Do Weight Loss Mobile Apps Include Evidence-Based Behavioral Strategies?

San Francisco, CA - Weight loss mobile apps are proliferating in the marketplace but it is unclear to what extent they include evidence-based strategies for weight loss. Apps using evidence-based strategies would seem more likely to be effective than apps relying strategies not rooted in the science of weight loss.

“Health care professionals don’t know which apps to recommend to patients so they may be hesitant to recommend any at all. We wanted to evaluate apps based on how well they approximate evidence-based behavioral counseling for obesity so that we can point health care professionals to apps that have a basis in science,” says Dr. Sherry Pagoto, at the University of Massachusetts Medical School.

Pagoto is the lead author of a study that evaluated the top 30 weight loss apps in the iPhone and Droid markets. Pagoto will present results of the study during a paper session on Thursday March 21, 2013 at 3:45 p.m. Pacific Time during the Society of Behavioral Medicine’s Annual Meeting & Scientific Sessions in San Francisco, CA.

Each app was coded against a checklist of 20 behavioral strategies employed in the Diabetes Prevention Program Lifestyle Intervention, a state-of-the-art behavioral weight loss intervention which is strongly supported by large clinical trial research. Findings revealed that apps included on average only 19% (sd= 13; range= 0-65%) of the evidence-based behavioral strategies. Seven of the 20 behavioral strategies were not found in any apps. The app with the highest number of behavioral strategies was MyNetDiary Pro which included 65% of the evidence-based strategies. The most common strategies included in apps were diet and exercise tracking, goal setting and feedback.

“Weight loss mobile apps certainly have room for improvement, as many of the behavioral strategies we routinely use in behavioral counseling for weight loss are not yet found in apps.

Missing strategies such as problem solving, time management, relapse prevention, and others are particularly helpful for people who are experiencing slow weight loss or low motivation,” says Pagoto.
“The good news about weight loss mobile apps is that they make certain behavioral strategies much easier for the user. For example, bar code scanners make dietary tracking much easier than the old-fashioned paper-and-pencil approach. Apps also have the potential to employ behavioral strategies at times when people need them the most which is an improvement upon clinical care which is restricted to clinical contacts. The hope is that developers and behavioral scientists unite to realize the full potential of the mobile app to be an effective weight management tool in this obesity epidemic.”

The study authors are Drs. Sherry Pagoto, Kristin Schneider, Mirjana Jojic, Michelle DeBiasse and Devin Mann.

The Society of Behavioral Medicine (www.sbm.org) is a multidisciplinary organization of clinicians, educators, and scientists dedicated to promoting the study of the interactions of behavior with biology and the environment and the application of that knowledge to improve the health and well being of individuals, families, communities and populations.

This study was presented during the 2013 Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM) from March 20-23 in San Francisco, CA. However, it does not reflect the policies or the opinion of the SBM.

Given that this study was presented at a scientific meeting, the data and conclusions reached should be regarded as preliminary, until they are published in a peer-reviewed journal. Funding agencies played no role in this study. There are no conflicts of interest for the investigators.

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