

Reflection 5 (Jenna Lee)

1) Describe some of the ways that Adverse Childhood Experiences (ACE) impact health across a lifetime.

Dr. Nadine Burke Harris described the alarming impacts of ACE on lifetime health outcomes in the video. In her statement, she said that those with high doses of ACE are three times more likely to develop heart and lung cancer as well as have a twenty-year difference in life expectancy. An untreated high ACE score will reduce a child's life expectancy by 20 years. In children who experience four or more ACEs, alcoholism is 7.4x more likely and suicide attempts are 12.2x more likely. It is not uncommon for children to live with abuse or neglect or to grow up with parents who suffer from mental illness or substance abuse. There is a much higher likelihood that they will experience childhood trauma. Trauma affects children's brains and bodies adversely, which can lead to detrimental health effects throughout their lives. In summary, the physical and emotional effects of trauma on a child's developing brain can be long-lasting and can be linked to issues such as depression, anxiety, and post-traumatic stress disorder. These issues can be exacerbated by ACEs, leading to higher rates of addiction and suicidal behavior.

2a) What percentage of the population has experienced at least 1 ACE? 2b) What percentage experienced at least 4 or more ACEs?

In the study population of 17,500 participants who were asked to report adverse childhood experiences, 67% reported at least one ACE. In addition, 12.6% reported at least four or more ACEs. It is really alarming to see this. Most American adults are more likely to suffer from ACEs.

3a) How might childhood trauma impact brain development? 3b) How might that impact shape human behavior?

According to Dr. Nadine Burke Harris, ACEs affect the nucleus accumbens, the brain's pleasure and reward center. In addition to feeding, sexual, reward, stress-related, and drug self-administration behaviors, the nucleus accumbens is considered to be the neural interface between motivation and action. In addition, it inhibits the prefrontal lobe, which is a critical area for learning as well as regulating impulses. MRI scans show significant differences in the amygdala, which is our brain's fear center. A high dose of ACEs increases the risk of developing unhealthy high-risk behaviors, such as alcoholism, substance abuse, and disruptive behavior. This is because ACEs interfere with the development of the prefrontal cortex, which is responsible for the regulation of emotions and impulses, as well as higher-order thinking skills like problem solving and decision-making. When the prefrontal cortex is impaired, individuals may struggle to control their impulses or make good decisions, which can lead to risky behaviors.

4) What were some of the best practices mentioned to intervene with children and families impacted by adversity and toxic stress?

According to Nadine Burke Harris, screening children for adverse childhood events is crucial. As part of the plan, she proposed working with a multidisciplinary team to reduce the impact of ACEs. This included home visits, care coordination, mental health nutrition, and other holistic interventions, such as medication when necessary. Furthermore, parents should be educated about the effects of toxic stress and ACEs. CDC recommends the following best practices: Educating states and communities about effective social and economic supports to address financial hardship and other conditions that put families at risk. Encourage employers to adopt family-friendly policies, such as paid family leave and flexible work schedules. Increasing access to programs that help parents and youth manage stress, resolve conflicts, and reduce violence. Enhancing school environments to prevent further trauma and lessen the impact of ACEs. Health care providers should be trained to recognize children with ACEs as well as adults who have an ACE background. They should also be trained to refer patients to effective family support and services.

References

CDC (n.d.). Preventing Adverse Childhood Experiences (ACEs) to improve U.S. health. Retrieved from <https://www.cdc.gov/media/releases/2019/p1105-prevent-aces.html#:~:text=A%20first%2Dever%20CDC%20analysis,aving%20a%20parent%20in%20jail>.