Authorship in oral and maxillofacial surgery
Gadjradj, P.S.; Jalimsing, M.; Jalimsing, S.; Voigt, I.

Citation
Gadjradj, P. S., Jalimsing, M., Jalimsing, S., & Voigt, I. (2021). Authorship in oral and maxillofacial surgery. Journal Of Maxillofacial And Oral Surgery, 20(2), 330-335. doi:10.1007/s12663-021-01538-9

Version: Publisher's Version
License: Creative Commons CC BY 4.0 license
Downloaded from: https://hdl.handle.net/1887/3196157

Note: To cite this publication please use the final published version (if applicable).
Authorship in Oral and Maxillofacial Surgery

Pravesh S. Gadjradj · Mamta Jalimsing · Sandhia Jalimsing · Istifari Voigt

Abstract
Background and Objective According to the International Committee of Medical Journal Editors (ICMJE), authorship should be offered based on fulfilling four criteria. Honorary authorship (HA) is a term used for authors enlisted who did not fulfill these criteria. The objective of this study was to determine the proportion of HA in the field of oral and maxillofacial surgery.

Material and Methods In 2020, a twenty-two question survey was sent to corresponding authors of four high-impact journals in the field of oral and maxillofacial surgery. The survey covered (1) demographics, (2) awareness of authorship guidelines and decision-making of authorship, and (3) honorary authorship.

Results The response rate was 24.8%. Of the respondents, 81.1% was aware of the issue of guidelines on authorship, while 56.3% was aware of the issue of HA. Yet, 15.5% of the respondents felt that one or more of their co-authors did not deserve authorship based on the ICMJE-guidelines.

Conclusion Based on the estimated proportions of HA, attempts should be made by universities, medical journals and individual researchers to further reduce authorship misuse.

Keywords Authorship · Guidelines · Oral and maxillofacial surgery

Abbreviations
HA Honorary authorship
ICMJE International Committee of Medical Journal Editors
BJOMS British Journal of Oral and Maxillofacial Surgery
JOMS Journal of Oral and Maxillofacial Surgery
JCMS Journal of Cranio-Maxillofacial Surgery
IJOMS International Journal of Oral and Maxillofacial Surgery

Introduction
Authoring scientific publications can provide clinicians opportunities to further their clinical or scientific career. According to the International Committee of Medical Journal Editors (ICMJE), authorship should be offered based on fulfilling four criteria [1]:

1. “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 [1].”

Mamta Jalimsing, Sandhia Jalimsing and Istifari Voigt have contributed equally to this work.

Pravesh S. Gadjradj
p.gadjradj@erasmusmc.nl

1 Department of Neurosurgery, Leiden University Medical Center, University Neurosurgical Center Holland (UNCH), Albinusdreef 2, 2333 ZA Leiden, The Netherlands

2 Faculty of Medicine, Erasmus MC: University Medical Center Rotterdam, Rotterdam, The Netherlands

© The Author(s) 2021
Honorary authorship (HA) is a term used for authors enlisted who do not fulfill these criteria. As HA gives inappropriate credit to authors, it is classified as scientific misconduct in the medical literature [2]. It is unknown to what extent HA is an issue in the maxillofacial literature.

Therefore, the aim of the current study is to analyze the proportion of HA in different journals in various journals in the oral and maxillofacial surgery.

Material and Methods

In 2020, a twenty-two question survey was sent to corresponding authors of articles published in 2019 in four high-impact journals in the field of oral and maxillofacial surgery. Editorials, manuscript correspondence and articles with only one author were excluded. The survey covered (1) demographics, (2) awareness of authorship guidelines and decision-making of authorship, and (3) honorary authorship [3–6]. The survey contained a list of “non-authorship” tasks such as obtaining funding. Authors performing one or more of these tasks and not contributing to the manuscript otherwise, are defined as “ICMJE-defined HA.” Furthermore, respondents were asked if they felt that one or more of their co-authors did not deserve authorship. This was defined as “self-perceived” HA.

Results

Demographics

In total, 227 out of the 914 sent surveys were answered, leading to a response rate of 24.8% (see Fig. 1). Most respondents were employed as oral and maxillofacial surgeon (65.2%), while they represent working locations from 40 different countries (see Table 1).

Awareness of Authorship Guidelines and Decision-Making of Authorship

Before the survey, 81.1% was aware of the ICMJE-guidelines, while 56.3% was aware of the issue of HA. Regarding the publication surveyed, the order of authorship was mostly decided by authors as a group (40.1%), followed by the first author (29.1%) and senior author (22.5%) deciding. The order of authors was mostly determined by the amount each contributed (42.9%).

Honorary Authorship

Overall, the proportion of self-perceived HA was 15.5%, which ranges from 5.5 to 21.3% among the journals surveyed, while the proportion ICMJE-defined HA was 49.8% ranging from 41.0% to 57.6%. Continent of employment and the journal surveyed were not associated with HA.

Figure 2 gives an overview of opinions on authorship issues. Most respondents (strongly) agreed (68.3%) that journals asking for “a statement of contribution” before submitting a work, does not prevent HA.

Discussion

The present study shows that the vast majority of the respondents are aware of the ICMJE-guidelines and agree with them. Despite this awareness of authorship guidelines, the proportion of self-perceived HA was 15.5%, while the proportion of ICMJE-defined HA was 49.8%.

Some limitations have to be acknowledged. First, the response rate is 24.8% which may introduce selection bias.
Table 1  Answers on questions regarding demographics, authorship guidelines and authorship decision-making

| Question                                                                 | N  | (%)    |
|--------------------------------------------------------------------------|----|--------|
| **Peer reviewed articles authored**                                      |    |        |
| < 5                                                                      | 35 | (15.4%)|
| 6 to 15                                                                  | 63 | (27.8%)|
| 16 to 25                                                                 | 29 | (12.8%)|
| > 25                                                                     | 100| (44.1%)|
| **Primary profession**                                                   |    |        |
| Oral and Maxillofacial surgeon                                          | 148| (65.2%)|
| Dentist                                                                  | 23 | (10.1%)|
| Researcher                                                               | 26 | (11.5%)|
| Other                                                                    | 3  | (1.3%) |
| **Tenure (years)**                                                       |    |        |
| 1 to 2                                                                   | 18 | (7.9%) |
| 3 to 5                                                                   | 35 | (15.4%)|
| 6 to 10                                                                  | 41 | (18.1%)|
| > 10                                                                    | 133| (58.6%)|
| **Aware of the ICMJE-guidelines on authorship**                         |    |        |
| Yes                                                                      | 184| (81.1%)|
| No                                                                       | 43 | (18.9%)|
| **If unaware, aware of other authorship guidelines**                    |    |        |
| Your institution guidelines                                              | 74 | (71.2%)|
| No guidelines are followed                                               | 21 | (20.2%)|
| Other                                                                    | 9  | (8.7%) |
| **Before taking the survey, aware of the general issue of honorary authorship** |    |        |
| Yes                                                                      | 108| (56.3%)|
| No                                                                       | 84 | (43.8%)|
| **Is there a senior member, who is automatically enlisted as author on all manuscripts?** |    |        |
| Yes                                                                      | 56 | (24.8%)|
| No                                                                       | 166| (73.5%)|
| Don’t Know                                                               | 4  | (1.8%) |
| **If so, do you feel this is justified?**                               |    |        |
| Never justified                                                          | 47 | (29.9%)|
| Rarely justified                                                         | 33 | (21.0%)|
| Sometimes justified                                                      | 43 | (27.4%)|
| Most of the time justified                                               | 18 | (11.5%)|
| Always justified                                                         | 16 | (10.2%)|
| **Ever been involved in authorship dispute**                            |    |        |
| Yes                                                                      | 64 | (28.2%)|
| No                                                                       | 162| (71.4%)|
| Other                                                                    | 1  | (0.4%) |
| **Has a professional relationship been damaged because of an authorship dispute?** |    |        |
| Yes                                                                      | 164| (73.9%)|
| No                                                                       | 58 | (26.1%)|
| **Regarding your paper, who decided the order of authorship?**          |    |        |
| Yes                                                                      | 148| (65.2%)|
| No                                                                       | 79 | (34.8%)|

 Springer
| Question                                                                 | N (%)       |
|-------------------------------------------------------------------------|-------------|
| First author                                                            | 66 (29.1%)  |
| Senior author                                                           | 51 (22.5%)  |
| Authors decided as a group                                              | 91 (40.1%)  |
| The funding source of this study                                        | 4 (1.8%)    |
| Other                                                                   | 15 (6.6%)   |
| **What was your primary role in the article?**                          |             |
| Wrote all or most of the article                                        | 161 (70.9%) |
| Wrote minor parts of the article                                        | 3 (1.3%)    |
| Only revised the article and made corrections and changes in content    | 9 (4.0%)    |
| I supervised the writing of others                                      | 19 (8.4%)   |
| Performed majority of data collection/ analysis                         | 14 (6.2%)   |
| Other                                                                   | 21 (9.3%)   |
| **Gender**                                                              |             |
| Male                                                                    | 170 (74.9%) |
| Female                                                                  | 57 (25.1%)  |
| **Continent employed**                                                  |             |
| Africa                                                                  | 8 (3.5%)    |
| Asia and Oceania                                                        | 64 (28.2%)  |
| Europe                                                                  | 100 (44.1%) |
| North America                                                           | 20 (8.8%)   |
| South America                                                           | 35 (15.4%)  |
| **Study funding (multiple answers possible)**                           |             |
| (Pharmaceutical) Industry                                               | 0           |
| University sponsored                                                    | 48 (21.1%)  |
| No funds obtained                                                       | 172 (75.8%) |
| Other                                                                   | 12 (5.3%)   |
| **What criteria did you use to decide the order of authorship?**        |             |
| The authors are listed                                                  | 226         |
| In the order of the amount each contributed                             | 97 (42.9%)  |
| In the order of the amount each contributed, except the last author,    | 15 (6.6%)   |
| who is the most senior in the group but did not contribute to the       |             |
| study                                                                   |             |
| In the order of the amount each contributed, except the last author,    | 109 (48.2%) |
| who provided the concept, supervision and responsibility for all steps  |             |
| In alphabetical order                                                   | 1 (0.4%)    |
| Other                                                                   | 4 (1.8%)    |
| **Did anyone suggest to include an honorary author?**                   |             |
| Yes                                                                     | 39 (17.4%)  |
| No                                                                      | 185 (82.6%) |
| **Did any of your coauthors performed only one or more “non-authorship”** |             |
| tasks and nothing else related to study design, manuscript preparation  |             |
| etc.?                                                                   | 227         |
| BJOMS                                                                   | 22 (44.9%)  |
| JOMS                                                                    | 16 (41.0%)  |
| JCMS                                                                    | 34 (57.6%)  |
| IJOMS                                                                   | 41 (51.3%)  |
| **Which tasks were performed? (multiple answers possible)**             |             |
| Supervising/ recruiting coauthors                                        | 28 (12.3%)  |
Second, we surveyed corresponding authors. Corresponding authors might consist of more senior authors which can give a lower estimate of HA. Finally, recall bias could be introduced due to the retrospective nature of the survey. Previous published studies suggest some solutions to reduce the proportion of HA. For example, a solution might be the implementation of courses on publication ethics for researchers. Another solution might be the referral to and

Table 1 continued

| Question                                                                 | N (%)          |
|-------------------------------------------------------------------------|----------------|
| Obtaining funding or material support                                   | 15 (6.6%)      |
| Recruiting study subjects                                              | 34 (15.0%)     |
| Performing cases used in the study                                      | 44 (19.4%)     |
| Contributing illustrations                                              | 23 (10.1%)     |
| Reviewing the manuscript                                                | 78 (34.4%)     |
| Approving the manuscript before submission                              | 57 (25.1%)     |
| Signing statement of copyright transfer                                 | 35 (15.4%)     |

Do you believe that any of your coauthors enlisted for the current article did not make sufficient contributions to merit coauthorship?  
BJOMS: 8 (16.3%)
JOMS: 2 (5.5%)
JCMS: 8 (13.6%)
IJOMS: 17 (21.3%)

Selection of answers on “what does authorship mean to you?”

“That the authors contribute NO freeloaders!”
“It means a lot, especially to be first author on a publication. This is, as specific criteria in terms of publications are requested by the university. It is also important in which journal the paper is published. Higher ranked journals bring more points with regards to the university criteria than lower ranked journals.”
“I have previously felt pressure to put senior department members as authors on papers for which they did not contribute. This practice should and must change.”
“It provides me a sense of accomplishment and respect.”
“My work my name. Not my work, don’t want my name anywhere!”

Fig. 2 Opinions on authorship issues
endorsement of authorship guidelines by medical journals. Furthermore, implementing a support system to discuss and resolve authorship disputes may also help reduce the proportion of HA [7].

Based on the estimated proportions of HA, attempts should be made by universities, medical journals and individual researchers to further reduce authorship misuse. These attempts should not only focus on raising awareness of authorship guidelines but also on facilitating open discussions of authorship issues for both junior and senior researchers.

Declarations

Conflict of interest

The authors have no conflicts of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

Funding No funding was received for this work.

References

1. Defining the Role of Authors and Contributors: International Committee of Medical Journal Editors. Available from: http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html
2. Martinson BC, Anderson MS, de Vries R (2005) Scientists behaving badly. Nature 435(7043):737–738
3. Flanagin A, Carey LA, Fontanarosa PB, Phillips SG, Pace BP, Lundberg GD et al (1998) Prevalence of articles with honorary authors and ghost authors in peer-reviewed medical journals. JAMA J Am Med Assoc 280(3):222–224
4. Wislar JS, Flanagin A, Fontanarosa PB, Deangelis CD (2011) Honorary and ghost authorship in high impact biomedical journals: a cross sectional survey. BMJ 343:d6128
5. Gadjradj PS, Fezzazi RE, Meppelder CA, Rietdijk WJ, Matabadal NN, Verhemel A et al (2018) Letter: honorary authorship in neurosurgical literature: a cross-sectional analysis. Neurosurgery 82(1):E25–E28
6. Reinisch JF, Li WY, Yu DC, Walker JW (2013) Authorship conflicts: a study of awareness of authorship criteria among academic plastic surgeons. Plast Reconstr Surg 132(2):303e-310
7. Aliukonis V, Poskute M, Gefenas E (2020) Perish or publish dilemma: challenges to responsible authorship. Medicina (Kaunas). 56(3):123

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.