Limited Access to Integral Care: Digital Therapeutics Show Promise of Scalable Solutions to Behavioral Interventions

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Functional gastrointestinal disorders, or disorders of gut-brain interaction, present significant biological, psychological, and social burdens to the individual and society at large. Emerging research shows that because of the multifactorial nature of these conditions, multidisciplinary treatment is typically needed. Traditional medical approaches now benefit from the addition of nutrition therapy and psychogastroenterology, or the use of evidence-based psychological treatments tailored to gastrointestinal conditions. Currently, there are significant barriers to receiving psychogastroenterology services and it is likely that digital therapeutics have an important place in improving treatment access and outcomes for a select group of patients.

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THE MANAGEMENT OF FUNCTIONAL GASTROINTESTINAL DISORDERS

The biological, psychological, and social impacts of functional gastrointestinal disorders, or disorders of gut–brain interaction (DGBI), are substantial and affect nearly 40% of adults around the world (1). Owing to DGBI complexity and multifactorial nature, a multidisciplinary team may be required to aid in stabilizing symptoms, address comorbidities, and improve patient quality of life (2). Registered dietitians and clinical psychologists with expertise in gastroenterology are now considered first-line treatment providers, especially for patients with IBS (3). Although access to a gastrointestinal (GI) dietitian is limited, there are even fewer GI psychologists available for the number of patients who could benefit from behavioral treatments that include cognitive behavioral therapy, hypnotherapy, and other third-wave psychological interventions (3–6). Szigathy et al. presented a pilot study of incorporating multidisciplinary care using of a coached, digital cognitive behavioral intervention (dCBI) for individuals with DGBI with significant mood and anxiety symptoms. As with other digital and self-directed behavioral treatments for mood and GI conditions of recent years, the results show promise (7–9). It is essential that the field of gastroenterology develop scalable options for improving access to multidisciplinary care for this complex patient population, who are suffering.

STUDY RESULTS

The authors used an open, nonrandomized implementation trial preformed under a quality assurance framework at a tertiary specialty neurogastroenterology clinic. The team consisted of savvy and well-resourced providers who have expertise in the delivery of integrative care for patients with complex gastrointestinal conditions and psychiatric symptoms. As with most clinics like this around the country, there are long wait times and barriers to care that need innovative solutions such as what is proposed. The study team used the UPMC owned, dCBI called RxWell, given as an e-prescription during real-time clinical encounters for patients with functional gastrointestinal disorders displaying emotional distress. The study allowed the patients to receive access to a self-directed CBT and mindfulness training program through RxWell and access to a digital health coach. These patients may have typically waited several weeks to receive behavioral or mental health care, which could lead to exacerbation of their DGBI. Anxiety and depressive symptoms improved, and RxWell may have reduced emergency department utilization, highlighting the potential for broader use in gastroenterology settings. This specific dCBI still required the use of health coaches; bachelor's level graduates with basic training in psychological concepts, who would be alerted by the app if a patient began displaying signs of escalating risk. The coach would then contact the referring clinician for next steps in the patient's treatment. Therefore, an improving access to aspects of multidisciplinary care for patients who may have otherwise received nothing or been on a long waitlist, this option still requires several skilled providers.

IDENTIFYING APPROPRIATE PATIENTS FOR DIGITAL THERAPEUTICS

With the emergence of digital therapeutics, targeting patients with GI conditions comes great responsibility to educate both the patient seeking the service and the provider who is contemplating a recommendation. As this research highlights, protocols for risk escalation are important. This study used the digital health coach who alerted the appropriate medical expert to ensure the safety of

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the patient. Furthermore, most of the patients in this study had at least 1 initial contact with a behavioral therapist who likely had a strong clinical impression of whether the patient could benefit from the use of RxWell. Therefore, the generalizability of who the appropriate patient for the dCBI in real-world settings is still left to be determined via larger clinical trials.

INTEGRATION INTO THE REAL WORLD

Patients with DGBI are often desperate to improve their mood, GI symptoms, and quality of life. They are typically searching on their own for solutions, in addition to using traditional health care. Because digital therapeutics become more available to patients in App Stores, those providing gastroenterology care should be aware of the following considerations:

1. Patients with GI conditions and severe mood symptoms should not solely rely on self-directed, digital behavioral interventions. In clinical practice, most psychogastroenterology treatments, such as gut-directed hypnotherapy or cognitive behavioral therapy, are not recommended for patients with severe mood symptoms, notable cognitive deficits, untreated posttraumatic stress, or those who are at risk for being in an altered state of consciousness (i.e., psychosis, dissociative identity disorder, schizophrenia, and borderline personality disorder). Therefore, these patients should be prioritized to comprehensive mental health services to stabilize their psychiatric symptoms.
2. Providers should discuss the reason for recommending a digital therapeutic (i.e., to support in-person medical care, to use while on a waitlist for behavioral therapy consultation, to use as a self-directed behavioral therapy, or in-lieu of seeking in-person behavioral therapy).
3. As more digital behavioral therapeutics go to market, providers should be aware that patients are curious about the potential value of adding one to their treatment plan and may have questions about which services may be best suited to their needs. Therefore, providers should begin to prepare for answering such questions and be aware of what is on the market for gastroenterology patients.
4. This study used the widely available GAD7 and PHQ8 screening tools for symptoms of anxiety and depression. At the very least, gastroenterology practices should consider standardizing use of mental health screening measures to inform treatment recommendations to in-person, digital or a combination of both behavioral options. This study also underscores the important role of behavioral health consultation with experts who can assist in directing patients to the appropriate services.

CONCLUSIONS

It is clear that innovative ways to offer integrative treatment options are necessary considerations for clinicians treating patients with GI (6,10). Psychogastroenterology services are typically limited to large health systems. Digital therapeutics, when combined with regular screening and discussions of mental health in gastroenterology practice, offer an alternative, scalable solution for a subset of appropriate patients.

CONFLICTS OF INTEREST

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