Digital TherapeuticsAddress Unmet Needs

Lack of access to safe and effective solutions for sleep problems and insomnia represents a significant public health concern. Insomnia affects 10-20% of the population and is a risk factor for the development of other mental health difficulties, including anxiety and depression (Baglioni et al., 2011; Hertenstein et al., 2019).



Current Interventions

Cognitive behavioral therapy (CBT) is the first line treatment for insomnia (Qaseem et al., 2016). However, CBT is traditionally delivered by highly trained specialists and therefore is nearly impossible to access for most people around the world due to cost and availability of appropriate providers. As a result, the majority of people with insomnia do not have access to treatment and those who do often rely on sleeping pills, which are not recommended for long-term use. Additionally, sleeping pills are associated with notable risks and side effects (Dyer, 2019).

There are three distinct barriers to accessing CBT: (1) limited access to CBT providers; (2) lack of referral to CBT by primary care providers who do not routinely screen for sleep disorders; (3) lack of patient knowledge of CBT, or the presence of negative beliefs about therapy (stigma) (Kathol et al., 2018).

Addressing the Need

Sleepio, a digital therapeutic created by Big Health, a member of the Digital Therapeutics Alliance, serves as an example of how digital therapeutics provide an opportunity to address unmet medical needs for millions of people around the world.

Digital therapeutics are able to address healthcare access problems and offer swift scalability to end users. As a fully automated and self-guided program, Sleepio allows individuals to effectively address common sleep problems for which they might otherwise not receive appropriate help.

Added Benefits

As standardized products, digital therapeutics also have the ability to provide consistent and reliable outcomes, similar to pharmaceuticals. To date, Sleepio has been validated in 8 randomized controlled trials, showing consistent effectiveness in improving sleep across a wide range of populations and settings (e.g., Cheng et al., 2018; Espie et al., 2012; Espie et al., 2017).

Another benefit digital therapeutics provide is helping individuals avoid certain forms of stigma sometimes associated with seeking help for mental health difficulties. In Sleepio's case, the product is often provided to employees by their employers. Employer partners working with Sleepio highly value this aspect of digital therapeutics, as they are well aware of the significant obstacle stigma presents in keeping people from accessing the help they need.

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