

Letters to the editor

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Artificial intelligence

AI is now everywhere

Sir, the world of technology is buzzing with a new word – ChatGPT, a new artificial intelligence (AI) chatbot which is trained to follow instructions in a prompt and provide a detailed response.^{1,2} Users can simply feed in their queries, and the chatbot will reply to them. Unlike other AI chatbots, ChatGPT can answer follow-up questions, admit their mistakes, challenge incorrect premises, and reject inappropriate requests. As an example, Figure 1 shows text that was generated within three seconds when ChatGPT was instructed to ‘write a letter to the editor about artificial intelligence in dentistry in 300 words’.

ChatGPT was launched on 30 November 2022, by San Francisco-based OpenAI. It was co-founded by its current CEO, Sam Altman, and Elon Musk in 2015 and is presently funded by Microsoft and others. By 4 December 2022, OpenAI estimated ChatGPT already had over one million users. At its core, ChatGPT is a large language model and is an AI-powered conversational chatbot, which uses algorithms to analyse a massive corpus of text, often scraped from the internet, to respond to user requests

in language that can sound surprisingly human.³

It is not free from errors or limitations. On its website, OpenAI admits that ChatGPT sometimes writes plausible-sounding but incorrect or nonsensical answers.⁴ While there is immense scope for AI in dentistry, academic and scientific journals will have serious issues to confront, as soon they will also need AI to detect whether the text was generated by AI or human intelligence.⁵

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Public health

HPV training

Sir, a recent letter in the *BDJ* titled ‘Sex conscious clinicians’ has raised an important issue.¹ This letter aims to take a closer look at the role of oral health care professionals in promoting early HPV vaccination. The HPV vaccine has been shown to be highly effective in preventing certain types of cancer, including cervical, vaginal, and vulvar cancer, as well as HPV-related oropharyngeal cancers. However, despite its effectiveness, the vaccine has a high rate of parental declination and hesitancy. This can be due to factors like lack of awareness about the vaccine, misinformation, or concerns about safety.²

Missed clinical opportunities and inconsistent vaccine recommendations are key factors in vaccination rates being lower than targeted coverage rates. A provider’s patient counselling skills are crucial in introducing the vaccine, providing evidence-based recommendations, and addressing parent concerns about the vaccine when they may be hesitant to immunise.^{3,4} Immunisation education tools can boost providers’ confidence and willingness to recommend the vaccine. For instance, the HPV Vaccine: Same Way, Same Day smartphone application was developed to provide web-based training to healthcare professionals. In a pilot study, it has been shown to improve providers’ self-efficacy, attitudes, and knowledge regarding the HPV vaccine recommendation strategies.⁴

The dental workforce can be empowered by training and continuing education courses to boost HPV vaccination delivery rates.⁵ Resources from the Centers for Disease Control and Prevention (CDC) can be used to update knowledge about the vaccine and learn practical strategies for effective health communication.⁶ Due to the

Dear editor,

I am writing to bring to your attention the growing role of artificial intelligence (AI) in the field of dentistry.

As with many other industries, AI is being utilized in dentistry to improve efficiency and accuracy, as well as to enhance the patient experience. For example, AI can be used to accurately diagnose dental issues and recommend treatment plans, freeing up time for dentists to focus on more complex tasks. It can also be used to create more precise and personalized treatment plans, as it can analyze a patient’s medical history and provide recommendations based on that data.

Additionally, AI can be used to assist with tasks such as scheduling appointments, processing insurance claims, and even interacting with patients. This not only saves time and resources, but it also allows dentists to provide a more streamlined and efficient experience for their patients.

However, it is important to note that AI should not be seen as a replacement for human dentists. Instead, it should be viewed as a tool to assist and augment the work of dental professionals. By leveraging the power of AI, dentists can provide higher quality care to a greater number of patients, ultimately benefiting both the profession and the public.

Overall, the incorporation of AI in dentistry has the potential to greatly improve the efficiency and effectiveness of dental care. It is an exciting development that should be embraced and utilized to its full potential.

Sincerely,

[Your Name]

Fig. 1 AI-generated text using ChatGPT