Yanelis Diaz

Medicine
yanelis.a.diaz@vanderbilt.edu

Psychosocial Risks and Childhood Obesity in Latino Children Living in Nashville

Introduction: COACH is a randomized control trial targeting childhood obesity in low-income Latino families through a community-based, individualized behavioral intervention. Past studies show psychosocial characteristics have an impact on parent and child health behaviors that contribute to childhood obesity. The purpose of this study is to analyze baseline data from COACH to find key associations between psychosocial characteristics and childhood obesity in Latino families.

Methods: In a cross-sectional study design, baseline data was utilized from 303 participants enrolled in COACH. The psychosocial variables of interest were well-being, social support, financial hardship, community resources, and food insecurity. Data was collected from five behavioral scales: Family Resilience Assessment Scale, ENRICHD: Social Support, WHO-5 Wellbeing Index, USDA House Food Insecurity, and a financial hardship question. A multivariable linear regression model was conducted to assess the associations of each variable with child BMI-Z; the model adjusted for parent BMI, parent birth country, child age, and child sex.

Results: The average child BMI-z percentile was 76.5, child age was 5.2 years old, and Adult BMI was 31.3. Most caregivers were born in Mexico (37%), Honduras (21%), Guatemala (20%), or El Salvador (10%). Participants reported difficulty paying their bills often or sometimes (53%) and food insecurity (34%). Higher scores on ENRICHD: Social Support were marginally significantly associated with lower child BMI-Z (-0.02; 95% CI=[-0.05, 0.004]; p=0.088). Higher adult BMI had a significant association with higher child BMI-Z (0.06; 95% CI=[0.03, 0.08]; p = 0.00).

Conclusions: Of the psychosocial domains, a marginal association was found between child BMI-z scores and social support. These results help understand how psychosocial factors can be used to create targeted interventions and subsequently decrease health disparities affecting minority and low-income pediatric populations.