



Plagiarism in Medical Scientific Research: Can Continuing Education and Alarming Prevent This Misconduct?

Seung-Kee Min

Division of Vascular Surgery, Department of Surgery, Seoul National University College of Medicine, Seoul, Korea

“Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different.”

- T.S. Eliot [The Sacred Wood] -

Plagiarism should be recognized as a long-standing major misconduct in medical scientific research. There are numerous stories of plagiarism in creative fields, such as literature, music, art, movies, and science. The word “plagiarism” was derived from the Latin word “plagiarius,” which means “kidnapper” [1]. Plagiarism can be translated as stealing of words, rip-off, piracy, or knockoff. The World Association of Medical Editors defines plagiarism as “the use of others’ published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing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.” [2].

Although there are debates regarding modified concepts of imitation, templating, parody, or homage, plagiarism in medicine is considered a form of misconduct. Plagiarism is an ethical issue at its core but is frequently accompanied by copyright infringement, which is a legal issue resulting in punishment. Why is plagiarism a major issue for medical authors? The essence of good scientific writing should be accuracy and honesty. However, extensive plagiarism can occur in the medical field due to the concept of “publish-or-perish,” and many researchers plagiarize intentionally or unintentionally for new appointments or promotions in their academic career, hoping to acquire funds or establish a reputation.

Our journal, *Vascular Specialist International* (VSI), has a

strict policy of anti-plagiarism, and our editors do our best to detect and prevent plagiarism, which is clearly demonstrated in the instruction for authors [3]. We perform a similarity check with iThenticate® (Oakland, CA, USA), a plagiarism-screening tool, for all submitted manuscripts; subsequently, editors review the degree and contents of similarity in detail. If we detect any indication of plagiarism, an e-mail is sent to the corresponding author explaining the similarity and requesting a revised version. If the author’s response is acceptable, we process the article for peer-reviews. If any argument regarding plagiarism develops at any time during the publication process or after publication, we follow the steps suggested by the Committee on Publication Ethics (COPE) [4]. When a major instance of plagiarism is revealed, strict disciplinary actions are taken against the plagiarists, including retraction of article, suspension of authors, a notice of retraction and apology letter from journal editors, and informing the author’s superior or research governance at the author’s institution, which may result in loss of funding and expulsion from their job.

During recent years working as the editor-in-chief of VSI, I have encountered several cases of plagiarism, which were primarily unintentional, due to a lack of knowledge about plagiarism. I think the concept and forms of plagiarism should be taught to all the members involved in journal publication, including authors, peer-reviewers, editors, and readers. For authors, knowing and avoiding plagiarism during scientific writing is important. For peer-reviewers, it is important to detect plagiarism, as well as inappropriate or false citation in order to improve the honesty and quality of an article. For editors, preventing, detecting, and punishing

Corresponding author: Seung-Kee Min, Division of Vascular Surgery, Seoul National University Hospital, 101 Daehak-ro, Jongno-gu, Seoul 03080, Korea

Tel: 82-2-2072-0297, Fax: 82-2-766-3975, E-mail: skminmd@snuh.org, <https://orcid.org/0000-0002-1433-2562>

Copyright © 2020, The Korean Society for Vascular Surgery

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Vasc Specialist Int 2020;36(2):53-56 • <https://doi.org/10.5758/vsi.203621>

plagiarists is increasingly important. Furthermore, readers should report any suspected plagiarism of both their works and others to the concerned journal editors or publishers. All these efforts can prevent plagiarism and establish a good research environment with creativity, honesty and justice in medical fields.

Issues of plagiarism include plagiarism of text, graph, or figures, plagiarism of idea, mosaic plagiarism, self-plagiarism, and duplicate publication. I hope that all authors, reviewers, and readers can understand the different types of plagiarism through the recent cases detected and prevented in VSI.

1) Plagiarism of ideas

If authors use an idea, thought, or invention from the work of others and present it as their own without proper acknowledgment, it is considered plagiarism of ideas. This type of plagiarism is incredibly difficult to detect. For example, after rejecting a particular article, an editor or reviewer may take the idea in the rejected work, write a new article, and publish it in another journal under their own name. Similar instances are frequently seen among post-graduate students who steal ideas for their thesis articles from existing research. They would take a thesis several years old and present it as new without acknowledgment.

2) Plagiarism of graphs or tables

Two Korean surgeons submitted an original article to VSI, inserting a table of data from another article with a citation in the reference (VSI-19-0048). This was detected by a manuscript editor after being accepted by three peer reviewers. No reviewer had noticed this or questioned it, and the authors did not consider it plagiarism. The editor advised the author to delete the table and published the article. Using a graph or table from published articles without permission is plagiarism and copyright infringement. The author is required to obtain permission from the copyright holder, usually an academic society or publisher. If the journal is an open access journal, the author can use the table with proper citation according to the creative commons license. VSI is an open access journal, and anyone can use the contents for non-commercial purposes if properly cited. For any commercial use, permission must be obtained from VSI, even for reuse by the author. The proprietary rights notice is in the following journal website: <http://www.vsi-journal.org/about/sub03.html>.

3) Plagiarism of figures

Four Indian surgeons submitted a review article on venous intervention to VSI (VSI-20-0024). During the peer-review process, a reviewer noticed that all the figures in the manuscript were adopted from other previously published articles, providing only citation references without permission. The editor-in-chief immediately stopped the peer-review process and rejected the article with a notice that using a figure from other published articles without permission is plagiarism and copyright infringement. The authors were advised to replace the figures with their own or obtain permission from the copyright holder. This did not appear to be intentional plagiarism but resulted from a lack of knowledge on plagiarism and copyright infringement. Figures of rare cases, especially in surgical fields, are extremely valuable assets for experienced surgeons, which can create their legacy and should be protected from plagiarists.

4) Plagiarism of text

This kind of plagiarism is very popular in present times because the act of copy-pasting is simple using a computer word processor. Two American surgeons submitted a technical note about endovascular procedure of iliac branch device, which they insisted was a novel technique (VSI-20-0019). The managing editor ran a similarity check with iThenticate®, which resulted in 38% similarity. Interestingly, an article published in *Journal of Vascular Surgery* showed 8% similarity; however, the article was not cited in the reference list. Furthermore, the number of patients treated, mean age, and location of treated vessels were identical to the JVS article; thus, the issue of plagiarism was raised. Before the peer-review process, the editor sent an e-mail to the author, requesting an explanation. The authors pleaded that it was a simple mistake and withdrew the manuscript. In another instance, two authors from Turkey submitted a case report (VSI-19-0017), and iThenticate® showed 47% similarity and revealed a previously published but uncited article from Saudi Arabia. The editors rejected the article immediately and sent an e-mail regarding the situation, but there was no reply from the authors.

iThenticate® is an anti-plagiarism software, and VSI editors run this for all submitted articles before processing peer-reviews. Authors can run this program by paying or using free trial versions in a library, to gauge any possibility of unintended plagiarism in their text.

As Isaac Newton wrote [5]—“If I have seen further it is by standing on the shoulders of Giants”—significant intellectual progress is made not only through genius but also

by using the scientific knowledge accumulated by previous researchers. In recent articles on vascular surgery, we have usually adopted the text from reporting standards, the definition of risk factors or outcomes from famous guidelines, or consensus statements. Thus, some similarities in the section on materials and methods are somewhat inevitable. However, similarities in hypothesis, purposes, study design and conclusions of the study are not acceptable for publication. Authors should write articles in their own words and avoid plagiarism through paraphrasing, quotation, and proper citation.

5) Redundant or duplicate publication

Two Korean surgeons submitted an original article dealing with a randomized clinical trial (RCT) on deep vein thrombosis (VSI-20-0004). Although the manuscript was well-written, the sample size was insufficient, and a peer reviewer asked how they calculated the number of enrollments. The authors confessed that the patients were in a group enrolled in a multicenter trial sponsored by a company, and that the result of the study had already been published in another journal. Reporting a fragment of a RCT is unethical, illogical, and illegal. The authors must obtain permission from the sponsor for a separate publication of their locally enrolled patients. Furthermore, the second publication should have different purposes, topics of interest, and conclusions. If not, it is a redundant or duplicate publication and is not acceptable for publication in any scientific journal.

6) Self-plagiarism

Authors from Iran submitted an original article comparing basilic vein transposition and arteriovenous graft (VSI-19-0014). Similarity check with iThenticate® revealed 55% similarity, showing major overlap with a previously published article in *Journal of Vascular Access*. Although the title and author list were different, one author was included in both articles, and the abstract and methods were almost identical. This was considered self-plagiarism, and the article was immediately rejected. The editor sent an e-mail to the corresponding author to explain this misconduct and verify the originality of the submitted article, but no response was provided. At the time, editors were not aware that strict disciplinary actions should be actively applied for plagiarism, as recommended by COPE [4]. Currently, VSI editors agree that stronger action is necessary to prevent this misconduct.

The reasons why plagiarism has become an endemic in

medical society is clear: lack of knowledge on plagiarism, lack of ideas, greed of authors, stress about promotion, insufficient technique or resources, and increasing pressure to publish. Notably, predatory editing services constitute another reason for plagiarism [6]. Several professional editing services are available for support in translation and writing, particularly for non-English speaking authors. Some of these services violate publication ethics for money, copy-and-paste or combine texts, steal other's data or figures, or sell authorship to doctors in different hospitals. The authors or editors in non-Anglophone countries should be aware of these corrupt businesses. Contract cheating is another form of intentional plagiarism initiated by the author, which should be punished [7]. If you discover that your article was plagiarized by unethical authors, the actions to be taken are well presented by Baydik and Gasparyan [8]. Often, good research from non-English journals can be stolen, translated, and published in more famous English journals. This kind of misconduct is difficult to detect using the antiplagiarism software currently available. If you are the author of the original journal, please do not hesitate to report the misconduct. As the "Me-Too" movement is changing the world for the better, the accumulation of these ethical practices will significantly improve the integrity of the medical scientific world.

In conclusion, all the members of scientific journals need to be vigilant in detecting and preventing plagiarism. Unintentional plagiarists need to be educated, and intentional, blatant plagiarism should be punished. VSI editors will continue to offer education on plagiarism, and serial reports on detected plagiarism cases and the actions undertaken. Just as night watches keep the town safe from thefts, VSI editors hope this editorial and the announcement of a strict antiplagiarism policy can prevent plagiarism in VSI and other medical scholarly journals.

CONFLICTS OF INTEREST

Seung-Kee Min has been the editor-in-chief of *Vasc Specialist Int* since 2019.

ORCID

Seung-Kee Min

<https://orcid.org/0000-0002-1433-2562>

REFERENCES

- 1) Gasparyan AY, Nurmashev B, Seksenbayev B, Trukhachev VI, Kostyukova EI, Kitash GD. Plagiarism in the context of education and evolving detection strategies. *J Korean Med Sci* 2017;32:1220-1227.
- 2) World Association of Medical Editors. Recommendations on publication ethics policies for medical journals [Internet]. Englewood: WAME; C2016 [cited 2020 Jun 2]. Available from: <https://wame.org/recommendations-on-publication-ethics-policies-for-medical-journals#Plagiarism>.
- 3) Vascular Specialist International. Instructions for authors. Research and publication ethics [Internet]. Seongnam: The Korean Society for Vascular Surgery; 2019 Dec 16 [cited 2020 Jun 2]. Available from: <http://www.vsjournal.org/authors/sub01.html>.
- 4) Committee on Publication Ethics. (a) Suspected plagiarism in a submitted manuscript. (b) Suspected plagiarism in a published manuscript [Internet]. New Kings Court: COPE; 2019 Feb 1 [cited 2020 Jun 1]. Available from: <https://publicationethics.org/guidance/Flowcharts>.
- 5) Wikipedia. Standing on the shoulders of giants [Internet]. San Francisco: Wikipedia; 2020 May 18 [cited 2020 Jun 4]. Available from: https://en.wikipedia.org/w/index.php?title=Standing_on_the_shoulders_of_giants&oldid=957402188.
- 6) Hong ST. Plagiarism continues to affect scholarly journals. *J Korean Med Sci* 2017;32:183-185.
- 7) Muller LS. A keen eye avoids plagiarism: a cautionary tale. *Prof Case Manag* 2019;24:323-326.
- 8) Baydik OD, Gasparyan AY. How to act when research misconduct is not detected by software but revealed by the author of the plagiarized article. *J Korean Med Sci* 2016;31:1508-1510.