may include issues ranging from data fabrication, conducting research without informed consent, unethical authorship, to not disclosing a conflict of interest.5) For example, the National Institutes of Health (NIH) in addition to other major scientific societies, defines research misconduct the same way as the ORI6) and the BMJ uses a slightly amended version of the definition given by the U.S. government.7)

Here, we introduce how the ICMJE and the American Medical Association (AMA) handles research misconduct and how their policies ensure that misconduct does not compromise research.

Different ways of handling research misconduct

The ICMJE states that *scientific misconduct*, or research misconduct, includes but is not necessarily limited to data fabrication; data falsification including deceptive manipulation of images; and plagiarism.8) The ICMJE recommends that in situations where misconduct is alleged, it is the editor’s responsibility to pursue the problem. If the editor think it necessary, an Expression of Concern is published in the journal which informs readers of the outcome of the situation. For example, in cases where the allegations require authors to provide the editor with original data but the authors refuse to cooperate, the ICMJE suggests publishing an Expression of Concern. If scientific misconduct is
proven, the article would then be retracted. In situations where no misconduct can be proven, but still involves concern, the ICMJE suggests publishing highlights of the matter for its readers. Furthermore, the ICMJE recommends that previous publications by the authors in question for research misconduct, also be questioned.

The AMA states that research misconduct involves both ethical and legal implications for authors and editors. In the AMA Manual of Style, it is mentioned that the recommendations of the ICMJE is supported by significant organizations such as the World Association of Medical Editors (WAME), the Council of Science Editors (CSE), and the Committee on Publication Ethics (COPE). It also provides detailed information on what the editor should do as the first step when confronted by an allegation of research misconduct, which is mainly falsified, fabricated, or plagiarized work that is either published or submitted. The handling or approach to this would first involve contacting the corresponding author, requesting an explanation, and either requesting a formal letter of retraction from the authors. If the editor is not satisfied with the outcome, a formal investigation may be required. Formal investigations are conducted under the authority of the author’s institution, or with national agencies such as the ORI. It is also mentioned that editors need to make sure that any allegations or investigations be kept confidential.

**Closing message**

Although there is no standard definition for research misconduct, it generally refers to issues of falsification, fabrication, and plagiarism. It is therefore crucial for authors to understand the relevance and dangers of being accused of such misconduct and to protect themselves by acquiring the fundamental knowledge surrounding these issues when preparing manuscripts for publication.

**References**

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