

Childhood adversity worsens effects of stress, adding to current hardships, says new research

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Children who experience trauma may enter a cycle of negative emotions — anxiety and depression — that could contribute to health problems later and precipitate an early death, a leading health psychologist said Saturday.

"A child who experienced a death of a parent, witnessed severe marital problems between parents or was abused may be more vulnerable to stressful events later in life," said Janice Kiecolt-Glaser, PhD, of Ohio State University College of Medicine. "Our latest research shows that childhood adversity casts a long shadow on one's health and can lead to inflammation and cell aging much earlier than for those who haven't experienced these events. Those reporting multiple adversities could shorten their lifespan by seven to 15 years."

Further, adults who experienced some adversity in childhood appeared to continue to be at greater risk for <u>health consequences</u> even in later life, said Kiecolt-Glaser, who studied men and women whose average age was 70.

She spoke Saturday on the topic "How Stress Kills: Assessing the Damage and Various Remedies" at the American Psychological Association's 118th Annual Convention.

Using a community sample of 58 caregivers for a spouse or parent with



Alzheimer's disease or another progressive dementia and 74 demographically similar controls who had no caregiving responsibilities, Kiecolt-Glaser, research partner Ronald Glaser, and co-authors analyzed participants' depression levels and occurrence of childhood trauma to determine how negative emotions and stressful experiences affect known biochemical markers of stress. The authors also wanted to know if childhood maltreatment could even enhance the adverse effects of caregiving, a chronic stressor that can affect mental and physical health.

The researchers measured several blood inflammatory markers: cytokines interleukin (IL-6), tumor necrosis factor-alpha (TNF-a) and telomere length. Telomeres are the ends of strands of DNA. Shorter telomeres have been linked with aging, age-related diseases and death. IL-6 and TNF-a have also been linked to a number of cardiovascular, autoimmune and infectious diseases.

Participants completed a questionnaire on depression and answered questions about past child abuse or neglect; losing a mother or father during childhood; witnessing severe marital problems; growing up with a family member who suffered from mental illness or alcohol abuse; or lacking a close relationship with at least one adult in childhood.

Participants with immune-related health problems, such as cancer or recent surgeries or diabetes, were excluded as well as those taking anti-inflammatory medications.

In the sample, 42 (32 percent) of the participants reported some form of physical, emotional or sexual abuse during childhood while 90 (68 percent) of the participants reported no child abuse. Fifty-eight (44 percent) of the participants reported no childhood adversities, 43 (33 percent) reported one childhood adversity and 31 (24 percent) reported experiencing multiple adversities.



"We found that childhood adversity was associated with shorter telomeres and increased levels of inflammation even after controlling for age, caregiving status, gender, body mass index, exercise and sleep," said Kiecolt-Glaser. "Inflammation over time can lead to cardiovascular disease, osteoporosis, arthritis, Type 2 diabetes and certain cancers."

Childhood abuse and caring for an ill spouse or parent was also associated with higher levels of depression, she said.

"These early childhood experiences have lasting, measureable consequences later in life, producing effects that are large enough to be perceptible even in the face of a current major stressor — caring for a family member with dementia. The findings show the importance of intervening early to prevent these stress effects."

This study and others suggest that psychological factors may influence the incidence and progression of a variety of age-related diseases through how they affect the immune system. Psychological treatment, exercise, yoga and meditation can lessen negative emotions, which may diminish inflammation from occurring in the first place, said Kiecolt-Glaser.

Provided by American Psychological Association

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