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Editorial

Using CHAT GPT to write scientific manuscripts: Frame of reference

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Chatbots are increasingly being used in a variety of websites, mobile devices and messaging softwares, it is an electronic system that generates a simulation of how a human conversation would be. They are used primarily as helpdesk solutions whereon the customer can write specific phrases or keywords and the chatbot fetches the necessary information to resolve the issue eliminating the need to connect the customer with a service agent at a call centre. Chat GPT is an acronym for Chatbot Generative Pre-Trained Transformer developed by Open AI. It is a type of artificial intelligence software that uses loop reinforcements and deep machine learning to simulate human conversations with humans. It's repository is the information in the world wide web. The answers given by the Chat GPT app maybe either pre-written or a newly generated. It can be asked to generate a multitude of responses from preparing draft replies, source information about an area of interest, correct grammar and text errors or even solve problems. [1]

Artificial Intelligence (AI) as such is finding increasing applications in the specialties of radiology, pathology, even surgery. [2] It can also generate manuscripts based on a series of instructions given by the author. Coming to scientific writing it has been considered to be an art. Author(s) painstakingly review published articles, derive inferences and interpret their data in the light of current evidence and then set out to write a manuscript that is both an original and compelling read for the textbook/ periodical/ journal's readership. Needless to say, this is exercise is arduous and time consuming. In this scenario Chat GPT could be a promising aid, however it's rampant and unregulated use for scientific writing could raise ethical concerns.

Chat GPT is already finding application in writing manuscript, creating draft manuscripts, improving the quality of texts, or collate information. [3] Given the understanding that the author has of the moment of Chat GPT, it can find limited use developing an initial draft when provided with the necessary raw information with even the ability to suggest title, it can also help in formatting and correcting language errors. [4] However to the best of author's knowledge there are no known papers on comparing manuscripts written by AI and humans.

Writing a manuscript is also a continuous process, in which a group of researchers guide and supervise the text. This text is therefore in a state of constant evolution until finalised. This requires a deep insight into the subject. A Chatbot on the other hand despite it's high computation speed and lack of fatigue is limited in generating outputs based on the inputs it receives. So, inadequate inputs may result in inadequate outputs thereby compromising the quality of the end result. Keeping this in mind, AI Chatbots cannot replace human researcher's expertise, judgement and nuance. Writing nuances are intricately linked to the personality of the author(s) again something which cannot be replaced by an algorithm. A subject expert can critically analyse text which helps in eliminating biases which inproves the quality of work. A Chatbot will not

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have this ability. Also given the tremendous reduction in workload that goes into a writing a manuscript, it could lead to a sudden increase in publications which may not be correlated to the researcher's experience. On adding then name of an AI chatbot in the authorship is also a topic that needs intense discussion.

In summation; we will see a spurt in AI enabled Chatbots that will help authors and researchers in the future in reviewing information, preparing drafts, however the human role in critically analysing information based on their expertise, experience, personality is what will help science actually grow.

There are interesting times ahead, and maybe we will approach "singularity", but till then our style of presenting data shall reign supreme.

Conflict of Interest

None.

References

1. Salvagno M, Taccone FS, Gerli AG. Can artificial intelligence help for scientific writing? *Crit Care*. 2023;27:75. doi:10.1186/s13054-023-04380-2.
2. King MR. The future of AI in medicine: a perspective from a Chatbot. *Ann Biomed Eng*. 2022;51:291–6.
3. Hutson M. Could AI help you to write your next paper? *Nature Nature Res*. 2022;611:192–3.
4. Hammad M. The impact of artificial intelligence (AI) Programs on writing scientific research. *Ann Biomed Eng*. 2023;51:459–60.

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