Authorship & Responsible Publication

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Presentation Outline

• Introduction
• Authorship
• Responsible Publication
• Summary
• References
Introduction

- Researchers share the results of their works with colleagues/scientists and the public in a variety of ways.
- Early results are usually shared during laboratory meetings, in seminars, and at professional meetings.
- Final results are usually communicated to others
  - through press releases, public announcements, newspaper, articles to the public.
  - through scholarly articles and books (publication) to colleagues/scientists
Generally, all forms of publication should present:

- a full and fair description of the work undertaken (Methods)
- an accurate report of the results (Results) and
- an honest and open assessment of the findings (Discussion)
Authorship

Authorship is crucial to your success as an academic.
Authorship

• The names that appear at the beginning of a paper (Byline) serve one important purpose.
• They let others know who conducted the research and should get credit for it.
• is generally limited to individuals who make significant contributions to the work that is reported.
• also implies responsibility and accountability for published work.

An Author is generally defined as who has

• contributed sufficiently to a scientific report to be listed on the byline of the published report.
• been involved in all aspects of the creation of the work including research, design, analysis, and final presentation of the work.
• made a substantial intellectual or practical contribution to a publication.
Who is an author?

The ICMJE (2019) recommends that authorship be based on the following 4 criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND

2. Drafting the work or revising it critically for important intellectual content; AND

3. Final approval of the version to be published; AND

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.

“ All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as authors “.
Different Types of Authors

First / Lead Author

- **is the first named author** of a publication in academic publishing.
- **did most to the work**, experiments, including writing of the manuscript.
- **has made the most significant intellectual contribution** to the work, in terms designing the study, acquiring and analyzing data from experiments, and writing the manuscript.

Second Author

- **is the second main person** who contributes mainly to experiments and manuscript writing. Somewhat less in percentage to first author.
- **helped out the most, and/ or mentored the 1st author** (e.g. if 1st author was grad student).
Co-author
- has made a significant contribution to a journal article.
- Somewhat less in percentage to first author and so on for second, third, fourth and rest.
- also shares responsibility and accountability for the results.

Last Author
- is usually the group leader or PI who may have given significant intellectual inputs and supervised the work, but might not have actively conducted the experiments or written the manuscript.
- is also often the corresponding author.

Corresponding / primary author
- is usually the senior author who provides the intellectual input and designs and approves the protocols to be followed in the study.
- takes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process.
- ensures that all the journal’s administrative requirements and responsibility for all aspects of a publication.
Consideration and Sequence of Authorship

• Authorship consideration is usually all of the researchers’ contribution to that project.

• The criteria for Order/Sequence of Authorship consideration is usually all of percentage of their contribution to that project.

• Researchers themselves/author group and not the editors decide which individuals have contributed sufficiently to earn the designation “author.”

• Authors are usually listed in their order of importance, with the designation first or last author carrying special weight.

However, there are no universally accepted standards for assigning authorship.
Example:

Arrangement of author list in a meaningful order for multi-author paper publication

<table>
<thead>
<tr>
<th>Contribution to a research paper</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept development</td>
<td>4</td>
</tr>
<tr>
<td>Research Design</td>
<td>4</td>
</tr>
<tr>
<td>Research supervision</td>
<td>2</td>
</tr>
<tr>
<td>Study material collection (paid job)</td>
<td>1</td>
</tr>
<tr>
<td>Study material collection by the researcher</td>
<td>2</td>
</tr>
<tr>
<td>Data collection (paid job)</td>
<td>1</td>
</tr>
<tr>
<td>Data collection by the researcher</td>
<td>3</td>
</tr>
<tr>
<td>Data processing</td>
<td>3</td>
</tr>
<tr>
<td>Data Analysis and interpretation</td>
<td>4</td>
</tr>
<tr>
<td>Literature review</td>
<td>5</td>
</tr>
<tr>
<td>Writing the paper</td>
<td>5</td>
</tr>
<tr>
<td>Revising the article</td>
<td>4</td>
</tr>
<tr>
<td>English language editing services (copy editing and proofreading) – (paid job)</td>
<td>1</td>
</tr>
<tr>
<td>Content editing services</td>
<td>3</td>
</tr>
</tbody>
</table>

Journal of Academic Ethics (https://doi.org/10.1007/s10805-020-09375-0)
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Other Categories of Authorship
that may be acceptable in certain circumstances

Group Authorship.
• Group authorship may be appropriate when a group of researchers has collaborated on a project, such as a multicenter trial, a consensus document, or an expert panel.
• Because it can be inaccurate and impossible to list all collaborators (some would not meet basic ICMJE authorship criteria and byline space may preclude such a listing).

Deceased or Incapacitated Authors.
• For cases in which a co-author dies or is incapacitated during the writing, submission, or peer-review process, co-authors should obtain disclosure and copyright documentation from a familial or legal proxy.
Unacceptable / Inappropriate types of authorship

**Guest authorship.**
- has been defined as authorship based solely on an expectation that inclusion of a particular name will improve the chances that the study will be published or increase the perceived status of the publication.

**Gift (Honorary or Courtesy or Prestige) authorship.**
- is credit, offered from a sense of obligation or tribute within the context of an anticipated benefit, to an individual who has not contributed to the work.

**Ghost authorship.**
- participate in a significant contribution to the work without disclosed in the author byline or Acknowledgments.

**Anonymous Authorship.**
- Because authorship should be transparent and requires public accountability, it is not appropriate to use pseudonyms or to publish scientific reports anonymously.
Non-Author Contributors
(Who should not be an author)

• Contributors who meet fewer than all 4 of the above criteria for authorship should not be listed as authors, but they should be acknowledged.
• Individuals who have made less substantial contributions should be identified in the Acknowledgments.
• Examples of activities that alone (without other contributions) do not qualify a contributor for authorship are:
  - participating solely acquisition of funding
  - general supervising overall activities of a research group,
  - participating solely in collection of data,
  - general administrative support,
  - routine technical support,
  - writing assistance,
  - technical editing,
  - language editing, and
  - proof reading.
Responsibilities of an author  
(Responsible authorship)

1. All authors meet authorship criteria.
2. Authorship criteria should be agreed by all investigators at an early stage of research / when starting a project.
3. Each co-author is responsible for the content of all appropriate portion of the manuscript as well as integrity of the research work.
4. Authors should have confidence in contributions of their co-authors.
5. An individual retain right to refuse the authorship
6. Submit accurate data and ensure the research integrity.
7. Submit an original work that have not been previously published nor submitted to another journal.
Responsibilities of an author
(Responsible authorship)

9. Have **reviewed** and approved the manuscript.
10. Obtain **approval** of all authors for the final manuscript to be submitted.
11. If authors request removal or addition of an author after manuscript submission or publication, journal editors should seek an explanation and signed statement of agreement for the requested change from all listed authors and from the author to be removed or added.
12. Submit **statements detailing each author's contributions** to be included in each publication if being requested by editor.
In Summary, an authorship

- provides credit for an individual’s contributions to a study and carries accountability.
- is important to the reputation and professional advancement.
- is important academic, social and financial implications.
Case Example

Responsible Conduct of Research and Ethical Publishing Practices: A Proposal to Resolve ‘Authorship Disputes’ over Multi-Author Paper Publication

Satya Sundar Sethy

Published online: 20 May 2020
© Springer Nature B.V. 2020

Abstract
Responsible conduct of research and ethical publishing practices are debatable issues in the higher education literature. The literature suggests that ‘authorship disputes’ are associated with multi-author paper publication and linked to ethical publishing practices. A few research studies argue authorship matters of a multi-author paper publication, but do not explain how to arrange author list meaningfully in a multi-author paper. How is a principal author of a multi-author paper to be decided? The literature also does not clarify whether language editor(s) could claim authorship for a research paper publication? The paper adopts qualitative methodology that subsumes descriptive, evaluative, and inter-
Authorship is crucial to your success as an academic

The most sensitive part of writing a paper
Publication is the final stage of research and therefore a responsibility for all researchers.
Publication

- The word **publication** means the **act of publishing**, and also refers to any printed copies.
- Is formal, well structured and controlled.

Preparing a Manuscript for Submission to a Medical Journal

- **Title Page**
- **Abstract**
- **Introduction**
- **Methods**
- **Results**
- **Discussion**
- **Acknowledgement**
- **References**
- **Tables**
- **Illustrations (Figures)**

Each element of a publication serves an important purpose and must be carefully prepared to make sure it serves that purpose.
Writing for Publication

<table>
<thead>
<tr>
<th>Part</th>
<th>Section</th>
<th>Key characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX</td>
<td>Manuscript title</td>
<td>Most read - short - informative - reflects manuscript content</td>
</tr>
<tr>
<td>INDEX</td>
<td>Abstract</td>
<td>Summary of IMRAD sections - must stand alone - prepare it at the end</td>
</tr>
<tr>
<td>INDEX</td>
<td>Keywords</td>
<td>Used for indexing - avoid duplication of title words - not too general or too specific</td>
</tr>
</tbody>
</table>
“What question was studied?”
Background - state-of-the-art - definitions - objectives

“How was the research question studied?”
Study design - methods - operationalisation of integration

“What are the findings of the study?”
Clarity - new knowledge - no interpretation of data

“What do the findings mean?”
Generalisation - unexpected results - link to other findings

“What can be learned from the study?”
No summary - present only conclusions justified by results

IMRAD

Introduction
Methods
Results
Discussion
Conclusion
Acknowledgments

- Acknowledge help of others - list research grants

References

- Only internationally accessible references - only published or accepted material - list only references used in paper

Appendix

- Additional data (if applicable)
Responsible Publication (Publication Ethics)

Ethical standards for publication is essential and exist to ensure;
1. High Quality scientific publications
2. Public Trust in scientific findings
3. People receive Credit for their ideas

Make your research count, publish ethically
Who are responsible?

- Authors
- Reviewers
- Editors
- Publishers

As researchers, you can make valuable and lasting contributions to the health and future of society.

Understanding the ethical boundaries in scientific research and publishing is a key step in making sure your work gets off to the best start. From there, anything is possible.

The Ethics in Research & Publication program is the collaboration of an independent panel of experts in research and publishing ethics and Elsevier. The materials on this website have been developed to provide resources and tools so you can proceed confidently.

Scientific truth is the foundation of scientific advancement. Present your work with the intellectual integrity that the scientific community expects.

Make your research count, publish ethically.
Responsible Research Publication
( International Standards for Author)
A position statement developed at the 2nd World Conference on Research Integrity, Singapore, July 22-24, 2010

• This document aims to establish international standards for authors of scholarly research publications and to describe responsible research reporting practice.

• These standards should be endorsed by research institutions, funders, and professional societies; promoted by reviewers, editors and publishers for aiding in accuracy and integrity research work.

(www.elsevier.com>promis_misc>JACS-Ethics in Publishing Statement)
1. Soundness and reliability

1.1 The research being reported should have been conducted in an ethical and responsible manner and follow all relevant legislation.
1.2 The research being reported should be sound and carefully executed.
1.3 Researchers should use appropriate methods of data analysis and display.
1.4 Authors should take collective responsibility for their work and for the content of their publications.
2. Honesty

2.1 Researchers should present their results honestly and without fabrication, falsification or inappropriate data manipulation.

2.2 Researchers should strive to describe their methods and to present their findings clearly and unambiguously.

2.3 Reports of research should be complete. They should not omit inconvenient, inconsistent or inexplicable findings or results.

2.4 Research funders and sponsors should not be able to veto publication of findings that do not favour their product or position.

2.5 Authors should alert the editor promptly if they discover an error in any submitted, accepted or published work. Authors should cooperate with editors in issuing corrections or retractions when required.

2.6 Authors should represent the work of others accurately in citations and quotations. (Plagiarism)

2.7 Authors should not copy references from other publications if they have not read the cited work.
3. Balance

3.1 New findings of previous research should be presented in the context. The work of others should be fairly represented. Scholarly reviews and syntheses of existing research should be complete, balanced, and should include findings regardless of whether they support the hypothesis or interpretation being proposed.

3.2 Study limitations should be addressed in publications.
4. Originality

4.1 Authors should adhere to publication requirements that submitted work is original and has not been published elsewhere in any language. Work should not be submitted concurrently to more than one publication.

4.2 Applicable copyright laws and conventions should be followed. Copyright material (e.g. tables, figures or extensive quotations) should be reproduced only with appropriate permission and acknowledgement. (Plagiarism)

4.3 Relevant previous work and publications, both by other researchers and the authors’ own, should be properly acknowledged and referenced.

4.4 Data, text, figures or ideas originated by other researchers should be properly acknowledged and should not be presented as if they were the authors’ own. Original wording taken directly from publications by other researchers should appear in quotation marks with the appropriate citations.

4.5 Authors should inform editors if findings have been published previously or if multiple reports or multiple analyses of a single data set are under consideration for publication elsewhere.

4.6 Multiple publications arising from a single research project should be clearly identified as such and the primary publication should be referenced.
5. Transparency

5.1 All sources of research funding, including direct and indirect financial support, supply of equipment or materials, and other supports should be disclosed.

5.2 Authors should disclose the role of the research funder(s) or sponsor (if any) in the research design, execution, analysis, interpretation and reporting.

5.3 Authors should disclose relevant financial and non-financial interests and relationships that might be considered likely to affect the interpretation of their findings or which editors, reviewers or readers might reasonably wish to know.
6. Appropriate authorship and acknowledgement

6.1 The research literature serves as a record not only of what has been discovered but also of who made the discovery. The authorship of research publications should therefore accurately reflect individuals’ contributions to the work and its reporting.

6.2 In cases where major contributors are listed as authors while those who made less substantial, or purely technical, contributions to the research or to the publication are listed in an acknowledgement section, the criteria for authorship and acknowledgement should be agreed at the start of the project.

6.3 Researchers should ensure that only those individuals who meet authorship criteria (i.e. made a substantial contribution to the work) are rewarded with authorship and that deserving authors are not omitted.

6.4 All authors should agree to be listed and should approve the submitted and accepted versions of the publication. Any change to the author list should be approved by all authors including any who have been removed from the list.

6.5 Authors should not use acknowledgements misleadingly to imply a contribution or endorsement by individuals who have not, in fact, been involved with the work or given an endorsement.
7. Accountability and responsibility

7.1 All authors should have read and be familiar with the reported work and should ensure that publications follow the principles set out in these guidelines.

7.2 Authors must also follow relevant journal standards.

7.3 Authors should work with the editor or publisher to correct their work promptly if errors or omissions are discovered after publication.

7.4 Authors should respond appropriately to post-publication comments and published correspondence.
8. Adherence to peer review and publication conventions

8.1 Authors should **follow publishers’ requirements** that work is not submitted to more than one publication for consideration at the same time.

8.2 Authors should **inform the editor if they withdraw their work from review**, or choose not to respond to reviewer comments after receiving a conditional acceptance.

8.3 Authors should **respond to reviewers’ comments** in a professional and timely manner.

8.4 Authors should **respect publishers’ requests for press embargos and should not generally allow their findings to be reported in the press if they have been accepted for publication (but not yet published)** in a scholarly publication.
9. Responsible reporting of research involving humans or animals

9.1 Appropriate approval, licensing or registration should be obtained before the research begins and details should be provided in the report.

9.2 If requested by editors, authors should supply evidence that reported research received the appropriate approval and was carried out ethically.

9.3 Researchers should not generally publish or share identifiable individual data collected in the course of research without specific consent from the individual (or their representative).

9.4 The appropriate statistical analyses should be determined at the start of the study and a data analysis plan for the pre-specified outcomes should be prepared and followed.

9.5 Researchers should publish all meaningful research results that might contribute to understanding. In particular, there is an ethical responsibility to publish the findings of all clinical trials.

9.6 Authors should supply research protocols to journal editors if requested (e.g. for clinical trials) so that reviewers and editors can compare the research report to the protocol to check.
Improper practices of Publication

Some publication practices should be avoided.

- **Duplicate publication**
  Duplicate publication is the practice of publishing the same information a second time without acknowledging the first publication. This practice not only wastes time and resources but can also distort the research record and endanger public health.

- **Salami publication**
  Salami publication (sometimes called bologna or trivial or redundant publication) is the practice of dividing one significant piece of research into a number of small experiments (least publishable units or LPUs), simply to increase the number of publications.

- **Premature public statements**
  Researchers should follow standard publication practices when making research results public and not issue premature public statements about their work before it has been reviewed.
Plagiarism

• Is “the appropriation of another person’s ideas, processes, results or word without giving appropriate credit.
• Copying of sentences without referencing
• Theft of intellectual property
• Different types
  - Plagiarism of ideas (theft of new idea or theory)
  - Plagiarism of text (words/whole paragraph)
  - Self-plagiarism (two different publications with same results)
  - Collusion (Someone else’s work with your name on it)
  - Patch writing (Copying parts of another work and changing the a few words or order of the words)
IMPORTANCE OF PUBLICATION

• Scholarly publications are expected to provide a detailed and permanent record of research.

• Because publications form the basis for both new research and the application of findings, they can affect not only the research community but also, indirectly, society at large.

• Researchers therefore have a responsibility to ensure that their publications are honest, clear, accurate, complete and balanced, and should avoid misleading, selective or ambiguous reporting.
Case Example

Retraction—Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis

After publication of our Lancet Article, several concerns were raised with respect to the veracity of the data and analyses conducted by Sangisphere Corporation and its founder and our co-author, Sapan Desai, in our publication. We launched an independent third-party peer review of Sangisphere with the consent of Sapan Desai to evaluate the origin of the database elements, to confirm the completeness of the database, and to replicate the analyses presented in the paper.

Our independent peer reviewers informed us that Sangisphere would not transfer the full dataset, client contracts, and the full ISO audit report to their servers for analysis as such transfer would violate client

Introduction

The above-mentioned effective treatment against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection has led clinicians to redirect drugs that are known to be effective for other medical conditions to the treatment of COVID-19. Key among these repurposed therapeutic agents are the antimalarial drug chloroquine and its analogue hydroxychloroquine, which is used for the treatment of autoimmune diseases such as systemic lupus erythematosus and rheumatoid arthritis. These drugs have been shown in laboratory conditions to have antiviral properties as well as immunomodulatory effects. However, the use of this class of drugs for COVID-19 is based on a small number of anecdotal

Background

Hydroxychloroquine or chloroquine, often in combination with a second-generation macrolide, are being widely used for treatment of COVID-19, despite no conclusive evidence of their benefit. Although generally safe when used for approved indications such as autoimmune disease or malaria, the safety and benefit of these treatment regimens are poorly evaluated in COVID-19.

Methods

We did a multinational registry analysis of the use of hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19. The registry comprised data from 671 hospitals in six continents. We included patients hospitalised
Summary

• The research being reported should have been conducted in an ethical and responsible manner and should comply with all relevant legislation.

• Researchers should present their results clearly, honestly, and without fabrication, falsification or inappropriate data manipulation.

• Researchers should strive to describe their methods clearly and unambiguously so that their findings can be confirmed by others.
• Researchers should adhere to publication requirements that submitted work is original, is not plagiarised, and has not been published elsewhere.
• Authors should take collective responsibility for submitted and published work.
• The authorship of research publications should accurately reflect individuals’ contributions to the work and its reporting.
• Funding sources and relevant conflicts of interest should be disclosed.
To avoid
• Improper author contribution
• Data Fabrication
• Data Falsification
• Data/Image manipulation
• Plagiarism
• Multiple submission
• Duplicate / Redundant publication

To Consider
• Author Contribution
• Guidelines on submission
• Human right
• Privacy
• Confidentiality
• Culture and heritage
• Conflict of interests
• Peer Reviewer
Science

Science: logic, clarity and precision

"Without publication, science is dead"

Dr. Gerard Piel (1915 – 2004)
Chairman – Scientific American Magazine

As Researchers, You Can Make Valuable and Lasting Contributions to the Health and Future of Society.

Make Your Research Count, Publish Ethically.
References

- The Office of Research Integrity (ORI) Introduction to RCR: Authorship and Publication https://ori.hhs.gov/content/Chapter-9-Authorship-and-Publication-Responsible-publication)
- Research ethics, publication ethics and good practice guidelines (https://www.equator-network.org/library)
- Conventions of Scientific Authorship (Science/AAAS) (www.sciencemag.org>careers>2010/04>conventions-scientific-authorship)
- Ethical Standards for publication (http://www.biomedcentral.com/getpublished/writing-resources/publication-ethics)
- Guidelines on how to write and publish a peer-reviewed research paper. (http://buff.ly/2n820pA)