

Title:

The Role of Uncontrollable Trauma in the Development of PTSD and Alcohol Addiction

Source:

Volpicelli, Joseph, M.D., PhD., Balaraman, Geetha, Hahn, Julie, Wallace, Heather, M.A., and Bux, Donald, PhD. The Role of Uncontrollable Trauma in the Development of PTSD and Alcohol Addiction. *Alcohol Research and Health* 23(4) 1999: 256-264.

Email and Web Address:

None

Conclusion:

The research completed for this article reviewed both animal and human response to trauma in order to understand the relationship between post traumatic stress disorder (PTSD) and alcohol use. The findings of the research have indicated some important issues to be reviewed for the treatment of PTSD and alcoholism. One of the issues the research indicates is the ability to cope with trauma has a link to whether the individual had any control over the traumatic situation. When a person experiences a trauma where they have little to no control over the outcome the symptoms of PTSD are usually more severe and pronounced. The research indicated that by helping patients with PTSD to gain some control over their feelings relating to the traumatic event might help them to also gain control over their response to reminders of the traumatic event and lessen the impact of the reminder. However, in order to accomplish this most individuals are encouraged to relive the event in a very vivid and detailed manner. Reliving the trauma often elicits the biochemical response detailed below.

Individuals that experience a traumatic event often experience a biochemical response of an endorphin release. This release helps to numb the physical and emotional pain of the trauma. This release also can be present when a patient experiences reminders of the trauma. After the endorphin release the victim experiences a withdrawal and the numbing effect is no longer present. In order to cope with this withdrawal patients often turn to the numbing effects of alcohol. This relationship between PTSD and alcohol creates a viscous circle for the patient. As they are receiving treatment for the PTSD and being encouraged to relive the trauma the craving for alcohol becomes very intense during the endorphin withdrawal. The findings of the research indicated that by including a pharmaceutical opiod blocker for patients diagnosed with both PTSD the cycle of release, withdraw, and cravings could be disrupted.

Purpose:

The researchers in this study sought to explain the relationship between traumatic events early and later in life and the development of both PTSD and alcohol addiction. The researchers thoroughly investigated the body's response to trauma (through human and animal studies) to help understand the relationship between PTSD and alcohol use. The combination of this research as well as the information from a case study is used to examine the biochemical response to trauma as well as the symptoms of PTSD. The article examines alcohols effect on the symptoms of PTSD and again utilizes the case study to indicate alcohol's role in managing the symptoms of PTSD. This unique relationship presents a difficult issue in treating both the

substance abuse and PTSD. The researchers utilize scientific data as well as the case study to highlight an effective treatment protocol for this dual diagnosis.

Findings:

The most significant finding of the research completed for this article is the implications for the treatment of both PTSD and alcoholism. In order to establish these findings the researchers first had to examine typical responses to traumatic situations as well as the common symptoms of PTSD.

Approximately 8% of trauma victims will experience consequences that may worsen over time. The degree to which that person feels a sense of control over the traumatic even appears to be a key variable in coping with the event. Those victims who feel little or no control over the events in their lives seem to experience more severe emotional distress. These people often become fearful and extremely passive in similar or new distressful situations. The term to describe this behavior is “learned helplessness” and it bears similarities to PTSD.

The body’s biochemical response to trauma is significant to the relationship between PTSD and alcohol use/abuse. The article thoroughly explains the biochemical changes that occur when someone is experiencing trauma. The body’s response is the release of endorphins, which help to ease the pain the victim of significant trauma may experience. This release was often described as a “numbing effect”. This effect is also experienced by some PTSD sufferers when they are reminded of the traumatic event in one way or another. The large endorphin release is then followed by a deficiency period in which the person loses the physical and emotional pain relieving effect brought on by the endorphin release. The researchers also found that alcohol use was not increasing during stress, but after the stress or traumatic period. The article indicates that the research shows this is when PTSD sufferers are most likely to utilize alcohol to cope with the endorphin withdrawal in an attempt to replicate the “numbing effect” of the endorphin release. One important factor in determining the victim’s response to a traumatic situation related to whether the trauma was controlled or uncontrolled. In an uncontrolled trauma situation (one in which the victim feels helpless with no ability to influence the outcome of the situation) the victim experiences more severe PTSD symptoms.

The article establishes the “vicious circle” that individuals with PTSD and alcoholism often experience. In order to treat the PTSD, patients are often encouraged to relive traumatic experiences. However, reliving the trauma can and often does trigger the endorphin release and subsequent withdrawal detailed above. The endorphin withdrawal then triggers an increase in cravings for alcohol. Because of this cycle, both issues must be jointly addressed. The research conducted for the article found that the use of naloxone (“an injectable opioid receptor blocker”) prevented the patient from the analgesic effect of the endorphin release. Thus helping to disrupt the cycle detailed above.

Implications for Prevention:

There are two primary implications for successful intervention and treatment for relapse prevention that can be utilized in working with victims of trauma that result in PTSD and alcohol abuse and addiction. Therapy, which works to increase a person’s sense of control over traumatic events, can be useful in helping them cope when exposed to similar and future situations.

Reversing the effects of learned helplessness can be instrumental in recovering from PTSD. Also the use of drugs, which help to block the euphoric effects of alcohol, can also be a powerful tool in working with addiction. The use of naltrexone has been particularly helpful in blocking the endorphin response, which works to reduce the craving for alcohol.

The article indicated that due to their lack of control over such events children may experience very severe emotional distress that is related to a traumatic event. This finding would indicate the extreme importance of providing early and intensive prevention services to young people who are victimized or otherwise affected by a traumatic event.

Summary Provided By:

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