"ChatGPT" – Is it a New Wonder Drug in the Trial?

Sathish Muthu^{1,2}, Girinivasan Chellamuthu^{1,2}, Ashok Shyam^{3,4}

Introduction

"Apart from being an astute clinician and a skilled surgeon, does this world want me to be a good writer too?" - frowned one of our colleagues as we were discussing the importance of 1. Generating Ideas: I can help generate ideas for research documentation and publishing to ascertain one's position in topics, hypotheses, and potential directions for your medical academia.

Many of us could relate to his pain. Well, the pleasant part is that we might have a new relief drug. Optimists would describe it as a wonder drug. Pessimists would disregard even its presence. We can't, however, deny the fact that it is creating a loud noise in academia | 1-7 |. Let us try to understand reality and foresee the future by interacting with the hero himself, the through ChatGPT.

Authors: How would you describe yourself?

ChatGPT: "As an AI language model, I am a computer program designed to process and generate human-like text based on the input I receive. I don't possess personal experiences, emotions, or consciousness. However, I have been trained on a vast amount of data and have access to a wide range of information. My purpose is to assist users like you by providing information, answering questions, and engaging in conversation on various topics. While I strive to be helpful and accurate, it's important to remember that my responses are generated based on patterns and data, and I don't have subjective thoughts or opinions."

Authors: What will be your role in medical manuscript writing?

ChatGPT: "As an AI language model, my role in medical manuscript writing is to provide assistance and support throughout the writing process. Here's how I can contribute:

- manuscript.
- 2. Literature Review: I can assist in conducting literature searches and providing summaries, abstracts, or excerpts from relevant scientific articles to support your research.
- 3. Outlining and Structure: I can help you develop a clear and logical outline for your manuscript, ensuring that it follows the standard structure and includes all the necessary sections.
- 4. Writing Assistance: I can assist with writing various sections of your manuscript, such as the introduction, methods, results, discussion, and conclusion. I can provide suggestions, improve clarity, rephrase sentences, and offer alternative word choices.
- 5. Fact-Checking and Referencing: I can help ensure the accuracy of the information presented in your manuscript and assist with proper referencing and citation formatting according to the specified style.
- 6. Language and Grammar: I can help refine the language, grammar, and style of your manuscript, making it clear, concise, and coherent. I can identify and correct grammatical errors, improve sentence structure, and enhance the overall readability of the text.

Access this article online Website: www.jocr.co.in DOI: https://doi.org/10.13107/jocr.2023.v13.i07.3732





Author's Photo Gallery

Orthopaedic Research Group, Coimbatore, Tamil Nadu, India,

²Department of Biotechnology, Faculty of Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India.

³Department of Orthopaedic, Sancheti Institute for Orthopaedics and Rehabilitation. 4Chief Researcher, Indian Orthopaedic Research Group, India.

Address of Correspondence:

Dr. Sathish Muthu.

Orthopaedic Research Group, Coimbatore, Tamil Nadu, India.

E-mail: drsathishmuthu@gmail.com

Submitted: 04/04/2023; Review: 18/05/2023; Accepted: June 2023; Published: July 2023

DOI: https://doi.org/10.13107/jocr.2023.v13.i07.3732

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License https://creativecommons.org/licenses/by-ncsa/4.0/, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms



7. Revision and Editing: I can review and provide feedback on your manuscript, offering suggestions for improvement, identifying areas that require further clarification, and helping you address any issues raised during the review process.

It's important to note that while I can provide valuable assistance, I am an AI language model and not a substitute for professional medical expertise or the guidance of experienced researchers and clinicians. It is essential to have your manuscript reviewed by subject matter experts and follow the guidelines and requirements of your target journal to ensure the highest quality and accuracy of your work."

Authors: What are your limitations in medical manuscript writing?

ChatGPT: "While I can provide valuable assistance in medical manuscript writing, it's important to be aware of my limitations:

- 1. Lack of Current Research: My training data only goes up until September 2021, so I may not be aware of the latest scientific discoveries, breakthroughs, or changes in medical guidelines that have occurred since then. It's crucial to consult recent and reliable sources to ensure the accuracy and up-to-date nature of your manuscript.
- 2. Interpretation of Individual Cases: Medical manuscript writing often involves analyzing individual patient cases or data. As an AI, I lack access to specific patient information and cannot provide personalized medical advice or interpret individual cases. Always consult with medical professionals for personalized guidance.
- 3. Limited Contextual Understanding: While I have a broad knowledge base, I may not fully understand the specific context or nuances of your research. It's important to provide detailed and specific information to ensure accurate and relevant assistance.
- 4. Journal-Specific Guidelines: Each journal has its own specific formatting and submission requirements. Although I can provide general guidance on manuscript structure and formatting, it is essential to consult the guidelines of your target journal and follow their instructions for submission.
- 5. Peer Review: Peer review is a critical part of the manuscript writing process. While I can offer suggestions and provide feedback on your manuscript, it is important to have your work reviewed by subject matter experts to ensure its scientific validity, accuracy, and adherence to ethical standards.
- 6. Legal and Ethical Considerations: Medical research often involves ethical and legal considerations, such as patient

privacy, informed consent, and regulatory requirements. It is crucial to consult relevant guidelines, ethical boards, and legal experts to ensure compliance with the appropriate regulations.

Remember, while I can be a helpful tool in medical manuscript writing, it is essential to collaborate with domain experts, seek guidance from experienced researchers or clinicians, and follow the established scientific practices and guidelines in your field."

Authors: Where do you see yourself in the future in medical manuscript writing?

ChatGPT: "In the future, I see myself continuing to evolve and improve in supporting medical manuscript writing. Here are a few potential developments:

- 1. Up-to-Date Knowledge: I will strive to have access to more recent and updated medical research and information, allowing me to provide more current and relevant assistance in medical manuscript writing.
- 2. Improved Understanding of Context: I aim to enhance my understanding of the specific context and nuances of medical research, enabling me to provide more accurate and tailored guidance to researchers.
- 3. Integration of Research Tools: I may incorporate research tools and databases into my capabilities, allowing researchers to access and analyze relevant scientific literature more efficiently and effectively.
- 4. Enhanced Language and Writing Skills: I will continue to refine my language generation capabilities, ensuring more natural and coherent writing assistance. I will also improve my ability to understand and adapt to different writing styles and adhere to specific journal guidelines.
- 5. Collaboration with Experts: I may collaborate with domain experts, including researchers, clinicians, and journal editors, to incorporate their insights and feedback into my assistance. This collaborative approach can help ensure that my contributions align with the expectations and standards of the medical research community.
- 6. Ethical Considerations: I will continue to prioritize ethical considerations in medical manuscript writing, including patient privacy, data protection, and adherence to ethical guidelines. I will provide appropriate disclaimers and encourage users to seek professional advice when dealing with sensitive or individual-specific medical information.

It's important to note that while I can evolve and improve, I will always be an AI language model, and my role will complement human expertise rather than replace it. Collaborating with human researchers, clinicians, and journal editors will remain



Muthu S, et al www.jocr.co.in

essential to ensure the highest quality and ethical standards in medical manuscript writing."

Those were clear and good responses for a novice AI chat box like ChatGPT. The answers are formal and coherent. We admire and respect the disclaimer at the end of each answer. With Bard and Bing, the competition is building, and we can expect a real wonder drug for manuscript writing in the near future.

This being said, the current state of affairs concerning the use of ChatGPT in manuscript writing is not very helpful. It might very well be at the level of writing only a boring blog post from our initial trials. And, of course, we had to give a disappointing "Yes" to our colleague's question. Yes, to ascertain our position in academia and, in a good sense, to help build academia, clinicians should be good writers as well.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given the consent for his/ her images and other clinical information to be reported in the journal. The patient understands that his/ her names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of interest: Nil Source of support: None

References

- 1. Arif TB, Munaf U, Ul-Haque I. The future of medical education and research: Is ChatGPT a blessing or blight in disguise? Med Educ Online 2023;28:2181052.
- 2. Baumgartner C. The potential impact of ChatGPT in clinical and translational medicine. Clin Transl Med 2023;13:e1206.
- 3. Biswas S. ChatGPT and the future of medical writing. Radiology 2023;307:e223312.
- 4. Dahmen J, Kayaalp ME, Ollivier M, Pareek A, Hirschmann MT, Karlsson J, et al. Artificial intelligence bot ChatGPT in

- medical research: The potential game changer as a double-edged sword. Knee Surg Sports Traumatol Arthrosc 2023;31:1187-9.
- 5. Graham F. Daily briefing: ChatGPT listed as author on research papers. Nature 2023; DOI: 10.1038/d41586-023-00188-w. Online ahead of print.
- 6. Thorp HH. ChatGPT is fun, but not an author. Science 2023;379:313.
- 7. Gordijn B, Have HT. ChatGPT: Evolution or revolution? Med Health Care Philos 2023;26:1-2.

Conflict of Interest: Nil Source of Support: Nil

Consent: The authors confirm that informed consent was obtained from the patient for publication of this case report

How to Cite this Article

Muthu S, Chellamuthu G, Shyam A. "ChatGPT" – Is it a New Wonder Drug in the Trial?. Journal of Orthopaedic Case Reports 2023 July;13(7): 1-3.

