

## Oral Session 7

### Research Study

Title: "The Association Between Adverse Childhood Experiences and Cardiometabolic Outcomes Among Green Family Foundation NeighborhoodHELP Patients in Miami from 2016 to 2021: A Pilot Study"

Gameli Antonio; Zahra Ukani; Noël C Barengo MD, MPH, PhD; Pura Rodriguez, MPH; Prasad Bhoite; Eduardo Camps-Romero MD; Onelia G. Lage, MD

Category: Public Health; Epidemiology

Keywords: Obesity; Hypertension; Cardiometabolic Conditions; Depression; Adverse childhood experiences

**Introduction and Objective.** Based on recent literature, people who have endured adverse childhood experiences (ACEs) are at an increased risk of developing chronic conditions such as obesity, hypertension, and diabetes. Analyzing this association within our study population can characterize this problem in the Miami-Dade community and allow for public health measures to be employed to address it. The objective of our study was to determine whether there is an association between adverse childhood experiences and cardiometabolic conditions among Collaborative Care Program (CoCP) patients within the Green Family Foundation NeighborhoodHELP in Miami from 2016 -2021.

**Methods.** This non-concurrent cohort study included data from 150 used data from the NeighborhoodHELP patients. Adult patients who were referred to the NeighborhoodHELP Collaborative Care Program (CoCP) and were assessed for ACE scores were included. Participants with missing information on any of the key variables were excluded. The main exposure variable of the study was the ACE score. Participants were divided into (i) low ACE score (score  $\leq 3$ ) and (ii) high ACE score (4-10). The main outcome variable was the presence of obesity, hypertension, and diabetes (chronic health outcomes). Covariates included age, gender, race, ethnicity, marital status, preferred language, smoking, alcohol use and mental health status. Unadjusted and adjusted logistic regression analysis were used to calculate odds ratios (OR) and their corresponding 95% confidence intervals (CI).

**Results.** After adjusting for confounders including age, sex, GAD-7 score and PHQ-9 score, there was no statistically significant association between adverse childhood experiences and cardiometabolic outcomes (OR 0.76, 95% CI 0.35-1.66). None of the covariates were statistically significantly associated with cardiometabolic outcomes.

**Conclusions-Implications.** Our study found that there was no statistically significant association between adverse childhood experiences and cardiometabolic outcomes. Further research should be conducted within similar populations to evaluate the effect of a larger sample size or controlling for additional confounders maintains this finding or produces an association.