“Plagiarism” (also called “plagiary”) in research publication means an unethical act that is done to deceive readers about the origin of the ideas or words. It is considered to be a conscious, voluntary act that is done intentionally to copy something, and to mislead the reader into believing that the person whose name appears as the author was the original intellectual source of the words or ideas.

In recent years plagiarism and inaccurate citation have been discovered in research articles more frequently than before, and many editors now check all manuscripts to try to identify these problems before a manuscript is accepted for publication.

Two kinds of plagiarism are recognized: plagiarism of data and plagiarism of text. If editors and reviewers discover plagiarism, even if it involves only words and not data, they may suspect the authors of being dishonest about the scientific data, and may even suspect research fraud.

If the words are paraphrased (the same text rewritten with different words), the reference must be given. Paraphrased words are considered plagiarism if the idea is not the author’s original idea and the reference to the source of the original idea is not cited.

It is easy to check your manuscript before you submit it to the journal for phrases, sentences and paragraphs that have been used in previously published articles. Searching for a specific phrase or sentence with Google is easy and fast.

Plagiarism and good citation practice

Plagiarism and inaccurate citation may be unintentional due to unfamiliarity with the journal’s requirements, or intentional, done for the purpose of deceiving or misleading readers. Researchers in countries where English is not the first language may believe that language re-use is not plagiarism when they write for publication in English. However, many editors consider authors guilty of plagiarism even if citation and reference errors are the result of copy-and-paste writing to improve the English, and not caused by the intention to steal another scientist’s ideas.

Correct citation and accurate referencing of the sources are effective ways to prevent plagiarism. Accurate citing and referencing are the responsibility of all coauthors. It doesn’t matter how many coauthors there are, and it doesn’t matter who the main author, first author or corresponding author is. It doesn’t matter if some coauthors contributed only certain parts of the manuscript. Even if only one of the coauthors copied any part of the text or did not include all the necessary references, the editor may consider that all the coauthors are equally responsible. So the undesirable consequences of copying without accurate citation and referencing can affect the reputation and career of all the coauthors. The consequences can
also be harmful for the reputation of their department, their university or other institution, or even their country.

**Editors and plagiarism**

Editors, reviewers and other readers need to know which findings, ideas and words are original and which are taken from other sources. It is good ethical and scientific practice to acknowledge intellectual debts for ideas and information from any source, including non-academic sources and non-peer-reviewed sources from websites and blogs. Giving due credit and acknowledging priority for new findings and ideas are highly valued practices in research publication.

Journal editors (located mostly in English-speaking countries) usually don’t have much sympathy for authors’ problems with the English language. Many of them consider copy-and-paste writing (patchwork writing, patch writing, language re-use) as a kind of plagiarism, even if the purpose is to produce good English and even if the correct references are given. **If the same words are used they must be in quotation marks and the reference must be given. If the words are paraphrased, the reference must be given.**

Several software tools (iThenticate and CrossCheck, for example) have been developed for editors and publishers to check for plagiarism. The number of editors, journals and publishers that check each manuscript with plagiarism-detection software is increasing every day.

The software tools find matches between two texts and locate places where the same text has been used, but they are not judges. The software is not “intelligent”—it’s just a tool for automatic, electronic searching for matches, with no interpretation. The software cannot decide if matching text represents intentional plagiarism, an honest mistake, or the same article available on the internet or in the databases in two or more different places for legitimate reasons. Although editors are encouraged to study each case of duplicate text carefully, some editors with little time for this task assume that if the software finds a match, it must be plagiarism.

If plagiarism is detected **before the article is accepted**, the editor will probably reject the article and some editors will notify the authors’ superiors (head of department, dean, university, professional association) that the authors’ behavior is considered unethical. If plagiarism is detected **after the article is accepted**, the editor may “de-accept” it. If plagiarism is discovered **after the article is published**, the editor will usually retract the article, publish a retraction statement in the journal, and notify the databases that index the journal that the article has been retracted and should not be cited. Sometimes the editor will also notify the authors’ institution and ask the academic or ethics authorities there to investigate the authors’ behavior.

**Definitions of plagiarism**

Experts in research publication ethics do not agree on the precise definition of plagiarism. If an editor discovers copied text in your manuscript, his or her reaction will depend on which guidelines the editor prefers.

**Definition 1**
“The deliberate or reckless use of someone else’s thoughts, words or ideas as one’s own, without clear attribution of their source.”

“Falsifying the text may be an indication that data are also falsified. Editors take particular note, therefore, of repeated and extensive plagiarism in a paper submitted to them, because such an observation raises doubts about the integrity of the research being reported.”


**Definition 2**

“Substantial unattributed textual copying of another’s work means the unattributed verbatim or nearly verbatim copying of sentences and paragraphs which materially mislead the ordinary reader regarding the contributions of the author.”


**Definition 3**

“Plagiarism is a form of piracy that involves the use of text or other items (figures, images, tables) without permission or acknowledgment. Deceit plays a central role.”

Council of Science Editors. http://www.councilscienceeditors.org/editorial_policies/whitepaper/3-1_misconduct.cfm

Piracy and Plagiarism

“Piracy is defined as the appropriation of ideas, data, or methods from others without adequate permission or acknowledgment. Again, deceit plays a central role in this form of misconduct. The intent of the perpetrator is the untruthful portrayal of the ideas or methods as his or her own.”

“Plagiarism is a form of piracy that involves the use of text or other items (figures, images, tables) without permission or acknowledgment of the source of these materials. Plagiarism generally involves the use of materials from others, but can apply to researchers' duplication of their own previously published reports without acknowledgment (this is sometimes called self-plagiarism or duplicate publication).”


**Definition 4**

“Plagiarism is the use of others’ published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source. The intent and effect of plagiarism is to mislead the reader as to the contributions of the plagiarizer. This applies whether the ideas or words are taken from abstracts, research grant applications, Institutional Review Board applications, or unpublished or published manuscripts in any publication format (print or electronic).”

“Plagiarism is scientific misconduct and should be addressed as such.”
WAME (World Association of Medical Editors). Publication ethics policies for medical journals. http://www.wame.org/resources/publication-ethics-policies-for-medical-journals#plagiarism

**Definition 5**

“Plagiarism ranges from the unreferenced use of others’ published and unpublished ideas, including research grant applications to submission under “new” authorship of a complete paper, sometimes in a different language. It may occur at any stage of planning, research, writing, or publication: it applies to print and electronic versions.”


**Translation plagiarism**

The Committee on Publication Ethics considers that plagiarism does not have to be word-for-word the same, and plagiarism can be proven even in two different languages.


**Conclusion**

Inaccurate citations of the original sources can lead to an accusation of plagiarism. They cause a negative impression on editors, reviewers and readers. Inaccurate citations and plagiarism can prevent acceptance of the manuscript. Even if the peer reviewers or editor don’t discover the citation errors or plagiarism, readers who are experts in your research area will probably discover them after the article is published, and they may report the plagiarism to the editor or publisher. This can result in a complaint to the authors’ institution. Plagiarism can have negative consequences for the authors’ reputation and career.

**How to improve citation accuracy and avoid plagiarism**

1. Avoid copy-and-paste writing. The English may not be very good in the article you use as the source. Many articles in an unreadable writing style are published even in top journals.
2. Write or revise all the text yourself.
3. Insert provisional references (author and year of publication) in the first drafts of your manuscript for every idea or quotation taken from an earlier source. Convert them to the correct format (superscript numbers or numbers in parentheses or brackets) after the manuscript is completely finished.
4. Always use quotation marks [“ ”] to indicate verbatim quotations (even if they are only a few words), and provide the reference.
5. Ask a more experienced colleague or an author’s editor for advice. Your institution may have a writing center or research development center where you can ask for guidance.

**Bibliography**

Afifi M. Plagiarism is not fair play. Lancet 2007; 369: 1428


de Jager M, Kerans ME. A manuscript editor’s guide to handling plagiarism. METM09 presentations. Available at http://www.metmeetings.org/index.php?page=metm09_presentation_dejager_kerans


Kerans ME, de Jager M. Handling plagiarism at the manuscript editor’s desk. European Science Editing 2010; 36(3): 62-6

Mason PR. Plagiarism in scientific publications. Journal of Infection in Developing Countries 2009; 3(1): 1-4

Molaei G. Measures urgently required to prevent multiple submissions. Nature (Correspondence) 2009; 461: 723

Roig M. Guidelines for avoiding plagiarism, self-plagiarism, and questionable writing practices. Available at http://ori.dhhs.gov/education/guidelines_to_avoid_plagiarism.shtml

Shashok K. Crossing the thin line between paraphrasing without citation and plagiarism: the Sticklen retraction. The Write Stuff 2010;19(2):122-3

Vasconcelos SMR. Writing up research in English: Choice or necessity? Rev Col Bras Cir 2007; 34: 1-2


World Association of Medical Editors. Plagiarism. In: Publication ethics policies for medical journals. Available at http://www.wame.org/resources/publication-ethics-policies-for-medical-journals#plagiarism