Physician authors' perspectives on generative AI (GenAI) use in medical publications

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Poster 27

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KEY FINDINGS

While many authors see potential benefits of GenAI use in medical publications, including improved efficiency and productivity, authors have concerns around appropriate use, plagiarism, and how the role of authors will need to evolve.

CONCLUSIONS

- Clear industry guidelines are needed to address authors' concerns as GenAI adoption increases.
- Transparent communication between authors, pharmaceutical/biotechnology companies, and publication agency partners is needed to ensure that guidelines are appropriately followed.

INTRODUCTION

- As tools like ChatGPT reshape our industry, we are at the forefront of a paradigm shift in medical publications that is both exciting and challenging.
- While ICMJE, ISMPP, and COPE offer general guidance on GenAI disclosure in medical publications, authors must navigate varying and incomplete journal and congress standards in a rapidly evolving landscape.[1-3]
- Additionally, the role authors, pharmaceutical companies, and agency partners play in the publication process is interconnected, and GenAI use policies, experience, and comfort levels are likely not the same for each group, which has the potential to complicate the publication process.
- We aimed to gauge author perspectives on awareness, concerns, and acceptance of the use of GenAI in medical publications.

METHODS

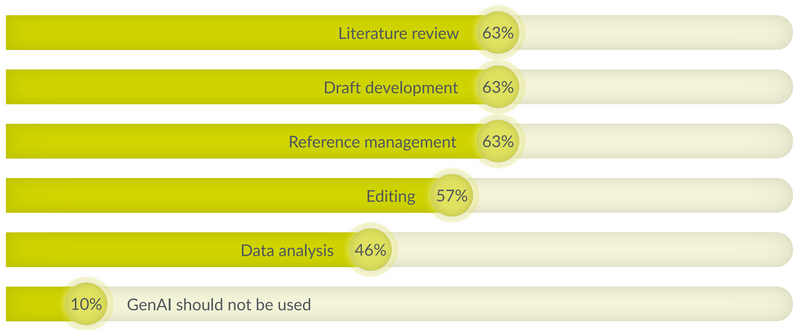
- We conducted an online survey of 35 healthcare provider (HCP) authors from the United States.
- Eligibility:
  - Coauthored ≥ 3 peer-reviewed clinical research publications in partnership/collaboration with a pharmaceutical/biotechnology company in the last 3 years
  - No specialty restrictions
  - Respondents were not eligible if they worked part- or full-time for a pharmaceutical or biotechnology company
- The survey was developed by Parexel and sent by Sermo to their network of HCPs in November 2024.
- Respondents were compensated for completion of the survey.

RESULTS

- Of 35 respondents, 19 (54%) had used GenAI tools, most commonly ChatGPT.
- The highest level of comfort with use of GenAI tools to assist with publications development is when a publications agency is involved (60% of respondents) versus self-use (54%) or co-author use (52%).

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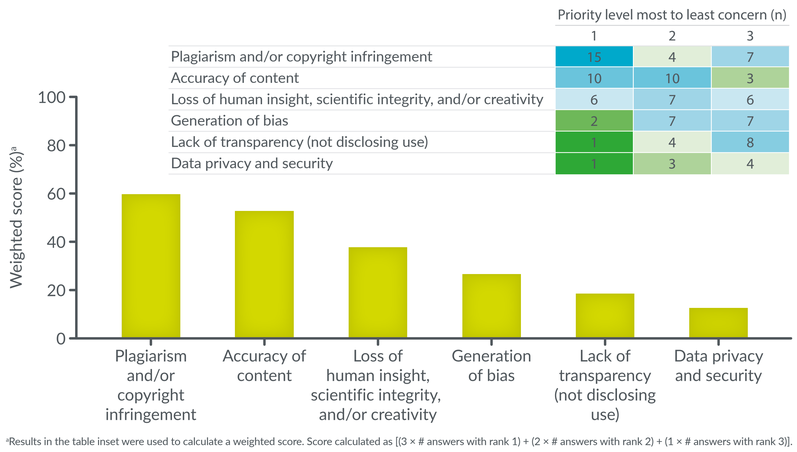
Respondents indicated that GenAI could benefit:



- Respondents felt that the primary way that GenAI tools could improve the process and/or quality of publications was through improved efficiency and productivity (> 80%); over half felt that AI could reduce human error, improve writing quality, and reduce research time.
- The top 3 concerns were plagiarism and/or copyright infringement (60%), accuracy (53%), loss of human insight/scientific integrity and/or creativity (38%) (**Figure 1**).
- 26 of 35 respondents selected plagiarism and/or copyright infringement as one of their top 3 concerns, while only 8 of 35 respondents selected data privacy and security as one of their top 3 concerns (**Figure 1**).

Figure 1. Primary concerns about using GenAI in publication writing

	Priority level most to least concern (n)		
	1	2	3
Plagiarism and/or copyright infringement	15	4	7
Accuracy of content	10	10	3
Loss of human insight, scientific integrity, and/or creativity	6	7	6
Generation of bias	2	7	7
Lack of transparency (not disclosing use)	1	4	8
Data privacy and security	1	3	4



[a]Results in the table inset were used to calculate a weighted score. Score calculated as [(3 × # answers with rank 1) + (2 × # answers with rank 2) + (1 × # answers with rank 3)].

Overall, if GenAI was used for content development:

57% felt that they would need to spend more time reviewing drafts

57% had concerns that a journal might reject a manuscript

- < 50% of respondents would accept authorship of a publication where GenAI was used; that number increased slightly when the respondent was not the lead or corresponding author (**Figure 2**).
- About half of the respondents (46%) felt that GenAI disclosure to authors should be made prior to draft development and/or at each subsequent draft.
- Respondents wanted GenAI guidelines to address transparency, quality control, plagiarism prevention, and human oversight (**Table 1**).
- Opinions were mixed on how GenAI might impact peer review; some expected increased scrutiny and others anticipated a more streamlined process.
- Overall, 46% versus 26% of respondents thought GenAI would positively versus negatively impact publication credibility (**Figure 3**).

Figure 2. Extent of agreement with the following statements regarding the use of GenAI (by pharmaceutical companies/publications agencies/authors) in the generation of medical publications content

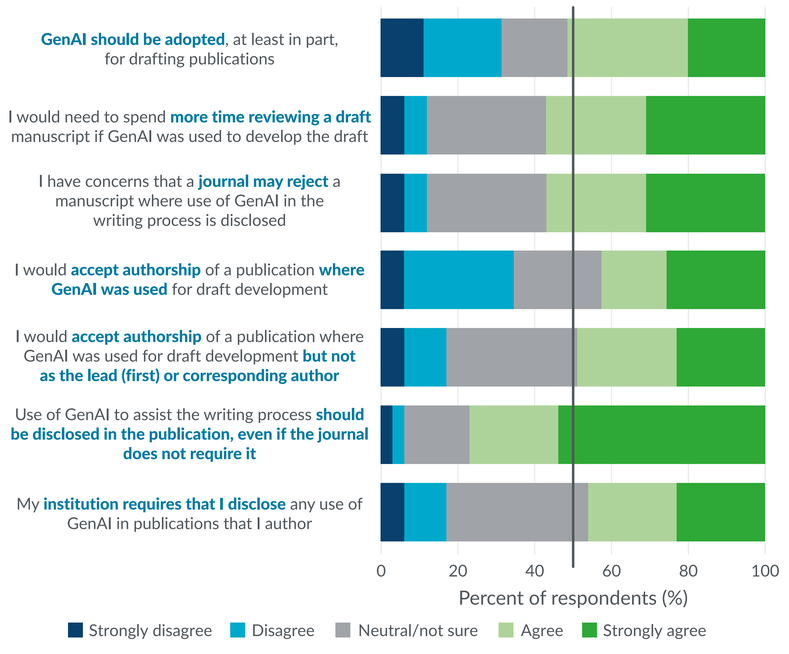
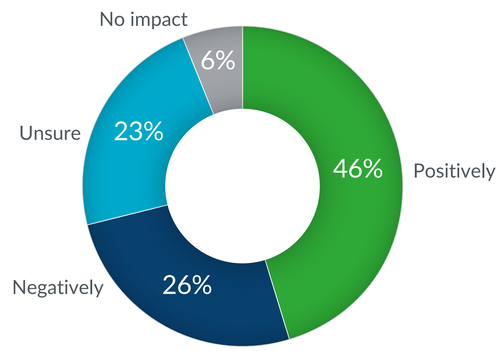


Table 1. Key points that authors would like addressed as guidelines for the use of GenAI in medical publications are developed (free response)

Themes	Responses[a]
Transparency and disclosure	• Clarity on what AI use by authors will be disclosed to readers • Disclosure of the extent and type of AI tool used • Percentage of AI vs human work
Accuracy and quality control	• Review of accuracy by authors (including ensuring no invalid sources are used) • Addressing grammatical and numerical errors, and undergo QC and proofreading processes • Ensuring scientific honesty
Plagiarism prevention	• Checks to avoid plagiarism
Human involvement/ responsibility	• Significant human input and editing required • All authors must be aware of AI use and take responsibility for content • Final product reviewed by a human author
Limitations and guidelines	• Use cases for GenAI and how high-impact journals are handling this • Ethical issues and how to mitigate them • Guardrails for AI use (eg, in which sections of a paper can AI be used)
Technical aspects	• Include a transcript of changes made by AI so that deletions are not overlooked • Ensure data and information safety • Address the issue of potential hallucinations
Specific applications	• Primarily use for editing pre-written authentic human content • Generating drafts
Opposition	• Some respondents suggested it should be banned or considered a "no-go," stating that "we should be better than this"
Positive outlook	• Should not vilify AI use • Potential for more streamlined processes

[a]Parexel AI Assistant was used to group and summarize free responses. Responses were reviewed and summarized further by a human.

Figure 3. Whether use of GenAI in medical publication writing would positively or negatively affect credibility of clinical trial publications



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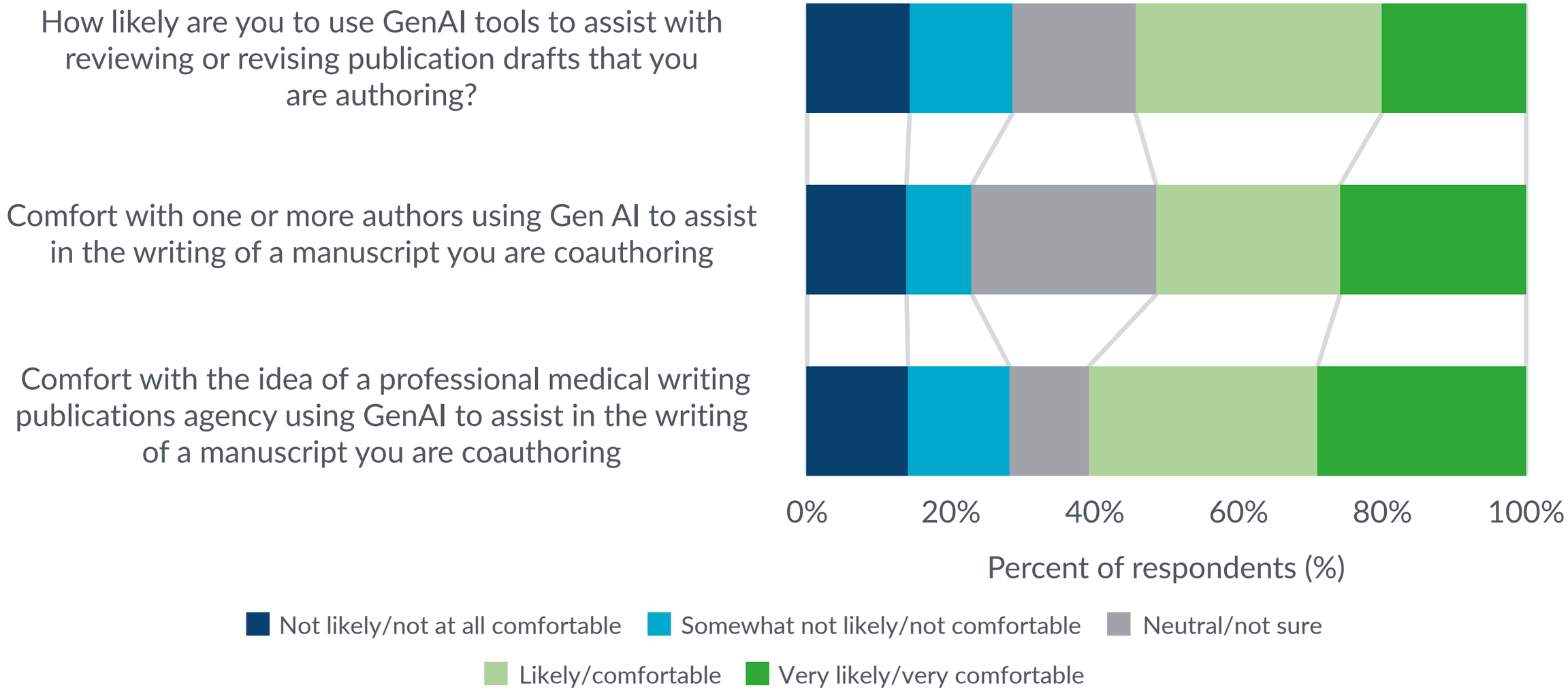
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REFERENCES

1. Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals. Updated January 2025. http://www.icmje.org/. Accessed April 10, 2025.
2. International Society for Medical Publication Professionals (ISMPP) position statement and call to action on artificial intelligence. *Curr Med Res and Opin*. 2024;40:9-10.
3. COPE Council. COPE position: Authorship and AI. https://publicationethics.org/guidance/cope-position/authorship-and-ai-tools. Accessed April 10, 2025.

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Supplemental Figure 1. Comfort level with use of GenAI for publications development



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