Effective education and integration of generative artificial intelligence into medical communications: use of a fictional-disease exercise to increase confidence

Amanda Webb, Valerie Moss, and Safeer Mughal

Prime, London, UK

Explore research in more detail by scanning the QR code

Exercise description, survey questions, and a PLS can be accessed on the website

Conclusions

- This exercise improved team sentiment and the understanding of AI within a medical communications context, highlighting its potential as a first step in AI integration.
- Sustained efforts, including formal training and dedicated support, are crucial to building confidence and ensuring effective and compliant utilization of AI within the team.

Introduction

- Generative artificial intelligence (genAI) has the potential to improve the efficiency and quality of healthcare information and is being rapidly integrated into medical communications.
  - As a result, adequate education and training are necessary.
- Here, we evaluated the impact of a group training exercise using genAI tools to determine team sentiment and preparedness for AI integration in medical communications.

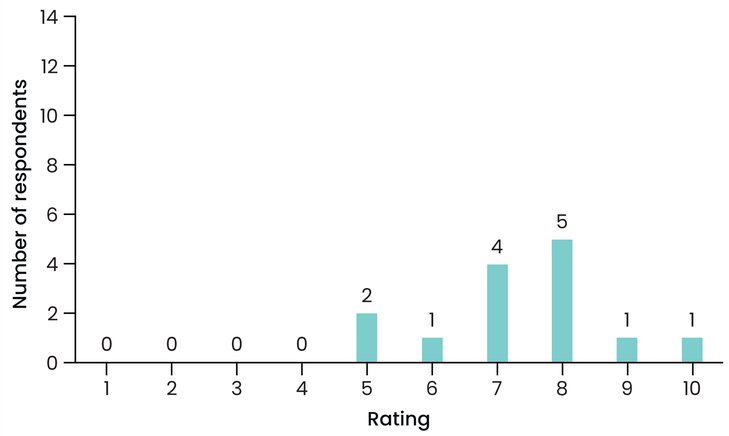
Methods

- In a team meeting setting, 37 participants were divided into small groups of ~4 people to complete an AI-based group exercise.
  - Groups had 20 minutes to create a fictional disease awareness storyboard using AI tools, including ChatGPT 3.5, Bing Copilot text and image generation, Perchance AI photogenerator, and MURF.AI.
- A follow-up survey was distributed to all participants to evaluate any changes in confidence and comfort when using AI tools, as well as any potential concerns or perceived needs for AI implementation. A full description of the AI task and the survey questions can be accessed via the QR code.

Results

- Of 37 participants, 14 completed the survey (38% response rate).
- The mean (standard deviation) rating of the overall experience with the AI exercise, where 1=poor and 10=excellent, was 7.4 (1.4; **Figure 1**).

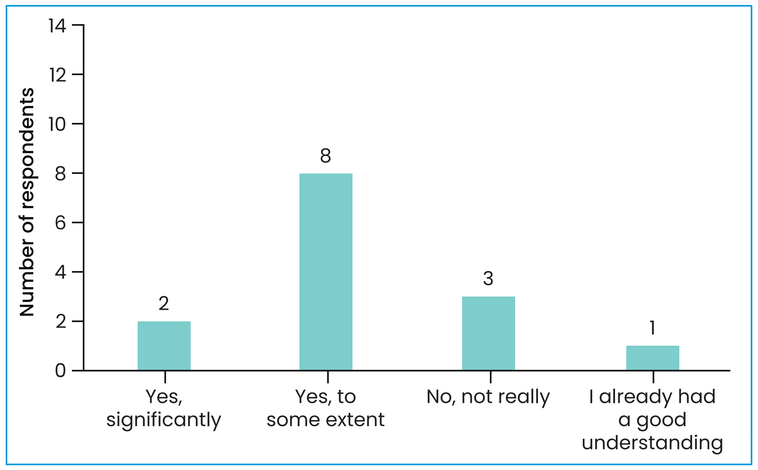
Figure 1. Overall experience with the AI exercise



Respondents (n=14) were asked how they would rate their overall experience with the AI-driven exercise (1=poor; 10=excellent)

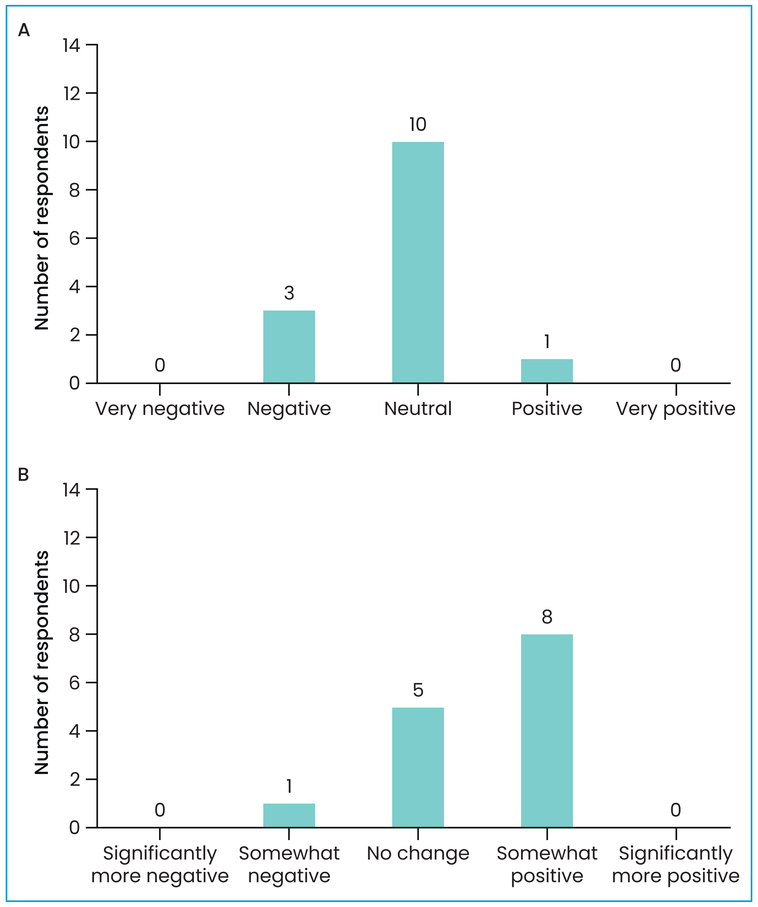
- No participants rated their experience less than 5 out of 10.
- Overall, 10 (71%) respondents said that the AI exercise increased their understanding of the capabilities and potential applications of AI in medical communications (**Figure 2**).

Figure 2. Perception of whether the AI exercise increased understanding of the capabilities and potential applications of AI



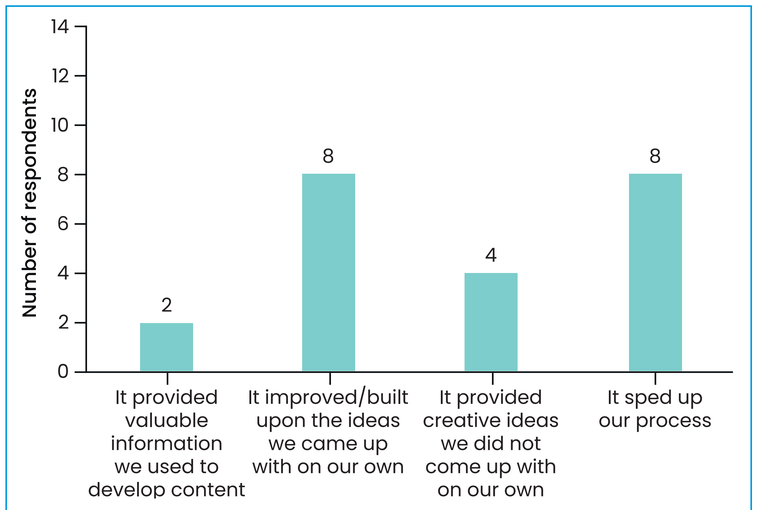
- Prior to the AI exercise, 10 (71%) respondents had a neutral feeling towards use of AI in medical communications (**Figure 3A**).
- After participation, 8 (57%) reported feeling somewhat more positive towards AI , 5 reported feeling neutral, and 1 reported feeling somewhat negative (**Figure 3B**).

Figure 3. Overall feelings about the use of genAI (A) before and (B) after participation in the AI exercise



- Most respondents felt that AI was helpful to speed up the process and build on their own ideas (**Figure 4**).

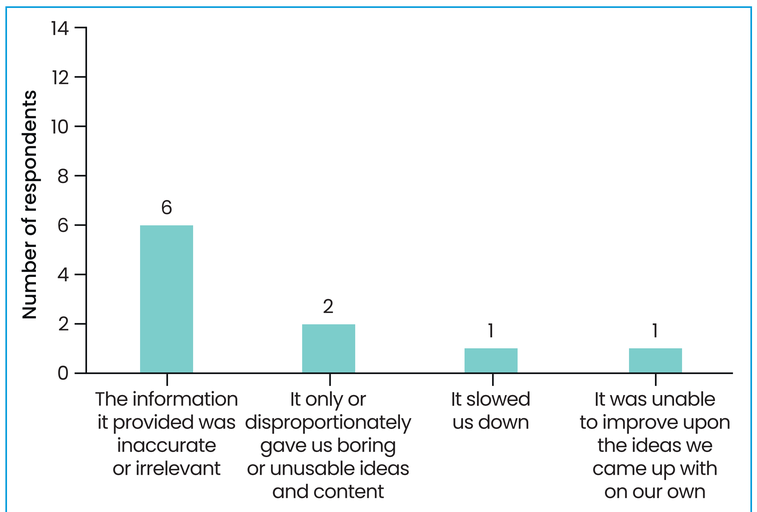
Figure 4. Perceptions on how AI can help when completing a task within a short timeframe



Respondents (n=14) were asked how they found AI helpful when completing the task within the short timeframe. They could check all that applied.

- The most reported reason for AI being unhelpful when completing the task in a short timeframe was that inaccurate or irrelevant information was provided (**Figure 5**).

Figure 5. Perceptions on how AI was considered unhelpful when completing a task within a short timeframe



Respondents (n=14) were asked how they found AI unhelpful when completing the task within the short timeframe. They could check all that applied. A response was not provided by 4 (29%) respondents.

- When asked about their biggest concerns with AI use in medical communications, 11 (79%) respondents were concerned about accuracy and reliability, and 9 (64%) were concerned about compliance and client perception when considering the use of AI.
  - Four were concerned about the potential for job displacement and security.
- Respondents had the opportunity to provide free-text responses indicating what would help them to integrate AI into their everyday practices.
  - Responses included AI platform guidance, clear ethical and compliance guidelines, and additional training opportunities.

Disclosures

Amanda Webb, Valerie Moss, and Safeer Mughal are employees of Prime, London, UK.

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