

# Original Articles

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## Group Authorship: Still an Open Question

### Introduction

The question of group authorship and of the difficulties it creates to authors, editors and indexers is not new but certainly of increasing importance. A considerable number of articles, letters and editorials have been published on the problems which unusual authorship, and in particular group authorship, can generate both at indexing and citation level. Although this issue has already been addressed in the past, it has never been given the attention it deserves and is, therefore still an open question.



The authors of this paper, whilst working on the setting-up of a bibliographic database and in the editing of a science journal for their institute of research, discovered this problem. They realised that it was important to solve this intriguing question and that this could only be achieved if all parties involved agreed to specific ground rules in addition to the adoption of a common language. Authors, editors and indexers who, whether they like it or not, strongly interact with each other, should be encouraged to work together in finding an appropriate solution to this question. This means understanding and accepting each other's problems and issues, analysing possible

solutions and implementing commonly-agreed standards and criteria. In other words, they should be able to understand, if not to speak, the same common language. Therefore the aim of this article is to foster a debate on the problems that group authorship may cause to the citation and indexing of articles.

### The question of group authorship: a domino effect

The group authorship problem is a multifaceted question. It arises when an article is written by authors, who are members of one or more research groups, whose design, data and findings are reported or analysed therein. Moreover, in particular, this happens in papers reporting large research studies such as multi-centre or randomized clinical trials, population or prospective studies and other observational investigations or initiatives, as well as papers deriving from a collective effort, which are published with increasing frequency in biomedical journals (1).

Authorship in these articles can be assigned in a number of different ways, for instance to all or only to some members of the group and/or to the group itself. To make things more complicated, group authorship can also be reported in the byline (the line where authors are listed in the title page) in a variety of ways. In addition, this is not always in accordance with full authorship criteria, often to the detriment of clarity and common sense.

All those who believe to have met the full criteria for authorship rightly expect to see their names properly listed in the byline of the printed article and easily retrievable in a bibliographic search. Unfortunately, as has been probably experienced by many, this does not always happen. On the

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contrary, the name of an individual author or of the group author may have been either excluded or incorrectly included in the bibliographic database and therefore be unidentifiable and irretrievable. Even in major bibliographic databases, such as PubMed of the National Library of Medicine and Science Citation Index of the Institute for Scientific Information, the difficulties in correctly retrieving articles with group authorship still persist.

### A manuscript in search of an author

The source of the problem is, often, at the beginning of the entire publication process. It is only here that the problem can be circumspected through a correct, responsible, ethical and unequivocal attribution of the authorship, to which particular attention should be paid in the case of group authorship articles.

The well-known *Uniform Requirements for Manuscripts Submitted to Biomedical Journals*, issued and periodically revised by the International Committee of Medical Journal Editors, states "When a large, multi-center group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript (1). These individuals should fully meet the criteria for authorship defined above (...). 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 acknowledgements. 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"(2).

Therefore according to the *Uniform Requirements*, it is up to the group itself to be responsible for the correct identification of the authorship and this should be done strictly in accordance with the three criteria listed in the same guidelines to meet full authorship (2). Furthermore it is up to the corresponding author to choose the preferred citation for the byline and to clearly transmit this information to the editor of the journal.

Avoiding irresponsible authorship has been a matter of debate over the past years and still is. It is a delicate subject, which entangles ethical behaviour and conflicts of interest (3). In the 2004 revision of the *Uniform Requirements* we read "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 (...). All persons designated as authors should qualify for authorship, and all those who qualify should be listed" (2, 4).

Utopia or real perspective? This is questionable, but it is certain that if correctly applied, these criteria would guard against all unethical behaviour regarding authorship in science papers, such as: ghost writers (authors, often professional writers, who are not cited in the byline), grafters (non/authors, for instance well known clinicians, recruited to appear in the byline for a fee), guest authors (partial or co-authors who are added in the byline to give more credibility and prestige to the article), not to speak of detractors and plagiarists (5, 6).

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## **An editor in search of group authorship criteria**

Science journals editors are not always fully conscious or truly concerned about the consequences which unclear identification of the group authorship might have at indexing level. The differences between "and" and "for" inserted between the individual name and the group name in the byline is not always clear, nor is the use of the asterisk or reference marks to enounce the names of other members of the group not cited in the byline. If the corresponding author does not pay enough attention to the identification of authorship in the byline, it is unlikely that the editor would notice it, or convince him/her to modify the chosen group authorship citation since this could lead to misinterpretation at the indexing level. The result could be wrong, misleading and uncertain identification of the group authorship in the printed article, as well as poor retrievability.

It is highly recommended that editors should include, in the *Instructions to Authors*, a paragraph specifically dedicated to group authorship articles. These additional instructions should also recall the principle of ethical and responsible authorship stated in the *Uniform Requirements*, and contain clear indications on how to cite group authorship in the byline, in the footnote of the first page and in the acknowledgements. *The Journal of the American Medical Association* (JAMA), for instance, suggests "Several options are available to authors and editors for articles involving research groups. For articles published in JAMA, group authorship can be designated in several ways. In perhaps the most common format, the names of individuals are listed in the byline with a designation that these authors are writing on behalf of or "for" the research group (...). In this case, the named individuals meet full criteria for authorship" (1).

## **An indexer in trouble**

An unclear identification of the group authorship in the byline of the printed article will most likely put the indexer in a difficult position. He will be called upon to interpret, which obviously could result in misinterpretation, what appears in the byline, for instance about which members of the mentioned group should be considered authors and indexed as such. Furthermore, he will have to align his indexing choices with those offered by the information retrieval system he is using. This is also why "the publication of group names in bylines has been reported to be problematic for bibliographic databases"(1).

The major bibliographic databases have long been trying to solve this problem. PubMed, for instance, has recently introduced a way to retrieve group authorship articles by searching the name of the group followed by [CN] which stands for corporate name, while for papers published before 2000 the group name is searchable in the title field by adding [TI]. However, this solution is not deemed to be entirely satisfactory by some authors who believe that the search should be made directly in the author field (7).

In online reference systems, therefore, despite the attention drawn to the issue resulting in the study and application of alternative solutions, there still persists a certain difficulty in correctly retrieving group authored papers: "indexing systems are not optimally adapted to group authorship" (7).

The examples shown below confirm how a poor group authorship identification in a printed paper could lead to misinterpretation and consequently to difficult retrievability. These papers have some of

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the authors affiliation in common, that is Istituto Superiore di Sanità (ISS), and have been indexed in the ISS bibliographic database containing all the papers published by ISS researchers. They also share the citation of group authorship, that is individual names followed by "for the" and the name of the study group. The indexing citation in PubMed and Science Citation Index (SCI) and the different ways of retrievability have been compared.

### *Example 1.*

a - Floridia M, Fragola V, Galluzzo CM, Giannini G, Pirillo MF, Andreotti M, Tomino C, Vella S, for the ISS-IP1 Study Group. HIV-related morbidity and mortality in patients starting protease inhibitors in very advanced HIV disease (CD4 count of < 50 cells/microL): an analysis of 338 clinical events from a randomized clinical trial. *HIV Medicine* 2002; 3(2):75-84.

b - Floridia M, Bucciardini R, Fragola V, Galluzzo CM, Giannini G, Pirillo MF, Amici R, Andreotti M, Ricciardulli D, Tomino C and Vella S (for the ISS-IP1 Study Group. Listed in Appendix). Risk factors and occurrence of rash in HIV-positive patients not receiving nonnucleoside reverse transcriptase inhibitor: data from a randomized study evaluating use of protease inhibitors in nucleoside-experienced patients with very low CD4 levels (<50 cells/microL). *HIV Medicine* 2004;5(1):1-10.

These two articles were searched in PubMed by adding the field specification [CN] to the name of the study group but only one was retrieved with this query (b). The other was not, because the name of the study group was indexed as an affiliation. In SCI neither were retrievable when searching by the study group name, as this option is not available in the system.

### *Example 2.*

Shafer RW, Smeaton LM, Robbins GK, De Gruttola V, Snyder SW, D'Aquila RT, Johnson VA, Morse GD, Nokta MA, Martinez AI, Gripshover BM, Kaul P, Haubrich R,

Swingle M, McCarty SD, Vella S, Hirsch MS, Merigan TC, for the AIDS Clinical Trials Group 384 Team. Comparison of four-drug regimens and pairs of sequential three-drug regimens as initial therapy for HIV-1 infection. *New England Journal of Medicine* 2003;349(24):2304-15.

Here, while PubMed indexes as authors only those whose names appear in the byline of the article as well as in the name of the study group, SCI indexes as authors also those (other members of the group) whose names are listed in the Appendix at the end of the article, omitting however the name of the group. Therefore, the work is retrievable in PubMed by searching either the group name or the names of the authors in the byline but not of those reported in the Appendix. On the other hand in SCI it is by searching the names of all authors, reported both in the byline and in the Appendix, but not of the study group name.

### *Example 3.*

Bianco E, Marcucci F, Mele A, Musto P, Cotichini R, Sanpaolo MG, Iannitto E, De Renzo A, Martino B, Specchia G, Montanaro M, Barbui AM, Nieddu R, Pagano L, Rapicetta M, Franceschi S, Mandelli F, Pulsoni A for the GIMEMA Study Group on HCV and Hematologic Diseases. Prevalence of hepatitis C virus infection in lymphoproliferative diseases other than B-cell non-Hodgkin's lymphoma, and in myeloproliferative diseases: an Italian Multi-Center case-control study. *Haematologica* 2004;89 (1) :70-6.

This, like the first paper cited in example 1, is not retrievable in PubMed by searching the group name with the field specification [CN], since the name of the group GIMEMA has been completely omitted in the indexing. Instead, part of the title "Italian Multi-Center case control study" was interpreted as to be the group author name. No mention of the group name is made in SCI where, however, the last part of the title was correctly indexed as such.

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In populating the Institute's bibliographic database with the published papers of internal researchers we were faced with the problem of correctly indexing group-authored papers. In addition, since the aim of this database is to index all papers where ISS researchers appear not only as byline authors but also as contributors (when cited, for instance, in the Appendix) we had to devise a way to adjust the database to meet these requirements. The solution we are now opting for (and with the hope it will be satisfactory) is to qualify authors as AM (which stands for Author among Members), AC (Author among Contributors), AP (Author among Participants) depending on what is indicated in the footnote of the title page or in the Appendix of the paper. By doing so, the publication list within the Curriculum Vitae of ISS researchers, automatically generated by this database, will also include those papers where full authorship criteria have not been fully met.

## Concluding remarks

Nowadays group authorship is not managed, interpreted and indexed according to uniform criteria. A responsible identification of the authorship, a clear indication in the citation by the corresponding author, its correct listing in the byline by the editor and its appropriate indexing in the bibliographic databases could help to prevent any possible misuse and misunderstanding regarding group authorship. To do this, however, what is meant by responsible, clear, correct, appropriate, should be defined, which will mean more standards for authors, editors and indexers. In addition commonly-agreed standards which should be frequently revised in order to be always up to date with developments in science and technology. This could become an interesting subject for future debate.

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## References

1. Flanagan A, Fontanarosa PB, DeAngelis CD. Authorship for research groups. JAMA 2002;288:3166-8.
2. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals: writing and editing for biomedical publication. Updated October 2004. Available from: <http://www.icmje.org/>.
3. Lattanzi A, Morosini P, Traversa G. The authorship debate and the inflation of scientific papers. Epidemiol Prev 2001;25(4-5):210-4. (In Italian)
4. Hoey J. Who wrote this paper anyway? : the new Vancouver group statement refines the definition of authorship. (Commentary). CMAJ. 2000;163(6):716-7.
5. Klein CJ, Moser-Veillon PB. Authorship: can you claim a byline? J Am Diet Assoc 1999;99(1):77-9.
6. Albert T, Wager E. How to handle authorship disputes: a guide for new researchers. In: The COPE Report 2003. London: Committee on Publication Ethics; 2003. Available from: <http://www.publicationethics.org.uk/reports/2003/>
7. Dickersin K, Scherer R, Suci ES, Gil-Montero M. Problems with indexing and citation of articles with group authorship. JAMA 2002;287(21):2772-4.