EDITORIAL

Plagiarism-related Dilemmas in Scientific Writing

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INTRODUCTION

The scientific writing in the present time has become an essential skill to express your research or ideas righteously. There are many scientific misconducts reported; plagiarism is one such issue in academic writing. Plagiarism is copying or claiming someone else's work or idea as own without attribution or permission of the original author.[1,2] Oxford Dictionary defines plagiarism as "The practice of taking someone else's work or ideas and passing them off as one's own." The word comes from the Latin word plagiarius, meaning kidnapping.[1]

Plagiarism is considered to be serious scientific misconduct, and the consequences range from suspension from writing any scientific literature for a period to a loss of academic career. There is a drastic increase in the plagiarism detection tools, in terms of online portals/software, and costs of these tools are on the rise. The majority of the tools use google search like engines or stylometry in finding the plagiarism. They do not consider many paid

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databases in their search, leading to a significant void in plagiarism detection.

Plagiarism Criteria[3-5]

- Copying someone else's work and not quoting them in references
- Copying of someone's idea and concept
- When you give false information while quoting reference
- Copying majority of someone's work with change in the sentence structure and even crediting their work
- Use of copyrighted material without the written permission of the original author.

Reasons for Plagiarism[3,4]

- There is lack of awareness regarding plagiarism rules
- Poor English-writing skills
- The abundant online content, making it easy to cut, copy, and paste
- Increased pressure to publish in academia
- No respect for others' original work.

Types of Plagiarism[3,4]

- Intentional and unintentional:
  - Intentional: Plagiarism done with an intent to copy/steal matter from others' original work will account for a higher percentage of plagiarism.
  - Unintentional: Plagiarism occurring because of improper quoting or use of common technical language leading to plagiarism, generally accounts for a lesser percentage of plagiarism.
- Single-source and multiple-source plagiarisms:
  - Single source: Copying of the text from single source accounts for a higher percentage of plagiarism. Majority of the journals have a clear policy on permissible content from the single source and multiple sources.
  - Multiple sources: Copying from multiple sources accounts for plagiarism.

- Direct and indirect plagiarism:
  – Direct plagiarism: It is cut, copy, and pasting of the scientific content from someone else's original work, restating some else's work, buying someone's work to show like yours.
  – Indirect plagiarism: When you forget to cite or give a reference to the source when you do not use parenthetical citation.
- Self-plagiarism: Borrowing or copying content from one's previous work and presenting it as new is self-plagiarism.
- Repetitive research: Repeating research from someone else's work as it is, without any variation.

Dilemma's in Plagiarism[2-10]

There are no universal guidelines followed all across the globe for detecting plagiarism. Few dilemmas are listed below:

- Universal tool/software, which has access to all paid, free, and all gray literature, so that it can detect the exact amount of plagiarism. There are many plagiarism detection software tools available in the market, each one with their advantages and disadvantages. The cost, accessibility, and ease to use are the few criteria that decide the use of these tools. Many users end up using free tools/software with limited reach.
- The scientific language and research language are to be accounted as not plagiarized. This accounts for one of the major dilemmas in detecting plagiarism. The use of scientific words/sentences like, e.g., a cross-sectional observational study was conducted, the study sample was recruited in the study, the sample size was calculated using the formula, etc. This call has to be taken by the editor/reviewer of the article.
- The concept of novelty in research is very vital to define what accounts for plagiarism if research is repeated and the reason for the same is not justified. Repetition of the entire research, right from the objectives to methodology without any reasoning being quoted, accounts for redundant data synthesis and misconduct. Such situations can be better assessed by the reviewer/editor.
- What is the permissible percentage of plagiarism from a single source and multiple sources? Generally, some plagiarism detection tool claims that acceptable norms must be from 5 to 10%. There has to be a clear recommendation by the governing bodies regarding the acceptable percentage from a single

source and multiple sources. The editor/reviewer should have the liberty to take a call on content similar to finding.

- Similarity and plagiarism: The word similarity refers to all the work published in public domain, which is quoted and necessary permission acquired. All scientific terminologies, symbols, and equations which are minor, and all references, contents, and acknowledgments in the manuscript. The plagiarism detection tools might show the content as plagiarized.
- Copyright and plagiarism: Copyright infringement is a law governing the scientific content and plagiarism is more of an ethical issue. The copyrighted materials like tables, graphs, and images need permission from the authors of the original work to reproduce; quoting/citing the original work is not good enough.

International Bodies governing Scientific Writing Misconduct

- The committee of publication ethics (https://publicationethics.org).[6]
- European Association of science editors (www.ease.org.uk).[7]
- World Association of medical editors (www.wame.org).[2]
- Council of science editors (www.councilscienceeditors.org).[8]

CONCLUSION

Plagiarism cannot be a deterrent to scientific writing; we have to be aware of the changes and updates regarding plagiarism and improve the writing skills. Nurturing the concept of transparency and honesty in research is the way forward. There is a need for more universal and detailed guidelines addressing the problem and uniform code that can be followed by all journals and governing bodies. The time also demands an open-source robust software/portal for plagiarism detection that can be accessed by all researchers.

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