

Abstract Title

An impact evaluation: Bringing Active Living and Nutrition into your Childhood Everyday (BALANCE) program and nutrition education on parental efficacy and child health behaviour change

J Blais St-Jacques¹, A Boucher¹, A Haasdyk²

¹Northern Ontario Dietetic Internship Program, Sudbury, ON, ²NEO Kids - Health Sciences North, Sudbury, ON

Abstract

Introduction: BALANCE is a family-based pediatric obesity program that focuses on changes in health behaviours and outcomes rather than changes in weight and Body Mass Index (BMI). Family-based behavioural interventions are regarded as the first line of treatment for childhood obesity.

Objectives: To establish if the nutrition education components were effective in eliciting parental efficacy for healthy behaviours in their children; and, if changes in parental efficacy were associated with patient age, attendance rate, BMI and serum biomarkers of improved health.

Methods: Parental efficacy was measured using the online Parent Efficacy for Children Healthy Weight Behaviour (PECHWB) scale completed by the child's legal guardian pre and post program (summer 2017/18 - winter 2018/19). Changes in parental confidence levels were assessed by comparing the mean difference of pre and post scores; statistical significance was determined using the Wilcoxon signed-rank test. Patient's age at intake, attendance rate, and changes in pre/post BMI, lipid profile and fasting blood glucose were assessed using regression analysis to determine an association with changes in parental confidence.

Results: Forty participants were recruited; 20 completed the PECHWB questionnaire both pre- and post-intervention. Changes in confidence were statistically significant for two of six scale components: fruit intake ($p < 0.0438$) and limitations to screen time ($p < 0.0090$). There was no association between pre/post changes in PECHWB with the number of classes attended nor with changes in BMI or serum biomarkers.

Conclusions: The BALANCE program appears effective in eliciting parental efficacy for certain healthy behaviours in their children, yet no related associations were evident. The low PECHWB scale response rates warrant further review as an appropriate evaluation tool. A larger sample size is required for more conclusive results.

Significance to the Field of Dietetics: Similar interventions that address parental efficacy and positive behaviour change may be beneficial in the treatment of childhood obesity.