Protecting Children's Psychological Well-being Could Help Strengthen Their Hearts as Adults

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It's no secret that stress weighs heavily on our hearts. Cardiovascular wear and tear accumulates over a lifetime, and experiences of poverty and abuse in childhood are known to set the stage for reduced heart health down the line. Generally, we don’t begin treating cardiovascular disease until symptoms begin to emerge in adulthood, but new research in Psychological Science suggests that fostering children’s psychological well-being could help reduce their risk for heart conditions as adults.

“In addition to mitigating adversity, prevention strategies targeting childhood psychological well-being may help foster healthy cardiometabolic outcomes in midlife,” wrote Julia K. Boehm (Chapman University), Farah Qureshi, and Laura D. Kubzansky (Harvard T. H. Chan School of Public Health). “Implementing prevention strategies earlier in the life course may help alleviate the burden of cardiovascular disease, which is the leading cause of death worldwide.”

Boehm and colleagues tested the connection between childhood well-being and adult heart health by analyzing essays written by 4,007 children as part of the 1958 National Child Development Study.
(NCDS) alongside cardiovascular data taken from them as adults. The NCDS is an ongoing longitudinal study follows the health and life outcomes of 17,415 people born in England, Scotland, and Wales during the same week in 1958. As a part of this process, participants wrote short essays at age 11 detailing what kind of life they imagined they would be living when they were 25 years old.

For Boehm and colleagues’ analysis, a pair of researchers coded each essay for indicators of psychological well-being. An essay was considered to demonstrate well-being if the child expressed optimism that they would experience personal growth and life satisfaction later in life.

Participants with higher childhood well-being scores were found to have healthier blood pressure and cholesterol levels at age 45. Although females and children from higher socioeconomic families were found to have better adult cardiovascular health overall, the link between childhood well-being and cardiovascular disease risk remained significant even when researchers controlled for socioeconomic status, sex, and the use of blood-pressure medications.

“Such associations may exist because psychological well-being fosters healthy behaviors or buffers the physiological consequences of stress,” Boehm and colleagues wrote. For instance, people with better mental health in childhood cope more effectively with stress, exercise more, eat healthier diets, and have better sleep quality, the researchers added.

Adult participants’ resting heart rate and the level of inflammatory biomarkers in their blood samples were not associated with childhood well-being despite being known risk factors for cardiovascular disease, Boehm and colleagues noted. This could be because the particular biomarkers measured in the NCDS may be more closely linked with individuals’ responses to short-term stress, the researchers suggested, acknowledging that further work is needed to fully untangle the relationship between childhood well-being, chronic inflammation, and heart health.

Nonetheless, a small but consistent relationship appears to exist between childhood well-being and cardiovascular disease risk in adulthood, the researchers continued, suggesting that interventions targeting children’s mental health could help strengthen their hearts as adults.

“Focusing only on health processes in adulthood ignores substantial life experiences in childhood that shape future health,” Boehm and colleagues wrote. “Childhood may be a key period for establishing healthy psychological functioning because many relevant processes—including cognitive growth, identity formation, and independence—are developing and may be malleable.”

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Reference