

Smartphone Applications: Therapy at Your Fingertips

To the Editor: Smartphone applications (apps) have garnered public interest in the field of psychiatry. These interventions help to reach underserved populations in need of mental health services. Preliminary apps assisted users to manage aversive emotional states, such as depression and anxiety.¹ Subsequently, the technology progressed to address a range of mental health problems including social robots for autism and sex robots such as Roxxy.² These apps employ cognitive-behavioral therapy (CBT) and can be used solo or with professional assistance.

A recent article³ in *The Primary Care Companion for CNS Disorders* compared traditional CBT with application-guided therapy. Six trials were analyzed that investigated a variety of patient populations including individuals with anxiety, depression, acrophobia, and panic disorder. In particular, young patients showed greater benefit, as smartphones play a more central role in their lives than older individuals. However, in all age groups, adherence was higher with some degree of clinician involvement.³

In the “real world,” self-guided treatments may not involve clinicians at all. While some apps are portrayed as educational, others are designed to develop therapeutic relationships. These relational apps have endearing names such as Woebot and Wysa and have engaging and empathetic properties. These “chatbot clinicians” are available 24 hours a day and are designed to form an alliance with users.² They are ready to chat about the “troubles of the day,” provide advice, and teach CBT strategies. These apps have a captivating screen

presence and interact with the patient to aid them in the recognition of their symptoms and self-management skills. Concurrently, more research is needed to ensure efficacy and safety of these virtual platforms.

Although technological advancements in this field are promising, the associated risks should not be disregarded. Long-term use of artificial intelligence (AI) interventions could result in some patients developing clinically meaningful attachments to these apps. People may humanize chatbots, which can precipitate an elevated level of trust that could be potentially misused. Just like in human therapeutic relationships, there is the risk of transference of emotions, thoughts, and feelings to the robot. Can the robot adequately manage transference aspects of the relationship?

Ethical principles must be considered when attempting to replace face-to-face mental health services with virtual apps. Although apps are accessible, issues such as safety, confidentiality, and privacy must be addressed. Applications such as Woebot are available through social media platforms and therefore are connected to patients’ real names. When a third-party site is used in conjunction with CBT apps, there is less protection of sensitive information.⁴ Conversely, Wysa allows users to remain anonymous without the use of a third party. Clear guidelines are needed on handling confidential data collected by assistive robots. International standards for clinical trials of AI systems have been developed in Europe to promote transparent protocols.⁵ Unregulated

growth raises concerns regarding the effects of these applications in vulnerable persons. In terms of beneficence, the primary advantage of apps is the potential to reach populations where mental health services are scarce. After all, it is hard to say no to therapy when it is at your fingertips.

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