The perception of artificial intelligence (AI) in medical publications

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In addition to AI tool training and quality, user familiarity, comfort and experience are barriers for effective and confident use of AI

Poster

What is your perception of AI?

Background

- The availability of AI tools such as ChatGPT, co-pilot and in-house proprietary AI tools has led to the increasing integration of AI into medical publications.
- The World Association of Medical Editors (WAME), Committee on Publication Ethics (COPE) and International Society for Medical Publication Professionals (ISMPP) have all introduced guidelines for AI use in medical publications.[1–3] Additionally, the ISMPP AI task force have developed a lexicon to support the integration of AI into the medical publications process.[4]
- However, there is a lack of understanding of how AI is perceived by publication professionals.

Objective

- This research aimed to gather insights from publication professionals to assess the perception of AI in medical publications.

Methods

- An anonymous survey was posted on the ISMPP LinkedIn group and our company's LinkedIn page and was open for data collection from 6–25 September 2024. The survey assessed the following:
  - Familiarity with AI in general using a scale of 1 (unfamiliar/never used) to 5 (very familiar/ frequent user).
  - The current experience with AI in publications development and reasons for not using AI.
  - Comfort of using AI in publication development using a scale of 1 (very uncomfortable) to 5 (very comfortable) for overall and for specific tasks.
  - What respondents think are the best uses of AI in publication development using a free text box.
  - What respondents are most apprehensive about regarding AI in publication development using a free text box.

Results

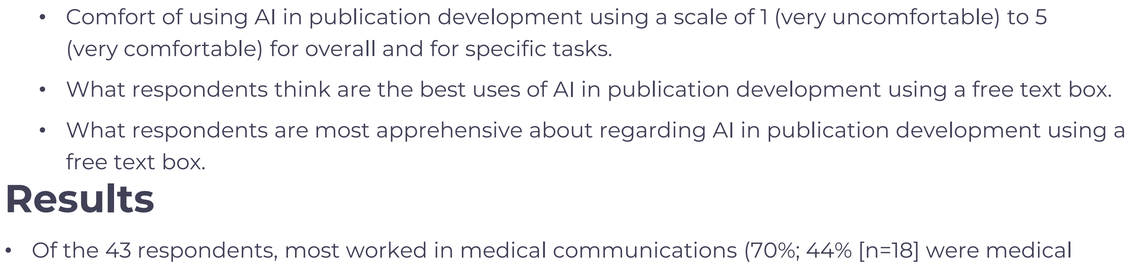
- Of the 43 respondents, most worked in medical communications (70%; 44% [n=18] were medical writers), based in Europe (51%) or North America (40%) and were 26–55 years old (84%) (Table 1).

Table 1. ***Demographics***

Respondents (%)	Total (N=43)	Using AI tools for publication development (n=9)	Not using AI tools for publication development (n=34)
Role*			
Author	2 (4.7)	2 (22.2)	0
Medical communications	30 (69.8)	7 (77.8)	23 (67.6)
Peer reviewer	1 (2.3)	1 (11.1)	0
Publisher/journal	2 (4.7)	0	2 (5.9)
Pharma	11 (25.6)	2 (22.2)	9 (26.5)
Age, years			
≤25	2 (4.7)	1 (11.1)	1 (2.9)
26–35	12 (27.9)	2 (22.2)	10 (29.4)
36–45	12 (27.9)	3 (33.3)	9 (26.5)
46–55	12(27.9)	1 (11.1)	11 (32.4)
56–65	5 (11.6)	2 (22.2)	3 (8.8)
Region			
North America	17 (39.5)	4 (44.4)	13 (38.2)
Europe	22 (51.2)	3 (33.3)	19 (55.9)
Asia–Pacific	4 (9.3)	2 (22.2)	2 (5.9)

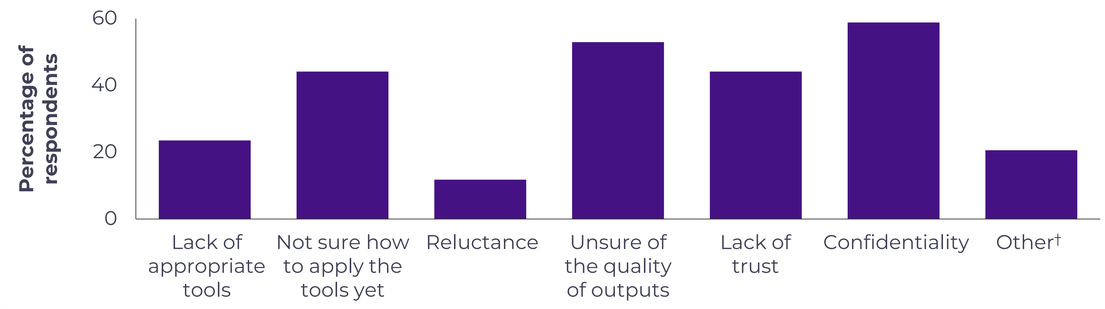
*Respondents could select more than one role.

Figure 1. ***Familiarity with AI tools in general***



- Respondents were slightly/somewhat familiar with AI tools in general (mean: 2.72) (Figure 1).
- 21% were using AI for publication development (Table 1).
  - Five of the nine respondents stated they use an in-house proprietary tool with current uses including routine tasks, landscape assessment/gap analyses, content review, drafting content and translation.
  - Three of the nine respondents stated they use publicly available tools, namely ChatGPT and Jasper, for adapting and developing sections of content, content clarity and grammar.
- Concerns about confidentiality (59%) and quality (53%) were the most frequent reasons respondents had not used AI for publication development (Figure 2).

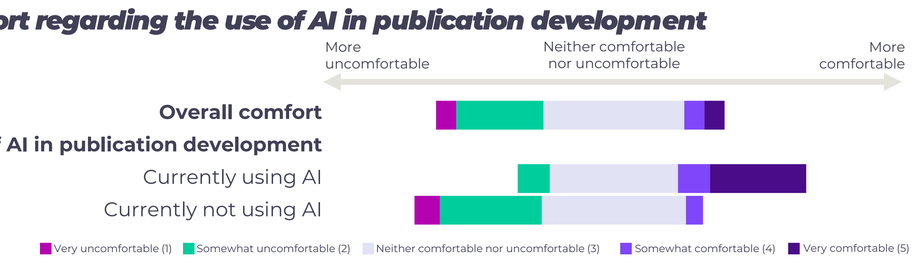
Figure 2. ***Reasons for not using AI in publication development (n=34)****



*Respondents could select multiple reasons.
†Other reasons included forbidden by company and client policies, and not developing publications only publishing them.

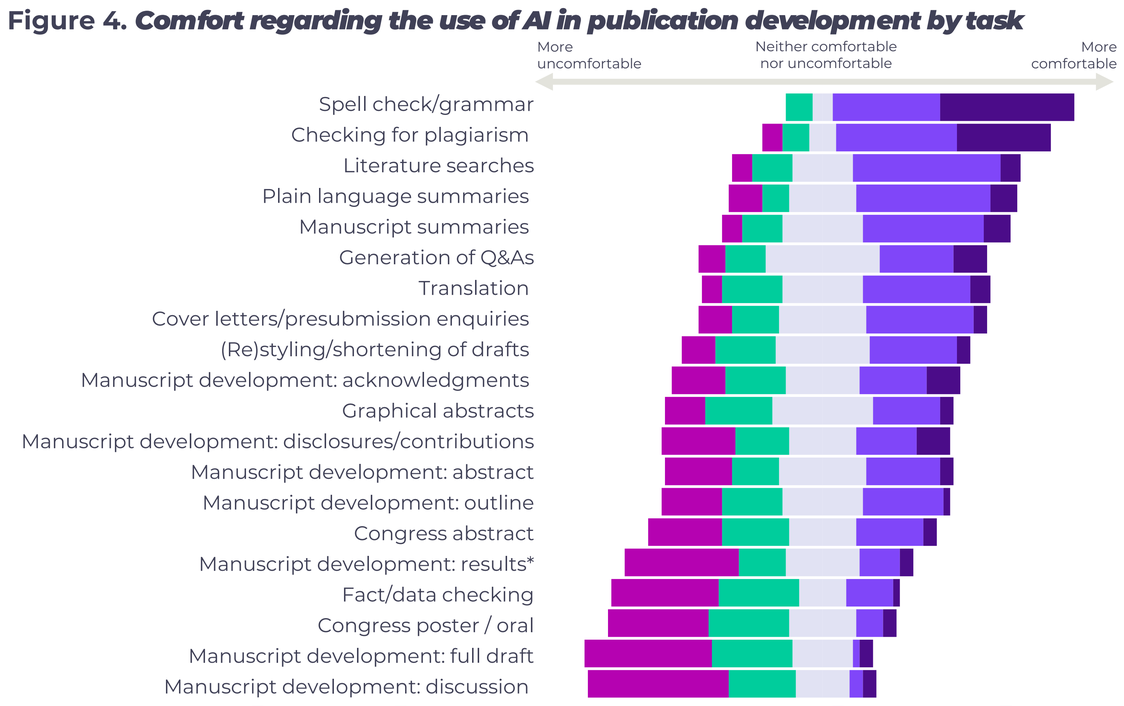
- Respondents (79%) were somewhat uncomfortable/indifferent regarding using AI in publication development (mean: 2.77); of the 14% (6/43) that were comfortable, 67% (4/6) were using AI in publication development (Figure 3).

Figure 3. ***Comfort regarding the use of AI in publication development***



- Overall, respondents were most comfortable with AI supporting simple tasks (eg, spell check, plagiarism check), enhancing content or creating derivatives of content, and less comfortable with generating new content, specifically content requiring interpretation or creativity (Figure 4).

Figure 4. ***Comfort regarding the use of AI in publication development by task***



*Including tables and figure redraws. Very uncomfortable (1); Somewhat uncomfortable (2); Neither comfortable nor uncomfortable (3); Somewhat comfortable (4); Very comfortable (5)

- Figure 5 and 6 show the best uses of AI in publication development according to respondents and what respondents are most apprehensive about.

Figure 5. ***Best uses of AI in publication development***



Frequency has been represented as font size using a log scale. COI, conflicts of interest; PLS, plain language summary.

Figure 6. ***What respondents are most apprehensive about***



Frequency has been represented as font size using a log scale.

Conclusions

- The overall sentiment towards AI is driven by the lack of familiarity as well as feeling uncomfortable/ indifferent regarding the use of AI in medical publications development, although this does vary depending on the task.
- Furthermore, user and tool training are barriers for effective and confident use of AI.

Future perspectives

- We anticipate that ongoing AI tool training will rapidly and reliably improve the outputs generated and in parallel user familiarity and experience will quickly increase.
- We have the potential to make medical publishing more efficient, accurate and inclusive, benefiting researchers, publishers and the broader scientific community by embracing the opportunity to use AI with appropriate human oversight whilst also aligning with current guidelines and policies.

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Disclosure statement

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