

List of Authors in Scholarly Publications: Sequence and What Value?

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Multidisciplinary collaborations and active participation of multiple authors in scientific studies and publications are being increasingly encouraged. This may be so because multi-author publications, presumably, have been considered to lend greater credibility, reliability, greater support, and enhance the integrity of the work as it will often reflect a pool of experiences and contributions from all the authors. When the article is finally published in a scientific journal, many other stakeholders' interests will become obvious such as is found in the work often done by the appointment and promotion committee in real academic circles, where credits are now awarded to each author for the purpose of promotion, grant allocation, and assigning supervision by grant awarding firms are just but a few examples.^[1] In these instances, surely, the stakeholders will pick interest in the order or sequence in which the list of authors names appear in the work. At this point, the question will then arise whether the list of authors' names in scholarly publications has any particular sequence or value? If it does, what is the interpretation of the sequence? What value does it has and how do you quantify the value? These could be some of the questions that will follow particularly during assessment of the roles or contributions made by various authors in multi-authored publications. This editorial is intended to highlight the interpretation of the order or sequence of list of authors names in scholarly publications and attempt to give a summary of the guidelines that have been in use for the evaluation of the roles or contributions made by various authors.

In scientific and scholarly publications, the roles of the first author has been wrongly misconstrue and thought that the person that has the greatest contribution to the work should be first author. With this misconception, that has been fairly straightforward in

identifying such a role in any multi-author publication. The major problem is often with the remaining names, which factors guide the order in which the remaining names are arranged? As at the moment, no universally accepted order is practiced among scholars. However, the following options and guidelines have been noted to be in place or use for various reasons.

AMOUNT OF CONTRIBUTIONS

In terms of the amount of contribution, initially the wrong assumption was that the first author was considered to have the greatest contribution, followed by the names of the person with second most contribution while the remaining names are followed and arranged in that decreasing order of the value of contribution. However, the current trend is that each author must fulfill the 4 minimum criteria for authorship set out by International Committee of Medical Journal Editors^[2] and other related organizations before he could be regarded and included in the list of authors. These minimum criteria include (1) substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; (2) drafting the work 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 in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Therefore, in terms of intellectual contributions to the article, this may no longer be tenable again as all certified authors should have full and equal participation. Except if conception and in addition, nonintellectual contributions such as coordination of authors work and leadership role is being considered to define this first author's position. In most cases now, it is by mutual agreement.^[2]

ALPHABETICAL ORDER

In some instances, after assigning the first author in the work, the remaining names are often arranged in alphabetical order.^[1,3] This has been considered and assumed to be an unbiased, systematic method. In most

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cases, this method is often used to avoid conflicts in conflict-prone situations or group of authors. However, this method often presents an undue rating during evaluation of the roles and contributions made by individuals in the list. Perhaps, a compromised way to settle that has been to allocate a universal value to all of them.

SENIORITY ORDER OR REVERSED SENIORITY

In this circumstance, after identifying the first author, the remaining names are arranged either in a seniority order or reverse seniority order. In seniority order, the most senior person in rank is put first, and he is followed by the second most senior and in that order to the least person in rank. While in the reverse seniority order, the names of the most junior person in rank closely follow that of the first author and in that order of seniority the remaining names are arranged. In this reversed seniority order, it is assumed that the most senior person in rank is serving a supervisory role and guide in the intellectual contributions from all authors. This appears to be the most favored among scholars and funding agencies.^[1]

For the purpose of quantifying or assigning credit to each author, the following options have been in use.

SEQUENCE CREDIT METHOD

In this method, the highest credit is undoubtedly awarded to the first author. The second gets half and the third author gets a third and in that order up till the tenth. The remaining authors thereafter, in cases of list of authors' names >10, get 5% of the remaining credit uniformly.^[1] However, with the current objective definition of the person that should be certified and included in the list of authors, it is advisable that no scholar and researcher should lay emphasis on this method again as it strongly negate and tends to discourage multidisciplinary, multisectoral, and interdisciplinary collaborations.

EQUAL CREDIT METHOD

In this method, the total credit allowed is equally divided among all the authors. This method has been found to be flawed in most instances because an undue rating is often given to the person with most and/or least contribution.

FIRST-LAST EMPHASIS CREDIT METHOD

In this method, the first author is given the highest credit; the last gets half of what the first has got while

the remaining authors are shared in equal proportions the remaining credit allowed.^[3]

EVIDENCE BASED CREDIT METHOD

In this method, it is expected that the roles or contributions of authors are known and clearly defined as footnotes in the article. The evaluation committee is expected to apportion the credits based on the evidence of contribution as spelled out in that published article. This will often require authors to state clearly their contributions in the publication. Probably, this may be more acceptable since most journals now ask for a statement on the contribution made by authors for the purpose of defining authorship. This may be equally useful as an evidenced based assessment when assigning credit to authors.

CONCLUSION

Many guidelines are in use for assigning the value of contributions made by multiple authors. Factors such as local preferences, field dependency, rank, and percent contribution have been noted to influence the sequence of names and assigning credits to individuals who have participated in multi-authored scholarly publications. There is a need for the development of a simple, scientifically objective, and universally acceptable guideline for arranging the names of multi-authored scholarly publications to enhance universal application and evaluation worldwide. Perhaps, assessment should be based really on the quality and impact of research rather than mere numbers. Research by nature must be necessarily collaborative and attempt to split or apportion credit to authors is counterproductive and should be discouraged. Institutions, research teams as well as editors and publishers should work to ensure that only those that have met the criteria for authorship are listed as authors. Effort should be made to actively discourage and sanction research teams and authors who mislead by gift authorship and other fraudulent practices.

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