Shedding light on the long shadow of childhood adversity

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Childhood adversity can lead to chronic physical and mental disability in adult life and have an effect on the next generation, underscoring the importance of research, practice and policy in addressing this issue, according to a Viewpoint in the May 1 issue of JAMA, a theme issue on child health.

Dr. Brent and co-author Michael Silverstein, M.D., M.P.H., of the Boston University School of Medicine, write that early child adversity, defined as child maltreatment, exposure to domestic violence, or living with a household member with serious mental illness, has been linked to myriad chronic conditions associated with premature death: smoking, substance abuse, obesity, cardiovascular disease, depression, and attempted suicide. They add that causal pathways between early adversity and these multiple outcomes are thought to be mediated by changes in stress responsivity, and that animal models have demonstrated that these effects are transmitted from parent to child through epigenetic (the effect of environment on gene expression) mechanisms. "While the pathways by which adversity exerts its effects have not been as elegantly elaborated in humans, it is posited that these epigenetic changes can contribute to immune dysfunction, insulin resistance, and cognitive difficulties that in turn lead to risky behavior and predispose to emotional lability [instability] and depression."

"The good news is that, if detected early enough, the impact of family adversity on child health outcomes can be reversed, or at least attenuated. For example, if maternal depression is treated to remission, the patients' children show symptomatic and functional gains. Economic interventions that provide local employment and move parents out of poverty have been shown to be temporally related to a decreased risk for behavioral disorders in the children of the assisted families. Earlier foster placement can, to some extent, reverse the deleterious neurobiological and cognitive effects of extreme deprivation in infancy."

The authors write that these findings about early adversity and its sequelae have important implications for research, practice, and policy. With regard to research, a better understanding of the biological mechanisms by which early adversity exerts its effects, "definition of the critical periods when such effects are particularly deleterious, and identification of effective approaches to their remediation or prevention are warranted. In addition, the shared roots of leading causes of worldwide disability (such as cardiometabolic disease and depression) suggest opportunities for synergy, because interventions that would prevent the development of these conditions would have a substantial effect on public health worldwide."

"For clinicians, given the potent and long-reaching effects of family adversity on health outcomes, knowledge can be empowering. Physicians must be taught about the effects of adversity, how to detect it, and what steps to take once identified. Screening, referral, and monitoring of the presence of adversity and its effects early in the child's life may prevent or attenuate the destructive multigenerational effects of dysfunctional parenting that occur as a consequence of untreated psychiatric disorder," they write.

The authors add that physicians must also be advocates for social policies that can help families achieve what all parents want—a secure environment for their children to develop into competent adults. "Home visitation programs for at-risk families of infants have been shown to have long-term positive effects on physical and mental health, education, employment, and family stability. Access to quality preschool education can help to buffer the deleterious effects of poverty."

"The economic cost—in excess health care utilization, nonresponse to treatment, incarceration, loss of employment, decrease in productivity,
disability—weighs heavily on families burdened with adversity but ultimately is borne by society as a whole. In the drive to improve quality of health care and contain costs, the huge price tag to society of early adversity cannot be neglected. Through research, clinical care, and advocacy, physicians can shine a light on the dark shadow of adversity and diminish its reach from generation to generation. Society can either invest in combating the effect of adversity on families now, or pay later.”

More information: JAMA.
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