



Conflict of Interest in Health Research Articles

SeyedAhmad SeyedAlinaghi^{1,2}, Faeze Abbaspour³, Esmail Mehraeen^{4,*}

¹ Iranian Research Center for HIV/AIDS, Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Tehran, Iran

² Research Development Center, Arash Women Hospital, Tehran University of Medical Sciences, Tehran, Iran

³ School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

⁴ Khalkhal University of Medical Sciences, Khalkhal, Iran

*Corresponding Author: Department of Health Information Technology, Khalkhal University of Medical Sciences, Khalkhal, Iran. Email: es.mehraeen@gmail.com

Received: 8 June, 2024; Revised: 30 October, 2024; Accepted: 8 December, 2024

Keywords: Ethics, Research Ethics, Conflict of Interest, Medical Ethics

Dear Editor,

Ethics in research is a cornerstone of ensuring the reliability of scholarly work. One of the ethical issues is conflicts of interest (COI). The term "conflict of interest" in a health research article encompasses scenarios where the personal or financial interests of individuals have the potential to undermine the integrity of the health research process and study results (1). It presents a challenge to individuals with responsibilities that conflict with personal interests and can inappropriately distort judgment, raising suspicion of compromised justice (2, 3). Conflicts of interest can encompass a wide range of interests, and among them, financial interests stand out prominently (1). Beyond monetary considerations, non-financial interests can also influence the credibility of research (4). These non-financial considerations may involve health professional advancement and social considerations. For instance, being influenced by personal relationships when conducting or reporting research, prioritizing work that enhances one's reputation within a community or field, even if it does not align with purely scientific objectives, avoiding controversial topics, or overemphasizing findings that align with a popular social point of views (5). Authors, reviewers, and editors may be subject to COIs (6).

Medical researchers must remain vigilant about personal, professional, or financial associations with potential reviewers that may be construed as conflicts of interest and actively avoid such conflicts of interest while also promptly disclosing them when they arise (7). The central issue regarding COI in publications revolves around how authors' interests can affect research integrity (8). However, there has been relatively minimal

focus on evaluating potential biases among editors and reviewers (9). In 2023, Makarem et al. conducted a study to investigate how COIs were disclosed by peer reviewers and editors, whether the disclosures pertained to their personal circumstances or those of their colleagues. The findings revealed notably low percentages of peer reviewers and editors addressing issues related to study funding and authors' COI. Furthermore, occurrences of peer reviewers and editors disclosing their individual COI, providing commentary on their own COI, or addressing COI in their colleagues were infrequent (10). In a study carried out by Ralph et al., in 2020, examining 20 public health journals, it was underscored that while concerns exist about authors' financial COI, the policies concerning COI for editors and peer reviewers were less demanding in terms of disclosure requirements when compared to the policies governing financial COI for authors (11). Dal-Re, conducted a study to examine the fulfillment of authors' and editors' individual disclosure of potential conflicts of interest in five top-ranked journals, it was observed that 99% of the journals required the disclosure of authors' conflicts of interest, whereas only 12% reported potential conflicts of interest for individual editors (12).

Reviewers play a crucial role in enhancing the reliability of the peer review process. While not a formal obligation, evaluating authors' COI and scrutinizing study funding sources can significantly benefit the integrity of the review process. Simultaneously, it is essential for journal peer reviewers and editors to promptly disclose any personal conflicts of interest they may have during the process. This involves acknowledging conflicts, declining reviews if conflicts are identified, and maintaining transparent

communication with the journal editors. The important responsibility of journal editors involves overseeing the review process, which includes evaluating peer reviewers' reports and deciding on the acceptance for publication. Furthermore, by selecting peer reviewers and dealing with any misconduct from authors or reviewers, editors exert considerable influence over the quality of the peer review process (12).

How can COI be addressed by authors, reviewers, and journal editors in an open review process where both parties can see and disclose their identities?? Authors should be cautious of associations with potential reviewers that might be perceived as conflicts of interest (13). They must transparently reveal any such conflicts during the submission process, stating them in the manuscript text (14). It is advisable to adhere to the guidelines of the journal on conflicts of interest. The primary measure for journals is to institute clearly defined COI policies, precisely communicate these policies to authors, reviewers, and members of the editorial board, and make sure these policies are readily accessible on the journal's website and seamlessly integrated into the submission guidelines (15). The International Committee of Medical Journal Editors (ICMJE) suggests the use of standardized forms for authors, whose adoption improves the accuracy of disclosures and simplifies comparability across different journals (16).

The Committee of Publication Ethics (COPE) recommends that reviewers openly declare any potential competing or conflicting interests, encompassing personal, financial, intellectual, professional, political, or religious considerations. Additionally, COPE advises reviewers not to assess articles if they are currently working at the same institution as any of the authors or have served as their mentor, mentee, close collaborator, or joint grant holder within the past three years (17). Concealing the affiliations of authors from reviewers may help to mitigate certain COIs in peer review (18). Due to the tendency of single-blind reviewers to favor submissions from top-ranking institutions and well-known authors, they are more likely to express interest in such papers and suggest their approval, in contrast to their double-blind counterparts but this is not a complete solution (19). According to a study conducted by Baggs et al., double-blinding of reviews was the most frequently reported method. However, even with author names concealed, blinded reviewers could accurately identify first authors more than 40% of the time (20). To maintain the quality and credibility of the journal, editors should provide peer reviewers with

comprehensive information regarding the criteria for manuscript evaluation and journal review policies, including ethical considerations and COI guidelines. When a reviewer discloses a conflict of interest, the editor may still choose to involve the reviewer if they determine that the conflict is unlikely to significantly affect the reviewer's ability to provide an objective and unbiased evaluation (2). Alternatively, inviting another reviewer is a potential solution, but it may be challenging in certain fields where there is a scarcity of expert reviewers (18).

Another important issue is that some journals have considered the suggestion of a reviewer as one of the mandatory submission steps, and authors have to suggest to one or more reviewers to complete the submission process. This may sometimes expose authors to conflicts of interest and retraction. Especially if the suggested reviewers do not accept or reject the journal's request and they may be considered unverified reviewers. To correct this process, it is important that journals make optional suggestions of reviewers and also have a database of potential reviewers so that they can decide independently only based on the referees they trust. It is suggested that this issue is also included in the guidelines of the COPE.

Footnotes

Authors' Contribution: The conception and design of the study: S. A. S. A.; Drafting the article: E. M. and F. A.; Revising it critically for important intellectual content: S. A. S. A. and E. M.; Final approval of the version to be submitted: S. A. S. A., E. M., and F. A.

Conflict of Interests Statement: The authors declare that there is no conflict of interest regarding the publication of this manuscript.

Funding/Support: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

1. Shin JH. [Conflicts of Interest in Research and Clinical Practice]. *J Korean Soc Radiol*. 2022;**83**(4):771-5. [PubMed ID: 36238922]. [PubMed Central ID: PMC9514588]. <https://doi.org/10.3348/jksr.2022.0050>.
2. Teixeira da Silva JA, Dobranszki J, Bhar RH, Mehlman CT. Editors Should Declare Conflicts of Interest. *J Bioeth Inq*. 2019;**16**(2):279-98. [PubMed ID: 31016681]. [PubMed Central ID: PMC6598958]. <https://doi.org/10.1007/s11673-019-09908-2>.
3. Brody H. Clarifying conflict of interest. *Am J Bioeth*. 2011;**11**(1):23-8. [PubMed ID: 21240802]. <https://doi.org/10.1080/15265161.2011.568587>.

4. Garattini L, Padula A, Mannucci PM. Conflicts of interest in medicine: a never-ending story. *Intern Emerg Med*. 2020;**15**(3):357-9. [PubMed ID: 32124207]. <https://doi.org/10.1007/s11739-020-02293-4>.
5. Resnik DB. Disclosing and Managing Non-Financial Conflicts of Interest in Scientific Publications. *Res eth J*. 2023;**12**(2):121-38. [PubMed ID: 37621567]. <https://doi.org/10.1177/17470161221148387>.
6. International Committee of Medical Journal Editors. *Disclosure of Financial and Non-Financial Relationships and Activities, and Conflicts of Interest*. 2024. Available from: <https://www.icmje.org/recommendations/browse/roles-and-responsibilities/author-responsibilities-conflicts-of-interest.html>.
7. Fink NE. Conflicts of Interest and An Approach to Managing Them. *Electronic J Int Federation Clinic Chem*. 2020;**31**(4):292-301. [PubMed ID: 33376469]. [PubMed Central ID: PMC7745299].
8. JAMA. *Instructions for Authors*. 2018. Available from: <https://jamanetwork.com/journals/jama/pages/instructions-for-authors>.
9. Bauchner H, Fontanarosa PB, Flanagin A. Conflicts of Interests, Authors, and Journals: New Challenges for a Persistent Problem. *JAMA*. 2018;**320**(22):2315-8. [PubMed ID: 30422174]. <https://doi.org/10.1001/jama.2018.17593>.
10. Makarem A, Mroue R, Makarem H, Diab L, Hassan B, Khabsa J, et al. Conflict of interest in the peer review process: A survey of peer review reports. *PLoS One*. 2023;**18**(6). e0286908. [PubMed ID: 37289790]. [PubMed Central ID: PMC10249818]. <https://doi.org/10.1371/journal.pone.0286908>.
11. Ralph A, Petticrew M, Hutchings A. Editor and peer reviewer financial conflict of interest policies in public health journals. *Eur J Public Health*. 2020;**30**(6):1230-2. [PubMed ID: 33313818]. <https://doi.org/10.1093/eurpub/ckaa183>.
12. Dal-Re R, Caplan AL, Marusic A. Editors' and authors' individual conflicts of interest disclosure and journal transparency. A cross-sectional study of high-impact medical specialty journals. *BMJ Open*. 2019;**9**(7). e029796. [PubMed ID: 31340971]. [PubMed Central ID: PMC6661703]. <https://doi.org/10.1136/bmjopen-2019-029796>.
13. Singhal S, Kalra BS. Publication ethics: Role and responsibility of authors. *Indian J Gastroenterol*. 2021;**40**(1):65-71. [PubMed ID: 33481172]. [PubMed Central ID: PMC7821455]. <https://doi.org/10.1007/s12664-020-01129-5>.
14. Young SN. Bias in the research literature and conflict of interest: an issue for publishers, editors, reviewers and authors, and it is not just about the money. *J Psychiatry Neurosci*. 2009;**34**(6):412-7. [PubMed ID: 19949717]. [PubMed Central ID: PMC2783432].
15. Resnik DB, Elmore SA. Conflict of Interest in Journal Peer Review. *Toxicol Pathol*. 2018;**46**(2):112-4. [PubMed ID: 29382273]. [PubMed Central ID: PMC5825276]. <https://doi.org/10.1177/0192623318754792>.
16. International Committee of Medical Journal Editors. *Conflict of Interest* 2021. 2021. Available from: <https://www.icmje.org/disclosure-of-interest/>.
17. Committee on Publication Ethics. *Ethical Guidelines for Peer Reviewers* 2017. 2017. Available from: <https://publicationethics.org/node/19886>.
18. Shah NB. The role of author identities in peer review. *PLoS One*. 2023;**18**(6). e0286206. [PubMed ID: 37342992]. [PubMed Central ID: PMC10284400]. <https://doi.org/10.1371/journal.pone.0286206>.
19. Tomkins A, Zhang M, Heavlin WD. Reviewer bias in single- versus double-blind peer review. *Proc Natl Acad Sci U S A*. 2017;**114**(48):12708-13. [PubMed ID: 29138317]. [PubMed Central ID: PMC5715744]. <https://doi.org/10.1073/pnas.1707323114>.
20. Baggs JG, Broome ME, Dougherty MC, Freda MC, Kearney MH. Blinding in peer review: the preferences of reviewers for nursing journals. *J Adv Nurs*. 2008;**64**(2):131-8. [PubMed ID: 18764847]. <https://doi.org/10.1111/j.1365-2648.2008.04816.x>.