Your smartphone, a personal support to manage and recover from depression

Camille Nadal

In 2017, World Health Organisation estimated that, globally, more than 311 million people of all ages suffer from depression. It is also the leading cause of disability worldwide [1]. In Nigeria for example, only 1/5 of those with a depressive episode receive any treatment and only 1 in 50 receives treatment that is minimally adequate. Difficult access to health institutions, high healthcare costs, and the stigma surrounding depression impede the access to help. Mobile Health is a growing field of research that brings innovative solutions to these issues, in particular relying on an everyday object: your smartphone.

Emotion regulation deficit, a main issue in depression

Emotion regulation is the process by which individuals influence which emotions they have, when they have them, and how they experience and express them [2]. One may engage in emotion regulation when appraising his/her current emotional state as inappropriate in our society, or when becoming aware that this emotional state is impacting in an unwanted way the impression one gives people, his/her relationships, work performance, or well-being. People living with depression suffer these two kinds of situations and are more susceptible to use dysfunctional emotion regulation strategies, such as rumination or substance abuse [3]. Successfully regulating their emotions is a key in their healing journey and their smartphone could be the assistant they need to achieve it.

Managing depression with the help of smartphones

In 2017, about 2.6 billion smartphones were in use worldwide [4] and the average smartphone ownership is about 79% in Europe [5]. Mobility, existence of numerous embedded sensors, interaction with wearable devices, all these features of smartphones make them very good tools for assisting people living with depression. Studies [6,7,8] showed that smartphones could be used to:

- Provide 24/7 access to support
- Accurately predict emotional states
- Detect suicidal thoughts
- Facilitate patient-therapist interaction
- Help compliance with treatment
- Motivate patients
As individuals experience differently depression, the assistance provided by technology needs to be adaptive. By making possible correlation between context data, occurring events, user input data and physiological measures, smartphones allow a highly personalized follow-up. Finally, mobile assistance does not have to be a standalone intervention, but can complement face-to-face therapy providing therapists with more complete and reliable data, and helping patients to gain self-awareness and learn effective strategies to manage and recover from depression.

Acknowledgments

This research has been conducted as part of AffecTech Marie Curie Innovative Training Network. AffecTech is funded by the European Commission and dedicated to delivering effective low-cost self-help technologies to help sufferers of affective health conditions such as depression, anxiety and bipolar disorders.

Sources


