

## LETTER TO THE EDITOR

### Rural health care through the eyes of ChatGPT: a virtual ally for health in remote communities?

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Not applicable.

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## FULL ARTICLE:

### Dear Editor

A recently published systematic review regarding ChatGPT not only summarized its benefits in healthcare education and research but also in healthcare practice<sup>1</sup>. An intelligent virtual assistant developed by artificial intelligence (AI) company OpenAI and specializing in dialogue-based interactions, ChatGPT is equipped with supervised and reinforcement learning techniques for language understanding and response generation. Previous research has shown that, when queried, ChatGPT can provide information regarding its own use in different areas, including medicine<sup>2</sup>.

The use of technology, mostly telehealth, in rural areas is not a novel topic, and its advantages as well as its disadvantages, including the high costs associated with its implementation, have been previously studied<sup>3</sup>. ChatGPT, as an AI chatbot that can handle multiple conversations simultaneously, with continuous availability, reduced infrastructure requirements, and

administrative costs, can potentially offer cost benefits compared to traditional telehealth services.

When questioned about its role in rural health, ChatGPT pointed out seven areas where it could be useful: (1) healthcare information, (2) health education and promotion, (3) symptom triage and telemedicine, (4) mental health support, (5) health monitoring and reminders, (6) language and cultural sensitivity, and (7) data collection and public health surveillance.

Rural areas often face challenges of limited healthcare resources and healthcare professionals. ChatGPT can serve as a virtual assistant, providing accessible information on various health topics. It can be utilized to disseminate health education and promotion campaigns in rural communities, offering personalized health advice, explaining complex medical concepts in simple language, and raising awareness about common health issues like vaccinations, hygiene practices, and disease prevention.

Furthermore, ChatGPT can assist in preliminary symptom triage, helping individuals in rural areas determine the urgency of their health concerns by asking relevant questions about their symptoms and medical history. It can also offer guidance for self-care. Integrating ChatGPT into telemedicine platforms can facilitate remote consultations with healthcare providers for minor ailments or for follow-up queries.

In areas where mental health services are scarce, ChatGPT can provide basic mental health support, including active listening, stress management techniques, and information about local resources for professional help. It can help reduce the stigma associated with seeking mental health support and provide a starting point for individuals to discuss their concerns.

For patients with chronic diseases requiring regular monitoring and adherence to treatment plans, ChatGPT can offer reminders for medication schedules, follow-up appointments, and lifestyle modifications.

Additionally, ChatGPT can be trained to understand and respond appropriately to different languages and cultural contexts, enabling better communication and engagement with patients from diverse backgrounds, thereby overcoming potential language

barriers.

In the realm of public health surveillance, ChatGPT can play a role in data collection. By analyzing conversations and identifying trends during interactions, AI algorithms can potentially identify disease outbreaks, emerging health concerns, or areas that require additional health interventions.

It is important to note that ChatGPT's role is supplementary, as emphasized by ChatGPT itself, ChatGPT is not intended to replace the expertise and personalized care provided by healthcare professionals during remote consultations. Nevertheless, ChatGPT can serve as a valuable virtual ally for health in remote communities.

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