Honorary Authorships in the Ophthalmological Literature

Hannah C. Hardjosantoso¹, Yalda Dahi², Alex Verhemel², Ingri Dahi², Pravesh S. Gadiradj²

¹Department of Ophthalmology, Erasmus MC: University Medical Center, Rotterdam, The Netherlands, ²Department of Neurosurgery, Leiden University Medical Center, Leiden, The Netherlands

Abstract

Purpose: To report the prevalence of honorary authorship (HA) among different journals in the ophthalmological literature

Methods: An online survey was conducted among corresponding authors of six journals with the highest impact factors in the ophthalmological field. The survey consists of questions regarding (1) demographics, (2) awareness of authorship guidelines, and (3) application of authorship guidelines on their current surveyed article. Furthermore, respondents were asked if they felt that according to their understanding of the International Committee of Medical Journal Editors (ICMJE) guidelines, a coauthor on their current article did not deserve authorship (perceived HA). Furthermore, respondents were asked if coauthors performed solely nonauthor tasks (ICMJE-defined HA).

Results: Out of the 1688 surveys sent, 333 were returned, leading to a response rate of 19.7%. Eighty-four and a half percent of all respondents were aware of the ICMJE guidelines. When deciding on order of authorship, most authors decided as a group (43.8%), followed by the senior author deciding (30.1%), and 77 articles were decided by the first author (23.4%). When asked if respondents believed that any of their coauthors did not make sufficient contributions to be included as an author, 8.8% affirmed. One hundred and thirty-one respondents stated that any of their coauthors performed only one or more nonauthor tasks, making the rate of ICMJE-defined HA 39.8%.

Conclusions: HA is present throughout all journals surveyed despite endorsement of the ICMJE guidelines by these same journals. The discrepancy between self-perceived HA and ICMJE-defined HA suggests the necessity for modifications to our authorship system or a contemporary revision to the ICMJE guidelines.

Keywords: Honorary authorship, International Committee of Medical Journal Editor criteria, Ophthalmology

Introduction

Authorship is supposed to represent the responsibility and accountability for published scientific work. It is an important medium to promote an academic’s status. In order to give proper credit to each individual that has contributed significantly to the published work, the International Committee of Medical Journal Editors (ICMJE) has set up guidelines consisting of four specific criteria:

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.”

To qualify for authorship, the authors should meet all four criteria. If an author did not meet all criteria and is still enlisted, this authorship is deemed as guest or honorary authorship (HA). HA has been studied in fields such as...
radiology and high-impact biomedical journals, in which percentages of 21.0–62.9% can be found, with research from Asia and Europe containing higher rates of HA.²,⁴ It is unknown if the ophthalmological field follows a similar trend. In this study, we aimed to assess current awareness on the ICMJE authorship guidelines and put specific emphasis on the prevalence of HA in ophthalmology.

**METHODS**

The six journals with the highest impact factors in the ophthalmological field in 2017 were selected. These journals are *Ophthalmology, American Journal of Ophthalmology, British Journal of Ophthalmology, Journal of Cataract and Refractive Surgery, Retina*, and *Experimental Eye Research*. All journals were screened for original reports. Editorials, commentaries, and opinion articles were excluded. An online survey, based on previous studies, was conducted among corresponding authors.⁴,⁵ If authors published multiple papers in 1 year in a journal, they would only receive one survey, and single-author articles were not addressed. First, questionnaires were mailed in May 2018 using SurveyMonkey, with reminders sent after one and 2 months.

The survey consisted of questions regarding (1) demographics, (2) awareness on authorship guidelines, and (3) application of authorship guidelines on their current article. Furthermore, respondents were asked if they felt that according to their understanding of the ICMJE guidelines, a coauthor on their current article did not deserve authorship (perceived HA). Furthermore, respondents were asked if coauthors performed solely nonauthor tasks such as obtaining funding or material support or recruiting study subjects (ICMJE-defined HA).

**RESULTS**

After screening 2526 eligible articles, 1688 surveys were mailed to corresponding authors, 333 of which were completed (response rate 19.7%). Response rates per question ranged from 98.5% to 100%. Respondents were located in 49 different countries, and the majority of the respondents were located in the USA (24.9%). The majority of the respondents (69.9%) were ophthalmologists.

Table 1 shows the results regarding awareness of authorship guidelines and decision-making on authorship. Eighty-four and a half percent of all respondents were aware of the ICMJE guidelines. Respondents who were not aware of these guidelines used department guidelines (60.0%), 34% did not follow any guidelines, and 6% followed journal guidelines. Seventeen percent of all respondents indicated that a senior member of their department is automatically enlisted as an author in all submissions. When deciding the order of the authors, most authors decided as a group (43.8%), followed by the senior author deciding (30.1%) while 77 articles were decided by the first author (23.4%). When asked if respondents believed that any of their coauthors did not make sufficient contributions to be included as an author, 8.8% affirmed. One hundred and thirty-one respondents stated that any of their coauthors performed only one or more nonauthor tasks, making the rate of ICMJE-defined HA 39.8%. No differences in HA between continents (Africa, Asia and Oceania, Europe, North America, and South America) could be identified (Chi-squared test, *P* > 0.05).

**DISCUSSION**

The current study is the first to investigate HA in ophthalmological journals. Rates of self-perceived and ICMJE-defined HA were 8.8% and 39.8%, respectively. Both of these percentages could be considered low when compared to rates reported in other disciplines such as radiology, neurosurgery, and dermatology.²,³,⁶ Despite a growing trend of journals requiring authors to enlist contributions and growing awareness on HA throughout the years, HA seems to persist in biomedical research. Aside from reasons such as coercive authorship, reasons may also lie within the difference between practicing actual research and a theoretical guideline. This may be especially difficult when conducting multicenter research. Take, for instance, a paper in which a rare disease is studied, and 21 institutions have enrolled one patient. Should all these institutions have one investigator included as author based on enrolling one patient?

The ICMJE guidelines on authorship are accompanied by the following note:

“The criteria are not intended for use as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criterion #2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript.”

In the light of the above note, all the investigators enrolling a patient should also be able to fulfill criteria 2 and 3 and then be eligible for authorship. In cases of disagreement, the guidelines continue “If agreement cannot be reached about who qualifies for authorship, the institution (s) where the work was performed, not the journal editor, should be asked to investigate.”

The current study is not without limitations. One is the response rate of 19.7%. The lower the response, the higher the chances that selection bias will be introduced. On the one hand, it may lead to a higher actual rate of HA due to corresponding authors actually being the senior researcher who merits HA. On the other hand, authors to whom the issue of HA may not be relevant, may be more likely not to reply, and the actual rate of HA may be lower than measured. Evidence-based recommendations for minimum response rates are, however, scarce, and a response rate of 19.7% is comparable to those of other online surveys.²,³,⁶ Due to the study design, recall bias may also be introduced.
**Table 1: Awareness on authorship guidelines and decision-making on authorship**

| Survey question                                                                 | n  | (%)   |
|---------------------------------------------------------------------------------|----|-------|
| Before taking the survey, are you aware of these ICMJE authorship guidelines?   | 329| (100) |
| Yes                                                                             | 278| (84.5)|
| No                                                                              | 51 | (15.5)|
| If you were unaware of ICMJE guidelines, are you aware of other authorship guidelines? | 50 | (15.2)|
| Department or institution guidelines                                            | 30 | (60.0)|
| No guidelines were followed                                                      | 17 | (34.0)|
| Journal guidelines                                                             | 3  | (6.0)|
| Is there a senior member of your department who is automatically listed as an author in all submitted manuscripts? | 329| (100)|
| Yes                                                                             | 56 | (17.0)|
| No                                                                              | 260| (79.0)|
| Don’t know                                                                      | 13 | (4.0)|
| If so, do you feel this is justified?                                          | 58 | (17.6)|
| Never justified                                                                 | 8  | (13.8)|
| Rarely justified                                                                | 13 | (22.4)|
| Sometimes justified                                                             | 14 | (24.1)|
| Most of the time justified                                                      | 12 | (20.7)|
| Always justified                                                                | 11 | (19.0)|
| Before taking the survey, were you aware of the general issue of honorary authorship? | 329| (100)|
| Yes                                                                             | 176| (53.5)|
| No                                                                              | 153| (46.5)|
| Did anyone suggest that you include an honorary author?                         | 328| (100)|
| Yes                                                                             | 22 | (6.7)|
| No                                                                              | 306| (93.3)|
| Who decided the order of authorship?                                           | 329| (100)|
| Authors decided as a group                                                     | 144| (43.8)|
| Senior author                                                                   | 99 | (30.1)|
| First author                                                                    | 77 | (23.4)|
| The funding source of this study                                               | 1  | (0.3)|
| Other                                                                           | 8  | (2.4)|
| Which criteria did you use to decide the order of authorship?                   | 328| (100)|
| In the order of the amount each contributed, except the last author, who provided the concept, supervision, and responsibility for all working steps of the project | 163| (49.7)|
| In the order of the amount each contributed                                     | 131| (39.9)|
| In the order of the amount each contributed, except the last author, who is the most senior in the group but did not contribute to the study | 13 | (4.0)|
| In alphabetical order                                                           | 3  | (0.9)|
| Other                                                                           | 18 | (5.5)|
| Perceived honorary authorship                                                   | 2  | (6.3)|
| Ophthalmology                                                                   | 2  | (9.1)|
| Am J Ophthalmology                                                              | 3  | (6.4)|
| Exp Eye Res                                                                     | 10 | (10.1)|
| Brit J Ophthalmology                                                            | 12 | (13.5)|
| Retina                                                                          | 0  |      |
| J Cat Refr Surg                                                                  | 12 | (30.0)|
| ICMJE-defined honorary authorship                                               | 12 | (37.5)|
| Ophthalmology                                                                   | 9  | (40.9)|
| Am J Ophthalmology                                                              | 14 | (29.8)|
| Exp Eye Res                                                                     | 45 | (45.5)|
| Brit J Ophthalmology                                                            | 39 | (43.8)|
| Retina                                                                          | 12 | (30.0)|

ICMJE: International Committee of Medical Journal Editors

Despite these limitations, the results of this study show that HA is present throughout all journals surveyed despite endorsement of the ICMJE guidelines by these same journals. The discrepancy between self-perceived HA and ICMJE-defined HA suggests the necessity for modifications to our authorship system or perhaps a contemporary revision to the ICMJE guidelines.
Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

References
1. ICMJE. Guidelines on Authorship. Available from: http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html. [Last accessed on 2019 Jul 22].
2. Eisenberg RL, Ngo LH, Bankier AA. Honorary authorship in radiologic research articles: Do geographic factors influence the frequency? Radiology 2014;271:472-8.
3. Gadjradj PS, Fezzazi RE, Meppelder CA, Rietdijk WJ, Matabadal NN, Verhemel A, et al. Letter: Honorary authorship in neurosurgical literature: A cross-sectional analysis. Neurosurgery 2018;82:E25-E28.
4. Wislar JS, Flanagin A, Fontanarosa PB, Deangelis CD. Honorary and ghost authorship in high impact biomedical journals: A cross sectional survey. BMJ 2011;343:d6128.
5. Bonekamp S, Halappa VG, Corona-Villalobos CP, Mensa M, Eng J, Lewin JS, et al. Prevalence of honorary coauthorship in the American Journal of Roentgenology. AJR Am J Roentgenol 2012;198:1247-55.
6. Kayapa B, Jhingoer S, Nijsten T, Gadjradj PS. The prevalence of honorary authorship in the dermatological literature. Br J Dermatol 2018;178:1464-5.