EDITORIAL

Caught between a ghost and a gift: Navigating authorship issues

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Authorship is often considered to be an academic currency funding several aspects of an academic career.¹ Academic institutions are placing more pressure on academics, regardless of discipline or expertise, to author and co-author research outputs. Authorship currency funds promotions, travel opportunities, academic esteem, and some institutions even provide a cash incentive for publishing original research. It is therefore not surprising that phrases like 'publish or perish' and 'I should be writing' are of similar importance as 'I need coffee' and 'when is the deadline', in the vocabulary of most academics, whether they are primarily researchers or clinicians.

It comes as no surprise that this sought-after commodity is often misused, misinterpreted and abused, leading to widespread plagiarism and authorship misconduct. A PubMed search with 'authorship' in the title listed 778 articles in 2012;2 a similar search at the time of writing lists 1 366 articles, highlighting that issues surrounding authorship are on the increase. At the same time authorship conflicts are also on the increase and have become one of the main areas within academia requiring mediation or arbitration.3 Two of the main culprits in authorship misconduct include ghost and guest/gift authorship.4 Ghost authors are those contributing to a research study and subsequent manuscript, without being acknowledged as an author. The prevalence of ghost authorships has been reported to range between 2 and 75%, with the higher prevalence predominantly being in industry-initiated clinical trial protocols, with statisticians in particular being omitted from the author list.^{1,5} Gift, guest or honorary authorship is the exact opposite, where individuals are added to publications regardless of their not meeting authorship criteria. Gift authorships are typically granted to an individual in the hopes that it will increase the probability of being accepted by a journal, as a favour to a colleague or friend, or as a result of that individual's position in the direct environment,6 with especially junior and emerging investigators being susceptible to being taken advantage of, given their inexperience and vulnerability in their environment.7 An increased number of authors on a manuscript has been associated with an increased likelihood of gift authorship,6 which could potentially serve as a warning sign to journal editors. However, using this warning sign in isolation could potentially be problematic, especially in the complex structure of multi-disciplinary collaboration or multi-site investigations, where multiple authors would be expected.

To try and prevent unethical publishing practices, most medical journals, higher education and research institutions in South Africa subscribe to the guidelines of the International Committee of Medical Journal Editors (ICMJE) which has published and refined

specific guidelines to define the role of authors and contributors on scientific publications.⁸ The ICMJE guidelines state that authorship is warranted only if the individual has fulfilled *all* the following criteria:

- 'The author has made substantial contributions to the conception and/or design of the work. This includes the acquisition, analysis or interpretation of data for the work; AND
- Has drafted the work or revised it critically for important intellectual content; AND
- 3. Has approved the final version that is to be published; AND
- 4. Agrees to be held 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.'

These guidelines however leave considerable room for interpretation where specifically points 1-3 can be argued extensively, as to a) what constitutes a 'substantial contribution'; b) how much scientific input and how many drafts of review constitutes 'critical revision'; and c) whether skimming over a final version constitutes 'approval of the final version'. These points are open to interpretation and can be extensively motivated and debated. Point 4 is the one that is arguably the most important factor to consider, and has received criticism in the past for being ambiguous,9 considering the reality and harshness of its potential implications. As it stands, point 4 is widely interpreted to mean that each author takes responsibility for what every other author does, regardless of the level of their involvement. The trachea implant scandal in Sweden, where severe repercussions, and professional and reputational harm was suffered by co-authors for the misconduct of one surgeon, shows that the responsibility associated with co-authorship should not be taken lightly.9,10 A recent study from Spain highlighted that research misconduct accounts for 65% of retractions,11 and although research misconduct does not always harbour equally severe consequences as illustrated in the Swedish scandal, an investigation into the effect of a single retraction has reported a lasting penalty of citation losses to the author and their citation network.12 The reputational damage of being associated with a paper retracted for misconduct therefore remains significant, and accepting gift authorship should be discouraged, if not from an integrity point of view, then from a reputational one.

A simple recommendation to prevent or resolve potential authorship issues includes open communication regarding authorship

at the onset and throughout the execution of studies. Although easy in theory, research studies naturally evolve over time, with new investigators being included and additional expertise being sought; therefore, it may become difficult to assign authorship while satisfying all involved. Additionally, workplace and collaborative environments are even more complex to navigate, making prevention of future conflict no easy task. It is clear that, although many guidelines, recommendations and indices are available to guide decision-making processes on authorship, the final judgement ultimately rests on the integrity of those involved in the research process.

References

- Marusic A, Bosnjak L, Jeroncic A. A systematic review of research on the meaning, ethics and practices of authorship across scholarly disciplines. *PLoS One*. 2011;6(9):e23477 1-17. https:// doi.org/10.1371/journal.pone.0023477.
- Brand RA. Further thoughts on authorship: gift authorship. Clin Orthop Relat Res. 2012;470(10):2926-29. https://doi.org/10.1007/ s11999-012-2504-3.
- Faulkes Z. Resolving authorship disputes by mediation and arbitration. Res Integr Peer Rev. 2018;3(12):16-18.
- Teixeira da Silva J, Dobranszki J. Multiple authorship in scientific manuscripts: ethical challenges, ghost and guest/gift authorship. Sci Eng Ethics. 2016;22:1457-72. https://doi.org/0.1007/s11948-015-9716-3.
- Gøtzsche PC, Hrobjartsson A, Johansen HK, et al. Ghost authorship in industry-initiated randomised trials. PLoS One. 2007;4(1 e19):47-52. https://doi.org/10.1371/journal. pmed.0040019.
- Bavdekar SB. Authorship issues. Lung India. 2012;29(1):76-80. https://doi.org/10.4103/0970-2113.92371.
- Kwok LS. The White Bull effect: abusive coauthorship and publication parasitism. *J Med Ethics*. 2005;31:554-56. https://doi. org/10.1136/jme.2004.010553.

- International Committee of Medical Journal Editors. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. 2019; (updated December):1-19. Available from: http://www.icmje.org/icmjerecommendations.pdf.
- Helgesson G, Eriksson S. Revise the ICMJE recommendations regarding authorship responsibility! *Learn Publ.* 2018;31:267-69. https://doi.org/10.1002/leap.1161.
- Herold E. A star surgeon left a trail of dead patients and his whistleblowers were punished. *Leapsmag*. 2018:1-21. Available from: https://leapsmag.com/a-star-surgeon-left-a-trail-of-deadpatients-and-his-whistleblowers-were-punished/.
- Campos-Varela I, Ruano-Ravi A. Misconduct as the main cause for retraction. A descriptive study of retracted publications and their authors. *Gac Sanit*. 2019;33(4):356-60. https://doi.org/10.1016/j. gaceta.2018.01.009.
- Lu SF, Jin GZ, Uzzi B, Jones B. The retraction penalty: evidence from the Web of Science. Sci Rep. 2013;3(Nov):3146(1-5). https://doi.org/10.1038/srep03146.

ERRATUM

There is an amendment to the authors of an article published in the previous issue, *South African Orthopaedic Journal* 2020;**19**(2): 79-83. The correct version is as follows:

The use of three-dimensional models to improve the reliability of tibial plateau fracture classification and their influence on surgical management

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It has been changed accordingly on the digital version.