

Study links lifetime interpersonal violence to increased risk of diabetes

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A new study conducted by a group of researchers, including the interim executive director of the University of Kentucky Center for Research on Violence Against Women (CRVAW), has found that people who

experience interpersonal violence or child abuse face a more than 20% increased risk of developing diabetes.

The study, "Lifetime Interpersonal Violence or Abuse and Diabetes Rates by Sex and Race," was recently published in the *American Journal of Preventive Medicine*.

"Lifetime interpersonal [violence](#) is associated with a 20% to 35% increased risk of developing [diabetes](#). However, both violence and type 2 diabetes are preventable. If we can take steps to reduce the risk of violence and trauma, this study shows we can also reduce the risk of developing diabetes," said Ann Coker, Ph.D., one of the [principal investigators](#) on the study, the Verizon Wireless Endowed Chair in CRVAW and a professor of epidemiology in the Department of Obstetrics and Gynecology in the UK College of Medicine.

More than 37 million American adults have diabetes, a disease that either stops the body from making insulin or using it appropriately to regulate blood sugar. According to the Centers for Disease Control and Prevention (CDC), diabetes is the eighth leading cause of death in the U.S.

In this study, lifetime interpersonal violence or abuse (IVA) was defined as physical or psychological violence, threats or abuse in adulthood, and [childhood abuse](#) or neglect. This type of violence is common and affects millions of people each year.

When someone suffers from [chronic stress](#) brought on by IVA, the body responds by elevating [cortisol levels](#) and suppressing insulin levels, which directly impacts diabetes risk through increased blood sugar levels.

Coker and researchers at Meharry Medical College in Nashville,

Tennessee, analyzed data from the Southern Community Cohort Study (SCCS) to explore the relationship between IVA and diabetes. The team said this work fills a gap in existing diabetes literature and provides more evidence to support trauma-related assessments.

"This is the first study with enough statistical power to look at the effect of lifetime [interpersonal violence](#) and [child abuse](#) or neglect on increasing the risk of diabetes development among [lower-income](#), male or female Southerners who identify as Black or white," said Coker.

The SCCS included approximately 25,000 participants who were asked questions between 2002 and 2015 on both types of violence and abuse. The study also prospectively measured rates of diabetes development over time.

"Before this research, we knew that partner violence was associated with diabetes among women, but we did not know that violence preceded diabetes development. We had no data on this relationship for men or within [racial groups](#)," said Coker.

"Our findings also show an increased risk in a timeframe before the additional social stress of the COVID pandemic. This strongly suggests the need for helping professionals across disciplines to implement effective violence prevention and intervention strategies to reduce the short and long-term social and health consequences of partner violence and child abuse," said Maureen Sanderson, Ph.D., lead author of the study and professor in the Department of Family and Community Medicine at Meharry Medical College.

"Those strategies include strengthening economic supports for families, promoting [social norms](#) to protect against adversity and violence, ensuring strong starts for children, teaching skills, connecting youth to caring adults and intervening to lessen harm."

The latest reports from the CDC show the economic burden of both IVA and diabetes comes at a staggering cost for the country: \$3.6 trillion associated with IVA and \$327 billion with diabetes. However, both can be stopped.

"Child abuse and partner violence affect a large proportion of U.S. citizens, and our findings show an increase before the additional stresses from the COVID pandemic. These forms of violence often co-occur in individuals and within families," said Coker. "The impact of these forms of family violence has significant and long-term mental and physical health consequences that CAN be prevented."

More information: Maureen Sanderson et al, Lifetime Interpersonal Violence or Abuse and Diabetes Rates by Sex and Race, *American Journal of Preventive Medicine* (2023). [DOI: 10.1016/j.amepre.2023.06.007](https://doi.org/10.1016/j.amepre.2023.06.007)

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