Piloting a mobile health intervention to increase physical activity for adolescents with ADHD

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Abstract

Physical activity (PA) reduces symptoms of Attention Deficit Hyperactivity Disorder (ADHD); interventions to increase PA may improve functioning and health for adolescents with ADHD. Mobile health (mHealth) technology and social media constitute promising interactive modalities for engaging adolescents—who are at highest risk for ADHD treatment drop-out—in interventions to increase PA. The current pilot study evaluated feasibility and acceptability of an innovative intervention incorporating an mHealth-linked wearable activity tracker (Fitbit Flex) and a Facebook group to increase PA among adolescents with ADHD. 11 adolescents diagnosed with ADHD (age 14–18, m = 15.5; 54% female) participated in a 4-week trial utilising the Fitbit Flex in conjunction with (1) weekly personalised step count goals (2) social support through a Facebook group and (3) daily text messages about PA. The study took place in the greater Seattle, Washington area in the fall of 2015. Adolescents completed online surveys twice per week to rate their ADHD symptoms and positive and negative mood states, and parents rated adolescent ADHD symptoms weekly.

Participants were adherent to the study protocol and acceptability of the intervention was high. Linear mixed models indicated that participants significantly increased their average weekly steps over the course of the study and demonstrated improvements in both adolescent and parent-reported ADHD Inattentive symptoms.

Results indicate that this mHealth intervention is engaging and promising for increasing PA among adolescents with ADHD and warrant further study. Implications for improving ADHD symptoms and overall functioning for this undertreated population are discussed.