

CHALLENGES WITH THE USE OF CHATGPT

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INTRODUCTION

Since its launch in November 2022, ChatGPT has had implications on the conduct and appraisal of education and scholarly activities. As with other generative artificial intelligence platforms, it can be used to extract relevant data from extensive information sources, aid in clinical and laboratory diagnosis, deliver timely updates to healthcare professionals, support students in solving case simulations, and assist patients in understanding their symptoms, accessing general health information, and exploring ways to improve their wellbeing. Despite its benefits to healthcare systems, questions about the credibility and reliability of the information it provides remain.

AIMS

To understand awareness, use, opportunities, and limitations associated with ChatGPT in healthcare and pharmacy education.

METHOD

- A systematic literature search was conducted following PRISMA 2020 guidelines across five scientific databases : PubMed, GoogleScholar, Scopus, ProQuest, and ResearchGate.
- The keywords: *“ChatGPT”, “Awareness”, “Challenges”, “Limitations”, “Use”, “Healthcare professionals”, “Pharmacy Education”* were used to extract relevant data.
- Peer-reviewed, open-sourced journal papers, published in English Language between November 2022 and November 2024 were included in the study.

Data Identification

- Pubmed, Google Scholar, Scopus, Proquest and ResearchGate

Screening

- Title and Abstract, Open-Access, Full-text

Data Inclusion

- Relevance to subject of study

RESULTS

- Literature search revealed 337 publications out of which 107 met the inclusion criteria.
- 40% of the articles focused on applications in healthcare and 22% of the articles reflected on limitations and ethical concerns associated with use of ChatGPT in healthcare.
- Opportunities cited included: enhanced personalized learning (n=11), facilitation research and clinical-decision making (n=43).
- Applications of ChatGPT in direct patient care were reported in 42 articles. Cardiology (n=11), Ophthalmology (n=9) and Radiology (n=8) were found to be the most widely reported specialties with extensive use of ChatGPT.
- 23 reports documented limitations and ethical concerns on use of ChatGPT in healthcare and pharmacy education (Figure 1).

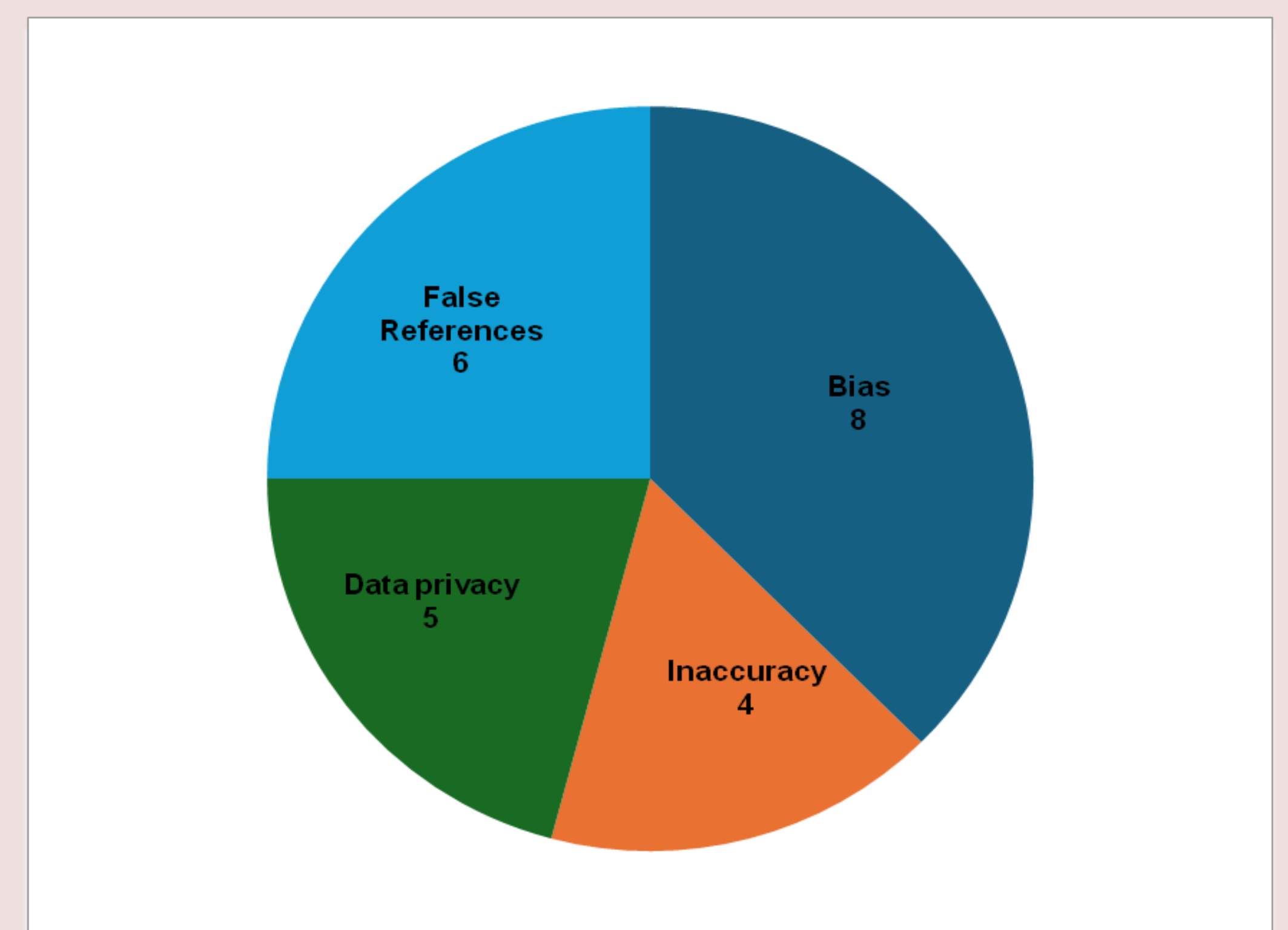


Figure 1: Reported Limitations with ChatGPT in Healthcare (N=23)

CONCLUSION

While ChatGPT can be beneficial for patient-centered care and learning, concerns about accuracy and ethics require robust regulation and further research for its safe and effective integration into education and healthcare. Updated and evidence-based sources of information should be used as training data for ChatGPT development, and professional oversight on all ChatGPT generated responses should be applied to ensure integrity when used in scientific research. Developing competencies for pharmacy students on ethical and rationale use of generative AI, is a means to ensure relevant education for current and future integration of AI in healthcare.