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Trauma and Stress

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Trauma and Stress

Effects of Trauma

Trauma is a reaction to a disturbing or distressing event overcoming one's ability in coping by causing hopelessness feelings, helplessness, and ability to experience a full range of experiences and emotions. The effects of trauma can vary depending on the stressful ordeal. Its effects are insomnia, depression, substance abuse (Terpou et al., 2019). Due to the traumatic event that took place, most people find it difficult to sleep because of fear of reliving the ordeal through flashbacks or nightmares. This affects how they relate with people close to them as they become irritated easily. Second, they perform poorly at school or work due to lack of enough rest. Depression occurs as an effect of a traumatic experience because of feelings of sadness, anger, anxiety, or loss of interest affecting their mental health. Depressed individuals also experience physical changes such as weight loss or weight gain, self-harm, and cardiovascular diseases (Terpou et al., 2019). Due to their inability to cope, people who have experienced a traumatic ordeal start abusing drugs such as alcohol and cigarettes to get rid of the feelings of pain or sadness. This ends up damaging their overall health due to the dependence on these substances.

Epigenetics and how Stress Plays a Role in It

Epigenetics examines how one's environment and behavior can bring about changes that affect how their genes work (O'Donnell & Meaney, 2020). The epigenetic changes are reversible compared to genetic changes, and they do not change one's DNA sequence. However, they can change how one's body reads their DNA sequence. The epigenetic changes begin when one is born, and these changes help determine cell functions as they grow. For instance, it determines

whether a cell can become a nerve cell or a heart cell. The types of epigenetic changes are histone modification, non-coding RNA, and DNA methylation.

Stress is a feeling of physical or emotional tension, causing one to feel nervous or frustrated since it is the body's reaction to a demanding situation. Stress causes DNA changes in the brain that may result in neurological and heart issues (Harvard Medical School, 2017). In relation to epigenetics, stress forces DNA methylation and histone modification by turning genes off or on. For instance, a recent study by Yao and colleagues found out that a new DNA modification known as N6-methyladenine increases when stress levels are high (Yao et al., 2017). This is because gene sequence always remains normal ones' entire life unless exposed to environmental factors that cause stress, like hormonal imbalance or a traumatic experience. This causes the DNA comprised of a certain gene getting exposed for a shorter or longer period, which turns this particular gene off or on, giving room for protein production changes. The protein production change affects the behavioral and psychological traits, which are passed from one cell to another. These cells then multiply in an individual at the same time is passable to children.

An Event in History and its Effect on the Next Generation

In 2001, on the 11th of September, the United States was attacked by 19 militants of the Al-Qaida group. The Al-Qaida was a group of extremist Islamic individuals whose leader was the late Osama Bin Laden. The Al-Qaida group hijacked four airplanes by conducting suicide bombing attacks (History.com Editors, 2018). Surprisingly, two airplanes were flown in New York into twin towers of World Trade Center. This killed hundreds of people and trapping thousands of people due to the crashing impact. The third airplane was directed towards Washington D.C at the same time hitting the pentagon while the fourth one crashed in

Pennsylvania field. This attack killed over 2,500 people, including the hijackers. The attack was conducted to instill fear and panic among the people. The above attack caused post-traumatic stress disorder among citizens in the United States who experienced the ordeal (Lowell et al., 2018). This is because the attacks were televised repeatedly for weeks and years that follow as people remembered their lost loved ones. The children from the next generation experienced anxiety and depression from this attack, especially if they learn that they lost a loved one to this ordeal. As a result, they become anxious, especially when traveling using airplanes, caused by fear of similar events occurring again. Due to genetic modification caused by stressful ordeals, as discussed earlier, other children can inherit their parents' genes if they did not learn how to cope or manage the effects of the traumatic event, in this case, the 9-11 attack. In addition, children whose parents never dealt with the effects of the 9-11 attack will develop behavioral health issues such as attention deficit hyperactivity disorder.

Importance of Early Discovery of Trauma in Children

It might be crucial in knowing how trauma will affect kids their parents went through because they might learn how to manage these effects early so that they do not pass their experiences to their children in the future. Notably, this would help children develop in a healthy way because they will feel safe, especially if they learn that what they are going through is not their fault.

Current Event in the World with Similar Effects in the Future

The current event going on in the world today is Covid-19 pandemic. Notably, the Covid-19 pandemic has affected people mentally due to anxiety caused by fear of contracting the virus and depression from losing their jobs. The pandemic caught the world by surprise, and as a result, many people have died from it. This ordeal will produce similar effects to future

generations if people who have experienced mental health issues brought about by the pandemic are not treated or well managed.

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