The Children's Attention-Deficit Hyperactivity Disorder Telemental Health Treatment Study: Caregiver Outcomes.


Abstract

The Children's Attention-deficit Hyperactivity Disorder (ADHD) Telemental Health Treatment Study (CATTS) tested the hypotheses that children and caregivers who received guideline-based treatment delivered through a hybrid telehealth service delivery model would experience greater improvements in outcomes than children and caregivers receiving treatment via a comparison delivery model. Here, we present caregiver outcomes. 88 primary care providers (PCPs) in seven geographically underserved communities referred 223 children (ages 5.5 - 12.9 years) to the randomized controlled trial. Over 22 weeks, children randomized to the CATTS service delivery model received six sessions of telepsychiatry and six sessions of caregiver behavior management training provided in person by community therapists who were trained and supervised remotely. Children randomized to the comparison Augmented Primary Care (APC) service model received management in primary care augmented by a single telepsychiatry consultation. Caregiver outcomes included changes in distress, as measured by the Patient Health Questionnaire (PHQ-9), Parenting Stress Index (PSI), Caregiver Strain Questionnaire (CSQ) and Family Empowerment Scale (FES). Caregivers completed five assessments. Multilevel mixed effects regression modeling tested for differences between the two service delivery models in caregiver outcomes from baseline to 25 weeks. Compared to caregivers of children in the APC model, caregivers of children in the CATTS service model showed statistically significantly greater improvements on the PHQ-9 (β = -1.41, 95% CI = [-2.74, -0.08], p < .05), PSI (β = -4.59, 95% CI = [-7.87, -1.31], p < .001), CSQ (β = -5.41, 95% CI = [-8.58, -2.24], p < .001) and FES (β = 6.69, 95% CI = [2.32, 11.06], p < .01). Improvement in child ADHD symptoms mediated improved caregiver scores on the PSI and CSQ. Improvement in child ODD behaviors mediated caregiver CSQ scores. The CATTS trial supports the effectiveness of a hybrid telehealth service delivery model for reducing distress in caregivers of children with ADHD and suggests a mechanism through which the service model affected caregiver distress.