

OLDER ADULTS' PERCEPTIONS AND ACCEPTABILITY TOWARD THE USE OF ARTIFICIAL INTELLIGENCE (AI)-BASED HEALTH TECHNOLOGIES: A QUALITATIVE STUDY

LEE Hiu Toon Jessica, WONG Kwan Ching Arkers
Hong Kong Polytechnic University, School of Nursing
Email: 20050357d@connect.polyu.hk; arkers.wong@polyu.edu.hk



INTRODUCTION

AI in healthcare is rapidly advancing, offering enhanced efficiency and accuracy. With the aging population rising, AI-based health technologies have emerged as crucial tools for monitoring, analyzing data, creating personalized treatment plans, and predictive analytics, especially in addressing the complex health needs of older adults. However, due to limited exposure to AI, older adults may have varied perspectives on its role in healthcare. This study investigates older adults' views on AI-based health technologies to understand their acceptance, challenges, and motivations for adoption. Insights gained will inform the development of more user-friendly AI solutions tailored to the needs of older adults, potentially improving their engagement and utilization of such technologies.

OBJECTIVES

- 1) To investigate older adults' attitudes and perceptions related to the use of AI-based health technologies
- 2) To identify potential facilitators, barriers and challenges that influence older adults' preferences toward AI-based health technologies
- 3) To inform the development of AI-based health technologies that are tailored to older adults' specific needs and preferences

METHODOLOGY

This study employed a qualitative descriptive design and utilized convenience sampling. 27 older adults from a community center were interviewed in three one-hour sessions on December 15, 2023. The interviews covered general impressions, past experiences, attitudes, expected challenges, and motivations regarding AI-based health technologies. Thematic analysis was utilized. Interview data were translated, transcribed, and coded to identify key insights. Sub-themes were derived from the codes and grouped into overarching themes to elucidate participants' perspectives on AI-based health technologies.

CONCLUSION

Older adults have varied perspectives on AI-based health technologies, blending curiosity with skepticism and valuing human involvement in healthcare decisions. To boost acceptance, developers should prioritize user-friendly AI solutions tailored to older adults' requirements. Strong privacy and security measures are essential to allay fears. Collaboration between AI systems and healthcare professionals fosters trust and merges human expertise effectively. Government support through guidelines can aid in the ethical implementation of AI in healthcare. By addressing these factors, AI technologies can cater more effectively to older adults, offering personalized care and enhancing health outcomes.