Research Days

May 5th, 12:00 PM - 12:15 PM

Spending on Public Benefit Programs and Exposure to Adverse Childhood Experiences

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Background: Adverse childhood experiences (ACEs) have been shown to be associated with poor health outcomes, and children living in poverty are more likely to experience ACEs. Our objective was to estimate the association between spending on benefit programs and cumulative exposure to ACEs among children.

Methods: This cross-sectional study examined state and federal spending, at the state-level, on 5 categories of public benefit programs: cash, housing, and in-kind assistance; housing infrastructure; childcare assistance; refundable Earned Income Tax Credit; and Medical Assistance Programs (e.g., Medicaid). The primary exposure was median annual spending per person living below the federal poverty limit across 2010-2017 Federal fiscal years (i.e., one observation per state). The primary outcome was state-level percentage of children aged <18 years having ever been exposed to ≥4 ACEs, as reported in 2016-2017 National Survey of Children's Health. Pearson correlations estimated unadjusted correlations. Linear regression models estimated associations after adjustment for states' racial and ethnic demographics. A sub-analysis including only children 0-8 years of age was conducted to more closely focus on children who could have been first exposed to ACEs in the 2010-2017 Federal fiscal years.

Results: Among the 51 states, a median of 6.3% of children (IQR: 5.2, 7.6) had exposure to ≥4 ACEs. Spending varied between states and was correlated with the percent of children with ≥4 ACEs (r= -0.41 [95% CI: -0.62, -0.15, p= 0.003]; Figure 1). Total spending on all benefit categories combined was associated with lower exposure to ≥4 ACEs (β coefficient= -0.11 [95% CI: -0.18, -0.04]; p= 0.005). This association suggests that for each additional $1000 spent per person living in poverty, there was an associated -0.7% point difference, or 496,379 fewer children accumulating ≥4 ACEs nationally. Increased spending in each individual benefit category was also associated with decreased reported ACEs exposure (Table 1, Figure 2; all p <0.05). Among children 0-8 years, greater average annual total spending as well as spending on cash, housing, and in-kind assistance; childcare assistance; and Medical Assistance Programs remained significantly associated with decreased reported ACEs exposure (Table 1).

Conclusions: Average annual spending on benefit programs was associated with less cumulative exposure to ACEs. Investments in public benefit programs not only decrease childhood poverty but may also have broad positive effects on near- and long-term child well-being beyond the programs' stated objectives.