Dean&Francis
ISSN 2959-6149

Complex PTSD: A Review in Etiology, Diagnosis, Symptom and Treatment

Jingying Ge[1,*]

[1]Department of Drama Performance, Shanghai Film Art Academy, Shanghai, China
*Corresponding author: jingy.ge@gmail.com

Abstract:

Complex post-traumatic stress disorder (CPTSD) is a severe trauma-related disorder that affects people's daily function, and causes extreme damage to individuals' self-concept, emotional regulation and social relationships. CPTSD was included in ICD-11 in 2019. However, currently the public lacks cognition of CPTSD, and CPTSD is rarely used in actual diagnosis and treatment. Many patients cannot realize that their depression or anxiety are related to prolonged or laten trauma events and thus cannot achieve enough effective and comprehensive treatment progress. Therefore, this article reviews the recent researches on CPTSD, and summarizes the symptom, etiology and treatment of CPTSD. The diagnosis of CPTSD requires patients meet all core symptoms of post-traumatic stress disorder (PTSD), and have disturbances in self-organization (DSO). The etiology of CPTSD mainly due to prolonged and multiple trauma events, and is contributed with childhood physical or emotional maltreatment, lack of benevolent childhood experience and stress in social relationships. CPTSD can be treated by trauma-focused treatment and enhanced skills in affective and interpersonal regulation (ESTAIR). Both PTSD symptom and DSO symptom should be given due attention in treatment process.

Keywords: Complex post-traumatic stress disorder; post-traumatic stress disorder (PTSD); trauma; childhood maltreatment; treatment.

1. Introduction

Post-traumatic stress disorder (PTSD) is well known as a trauma-related disorder in the medical view. It usually develops after a single serious disaster such as earthquake and car accident [1]. However, many traumatic events are prolonged and difficult to notice in life, such as domestic violence and emotional maltreatment. This kind of trauma is more likely to cause complex post-traumatic stress disorder (CPTSD) [2,3]. CPTSD was proposed by Judith Herman in *Trauma and Recovery* in 1992, for distinguishing from PTSD which caused by single trauma [4]. In 2019, CPTSD was officially included in *ICD-11*, and

ISSN 2959-6149

it was classified along with PTSD under the category of trauma-related disorder [2]. Diagnosing CPTSD needs patients meet all symptoms of PTSD, and have disturbances in self-organization (DSO). *ICD-11* stipulates that CPTSD cannot be diagnosed concurrently with PTSD [2].

CPTSD is more prevalent than PTSD in adolescents who was abused through a research in Denmark, with 41.2% and 17.6% respectively [5]. This shows that CPTSD has a wide-ranging impact on people. However, as a relatively new psychological disorder, although CPTSD was included in *ICD-11* in 2019, it is currently rarely used in actual diagnosis and treatment. Many classification and diagnostic criteria of mental disorders such as *DSM-5* or *CCMD-3* have not included CPTSD. The concept of CPTSD has not been sufficiently popularized and promoted either. Thus, it is very essential to raise public awareness of CPTSD and conduct more researches in its etiology and treatment.

This study is a literature review, summarizing recent researches of CPTSD in four aspects: etiology, diagnosis, symptom and treatment. Databases searching includes Google Scholar, ProQuest and PubMed, using keywords such as complex PTSD, PTSD, trauma, childhood maltreatment, flashback, disturbances in self-organization, treatment.

2. CPTSD

2.1 Etiology

According to the ICD-11 definition, CPTSD typically develops after an individual experiences an extremely threatening or terrifying event. Compared to PTSD, the traumatic experiences associated with CPTSD are often characterized by their prolonged duration, repetitive nature, and inescapable quality, such as torture, slavery, genocide campaigns, prolonged domestic violence, repeated childhood sexual or physical abuse [2]. Compared with PTSD, whose traumatic event is usually a single event and tend to be found in adulthood, traumatic event in CPTSD is more likely to be related to multiple experiences, especially in childhood [3]. Although ICD-11 provides a clear diagnostic framework, assessing DSO symptoms remains challenging in clinical practice, particularly as atypical symptoms like emotional flashbacks are easily overlooked.

2.2 Diagnosis and Symptom

ICD-11 recommended to use International Trauma Questionnaire (ITQ) to diagnose CPTSD and PTSD [1,2]. Diagnosing CPTSD requires the individual meets all diagnostic requirements for PTSD, and has three other characteristics related to disturbances of self-organization (DSO) [2].

The part of requirements for both PTSD and CPTSD includes: Exposure to an event or situation of an extremely threatening or horrific nature [1,2]. Following the traumatic event or situation, the development of a characteristic syndrome lasting for at least several weeks, consisting of all three core elements: (1) Re-experiencing the traumatic event in the present with overwhelming emotions and strong physical sensations, flashbacks, or repetitive nightmares which are related to the traumatic event [1,2]. (2) Individual with PTSD may deliberately avoid the circumstances that may lead to re-experiencing. In some severe cases, people may change the surrounding environment to avoid reminding traumatic event [1,2]. (3) Persistently feel heightened current threat, may be hypervigilance or an enhanced startle reaction to stimuli such as unexpected noises [1,2]. (4) The disturbance results significantly impair important functions in personal, social, occupational or other daily areas [1,2].

Three other characteristics related to DSO are required for diagnosing CPTSD: (1) Problems with emotional regulation. For example, heightened emotional reactivity to minor stressors, outbursts, self-destructive acts, dissociated or numbing emotions [2]. (2) Beliefs about oneself as worthless, diminished, and feeling ashamed, guilty and failed related to the traumatic event [2]. (3) Difficulties in sustaining relationships and hard to feel close connection with others [2].

Walker reckoned that DSO in CPTSD may be misdiagnose into other psychological disorder, enhanced patients feeling of ashamed and guilty [6]. The misdiagnosis may imply and strengthen patients' thoughts of the reason that they experienced traumatic event is only because they are worthless and diminished, which is a common symptom in CPTSD [6].

Flashback is a common symptom in both PTSD and CPTSD, but the forms of its occurrence in these two disorders are different [6]. Flashback is also called intrusive imagery [7]. Different from individual's intentionally memory of trauma, people feel like suddenly be re-experiencing the traumatic fragment without any consciousness of time or place [6,7]. It is like a vivid reliving of past experiences with vivid sensation and perception [7]. Most people with PTSD have a visual imagery when they are in a flashback [6]. They could see the past traumatic event with their visual senses. However, flashback in CPTSD is more concentrated on emotion [6,7]. People with CPTSD may not have visual re-experiencing, but feel extremely ashamed, guilty, anger and afraid when they are experiencing a flashback [6,7].

Clinicians are usually familiar with flashbacks with visual

sense, but the flashback with only active re-experiencing negative emotions is very common in CPTSD and should be given due attention in treatment [6].

3. The Relation between Childhood Trauma, Social Factor and CPTSD

People with CPTSD usually experienced multiple trauma events, especially in childhood [3]. Sölva et al. made a study, using latent class analysis, focused on 147 children and adolescents in foster care institutions in Lower Austria [8]. Sölva et al. found that children experiencing cumulative abuse (concurrent exposure to physical, emotional, sexual abuse, and neglect) exhibited more severe symptoms of DSO, PTSD and CPTSD compared to children experiencing limited abuse [8]. Additionally, children who have high level of emotional and physical neglect but low level in sexual and physical abuse also have problems related to DSO, but the severity is lower than the cumulative maltreatment group [8]. Neglect may not result in high symptom level of CPTSD in the first time, but may lead to risk of obstacle in self-organization development and experience of maltreatment in the future [8]. Therefore, neglect factor should be given attention in diagnosis and treatment.

The benevolent childhood experiences have positive impact on DSO, which is an important symptom in CPTSD [9]. Their study based on 275 adults who had experienced trauma event, explored the effects of adverse childhood experiences and benevolent childhood experiences on CPTSD [9]. Although adverse childhood experiences cannot directly impact DSO, it may link to PTSD symptom with re-victimization or polyvictimization across the whole life [9]. What is noticeable is that, the benevolent childhood experiences predicted DSO scores directly, and have protective effect after trauma event [9]. People who have benevolent childhood experiences such as security and support show less problems with emotional disorganization, negative self-concept and interpersonal barriers [9].

Social factors from family, school and social support are highly associated with CPTSD [10]. Their study was based on 1299 Lithuanian adolescents who are aging from 12 to 16, using ITQ-CA to distinguish them between PTSD and CPTSD, then investigated the effects of social factors in CPTSD [10]. The study illustrated that family problems such as financial difficulties and persistent conflicts were key risk factors [10]. The rate in adolescents whose family with these problems developing CPTSD is significantly higher than developing PTSD [10]. Resource insufficiency and tense family environment will impair adolescents' ability in emotional regulation and feeling of safety, enhancing the symptom of DSO and the risk of CPTSD development [10]. School problems also play an important role in CPTSD [10]. Comparing with the group for PTSD, the group for CPTSD is more likely to suffer from bullying and have difficulties in school learning [10]. Negative experiences in peer relationship have great impact on DSO [10]. The school environment is a core socialization development place for adolescents. As a consequence, poor experiences in school can intensify negative self-concept and interpersonal distress, and promote development of CPTSD [10]. Furthermore, the group for CPTSD has less social support from family members, friends, teachers or other adults [10]. The lack in social support can make adolescents consistently feeling lonely and helpless, and tend to fall in persistent emotional disorganization [10].

3.1 Symptom Mechanisms

Through enough-good early interactions with caregivers, children are satisfied in their expectations of safety, comforts and dependability from other's, therefore form secure attachment system. When the early caregivers become the source of trauma, children's safe and healthy attachment pattern will be damaged, resulting in anxiety, avoidance or disorganized attachment patterns. As the traumatic experiences lasts and repeats, individuals always remain vigilant and dissociation or overly dependent in relationships, thereby forming interpersonal dysfunction in CPTSD.

Long-term trauma changes individuals' strategies for recognizing and regulating emotions. When they face intense emotional stimuli brought by traumatic events, they may adopt ways of self-protection such as excessive vigilance, impulsiveness or numbness, dissociation, which are useful in the traumatic circumstances but harmful for the individuals' long-term development, and can lead to damage of the emotional regulation system and the development of CPTSD.

Childhood is an important period for an individual to form and develop self-concept. Frequent traumatic experiences in childhood can lead to the reinforcement of the internalized belief of self-flawed, shame, guilt and low self-esteem, eventually forming a deeply rooted negative self-perception, corresponding to the negative self-concept symptom in CPTSD's DSO symptom.

The prolonged cumulative trauma disrupts the secure attachment system, weakens the ability of emotional regulation, erodes the positive self-concept, corresponding to the characteristics of DSO symptom in CPTSD.

ISSN 2959-6149

4. Treatment for CPTSD

4.1 Trauma-focused Treatment

Trauma-focused treatment has showed its effectiveness for PTSD and CPTSD in a tightly scheduled intensive treatment program for adults who meet participation criteria and have no recent suicide attemps [11]. Their study developed an 8-day trauma-focused treatment plan for 308 patients who were diagnosed PTSD or CPTSD [11]. The treatment included prolonged exposure (PE), eye movement desensitization and reprocessing (EMDR) therapy, indoor and outdoor physical activity and psycho- education program, requested that the patients stay in the clinic during the treatment [11]. Unlike the traditional clinical view, this study did not set stabilization or skill training phase in the treatment [11]. The result illustrated that both PTSD and CPTSD patients' ITQ PTSD symptom decreased significantly [11]. 85% PTSD patients and 87.7% CPTSD patients lost the diagnosis based on ITQ [11]. Furthermore, although there were not any skills training regarding to emotion regulation or relaxation during the treatment, the patient's level of ITQ DSO also showed decline [11]. Their emotional regulation, social difficulties and self-concept were improved effectively. The study also showed that trauma-focused therapy's safety, as there was not any serious adverse event such as suicide, attempted suicide or hospitalization occurred, and patients did not show obvious deterioration of their symptom [11]. The result of the study refuted the traditional view that CPTSD patients have to receive stabilization phase therapy at first [11]. Trauma-focused can not only help CPTSD patients to reduce trauma re-experiencing and avoidance, but also improve their recovery from personality and social functions [11]. Individuals with DSO can try to receive trauma-focused therapy, their DSO symptom may reduce while their core trauma related injury and memory have gotten enough process. According to the study, in a substantial proportion of CPTSD patients, trauma-focused therapy can offer rapid and profound effects [11]. Trauma-focused treatment can not only reduce the treatment cycle, saving time and financial stress for CPTSD patients, but also lower the risk of patients dropping out from treatment halfway [11]. However, there were still 12.3% CPTSD patients still met the diagnosis criteria [11]. This means trauma-focused treatment is not adequate for every CPTSD patients. Some of them may still need to find prolonged or personalized treatment.

4.2 Enhanced Skills in Affective and Interpersonal Regulation (ESTAIR)

Enhanced Skills in Affective and Interpersonal Regulation (ESTAIR) is a comprehensive treatment specialized for CPTSD, designed to address limitations of traditional trauma-focused approaches [12]. ESTAIR includes the PTSD symptom in CPTSD, and specifically focused on affective dysregulation (AD), negative self-concept (NSC) and disturbances in relationships (DR), which are three aspects of DSO [12]. Compared with traditional treatment, ESTAIR offers a more comprehensive coverage of CPTSD's symptom, both PTSD symptom and DSO symptom can be given attention and treatment [12]. In addition, the structure of ESTAIR is more flexible and personalized, while it uses modular structure, allowing the sequence and emphasis to be adjusted according to individual needs [12]. In the AD module, which directly targets affective dysregulation, participants learn to recognize and define their emotions, enhance their ability of accepting and managing emotions, and cultivate positive emotional experiences [12]. In the DR module, patients modify their negative interpersonal patterns, enhance confidence in expression, understand social situations, and adjust their interpersonal expectations and behaviors flexibility [12]. NSC module aimed to help patients to use mindfulness and self-care to relieve dissociation, confront their negative thinking pattern, and establish a more balanced and friendly self-concept [12]. PTSD module aimed to alleviate re-experience, avoidance and hypervigilance by dealing with trauma memories with narrative, emotion and cognitive reappraisal processing [12].

Karatzias et al. made a pilot randomized controlled trial between ESTAIR and treatment as usual (TAS) [13]. 56 veterans were randomly allocated to the ESTAIR group or the TAU group [13]. The ESTAIR group took 25 sessions of treatment which include an initial formulation session and 24 sessions for AD, NSC, DR and PTSD symptom [13]. The TAU group took psycho-education, symptom-management, and/or active monitoring, and only one participant of the group received trauma-focused treatment [13]. The result showed that the decline in CPTSD symptoms (both PTSD and DSO) in the ESTAIR group was much greater than that in the TAU group [13]. Only 13.6% patients in the ESTAIR group still met the diagnostic criteria of CPTSD/PTSD at post-treatment, and the figure of TAU group was 84% [13]. This meant over eighty percentage of participants had clinical remission after ESTAIR [13]. Besides, depression and anxiety displayed greater improvement in the ESTAIR group than the TAU group [13]. The somatic symptoms decreased in both groups, but the difference was not significant [13]. The dropout rate was 18% and 11% in the ESTAIR group and the TAU group [13]. There was not serious adverse event during treatment in both groups [13]. In the qualitative survey after ESTAIR, patients generally believed that the

structure of ESTAIR is reasonable, skills training helped them improve emotional regulation, self-concept and social relationships [13]. Their family members and friends noticed the positive changes on them [13]. These results demonstrated the safety and feasibility of ESTAIR [13].

5. Discussion and Suggestion

CPTSD is a trauma-related disorder with PTSD symptom and DSO symptom [2]. Many researches illustrated that the etiology of CPTSD is because of multiple or prolonged trauma events, especially related to childhood maltreatment and insufficient of supports from positive social relationships [2,3,4,6]. Treatment for CPTSD should attach importance to both trauma re-processing and self-organization abilities [6,12,13]. Some individuals with CPTSD can benefit from trauma-focused treatment [11], but it may be more helpful for some patients to receive treatment that both focused on DSO and PTSD symptom such as ESTAIR [13]. If people with CPTSD are diagnosed to PTSD or other mental disorder such as depression, anxiety or borderline personality disorder, they cannot receive comprehensive treatment for all their symptoms and problems [6]. This can also cause patients to feel confused, ashamed and guilty, and hindering their recovery [6]. Therefore, it is absolutely necessary to widely recognize CPTSD as an independent disorder, and keep study it in-depth.

There are still some limitations in the recent CPTSD researches. Most researches use self-assessment forms such as ITQ to collect data, so the data may be biased and inaccurate due to individuals' cognition, bias and sense of shame [8-10]. If it is possible to use clinical interview to assess symptom at the same time, this limitation will be improved. However, there are no universally recognized and effective interview-based assessment standards and methods for CPTSD. In addition, most studies and their participants were from European countries. There is a lack of the data for other regions of the world. Different cultural and religious backgrounds, national conditions and development levels may lead to differences in the etiology, symptom and treatment effects in CPTSD. In the future, more diverse methods such as longitudinal designs and mixed-method approaches for CPTSD diagnosis and treatment can be explored, and researches can be conducted based on people with CPTSD in different countries and regions.

6. Conclusion

This study reviews the symptom, diagnosis, etiology and existing main treatment of CPTSD. Diagnosing CPTSD requires patients meet all symptom of PTSD and have disturbances in self-organization. Negative self-concept, affective dysregulation and problems in social relationships are the main differences between CPTSD's and PTSD's symptoms. Furthermore, people with CPTSD commonly have emotional flashback, which is hard to be realized while it not occurs with visual sense like common flashback in PTSD. Identifying and managing these flashbacks is very helpful for recovery. The etiology of CPTSD is usually related to laten prolonged trauma events, especially multiple maltreatment in childhood. Benevolent childhood experiences have a protective effect on individuals after trauma event, and can alleviate DSO symptom. Negative environment factors in family and school and the lack of healthy and safe supports from social relationships will lead to emotional disorganization and excessive negative self-evaluation, which can cause the development of CPTSD.

A correct understanding of CPTSD can help patients reduce their sense of shame and guilt. Re-perceiving and re-processing trauma treatment, as well as DSO related training, are both very important. For some CPTSD patients, directly conducting trauma-focused treatment is not only useful for PTSD symptom, but also have positive improvement on DSO. ESTAIR adds three sections besides PTSD symptom section: AD, NSC and DR. ESTAIR treatment is more flexible and personalized, and it covers a more comprehensive range of CPTSD symptom. Both treatments have been proven to be safe and effective.

The currently widely recognized method of diagnosing CPTSD is only through self-assessment questionnaires. Other CPTSD diagnosis method could be found in the future to combine with, like clinician interviews and neuroimaging evidence, in order to reduce the potential diagnosis mistakes caused by patients' personal biases or sense of shame in self-assessment questionnaires. Most current researches samples are from single western country. In the future, cross-culture studies and analyses samples from other regions of the world can be conducted to explore the differences in the etiology and treatment of CPTSD in various regions and cultures.

The research is a review and summary of the current research of CPTSD, demonstrated the symptom, diagnosis, etiology and treatment of CPTSD. It illustrates the differences between CPTSD and PTSD, and the reasons why CPTSD should be classified as a separate psychological disorder. CPTSD should receive greater attention from the public, and be truly applied in actual clinical diagnosis and treatment.

ISSN 2959-6149

References

[1] World Health Organization (2019). 6B40 Post traumatic stress disorder. ICD-11. https://icd.who.int/browse/2025-01/mms/en#2070699808

[2] World Health Organization (2019). 6B41 Complex post traumatic stress disorder. ICD-11. https://icd.who.int/browse/2025-01/mms/en#585833559

[3] Alpay, E. H., & Çelik, D. (2022). Complex Post Traumatic Stress Disorder: A Review. Psikiyatride Güncel Yaklaşımlar, 14(4), 589-596.

[4] Herman, Judith Lewis, 1942-. (1992). Trauma and recovery / Judith Lewis Herman. [New York, N.Y.] : BasicBooks

[5] Løkkegaard, S. S., Elklit, A., & Vang, M. L. (2023). Examination of ICD-11 PTSD and CPTSD using the International Trauma Questionnaire–Child and Adolescent version (ITQ-CA) in a sample of Danish children and adolescents exposed to abuse. European journal of psychotraumatology, 14(1), 2178761.

[6] Walker, P. (2023). Complex PTSD: From Surviving to Thriving. Beijing Science and Technology Press. ISBN 978-7-5714-2551-7.

[7] Wang, M., Liu, J., Sun, Q., & Zhu, W. (2019). Mechanisms of the formation and involuntary repetition of trauma-related flashback: A review of major theories of PTSD. International Journal of Mental Health Promotion, 21(3), 81-97.

[8] Sölva, K., Haselgruber, A., & Lueger-Schuster, B. (2020). Latent classes of childhood maltreatment in children and adolescents in foster care: Associations with ICD-11 PTSD and complex PTSD. European journal of psychotraumatology, 11(1), 1832757.

[9] Karatzias, T., Shevlin, M., Fyvie, C., Grandison, G., Garozi, M., Latham, E., ... & Hyland, P. (2020). Adverse and benevolent childhood experiences in Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD): implications for trauma-focused therapies. European journal of psychotraumatology, 11(1), 1793599.

[10] Daniunaite, I., Cloitre, M., Karatzias, T., Shevlin, M., Thoresen, S., Zelviene, P., & Kazlauskas, E. (2021). PTSD and complex PTSD in adolescence: discriminating factors in a population-based cross-sectional study. European Journal of Psychotraumatology, 12(1), 1890937.

[11] Voorendonk, E. M., De Jongh, A., Rozendaal, L., & Van Minnen, A. (2020). Trauma-focused treatment outcome for complex PTSD patients: Results of an intensive treatment programme. European Journal of Psychotraumatology, 11(1), 1783955.

[12] Karatzias, T., Mc Glanaghy, E., & Cloitre, M. (2023). Enhanced skills training in affective and interpersonal regulation (ESTAIR): a new modular treatment for ICD-11 complex posttraumatic stress disorder (CPTSD). Brain Sciences, 13(9), 1300.

[13] Karatzias, T., Shevlin, M., Cloitre, M., Busuttil, W., Graham, K., Hendrikx, L., ... & Murphy, D. (2024). Enhanced skills training in affective and interpersonal regulation versus treatment as usual for ICD-11 complex PTSD: A pilot randomised controlled trial (The RESTORE trial). Psychotherapy and psychosomatics, 93(3), 203-215.