

EDITORIAL

ICMJE Guidelines for Assigning Authorship and Acknowledging Contributions

This editorial is a departure for me inasmuch as I have decided to devote much of it to reprinting authorship guidelines set forth by the International Committee of Medical Journal Editors (ICMJE). My decision to do so stems from a growing concern about the practice of assigning authorship of a manuscript to those whose contribution is limited or even questionable. Many nursing authors, knowingly or unknowingly, may be engaging in practices that are commonplace in other disciplines without questioning whether they are indeed ethical.

The practice of assigning authorship of a given scholarly work varies from discipline to discipline. Each field develops its own practices based on the nature and type of scholarship inherent in the discipline, its historical system of knowledge development, and the pressures and rewards from its various constituencies. In the humanities, for example, most scholarly publications are solo authored. The scholar is expected to make an original contribution and collaboration among scholars is not common practice. This tradition of solo authorship may stem from the nature of the work required in the discipline. In fields such as philosophy and literature, the development of new insights requires personal vision that is best achieved alone. Consider, for example, that a work of fiction is rarely a co-authored endeavour, and that the latest philosophical theorem is constructed by a single scholar. Within these academic circles, co-authored work is not encouraged, perhaps due to the difficulty in ascertaining each scholar's unique contribution.

Authorship practices in the medical and biomedical disciplines stand in stark contrast to those in the humanities. Here, solo authorship is rare. Teams of researchers are encouraged to address problems together, each scholar contributing a unique perspective and a unique set of skills. Historically, publications in the medical and biomedical sciences have always been multi-authored. However, the number of authors per manuscript has increased significantly and it is now common to see five or more authors listed on a manuscript. Anyone remotely associated with a project is given authorship, rather than simply having his or her contribution acknowledged. The pressure to assign authorship stems in part

from the imperative to “publish or perish,” whereby quantity of publications is considered just as important as quality. (Many academic promotions committees, aware of this practice, all but ignore the middle authors, regarding only the first two authors and the last author on a manuscript as the true contributors.)

The practice of authorship assignment is less clear in nursing. In our experience at *CJNR*, most manuscripts are authored by two or three scholars. The humanities model of solo authorship, once prevalent in nursing, has been on the decline since the 1990s (Norris, 1993). While the practice of assigning authorship to all members of a team on every publication resulting from a project does exist in nursing, it is not widespread. This observation is in keeping with the results of a survey conducted almost 10 years ago in which Canadian nurses expressed the view that only those who make a significant contribution to a study should be given authorship (Butler & Ginn, 1998). It would be interesting to know whether this view is prevalent today, and the extent to which it holds sway.

There is a growing belief among editors of nursing journals that some authors do not merit authorship, given the nature and extent of their contribution. In some circles, professors are being encouraged to put colleagues' names on manuscripts to increase their chances for promotion and tenure even though these colleagues have not participated in the project — a very unethical practice indeed. Other unsavoury authorship practices creeping into nursing journals are ghost-authoring and ghost-writing. In ghost-authored submissions, the author hires another person to write his or her article without disclosing or acknowledging the true authorship of the submission. This is a growing practice. In the case of ghostwriting, the research is written up by a second party with or without the knowledge of the “designated” author. This is a topic for a future editorial. These practices, plainly put, are dishonest; editors fear they may be publishing half-truths or even lies, which can have dire consequences for the veracity of the science. Because of these and other unethical practices, an increasing number of nursing journals are now demanding full disclosure of authors' names and the nature and extent of each author's contribution before proceeding with manuscript selection and review.

The editors of medical journals have been grappling for some time with the issue of how authorship should be assigned. In 1978 a small group of editors of medical journals met informally in Vancouver to establish guidelines for the submission of manuscripts. What became known as the Vancouver Group later expanded and evolved into the ICMJE, whose mission is to develop ethical principles and guidelines related to all aspects of biomedical journal publication (www.icmje.org),

for the benefit of both authors and editors. Under the heading of “Ethical Considerations in the Conduct and Reporting of Research,” they have set forth guidelines for authorship and other matters relating to journal contributions. These guidelines are reprinted here to signal that they are the ones signed on and to be followed by *CJNR*.

Laurie N. Gottlieb
Editor-in-Chief

ICMJE Authorship and Contributorship

1. Byline Authors

An “author” is generally considered to be someone who has made substantive intellectual contributions to a published study, and biomedical authorship continues to have important academic, social, and financial implications. (1) In the past, readers were rarely provided with information about contributions to studies from those listed as authors and in acknowledgments. (2) Some journals now request and publish information about the contributions of each person named as having participated in a submitted study, at least for original research. Editors are strongly encouraged to develop and implement a contributorship policy, as well as a policy on identifying who is responsible for the integrity of the work as a whole.

While contributorship and guarantorship policies obviously remove much of the ambiguity surrounding contributions, it leaves unresolved the question of the quantity and quality of contribution that qualify for authorship. The International Committee of Medical Journal Editors has recommended the following criteria for authorship; these criteria are still appropriate for those journals that distinguish authors from other contributors.

- Authorship credit should be based on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3.
- When a large, multi-center group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript (3). These individuals should fully meet the criteria for authorship defined above and editors will ask these individuals to complete journal-specific author and conflict of interest disclosure forms. When submitting a group author manuscript, the corresponding author should clearly indicate the preferred citation and should clearly identify all individual authors as well as the group name. Journals will generally list other members

of the group in the acknowledgments. The National Library of Medicine indexes the group name and the names of individuals the group has identified as being directly responsible for the manuscript.

- Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship.
- All persons designated as authors should qualify for authorship, and all those who qualify should be listed.
- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

Some journals now also request that one or more authors, referred to as “guarantors,” be identified as the persons who take responsibility for the integrity of the work as a whole, from inception to published article, and publish that information.

Increasingly, authorship of multi-center trials is attributed to a group. All members of the group who are named as authors should fully meet the above criteria for authorship.

The order of authorship on the byline should be a joint decision of the co-authors. Authors should be prepared to explain the order in which authors are listed.

2. Contributors Listed in Acknowledgments

All contributors who do not meet the criteria for authorship should be listed in an acknowledgments section. Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chair who provided only general support. Editors should ask authors to disclose whether they had writing assistance and to identify the entity that paid for this assistance. Financial and material support should also be acknowledged.

Groups of persons who have contributed materially to the paper but whose contributions do not justify authorship may be listed under a heading such as “clinical investigators” or “participating investigators,” and their function or contribution should be described — for example, “served as scientific advisors,” “critically reviewed the study proposal,” “collected data,” or “provided and cared for study patients.”

Because readers may infer their endorsement of the data and conclusions, all persons must give written permission to be acknowledged.

References

- Butler, L., & Ginn, D. (1998). Canadian nurses' views on assignment of publication credit for scholarly and scientific work. *Canadian Journal of Nursing Research, 30*(1), 171–183.
- Norris, R. P. (1993). Letter to the editor. *Canadian Journal of Nursing Research, 25*(3), 77.