

# The physiological effect that develops because of the psychological impact of an abused child and it relates to a malignant disease as cancer

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## Opinion

Can the Psychological effect of abuse Child can make genetic alteration that lead to malignant disease as cancer, even after focused cognitive behavioral therapy?

Abuse is an attempt to control the behavior of another person. It is a misuse of power which uses the bonds of intimacy, trust and dependency to make the victim vulnerable. that have different types all of them lead to a psychological effect and in some cases physiological effect, according to (WHO) organization they defined child abuse and child maltreatment as “all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power”.<sup>1</sup>

Childhood experiences, both positive and negative, have a tremendous impact on future violence victimization and perpetration, and lifelong health and opportunity. As such, early experiences are an important public health issue. Much of the foundational research in this area has been referred to as Adverse Childhood Experiences (ACEs). Adverse Childhood Experiences have been linked to:

- risky health behaviors,
- Chronic health conditions,” e.g., disabilities, mental retardation, mental health issues, and chronic physical illnesses”.
- Low life potential.
- Smoking, alcoholism and drug abuse, and
- Early death.<sup>2</sup>

NSCAW researchers found that, at some point during the 3 years following a maltreatment investigation, 28 percent of children had a chronic health condition.<sup>3</sup>

ACEs are at elevated risk for age-related disease (Depression, Inflammation, and Clustering of Metabolic Risk Markers) Because of the increasing recognition that preventable risk exposures in early life may contribute to pathophysiological processes leading to age-related disease, first, depression has been linked to multiple biological abnormalities, including vascular pathologic changes, autonomic function changes, hypercoagulability, and hypothalamic-pituitary-adrenal axis hyperactivity. Evidence shows that depression in adulthood is linked to elevated risk of developing cardiovascular disease, diabetes, and dementia in later life. Second, inflammation contributes to atherosclerosis, insulin resistance, and neurodegeneration. Evidence shows that elevation in inflammation biomarkers, such as C-reactive protein (CRP), in adulthood predicts the development of cardiovascular disease, diabetes, and dementia in later life. Third, metabolic abnormalities such as obesity, dyslipidemia, glucose intolerance, hypertension, and cardio respiratory fitness

contribute to vascular lesions and hormonal imbalance. These abnormalities tend to cluster in the same individuals.<sup>4</sup> because of psychological pressure, the body tries physiological adaptations this process called Allostasis (e.g., rapid heart rate, increased blood pressure) induced by catecholamines and glucocorticoids in response to acute stress. High allostatic load occurs when toxic stress causes excessive activation of stress hormones, which can damage the metabolic, cardiovascular, immune, and nervous systems. Particularly for children, nervous system development can be disrupted, including growth of brain regions linked to planning, problem solving, self-regulation of behavior, and management of emotions.<sup>5</sup>

Adults who experienced abuse or neglect during childhood are more likely to suffer from physical ailments such as allergies, arthritis, asthma, bronchitis, high blood pressure, and ulcer.<sup>6-8</sup> There may be a higher risk of developing cancer later in life; Only 1 study to date has found an association between childhood abuse and cancer.<sup>9</sup> Children who experience abuse and neglect are at increased risk for smoking, alcoholism, and drug abuse as adults, as well as engaging in high-risk sexual behaviors.<sup>2</sup>

According to previous studies, the psychological status has an enormous impact on physiological status, some behavior of abuse person have common denominator related to cancer suspected risk factors, what if they stay away from those factors, do they have the ability to develop a malignant disease as cancer? Further research and studies are needed to find out the relation between cancer and the physiological effect of abuse child, and how we can guarantee a better future free of diseases.

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## Conflicts of interest

None.

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