

AI Chatbots and Psychotherapy: A Match Made in Heaven?

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Dear Editor, Artificial Intelligence (AI) is revolutionizing psychotherapy by combating its inaccessibility.¹ AI chatbots and conversational agents are among the most promising integrations in psychiatry and psychology. By harnessing the power of machine learning and artificial intelligence (Figure), AI chatbots and conversational agents can provide a level of interaction and support previously unattainable in the landscape of mental health. In this letter, I will explore some of their numerous benefits.

Chatbots have evolved from early examples such as ELIZA, a programmable natural language processing programme, and PARRY, a programme that mimicked the behaviour of a human with schizophrenia, to modern ones such as Woebot, Tess, and Replika, which offer cognitive behavioural therapy, sessions, and self-understanding, respectively. Some chatbots such as Kaspar and Nao are also embodied in physical robots, which help children with autism spectrum disorder (ASD) learn social skills and facial recognition. AI chatbots can address the challenges of mental health care, such as the shortage of professionals,² especially in underdeveloped countries; the stigma of seeking help, which is prevalent in many cultures; the cost of therapy, which can be prohibitive for many people; and the limitations of human therapists, who can have variable attention spans, attention-to-detail, and memory capacities. AI chatbots can also offer benefits such as accessibility, anonymity, personalization, and effectiveness. Studies have shown that AI chatbots can improve the outcomes and experiences of mental health patients in various ways, such as enhancing the performance of those with ASD with robotic "therapists",¹ increasing their disclosure of sensitive information to chatbots² and reducing their distress after talking about their problems with conversational agents.³

The benefits of AI chatbots for mental health are clear. However, they also face many challenges that limit their

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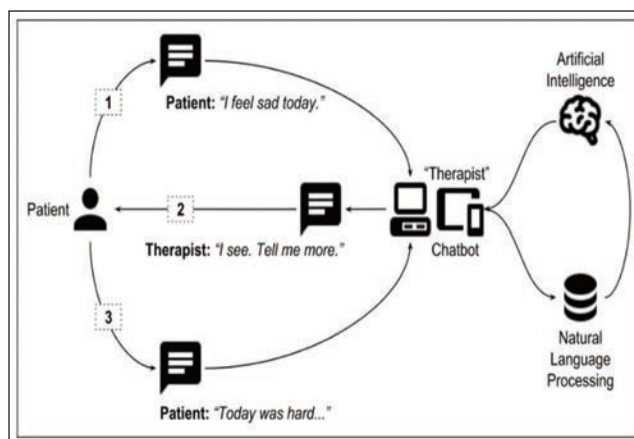


Figure: A sample interaction between a patient and a chatbot therapist.²

usability and reliability. They may lack the emotional skills of human therapists and may not be accountable for their diagnoses and recommendations. They may also not be based on sound mental health knowledge and evidence, as technology companies may not have expertise and experience in this field. Therefore, technology companies and mental health professionals must collaborate and adopt a rational approach to develop and evaluate chatbots. Only then can chatbots realize their full potential and complement existing mental health services safely and ethically.

Disclaimer: None.

Conflict of interest: None.

Funding disclosure: None.

DOI: <https://doi.org/10.47391/JPMA.9608>

Submission completion date: 01-04-2023

Acceptance date: 22-06-2023

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