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Title

Increased Adverse Childhood Events are Associated with Poor Nutrition in Adulthood

Priority 1 (Research Category)

Behavioral, psychosocial, and mental illness

Presenters

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Abstract

Adverse childhood experiences (ACEs) can be defined as a range of experiences occurring before the age of 18 that have the potential to produce future harm or distress to an individual's development. The association between ACEs and negative health outcomes is well-established and evident in research and practice. Among these health outcomes are increased risk for chronic disease, mental health conditions, and risky health behaviors. The association between ACEs and poor nutrition in adulthood has not been studied. Thus, the purpose of this study is to examine the relationship between ACEs and nutrition habits using a nationally representative sample. We analyzed a sample of 104,265 adults from a 2019 CDC state-specific Behavioral Risk Factor Surveillance System (BRFSS) survey, which gathered data on Adverse Childhood Experiences and self-reported nutritional behaviors. The population included people of different racial backgrounds that were ages 18 and up with varying education levels and annual income. A nutritional score was calculated based on the frequency of healthy and unhealthy food consumption that was asked a part of the survey. The four nutrition-related parameters assessed were vegetables, fruits, French fries, and sugar-containing fruit juices. The final nutrition score was computed as vegetables score + fruits score - French fries score - fruit juice with added sugar score. A linear regression model was used to assess the association between ACE score and nutrition score. Results are presented with unadjusted and adjusted beta coefficients with 95% confidence intervals. This showed a beta coefficient of -0.67 when comparing ACEs and nutrition ($p < 0.01$), and after adjusting for multiple factors including age, gender, marital status, education, income, BMI, and physical activity, we found a beta coefficient of -0.36 ($p < 0.01$). There was a statistically significant negative correlation between increased ACEs and poor nutrition habits in adulthood, suggesting there is an impact of ACEs on adult nutritional behavior, especially as the ACE score increases. Interventions to combat this at the public policy level as well as the individual clinician level should be explored in order to help reduce poor nutrition in this vulnerable population.