Benefits and Risks of ChatGPT in Dentistry and Dental Research

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ChatGPT has developed as a strong technology with the potential to revolutionize many domains of dentistry. ChatGPT, an open AI language model, has the potential to provide numerous improvements in the realm of dentistry and dental research [1, 2] It does, however, represent a number of threats that must be properly assessed and considered.

Benefits include improved patient communication, by which ChatGPT can enhance the dentist-patient communication by providing accurate and reliable information. It can answer the dental related questions, discuss various treatment options and address patient concerns promptly, ultimately increasing patient satisfaction. The ChatGPT acts as a valuable resource of education, providing access to the dental conditions and treatments, which can help the patients make informed decisions regarding their dental health and encouraging them adopt more healthy oral care habits. It also assists in scheduling patient appointments, triaging patients based on their symptoms, making it time -saving for dental professionals [3] ChatGPT can help dental researchers identify relevant literature, explore newer and viable research fields, and assist in data analysis and hypothesis formulation, allowing them to accelerate their research speed. It can also be used to create chatbots in dental education to teach dental and medical procedures for students on various topics, thus contributing as a teaching tool [4, 5].

On the contrary, ChatGPT may generate responses that are inaccurate or even out of date. As a result, carefully evaluating the offered information will guarantee that patients are not mislead. Even though it can substitute for communication, the human element or the nature of human interaction as well as the ability to address emotional concern goes missing. Data security remains a crucial consideration when incorporating ChatGPT into routine dental practices [6, 7].

Overall, the integration of ChatGPT in dentistry and research can bring numerous benefits, but it requires cautious implementation to mitigate potential risks and to ensure the best possible outcomes. Amalgamating the power of ChatGPT with human skill can lead to a more robust dental practice and reliable dental research, both of which will benefit mankind.

References

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