



Research Week 2020

INFLUENCE OF CAREGIVER WEIGHT-LOSS PROGRAM ON CHILDREN'S PHYSICAL ACTIVITY

Hannah Bessette, B.S.N., R.N., Karen Lyons, PhD, FAGSA, Christopher Lee, PhD, FAHA, FAAN, Lissi Hansen, PhD, RN
bessette@ohsu.edu
OHSU

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Abstract

Purpose

To assess the influences of change in moderate-to-vigorous physical activity (MVPA) /sedentary time (ST) of caregivers participating in a commercial weight-loss program (CWLP) on their children's change in MVPA/ST.

Background

While research shows that caregiver participation in CWLP can help reduce their weight-related outcomes, the secondary effects on a child's weight-related behaviors from caregiver participation in a CWLP are less known.

Methods

Data from 29 caregivers (20 parents and 9 grandparents) and their children/grandchildren were collected during an 8-week participation period. MVPA/ST data were collected using accelerometers, and BMI data were calculated from measured height and weight at beginning and end. Multivariate linear regression assessed the associations of changes in caregiver's percent of time spent in MVPA/ST and changes in their child's percent of time spent in MVPA/ST, controlling for child's sex and age. Beta coefficients (β) with 95% confidence intervals (CI) were reported.

Results

For caregivers that decreased BMI over 8-weeks, changes in time spent in MVPA was strongly associated with the change in children's time spent in MVPA compared to caregivers who maintained/increased BMI ($\beta=2.61$ [95% CI: 0.45, 4.77] and $\beta=0.24$ [-2.16, 2.64], respectively; $R^2=0.37$). Similarly, changes in caregivers' time spent in ST was strongly associated with changes in children's time spent in ST compared to caregivers who maintained/increased BMI ($\beta=2.42$ [1.02, 3.81] and $\beta=0.35$ [-0.45, 1.14], respectively; $R^2=0.63$).

Conclusion

Our findings reinforce encouraging caregivers to enroll in a CWLP may not only improve their weight-related behaviors, but also weight-related health in their children, including MVPA/ST.

