

Artificial intelligence in the management of lymphedema: an international evaluation of its safety and reliability

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Background

Recent advancements in lymphatic reconstruction may take time to be incorporated into official treatment guidelines, due to the need for a predefined and structured consensus process. Contrarily, artificial intelligence has the capacity to rapidly implement new research.



Six cases of lymphedema

Aim

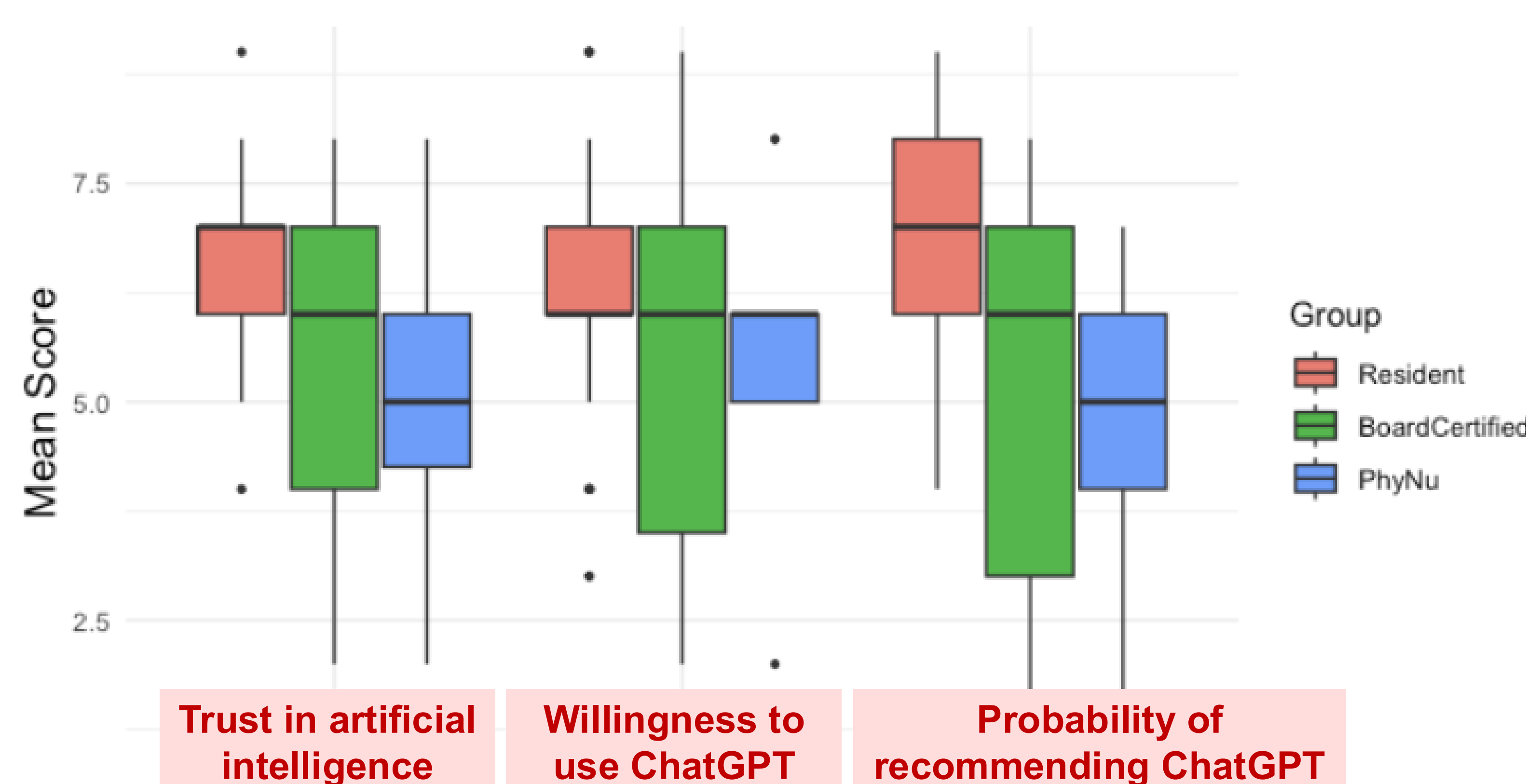
To assess the **safety and reliability** of ChatGPT-generated, personalized treatment recommendations for lymphedema management.

Methods

ChatGPT-generated treatment recommendations for six cases of lymphedema were evaluated by an **international, multidisciplinary, multiprofessional panel** using validated **DISCERN** questionnaires.

Results

A total of **67 participants** from 34 institutions across 11 countries completed the questionnaire, including 33 resident doctors, 24 board-certified doctors, and ten lymphedema physiotherapists/nurses (PhyNu). ChatGPT received high ratings for its **diagnostic accuracy** and **treatment relevance** by resident doctors. In contrast, experienced board-certified lymphedema specialists rated the responses significantly lower expressing concerns over **lack of sources** and inadequate communication of **potential complications**. Additionally, younger participants reported high overall trust and willingness to incorporate artificial intelligence into clinical decision-making.



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User friendliness	Lack of sources
Rapid responses	Inadequate surgical options
High diagnostic accuracy	Inadequate risk management

Conclusion

ChatGPT shows great potential as a **supplementary decision-making** aid for the management of lymphedema, particularly for less experienced clinicians. However, its current value is limited by a **lack of transparent citations** and **variable responses depending on prompt quality**.