



Ethical Challenges Around Multiple Authorship in Journal Articles

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Dear editor,

Academic individuals' careers and accomplishments commonly rely on their research contributions and authorship, and researchers' number of publications shows their creativity, productivity, and impact. Besides, financial benefits such as job promotions and research funds can be achieved by publishing papers. These regulations may result in ethical failures, and authors must bear responsibility in this regard (1). In today's highly competitive research industry, researchers may encounter ethical challenges when publishing their research findings.

Authors encounter many ethical challenges while working in research teams when it comes to publishing scientific papers. Previous studies have mentioned some of these considerations, such as adherence to ethical issues in examining subjects and the trustworthiness and honesty of examiners in disclosing potential sources of bias and conflict of interest (2). Moreover, authors must fulfill the requirements of authorship and accept the responsibilities of authorship, which bear ethical challenges as well. These responsibilities include ensuring the integrity and accuracy of the work, significant participation in study conception/design, data collection or analysis, data interpretation, and/or reviewing, writing, or revising the manuscript.

Another ethical issue that has been rarely noticed until now is the placing and order of authors in multiple-authored journal articles. The number of multiple-authored journal articles has been increasing over recent years because of a surge in interdisciplinary investigations. No exact limitation has been acknowledged for the number of authors in a manuscript. For instance, the New England Journal of Medicine published an article with over 900 authors in 1993 (3). Some researchers believe that there could be a direct relationship between the number of authors and the quality of the research because of more

cooperation among authors to improve the article. This could be true; however, the rise in multi-authored papers combined with the pressure of universities to publish has caused various unethical authorship practices in scientific research, which are challenging to control.

Junior researchers believe that attaching the name of senior staff to the paper as authors will improve the chances of being accepted for publication, whether or not they have made substantial contributions to the work. They may think that if they ask their seniors to accept research responsibilities, they can offend their chiefs, who hold considerable power over them and their employment, research opportunities, and recommendations for jobs and promotion. On the other hand, the seniors or chiefs of departments might wish to be seen as productive researchers, while their clinical and organizational responsibilities and occupations may prevent them from contributing directly to their colleagues' works. They may insist on being listed as principal co-authors because of their position of authority, logistical and administrative support, whether or not they have made any direct collaboration.

It is unethical for an author who has had little contribution to a study to gain the main authorship position merely because of his/her position in the organization. Any author must be given authorship credit according to his/her responsibility, participation, and direct influence on the research content.

In conclusion, multiple authorship is an inevitable phenomenon due to the growing rate of investigations conducted by research teams. Nevertheless, there are several moral challenges and authorship irregularities that should be handled carefully. Disputes may be raised between contributors because of misunderstandings and poor communication, which can be prevented by acquiring a basic understanding of the standards of shared au-

thorship. In this regard, multiple questions may be raised, which must be answered according to acceptable academic standards.

Authors' order must be determined according to their extent of contribution to the investigation. The essential parts of research that can determine an author's contribution are the formulation and execution of the project and the analysis and interpretation of data. Academic credit is not commonly given to data collection.

Finally, authors' contributions can be determined based on International Committee of Medical Journal Editors criteria:

1- Substantial contribution to conception and design, or acquisition of data, or analysis and/or interpretation of data.

2- Drafting the article or revising it critically for important intellectual content.

3- Final approval of the version to be published.

4- Agreement to be accountable for all aspects of the work to ensure that the questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

In recent years, most medical journals adhere to these criteria to identify authors' contributions to the research. Nevertheless, the application of these criteria for determining authors' orders could lead to some questions. For example, questions about the acceptance of guidelines, declaration of major supportive contributions, and giving credit to the authors who have made considerable ef-

forts in designing the study and gathering data and the colleagues who have modified the design and text must be answered. Each of these questions and dilemmas must be considered from a unique perspective to resolve ethical challenges around this issue.

Footnotes

Authors' Contribution: Study concept and design: SE, Drafting the manuscript: AE, Critical revision of the manuscript for important intellectual content: SE, Study supervision: SE.

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