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Childhood Adversity a Leading Preventable Factor in Death?

— Violence and neglect linked to suicide, STIs, heart disease

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Childhood adversity -- encompassing child abuse, neglect, and violence, among other hazards -- was associated with over 430,000 deaths in the U.S. in 2019, according to a systematic review.

"For perspective, this figure is higher than the total number of U.S. COVID-19 deaths for 2020. The true contribution of [childhood adversity] to mortality is likely much higher, as no published estimates were available on the association of [childhood adversity] with many leading causes of death," Katie McLaughlin, PhD, of Harvard University in Boston, and colleagues reported in *JAMA Pediatrics*.

Drawing upon seven meta-analyses, they found that deaths with the strongest ties to childhood adversity were from suicide and sexually transmitted infections, of which 38% and 33% of cases, respectively, could have been prevented if the adversity had not occurred. Childhood adversity was also implicated in various other unhealthy behaviors and disease markers, such as alcohol use, illicit drug use, and smoking.

McLaughlin's group estimated that 219,470 deaths due to heart disease can ultimately be traced back to childhood adversity. Heart disease is the leading cause of death in the country -- claiming approximately 650,000 lives every year, according to the CDC.

In the year 2020, there were approximately 365,000 deaths from COVID-19.

"Overall, these results suggest that experiencing [childhood adversity] is a leading preventable factor associated with mortality and should be a target for public health efforts to prevent chronic disease and mortality," the researchers wrote. They recommended interventions such as early screening for childhood adversity by pediatricians as well as increased access to home visitation services.

Prior estimates suggest that childhood adversity impacted just under half of all children in the U.S., with many experiencing multiple forms. Women and people of color are also more likely to have experienced childhood adversity.

Other groups have also linked various types of childhood adversity to cardiovascular disease risk, dementia, and life expectancy.

"The present study was, to our knowledge, the first attempt to examine the degree to which [childhood adversity] contributes to annual mortality, building on previous research that has demonstrated an increased risk of developing a wide range of chronic diseases," McLaughlin and colleagues said.

Their systematic review included 20,654,832 participants from 19 meta-analyses from the last 10 years that measured the impact of childhood adversity on at least one cause of death or other health outcome. Seven meta-analysis were used for the main mortality analysis, and the rest included for supplementary information on different types of adversity experiences.

Pooling the risk ratios for each cause of death from the meta-analyses, the investigators calculated a population attributable fraction (PAF) that was applied to nationwide statistics on the leading causes of death and disease from the CDC. Each PAF represented the number of cases that could have been avoided had there been no childhood adversity.

The paper's reliance on the PAF was a chief limitation of the study. "Given the observational nature of virtually all existing data on [childhood adversity] and health outcomes, causality cannot be directly inferred. Unmeasured third variables may contribute to associations of [childhood adversities] and health outcomes," McLaughlin's group conceded.

Study authors also noted that the prevalence of different forms of adversity were dependent on each other, meaning that changes in the prevalence of one would change the prevalence of another.

"Current health care spending that disproportionately targets disease outcomes and neglects these social determinants of health may be missing a substantial opportunity to intervene and improve population health," the researchers said. "By reframing how we think about the causes of death to include upstream drivers of poor health, the finite resources available to address population health may be allocated more effectively."