

Editorial

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ChatGPT and artificial intelligence in the Journal of Perinatal Medicine

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ChatGPT, in full Chat Generative Pre-training Transformer, allows a user to ask it questions using conversational, or natural, language. The latest version GPT-4 via the chatbot product ChatGPT Plus was released in March 2023. When presented with a query, ChatGPT will automatically generate a response, which is based on thousands of internet sources, often without further input from the user.

ChatGPT's is easy to use, and we believe that its user-friendliness could increase academic output. ChatGPT might also open the propagation of scientific and other knowledge since it can receive and produce copy in multiple languages, circumventing English-language requirements that can be a publishing barrier for speakers of other languages. As acknowledged by OpenAI, the creator of ChatGPT, it has also the capacity to cause potential harm by producing misleading or inaccurate content, thereby eliciting concerns around scholarly misinformation.

Among the limitations listed by OpenAI (<https://openai.com/blog/chatgpt>), are:

- ChatGPT sometimes writes plausible-sounding but incorrect or nonsensical answers.
- ChatGPT is sensitive to tweaks to the input phrasing or attempting the same prompt multiple times.
- The model is often excessively verbose and overuses certain phrases
- It will sometimes respond to harmful instructions or exhibit biased behavior.

Given these accounts and its popular usage, the editors queried ChatGPT as follows:

“Can you develop a 400–600 word policy and guideline for the Journal of Perinatal Medicine to direct authors how to use ChatGPT and artificial intelligence.” In

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Figure 1 you can read the complete answer by ChatGPT.

The screenshot shows a chat interface with a user message and a detailed AI response. The user message asks for a 400-600 word policy and guideline for the Journal of Perinatal Medicine regarding the use of ChatGPT and AI. The AI response is a structured document titled "Policy and Guidelines for Authors on the Use of ChatGPT and Artificial Intelligence in the Journal of Perinatal Medicine".

User: Can you develop a 400-600 word policy and guideline for the Journal of Perinatal Medicine to direct authors how to use ChatGPT and artificial intelligence

Title: Policy and Guidelines for Authors on the Use of ChatGPT and Artificial Intelligence in the Journal of Perinatal Medicine

Introduction: The Journal of Perinatal Medicine (JPM) recognizes the potential of ChatGPT and artificial intelligence (AI) in advancing scientific research and improving healthcare outcomes. This policy and guideline document aim to provide authors with detailed instructions on utilizing ChatGPT and AI responsibly and effectively in their submissions to JPM.

1. Purpose and Scope:
 - 1.1 The purpose of Integrating ChatGPT and AI in JPM is to facilitate scientific inquiry, data analysis, and decision-making in perinatal medicine research.
 - 1.2 Authors are encouraged to use ChatGPT and AI to enhance their research methodologies, data interpretation, and knowledge synthesis.
2. Responsible Use:
 - 2.1 Authors should disclose the use of ChatGPT and AI in their manuscripts, including the specific tools, algorithms, or models employed.
 - 2.2 AI should be seen as a supportive tool, complementing traditional research methodologies, clinical expertise, and critical thinking.
 - 2.3 Authors must exercise critical judgment and independently verify AI-generated outputs for accuracy, reliability, and ethical considerations.
 - 2.4 Authors should clearly articulate the roles and limitations of ChatGPT and AI in their research, avoiding any overstatement or exaggerated claims.
3. Data Collection and Privacy:
 - 3.1 Authors should adhere to appropriate ethical standards and regulatory requirements when collecting and utilizing data for AI applications.
 - 3.2 Informed consent should be obtained from patients or participants, ensuring their understanding of the data collection and AI utilization process.
 - 3.3 Authors should take measures to protect patient privacy, anonymize data, and handle sensitive information in accordance with relevant laws and guidelines.
4. Transparency and Reproducibility:
 - 4.1 Authors should provide a detailed description of the AI methodologies employed, including algorithm selection, training data, and validation processes.
 - 4.2 Source code, pre-trained models, and relevant data should be made available to enable replication and further research, where possible.
 - 4.3 Transparency in reporting the AI pipeline, hyperparameter settings, and evaluation metrics used is crucial for ensuring reproducibility and scientific integrity.
5. Validation and Interpretation:
 - 5.1 Authors must validate the AI models or algorithms used, demonstrating their reliability, accuracy, and generalizability.
 - 5.2 Interpretations derived from AI-generated outputs should be critically assessed, considering the clinical context, prior knowledge, and potential biases.
 - 5.3 Authors should clearly delineate between correlations and causal relationships, avoiding unwarranted claims of causation solely based on AI-generated results.
6. Peer Review and Editorial Process:
 - 6.1 Manuscripts utilizing ChatGPT and AI will undergo the same rigorous peer-review process as other submissions.
 - 6.2 Reviewers and editors should evaluate the scientific validity, methodological rigor, and ethical considerations of the research, irrespective of AI utilization.
 - 6.3 Authors should respond to reviewer comments and provide clarifications regarding the use of ChatGPT and AI, addressing any concerns raised.

Conclusion: By adhering to these policies and guidelines, authors can harness the potential of ChatGPT and AI effectively and responsibly in their submissions to the Journal of Perinatal Medicine. The integration of AI should contribute to advancing perinatal medicine research while upholding the principles of scientific integrity, ethical conduct, and patient-centered care.

Note: This policy and guideline document serves as a general framework and should be adapted to specific institutional or regulatory requirements.

Figure 1: ChatGPT question and answers.