## PROLIFERATION OF CHAT GPT INTO HEALTH RESEARCH

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"Chat GPT" (Generative Pre-trained Transformer) is an Artificial Intelligence (AI) based conversational LLM (Large Language Model), launched in November 2022, developed by Open AI (Open AI, LLC, San Francisco, CA, USA). Chat GPT etymology is related to being a CHATBOT (a program able to understand and generate responses using a text-based interface) based on the generative pre-trained transformer (GPT) architecture.<sup>1</sup> The AI chatbots and Chat GPT are sophisticated and can respond to multiple languages.<sup>2</sup> Globally, ChatGPT is the fastest-growing application used in internet history, with nearly 100 million users as of January 2023, and currently has roughly 1.8 billion website visitors per month.<sup>3</sup> ChatGPT can improve the healthcare system and enhance healthcare outcomes by assisting with clinical decision support and relevant clinical guidelines.<sup>4,5</sup> ChatGPT can be valuable for streamlining the workflow and refining personalized medicine in healthcare practice.<sup>6</sup> It can play an essential role in medical education by providing updates on new developments in different medical fields and a tool of assessment to assess the clinical skills of medical students.<sup>7</sup> AI chatbot can be a search engine that helps write research papers. It can be used as an intermediary in a cognition session, assisting in topic selection and reducing the time the authors spend searching for articles.<sup>8</sup> Identifying the boundaries of ChatGPT and their significant limitations, many challenges arise for research purposes.<sup>9</sup> Inaccuracies, transparency, and biases are issues that need to be addressed when using AI-generated text. The unethical utilization of AI technology may extend to fabricating images, which constitutes scientific misconduct.<sup>10</sup> An issue raised by the international press recently, ChatGPT has been listed as a co-author on several papers already. Should co-authorship be assigned to ChatGPT if it drafts large parts of the research paper?11

"WAME Recommendations on ChatGPT and Chatbots with Scholarly Publications" revised and followed the proliferation of chatbots and their expanding use in scholarly publishing and emerging concerns regarding the lack of authenticity of content when using chatbots. They aim to help authors and reviewers understand how best to attribute the use of chatbots in their work and to address the need for all journal editors to have access to manuscript screening tools. According to The WAME Principal recommendation, only humans can be authors; Chatbots cannot serve as authors.<sup>12</sup> Human authors should take full responsibility for academic work and use ChatGPT applications within acceptable standards with transparent disclosure.<sup>13</sup> These recommendations emphasize the importance of manuscript screening tools to detect AI, guide editors on using chatbots in papers published in their journals, and assist authors and reviewers in properly attributing chatbots to their work. Embracing the potential of ChatGPT while remaining vigilant against potential pitfalls, we must collectively ensure that the synergy between human ingenuity and AI contributes positively to advancing health research. With an unwavering commitment to ethical practices and transparent communication, we embark on a journey where technology and academia converge, fostering a new era of scholarly excellence.

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