
Abstract

Utilizing a Culturally-Modified Smartphone App to Increase Engagement in Depression Treatment among Chinese Americans: A Pilot Study

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Abstract

Background: As smartphone technology has become ubiquitous in the US society, recent research indicates there is a high rate of smartphone ownership and medical apps use among ethnic minorities. Although the actual effectiveness of medical apps is largely unknown, emerging data has shown interest and feasibility of utilizing smartphone apps to reduce health disparities and improve engagement with the health care system among low-income minorities.

Objective: This is a pilot study to evaluate the feasibility of using a smartphone application featuring a culturally-validated Chinese Bilingual version of the Patient Health Questionnaire (CB-PHQ-9) and Tai-Chi mindfulness intervention among Chinese American with depression. We hypothesize that Chinese American outpatients will be able to download the app to their personal smartphone and use it for 30 days. We further hypothesize that the culturally-customized screening tool and mindfulness intervention delivered through a smartphone app will increase the engagement to seek depression treatment among Chinese Americans.

Methods: A total of 25 participants will be recruited from outpatient psychiatry and primary care clinics at Beth Israel Deaconess Medical Center (BIDMC) located in Boston, Massachusetts. Eligibility requirements include Chinese ethnicity, fluency in either English or Mandarin Chinese, and a baseline score of 10 or higher on the PHQ-9. Participants will be instructed to use the Tai-Chi mindfulness exercise and then complete the CB-PHQ-9 once a day during a 30-day period. At the 30th day follow-up visit, a 10-minute semi-structured verbal interview and a written survey containing the System Usability Scale (SUS) will be administered to each participant to collect user feedback. The data of daily app login, CB-PHQ-9 scores, and self-reported physical location will be automatically recorded by the app.

Results: Preliminary results will be available by the time of the CHC 2017 meeting. The IRB of this pilot study is currently under review at BIDMC.

Conclusions: Preliminary results will be available by the time of the CHC 2017 meeting. The IRB of this pilot study is currently under review at BIDMC.

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KEYWORDS

Smartphone apps; Cultural psychiatry; Asian American; Depression

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