

The Causes and Interventions of PTSD

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Abstract. Post-traumatic stress disorder (PTSD) is a complex condition that arises in response to individuals experiencing traumatic events. It inflicts profound stress on individuals and detrimentally impacts their psychological and physical well-being. This essay aims to delve deeply into the causes of PTSD and propose relevant interventions from both therapeutic and personal perspectives. The causes of PTSD encompass a range of factors, including biological, psychological, and social influences. The damage wrought by PTSD is primarily due to the re-living of the trauma, leading to symptoms such as heightened anxiety, debilitating panic attacks, and a loss of control. Furthermore, social disengagement and diminished enjoyment in life are exacerbated by avoidance behaviors and emotional numbing reactions. Increased vigilance and arousal contribute to physical health problems, sleep disturbances, and persistent irritability. The overall disruption in one's quality of life profoundly affects their relationships, employment, and self-image. Seeking professional assistance from psychological consultants and receiving support from individuals undergoing the recovery process is crucial in preventing secondary harm to patients.

Keywords: PTSD; traumatic events; causes; interventions.

1. Introduction

Post-traumatic stress disorder (PTSD) is a psychological and behavioral illness develops after being exposed to a traumatic incident. For example, the incident includes sexual assault, combat, vehicle accident, child abuse, family abuse, as well as other potentially fatal experiences [1]. This disorder manifests in patients through distinct symptoms, which encompass intrusive recollections, recurrent nightmares, intense distress triggered by reminders, and physiological reactivity [2]. Epidemiological studies conducted within community populations reveal that the prevalence of PTSD ranges from 1% to 10% [3]. Notably, among individuals who have experienced trauma, the risk of developing PTSD is notably higher. For instance, HOGUE et al. reported that the incidence of PTSD among soldiers with prior combat experience can be as high as 71-86%. Research on PTSD primarily focuses on comprehending the disorder, including its causative factors, risk elements, underlying mechanisms, and the determinants contributing to its onset and persistence. This body of knowledge plays a pivotal role in ensuring accurate diagnosis, effective treatment, and the formulation of prevention strategies. Furthermore, research seeks to develop preventative interventions aimed at reducing the risk of PTSD in populations exposed to trauma. This research can also identify individuals at higher risk for developing PTSD, allowing for the implementation of targeted interventions to mitigate the impact of trauma exposure. Additionally, research on PTSD plays a vital role in combating the stigma associated with the disorder. It challenges misconceptions and helps reduce the societal stigma surrounding PTSD. By providing a more comprehensive understanding of the condition and its consequences, research fosters greater empathy, awareness, and acceptance of individuals dealing with PTSD, ultimately leading to improved societal support and inclusion.

2. Causes of PTSD

2.1. Biological Factors

Biological factors are important in the development of PTSD. Research shows that genetics have potential influence on the prevalence of PTSD. For example, according to twin studies, compared to dizygotic twins, monozygotic twins show a substantially higher concordance for PTSD [4]. In

addition, from neuroendocrine level, research in the future indicates that low cortisol levels during psychological trauma exposure may indicate the onset of PTSD [5]. Cortisol is a steroid hormone which is produced by one's adrenal glands. People's blood levels of cortisol are raised when they are under stress. Cortisol affects numerous bodily areas and serves a multitude of vital purposes. It can improve the body's response to stress or danger, speed up the body's glucose metabolism, regulate blood pressure, and lessen inflammation. Therefore, a relative low Cortisol level will impede one's ability to react to stress, and potentially predict PTSD.

2.2. Psychological Factors

Psychological factors also play an undeniable role in the etiology of PTSD. It is crucial to recognize that different exposures to traumatic events yield varying rates of PTSD development. In the case of special police officers, the heightened prevalence of PTSD is closely tied to the elevated stressors inherent in their line of work. Their profession often entails exposure to unconventional and frequently recurring traumatic events. Consequently, special police officers inevitably find themselves confronting new cases that bear a connection to previous traumatic experiences. If an individual has not managed to shed the lingering effects of past traumatic events and struggles with effective self-regulation, these new incidents can serve as powerful triggers. Thus, for someone who has recently emerged from a traumatic event, there exists a real possibility that a fresh occurrence may reignite the emotional distress, plunging them into a psychological crisis [6].

Moreover, nurses in intense care unit also have similar situation. These medical workers face huge work pressure from various aspects, including workload pressure, medical accident pressure and doctor-patient relationship pressure. The emergency department, ICU, operating room, and other departments that are often in contact with ill patients, due to their fast work pace, patients in critical condition and high work intensity, medical staff, especially nursing staff, are in a state of overload for a long time, seriously damaging and threatening the psychological and physical health of them, and it increases the probability of the occurrence of PTSD [7].

In addition, cognitive contortion also has huge impact in the occurrence of PTSD. Common cognitive distortions include overgeneralization (drawing broad negative conclusions based on limited evidence), personalization (attributing excessive blame to oneself), and catastrophizing (expecting the worst possible outcome). These distortions can perpetuate negative appraisals and bring PTSD symptoms. Research indicates that certain groups of people, such as university students, can develop PTSD from typical cognitive contortion [8].

2.3. Social Factors

Social environment in which people live is crucial to the development of PTSD as well. Social factors include social disruption and displacement, stigma, and social rejection, as well as lack of social support. Research has demonstrated that individuals and societies facing disadvantages are more susceptible to experiencing severe stressors and PTSD. Maercker's research indicates that social influences, such as individualistic vs collectivistic or alternative perspectives to human values, are recognized as playing a role in the intensity and progression of PTSD [9]. Research indicates that interpersonal traumas are particularly important in causing fear and other trauma-related reactions, suggesting that these traumas are pathogenic for PTSD [10]. In fact, socioeconomic factors, such as poverty, unemployment, and limited access to resources and healthcare, can contribute to the risk and impact of PTSD. Individuals from lower socioeconomic backgrounds may face increased exposure to traumatic events, limited access to trauma-informed care, and higher levels of chronic stress, which can exacerbate PTSD symptoms.

3. Intervention Methods of PTSD

3.1. Therapy

The most effective techniques for treating PTSD include behavioral and cognitive-behavioral therapies like eye movement desensitization and reprocessing (EMDR), extended exposure therapy, and cognitive processing therapy.

3.1.1. Prolonged Exposure Therapy

Exposure therapy is a common intervention method in cognitive behavioral therapy that assists individuals in facing their concerns. One particular kind of cognitive behavioral therapy called prolonged exposure helps patients to deal with trauma-related memories, feelings, and circumstances one at a time.

The majority of people wish to stay away from anything that makes them think of the trauma they went through, but doing so only makes them more afraid. Intentionally teaching someone that traumatic memories and signs are harmless and shouldn't be avoided can help reduce the symptoms of PTSD. Prolonged exposure therapy processes in three phases, the first phase is completed in one or two times. It mainly collects the data, establishes the relationship between patients and consultants and explains the principle of therapy [11]. The second phase includes 45-60 minutes of imaginative exposure and 30 minutes of vivo exposure. And the third phase mainly includes retrospect and summary, as well as discussing how to cope with symptoms in the future.

3.1.2. Cognitive processing therapy

Cognitive processing therapy (CPT) stands out as an evidence-based, cognitive-behavioral intervention meticulously crafted to address PTSD and its comorbid symptoms. A wealth of studies has consistently underscored the efficacy of CPT in the treatment of PTSD [12]. A comprehensive analysis of data, involving 1,130 participants, revealed that individuals who underwent CPT treatment exhibited notably better outcomes. Posttreatment, CPT recipients outperformed an approximately 90% of those under inactive control circumstances, and this favorable trend persisted at an impressive rate of 82% during the follow-up period. Furthermore, CPT exceeded inactive control conditions on non-PTSD outcome measures both during monitoring as well as after treatment, as well as on PTSD-related indicators. It is worth noting that CPT exhibited superior performance compared to other active treatments at posttreatment, although this advantage was not as pronounced during follow-up. Notably, the effect ranges of CPT in mitigating PTSD symptoms were not obviously influenced by the age of participants, total sample size, the duration of the follow-up period, or whether the treatment was administered in a group or individual format. However, previous studies exhibited larger effect sizes, and the percentage of female participants influenced the impact of CPT on non-PTSD outcomes. These robust findings collectively affirm that CPT represents an efficacious treatment for PTSD, offering sustained advantages across a spectrum of outcome measures.

Below is a description of the CPT process. The patient begins by writing an effect report which summarizes their current reasoning for the occurrence of traumatic event also how it impacted their perceptions of the outside world, other people, and themselves. The patient then begins to process the experience in a formal way. The following session, the patient reads a detailed account of the most painful experience they have written, an attempt to break the mode of suppressing thinking and feelings connected to the trauma. The therapist utilizes methods like Socratic questioning and other strategies to help the patient confront negative beliefs (such guilt feelings) connected to the trauma to modify any dysfunctional thinking. Ultimately, after the patient has mastered the ability to recognize and confront maladaptive thought patterns, the patient applies those abilities to further assess and adjust beliefs associated with traumatic experiences. At this stage, the therapist works with the patient to assist them learn how to apply these adaptive strategies to enhance their quality of life and overall functioning even when they are not receiving therapy. Since traumatic experiences can damage all of these areas, therapists may concentrate especially on security, conviction, authority, command, respect, and closeness.

3.1.3. Eye Movement Desensitization and Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) therapy was developed in 1987 to treat PTSD. It is based on the Adaptive Information Processing paradigm. Individual EMDR therapy is usually scheduled weekly or twice a week with a total of six to twelve sessions; however, some patients respond better with less sessions. Sessions may be held back-to-back days [13].

EMDR therapy targets the memory directly with the goal of changing how the memory is administered within the brain, which should decrease and eventually eliminate the problematic symptoms. This contrasts with alternative therapies that focus on altering the feelings, ideas, and reactions brought on by traumatic events directly.

Clinical observations conducted during EMDR therapy indicate that the standardized protocols of EMDR, which include eye movements and other forms of rhythmic left-right (bilateral) stimulation (e.g., taps or tones), may accelerate the learning process. Vibrant and emotionally charged memories become less vivid when individuals momentarily concentrate on the trauma memory while also experiencing bilateral stimulation (BLS).

Taking a client's history, getting them ready, analyzing the target memory, processing the memory through adaptive resolution, and reviewing the outcome of treatment are all part of the systematic eight-phase process of EMDR therapy.

EMDR has several advantages. Firstly, EMDR has been shown to be beneficial in numerous research. Compared to other types of therapy, it usually has a quicker effect. People who use EMDR usually get results much sooner than with other forms of therapy. Additionally, it requires less homework than other forms of therapy, which usually call for journaling or other assignments to be completed outside of scheduled sessions. Processing and overcoming your trauma are the main goal of EMDR. EMDR has some disadvantages compared to other forms of therapy. Firstly, its operational mechanisms remain theoretical. The discovery of EMDR was accidental. Experts are still unable to adequately explain why it works, despite the evidence that it does. Moreover, this is an uncommon method. EMDR was developed in 1989. However, other types of therapy have been practiced for longer time. Therefore, further research needed to be done before experts can decide whether EMDR is a long-term fix or whether individuals still need therapy after that.

3.2. Individual Interventions

There are certain things that people can do that are appropriate to assist PTSD sufferers. First, offer support and understanding to the person with PTSD. Individuals should listen attentively when they want to talk and let them know that they are there for them. It's important for people to acknowledge their feelings and experiences, and judgment and criticism are always inappropriate.

Second, create a safe and non-threatening environment for the person with PTSD. People should be aware of their triggers and try to stay away from situations or subjects that could be upsetting. It's crucial to comfort them and reassure them of safety. Third, encourage treatment. People should support the patient in getting professional care for their PTSD and offer to help them locate appropriate mental health providers or treatment alternatives. Finally, be patient and understanding. It takes time to recover, so being patient and understanding during their healing process is significantly crucial. Individuals should support them without expecting immediate results or a linear progression in their recovery.

4. Conclusion

PTSD is an intricate mental health illness that exerts a profound impact on individuals who have undergone traumatic experiences. This essay has delved into the origins and treatment strategies for PTSD, unveiling the intricate nature of this disorder and the diverse array of approaches available for intervention. The causes of PTSD are fundamentally rooted in exposure to traumatic events, encompassing scenarios like combat, natural disasters, accidents, or interpersonal violence. These events can trigger an array of psychological and physiological responses, ultimately culminating in

the development of PTSD. Moreover, individual factors, such as genetic predispositions and prior trauma history, can significantly influence a person's susceptibility to PTSD. Psychotherapy, in particular techniques like EMDR, CBT, and CPT, has shown strikingly effective results in helping people deal with traumatic experiences, control troubling symptoms, and develop useful coping mechanisms. In conclusion, comprehending the causes and interventions of PTSD is paramount for providing effective support and treatment to individuals grappling with this condition. By acknowledging the intricate interplay of factors contributing to PTSD and implementing holistic intervention methods, we can make substantial progress in enhancing the lives of those afflicted by this disorder. Through education, empathy, and the provision of appropriate resources, we can forge a society that nurtures resilience, facilitates healing, and promotes well-being among individuals impacted by PTSD.

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