Health-related quality of life and physical activity in children and adolescents 2 years after an inpatient weight-loss program.

Abstract:
To investigate changes in health-related quality of life (HRQOL), body mass index (BMI), physical activity, and sedentary behavior at 24 months after an inpatient weight-loss program and to examine correlations between changes in HRQOL and BMI or physical activity. This prospective study included 707 overweight and obese individuals (mean age, 14 ± 2 years; 57% girls) participating in a 4- to 6-week inpatient weight-loss program, 381 of whom completed a 24-month follow-up. HRQOL, physical activity, sedentary behavior, and BMI were assessed at baseline, at discharge, and at 6, 12, and 24 months after starting therapy. Longitudinal analyses were conducted using repeated-measures mixed models, adjusted for age, sex, and baseline outcome and accounting for attrition over time. All variables improved over treatment and 6-month follow-up (P< .05). At 24 months, overall HRQOL indicated improvements relative to baseline (3 points on a scale of 0-100; 95% CI, 1.68-4.47; P< .001). Of the 6 HRQOL domains, the greatest improvement was observed for self-esteem (11 points; 95% CI, 8.40-13.14; P< .001). BMI was 0.5 kg/m(2) lower than at baseline (95% CI, -0.92 to -0.02; P = .04). Long-term changes in physical activity explained 30% of the variation in overall HRQOL (P = .01), and change...
in BMI was not associated with a change in HRQOL. This inpatient weight-loss program was associated with positive changes in HRQOL over the long term, with particular improvements in self-esteem. The results indicate the potential role of physical activity in improving HRQOL without a substantial change in body composition.