Low-income obesity patients lose weight in new study

October 22 2018

With the help of a free phone app, low-income obese patients with signs of cardiovascular risk lost a clinically meaningful amount of weight, finds new research from Duke University.

The study is among the first to report successful weight loss within a low-income population—a group that suffers from skyrocketing rates of obesity but has proven hard to treat, said lead author Gary Bennett.

"Obesity continues to wreak havoc on the health of our country and we've had the most difficulty treating low-income Americans, those who are most affected by the condition," said Bennett, the Bishop-MacDermott Family Professor of Psychology and Neuroscience at Duke University.

"This study shows we can help patients who are most at risk by embedding treatment in primary care settings and keeping patients engaged using a simple app."

In the study, patients in a primary care clinic used a free app called Track to monitor behavior changes. The app wasn't used in isolation: Doctors were well-versed in the app and dietitians also followed up with coaching calls. Patients who used the app and received coaching calls fared much better than a control group that received routine care.

Among Track program participants, 43 percent lost more than 5 percent of their body weight over the course of a year. Their waist sizes

decreased, as did their blood pressure. And an even larger number of participants—56 percent—lost at least 3 percent of their body weight over 12 months, which doctors consider a healthy amount of weight loss. The results are among the best obesity treatment outcomes seen in a medically vulnerable population, Bennett said.

At a time when obesity remains epidemic, the research also offers encouraging evidence of a treatment approach that can work in a primary care setting. That's important, as primary care settings are where most patients receive health care. Yet primary care settings rarely offer effective weight-loss treatment, and very few studies have measured delivery of a weight loss app in such setting.

The results appear online Oct. 22 in the *American Journal of Preventive Medicine*.

Most weight-loss research to date has focused on otherwise healthy people who just want to lose weight. Yet obesity very often exists side by side with other health problems. For that reason, the researchers focused on obese people who were sick: In addition to obesity, study participants suffered from either hypertension, high cholesterol or diabetes.

"Most of what we know about obesity treatment is based on people who are reasonably healthy and highly motivated to lose weight," Bennett said. "We've shown an ability to promote clinically meaningful weight loss among patients who need help the most, those with low motivation who already have the health risks associated with obesity."

The study took place in a mostly rural area. To Bennett, the successful results suggest that digital obesity treatments can help close the gap between obesity care in urban and rural settings.

"Digital treatments allow us to reach into the most remote settings to

deliver high-quality care," Bennett said. "Expanding broadband services to all Americans should be a public health priority."

More information: "Effectiveness of an App and Provider Counseling for Obesity Treatment in Primary Care," Gary G. Bennett, Dori Steinberg, Sandy Askew, Erica Levine, Perry Foley, Bryan Batch, Laura Svetkey, Hayden Bosworth, Elaine Pulio and Ashley Brewer, Abigail DeVries and Heather Miranda, *American Journal of Preventive Medicine*, December 2018. DOI: 10.1016/j.amepre.2018.07.005

Provided by Duke University