Review

Psikiyatride Güncel Yaklaşımlar-Current Approaches in Psychiatry 2022; 14(4):589-596

DOI: 10.18863/pgy.1050659

# Complex Post-Traumatic Stress Disorder: A Review

## *Karmaşık Travma Sonrası Stres Bozukluğu: Bir Gözden Geçirme*

Emre Han Alpay[1], Dilek Çelik[2]

[1] Mersin University, Mersin

[2] Doğu Akdeniz University, Mağusa

**ABSTRACT**

Complex trauma is a diagnosis that occurs due to repetitive, long-term and interpersonal traumatic events and its symptoms are different from post-traumatic stress disorder (PTSD). Although many studies have been conducted on complex trauma for many years, it has not been accepted as a different diagnosis. The 11th Edition of the International Classification of Diseases (ICD-11), published by the World Health Organization in 2018, includes complex post-traumatic stress disorder, a new diagnosis, besides post-traumatic stress disorder (PTSD) under the category of "Stress-Related Disorders". In addition to the three diagnostic criteria of PTSD (re-experiencing, avoidance, and hypervigilance), 3 new symptoms related to self-organization have been added to this new diagnosis, namely emotion dysregulation, problems in interpersonal relationships, and negative self-concept. In this review study, firstly, the differences in the diagnosis of PTSD according to DSM-5 and ICD-11 were examined. Then, the history, definition and differences between complex PTSD disorder and other disorders were examined. Finally, studies on the methods used in the treatment of Complex PTSD were reviewed.

**Key words:** Post-traumatic stress disorder, complex post-traumatic stress disorder, ICD-11

**ÖZ**

Karmaşık travma, tekrarlayan, uzun süreli ve kişilerarası ilişkilerden kaynaklı travmatik olaylardan dolayı meydana gelen ve belirtileri travma sonrası stres bozukluğundan (TSSB) farklı olan bir tanıdır. Karmaşık travma ile ilgili olarak uzun yıllardır çalışmalar yapılmasına rağmen farklı bir tanı olarak kabul edilmemiştir. Dünya Sağlık Örgütü tarafından 2018 yılında yayınlanan Uluslararası Hastalık Sınıflandırmasının en güncel versiyonu olan 11. Baskısı (ICD-11), "Stres İle İlişkili Bozukluklar" kategorisi altında travma sonrası stres bozukluğu ile birlikte yeni bir tanı olan karmaşık travma sonrası stres bozukluğuna yer vermiştir. Bu yeni tanı, TSSB'nin üç tanı ölçütünün (yeniden yaşantılama, kaçınma ve hipervijilans) yanı sıra duygu disregülasyonu, kişiler arası ilişkilerde sorunlar ve olumsuz benlik kavramı olmak üzere benlik organizasyonu ile ilgili 3 yeni belirtiyi de içermektedir. Bu derleme çalışmasında ilk olarak Tanısal ve Sayımsal El Kitabının (DSM) 5. baskısın (DSM-5) ve ICD-11'e göre TSSB tanısındaki farklılıklar incelenmiştir. Daha sonra karmaşık TSSB bozukluğunun tarihçesi, tanımı ve diğer bozukluklarla arasındaki farklılıklar incelenmiştir. Son olarak Karmaşık TSSB'nin tedavisinde kullanılan yöntemler ile ilgili çalışmalar aktarılmıştır.

**Anahtar sözcükler:** Travma sonrası stres bozukluğu, karmaşık travma sonrası stres bozukluğu ICD-11

## Introduction

Post-traumatic stress disorder (PTSD) was included as a diagnosis for the first time in the 3rd edition of the Diagnostic and Statistical Manual of Mental Diseases (DSM-III, American Psychiatric Association 1980). The data obtained from the essential and innovative empirical studies conducted for many years continued to be developed with the editions of the DSM in 1987 and 2000. They took their final form in the DSM-5 (APA 2013). Significant changes have been made regarding the diagnosis of PTSD in the DSM-5, the latest edition of the DSM. Criterion A is not only the key component of PTSD nosology, but it is also the most controversial. Many researchers criticized criterion A in the DSM-IV for being too inclusive (Spitzer et al. 2007, McNally 2009). However, criterion A continued to exist in the DSM-5 but was modified to limit its inclusiveness. Criterion A of the DSM-5 requires "real or threatened death, serious injury, or sexual violence" (APA 2013). Stressful events that do not involve an immediate threat to life or physical injury, such as psychosocial stressors (e.g., divorce or job loss), are not considered as trauma. Another change between DSM-IV and DSM-5 is the number of the symptom cluster. There were three symptom clusters in DSM IV (re-experiencing, avoidance/reduction in reactivity, and hyperarousal), while four symptom clusters in DSM-5 (re-experiencing, avoidance, change in cognition, and hyperarousal) (APA 2013). Compared to DSM-IV, DSM-5 covers changes in mood and cognition such as guilt, shame, and insecurity as a

**Address for Correspondence:** Emre Han Alpay, Mersin University, Faculty of Arts and Sciences, Department of Psychology, Mersin, Turkiye
**E-mail:** emrehan@hotmail.com **Received:** 29.12.2021 **Accepted:** 26.05.2022
**ORCID ID:** 0000-0002-3479-2013

new set of criteria. This new criterion has been added as they are commonly reported with PTSD, particularly in military incidents, emergency response, and individuals exposed to interpersonal violence. Conceptually, this addition represents an extension of the traditional fear response focus of PTSD to include other emotional reactions. This expansion resulted in the DSM-5 working group defining PTSD with four criteria and requiring at least 8 out of 19 possible symptoms (Galatzer-Levy and Bryant 2013). However, both versions require that the symptoms have been present for at least a month and that there is impairment in at least one area of functionality. Despite this expansion made in the DSM-5, unlike the DSM-IV, it remains a matter of debate whether the diagnostic criteria in the DSMs are sufficient, especially in terms of discrimination against other diagnoses (Brewin et al. 2017).

Recently published Diagnostic and Statistical Manual of Mental Disorders, fifth edition, text revision (DSM-5-TR; APA 2022) retained the DSM-5 PTSD diagnostic criteria with only one change. In criterion A.2 criterion, "witnessing the traumatic event does not include events witnessed electronically, on television, in films or pictures," was removed for children who are six years old and younger.

Another handbook used to identify mental health problems like the DSM is the 'Manual of the International Statistical Classification of Diseases and Related Health Problems (ICD)' published by the World Health Organization (WHO). A comprehensive revision of trauma-related disorders is included in the 'Stress-Specific Disorders' category in the 11th version of the International Classification of Diseases (WHO 2018) published in recent years. Studies on Complex PTSD, which is accepted as a diagnosis together with ICD-11, are increasing day by day in the literature. This study aims to examine the diagnostic criteria of Complex PTSD, its prevalence, relationship with other diagnoses, and intervention methods will be reviewed considering the literature. Moreover, this review study aimed to inform both researchers and clinicians about Complex PTSD.

## Diagnosis and Diagnostic Criteria

The PTSD diagnostic criteria in ICD-11 aimed to minimize overlap with other diagnoses such as depression and anxiety disorders and to capture a minimal set of criteria that capture the 'essence' of the post-traumatic event response. Diagnostic criteria for ICD-11 PTSD include (1) reliving the traumatic experience here and now, (2) avoiding traumatic reminders, and (3) an increased sense of present threat. Diagnosis of PTSD includes exposure to an extreme stressor and the presence of at least one symptom from each cluster (Hyland et al. 2018). The reduced number of symptoms in ICD-11 also reduced the combination of symptoms for PTSD diagnosis. In contrast, Galatzer-Levy and Bryant (2013) revealed 636120 different possible symptom combinations for the DSM-5 PTSD diagnosis criteria. Shevlin et al. (2018) stated only 27 possible symptom combinations for the ICD-11 PTSD diagnosis criteria.

One of the most important differences between the two diagnostic systems is the rate of co-diagnosis with mental health such as depression and anxiety disorders (Barbano et al. 2019, Bruckmann et al. 2020). The most recent versions of both diagnostic systems claimed that they aim to reduce the diagnosis of PTSD and various co-morbid conditions. However, most of the symptoms included as criteria for diagnosing PTSD in the DSM-5 overlap with other disorders. For example, sleep and concentration problems and irritability are common symptoms of generalized anxiety disorder. In addition, major depressive disorder is characterized by negative beliefs about oneself and the world, self-blame, decreased interest in activities, separation from others, and numbness. Therefore, the probability of co-diagnosis with PTSD is relatively high, especially in depression (Afzali et al. 2017). It is noteworthy that compared to the DSM-5 diagnostic criteria, the ICD-11 diagnostic criteria showed lower rates of comorbidity, especially with depression and anxiety disorders (e.g., Wisco et al. 2017, Oe et al. 2020). For example, Shevin et al. (2018) reported that 27.4% of the participants who met the diagnostic criteria of DSM-5 PTSD also met anxiety disorders and depression criteria. However, this rate decreased to 21.0% who met the diagnostic criteria of ICD-11 PTSD. In a study (O'Donnell et al. 2014) conducted with a sample of 953 injury cases, it was found that PTSD was associated with an 11% higher comorbidity rate of depression compared to ICD-11 according to DSM-5 diagnostic criteria. However, the difference was not statistically significant. In another study, Shevlin et al. (2018) reported no significant difference in the comorbidity rates of depression and anxiety disorders accompanying PTSD between the DSM IV-TR and DSM -5 diagnostic criteria. However, the diagnosis of PTSD made with the ICD-11 diagnostic criteria showed significantly lower comorbidity rates compared to both DSM-IV and DSM-5 diagnostic criteria. Another innovation in ICD-11 is the Complex PTSD diagnosis, which was included to identify broader and more complex post-traumatic reactions (Maercker et al. 2013). The concept of complex PTSD is not new and was included as a diagnosis for the first time in ICD-11. First, in the 1990s, Terr (1991) and Herman (1992a) suggested a meaningful clinical distinction between single traumatic events experienced by the individual and repetitive, long-term, and interpersonal traumatic events.

Herman (1992a) stated the long-term negative impact of chronic stress experienced by the individual on emotion regulation, self-regulation, self-perception, and interpersonal functioning. Herman defined this phenomenon as 'complex trauma.' Also, according to Herman (1992b), being a victim of childhood sexual and physical abuse, domestic violence, being victim of a commercial sexual exploitation, or the slave trade; or being a child soldier; who has been subjected to torture, genocide, or other forms of organized violence, show a different set of symptoms that can distinguish from PTSD. In support of this idea, studies conducted in the following periods also draw attention to the deficiencies in this area of functionality, especially in individuals exposed to childhood maltreatment. For example, some studies (Pollak et al. 2000, Maughan and Cicchetti 2002, Southam-

Gerow and Kendall 2002) showed that maltreated children have difficulty with emotional expression, recognition, reactivity, and social interactions compared to children who have not been maltreated. Charuvastra and Cloitre (2008) stated that the impact of interpersonal traumas are quite intense because social ties strongly affect the sense of self and relational and emotional regulation capacities. In another study, Cloitre et al. (2005) reported that emotion regulation and interpersonal problems among women with a history of childhood abuse were strong predictors of functional impairment beyond PTSD symptom severity.

In previous years, diagnoses similar to the clinical picture of Complex PTSD were emphasized. These include 'Disorders of Extreme Stress, DESNOS' and 'Enduring Personality Change after Catastrophic Experience, EPCACE' (WHO 1992, Wilson et al. 2001, Classen et al. et al. 2006). These diagnoses aimed to describe the symptoms in patients who have experienced a severe, recurrent, and/or traumatic event early in life. (Herman 1992a, Brewin et al. 2017, WHO 2018). Empirical studies (Cloitre et al. 2009, Dvir et al. 2014, Lonergan 2014) revealed that repeated interpersonal trauma experience (especially in childhood) hinders the individual's emotional and cognitive development and may affect self-organization skills. DESNOS was first introduced as a result of DSM-IV field trials. Initially it was thought of as an independent DSM diagnosis consisting of six symptom clusters: somatization, changes in the regulation of emotions and impulses, attention or consciousness, self-perception, relationships with others, and meaning systems (Ford et al. 2005). However, as a result of DSM-IV (APA 2000) field studies conducted to test the validity of the DESNOS construct, it was observed that very few of the participants (between 4 and 6%) showed DESNOS symptoms without PTSD diagnostic criteria. Therefore, this diagnosis did not confirm the idea of an independent diagnosis (Van der Kolk et al. 2005). As a result, DESNOS symptoms were included in the DSM-IV not as separate diagnostic criteria but as "associated features" of PTSD (Cloitre et al. 2011). Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world, referred to in the DSM-5 as "complex"; persistent negative emotional state; reckless or self-destructive behavior; and signs of depersonalization and derealization have been included in the diagnosis of PTSD (Friedman 2013).

A clear concept related to complex post-traumatic diagnosis was recognized in the ICD more than in the DSM. EPCACE is a diagnosis in ICD-10 which was similar to complex PTSD. This diagnosis is characterized by a hostile or distrustful attitude towards the world, social withdrawal, feelings of emptiness or hopelessness, a chronic sense of "extreme" as if under constant threat, and alienation. It has been stated that individuals cannot be diagnosed with EPCACE and PTSD together (WHO 1992).

While PTSD (as defined by ICD-11) remains a core component of complex PTSD, it includes three clusters of disturbances in self-organization. This cluster comprises 4-emotion dysregulation, 5-interpersonal dysfunction, and 6-negative self-perception (ICD-11; WHO 2018). Emotion dysregulation symptoms include hyperactivation (e.g., high emotional reactivity and anger outbursts) or hypoactivation (e.g., emotional numbness or dissolution) (Dvir et al. 2014). Negative self-symptoms reflect excessive and negative self-evaluations and persistent negative views of the self. Studies (e.g., Badour and Adams 2015) suggest that people develop a negative self-perception after exposure to a traumatic event (especially interpersonal traumatic events). Disorders in interpersonal relationships reflect difficulties in developing and maintaining interpersonal relationships (for example, feeling distant from others, having difficulty maintaining relationships) or displaying reckless or aggressive behaviors in interpersonal relationships. Social withdrawal, isolation, and disconnection from others are commonly observed results of exposure to interpersonal traumas at an early age (Walsh et al. 2010).

## Complex PTSD and Other Disorders

The most apparent distinction between complex PTSD and PTSD is the traumatic event that the person experienced. Studies show that PTSD is associated with a single traumatic event in adulthood (Cloitre et al. 2013) or with multiple exposures to the same traumatic event (Glück et al. 2016). Some empirical studies (Knefel and Lueger-Schuster 2013, Knefel et al. 2015, Karatzias et al. 2017, Frewen et al. 2019, Van der Kolk, Ford, and Spinazzola 2019) have shown that complex PTSD is associated with long-term interpersonal relationships. It is related to multiple traumatic events experienced (especially in childhood). In addition, while anxiety symptoms increase in PTSD (Knefel and Lueger-Schuster 2013), depressive symptoms that increase more in complex PTSD (Hyland et al. 2017a, 2017b) come to the fore. The degree of impairment in functionality is also essential in distinguishing these two diagnoses. Cloitre et al. (2013) stated that participants diagnosed with complex PTSD showed significantly more impaired functionality than participants with PTSD. In addition, individuals diagnosed with complex PTSD show higher levels of dissociative symptoms than people diagnosed with PTSD (van Dijke et al. 2015, Hyland et al. 2019; Powers et al. 2019). Furthermore, exposure to a traumatic event early stages of life is a risk factor develop Complex PTSD symptoms than PTSD (Van der Kolk et al. 2005).

Studies conducted with community samples and self-report tools showed that ICD-11 PTSD and Complex PTSD have different prevalence rates. For example, in a study conducted in the United States (Cloitre et al. 2019), PTSD and complex PTSD prevalence was reported as 3.4% and 3.8%, respectively, according to ICD-11 diagnostic criteria. In a study conducted in Israel (Ben-Ezra et al. 2018) prevalence rate of PTSD (9.0%) is higher than complex PTSD (2.6%). In another study conducted in the German sample, the prevalence of PTSD (1.5%) and complex PTSD (0.5%) was lower than in Israel and the USA. These data show that PTSD and complex PTSD are common disorders seen in the population sample according to the ICD-11 diagnostic criteria (Cloitre et al. 2019).

A critical discussion about Complex PTSD defined in ICD-11 is

its similarity with the DSM-5 borderline personality disorder diagnosis (Lewis and Grenyer 2009, Kulkarni 2017). In the DSM-5, borderline personality disorder includes nine diagnostic criteria: emotional instability, impulsivity, suicidal or self-harming behaviors or threats, inappropriate or intense anger or difficulty controlling anger, unstable interpersonal relationships, intense efforts to avoid abandonment, identity disorder, chronic emotional emptiness, and temporary stress-related paranoid thinking or severe dissociative listed as symptoms. These symptoms are associated with significant functional disorders (APA 2013). There is a link between these symptoms of borderline personality disorder and complex PTSD symptoms (i.e., emotion regulation, relationships, and self-beliefs) and cause adverse effects on interpersonal relationships (Macintosh et al. 2015).

Moreover, Resick et al. (2012) suggested that all BPD symptoms, except for suicide and fear of abandonment, can be interpreted as overlapping with complex PTSD symptoms. In addition, although a causal relationship between exposure to trauma and borderline personality disorder has not yet been established (Ball and Links 2009), it is reported that approximately 97% of individuals diagnosed with borderline personality disorder experienced traumatic events in their childhood (Temes et al. 2017). Findings from neurological studies (Cattane et al. 2017) have shown that brain changes associated with childhood trauma, such as those affecting the hypothalamic-pituitary-adrenal axis, are risk factors for borderline personality disorder. In addition, dissociation is one of the common symptoms of complex PTSD (Hyland et al. 2019) and borderline personality disorder (Scalabrini et al. 2017). These findings have led some authors to propose reclassifying borderline personality disorder as a trauma-related disorder (Lewis and Grenyer 2009).

There are distinctive differences between complex PTSD and borderline personality disorder (Cyr et al. 2022). For example, characteristics of borderline personality disorder are present in various contexts from early adulthood, whereas complex PTSD symptoms must appear after one or more traumatic events (APA 2013, WHO 2018). Emotional reactivity is one of the similarities between borderline personality disorder and complex PTSD (Brewin et al. 2017). However, although present in complex PTSD, anger, suicide, and self-harming behaviors, which are evaluated within the scope of emotional reactivity, are more central symptoms of borderline personality disorder (Cloitre et al. 2014).

Moreover, changes in identity and relationships in borderline personality disorder are characterized by a view of oneself and others that alternate between extremely positive (i.e., idealization) and negative (i.e., devaluation) poles, whereas in complex PTSD patients are consistently linked with distrust of others. They have a consistent negative self-concept (Cloitre et al. 2011). As Ford and Courtois (2014) summarize, "excessive alertness to harm" is at the center of complex PTSD, while "hypersensitivity to perceiving oneself as abandoned" is central to borderline personality disorder.

## Treatment

Studies related to the treatment of PTSD support the effectiveness of treatments such as trauma-focused Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) (Mendes et al. 2008, de Jongh et al. 2019, Lewis et al. 2020). These approaches have also been reported to be effective for a range of PTSD survivors, including victims of sexual abuse, refugees, war veterans, and motor vehicle accident victims (Foa et al. 2009). However, most of the available evidence regarding these interventions is used to treat a single type of trauma experienced in adulthood (Bisson et al. 2013).

Whether these methods used in treating PTSD are suitable for more complex traumatic cases such as Complex PTSD is a matter of debate. The "Complex Trauma Study Group" established within the International Association for the Study of Traumatic Stress (ISTSS) is working to develop clinical guidelines aimed at the treatment of complex PTSD (Weiss 2012). This group published the "Specialist Treatment Handbook for Complex PTSD in Adults" in 2012 (Cloitre et al. 2012). This handbook has been prepared to consider Herman's (1992a) early work on complex trauma (Cloitre et al., 2012). Herman recommended a three-phase treatment plan for complex PTSD cases: stabilization, trauma memory processing, and reintegration. Although the duration of each step in this treatment plan is not predetermined (depending on the client), it can also be applied in short periods, such as a single session (Courtois and Ford 2013).

The first phase, namely the stabilization phase, aims to strengthen the emotional awareness and expression capacities while focusing on the client's safety. It also includes psychoeducation, which provides information to the client about trauma and complex PTSD (Cloitre et al. 2011). Due to delaying the following stages, this stage is criticized as whether necessary for the treatment process (Bicanic et al. 2015, De Jongh et al. 2016). The second phase involves the exploration of traumatic memories first to reduce the acute emotional distress arising from the memories and then re-evaluate their meaning and integrate them into a coherent and positive identity. In other words, at this stage, the focus is on reviewing and evaluating the memories of the trauma to facilitate the mental reorganization of the traumatic event and its integration into memory. At this stage, the emotions arising from complex traumatic stress disorder are also focused on (Cloitre et al. 2012). However, the focused emotions are not limited to anxiety. Shame, anger, grief, and mourning are usually focal points (Courtis et al. 2009).

Regarding the third and final stage, two primary purposes can be mentioned: (1) to show interest in themselves by getting rid of the emotions developed in the context of trauma, and (2) to focus on "power and control feelings" in relationships and increase these feelings in the person. According to Cloitre et al. (2012), the transition to the third stage is a process that is decided together with the client as the complex PTSD symptoms of the client begin to subside. Some studies (Courtois and Ford 2009, Courtois 2010) have drawn attention to the importance

of working with the development of identity and self-esteem after clients integrate their memories of trauma and become aware of the losses, they have experienced due to trauma. These studies recommend focusing on developing relationships in the third stage, including working on social skills to develop trusting relationships and support networks.

Studies investigating the effectiveness of this treatment method (Cloitre et al. 2010, Dorrepaal et al. 2010) showed that this treatment approach is effective in the treatment of PTSD symptoms. Moreover, it has been reported to be effective in recovering persistent and pervasive emotion regulation problems, relationship problems, changes in attention and consciousness (e.g., dissociation), negatively affected belief systems, and somatic symptoms. The recommendation of a phase-based approach as a treatment strategy for complex PTSD has been endorsed by other specialist organizations focusing on trauma disorders (for example, the National Institute for Clinical Excellence 2005).

Van der Kolk et al. (2005) stated that patients with complex trauma histories complained more about functional impairments in affect and interpersonal functioning and sought help in these areas rather than seeking treatment to alleviate PTSD symptoms. Accordingly, it was argued that the main goals in the treatment of complex PTSD should be developing emotion regulation strategies and/or focusing on interpersonal problems (Cook et al. 2004, Stein and Allen 2007, DePrince et al. 2011, Brown et al. 2012, D'Andrea and Pole 2012, Blalock et al. 2013, Cloitre et al. 2013, Jepsen et al. 2013, Tummala-Narra 2014).

## Conclusion and Recommendations

The diagnostic criteria for PTSD and complex PTSD proposed in the ICD-11 result from an attempt to develop a new international classification for stress and trauma-related disorders. These criteria in ICD-11 not only increase the clinical utility and applicability of the two diagnoses but also try to simplify the definitions for both diagnoses, reduce the number of symptoms, and clarify the differences as well as the relationship between the two disorders (Brewin et al. 2017). Brewin (2020) states that complex PTSD, as a new diagnosis, can be easily distinguished by clinicians working in a practical context and meets a long-discussed need. Besides its clinical benefit, it is also an important development for empirical research. For example, recent studies indicate that difficulties in emotion regulation play a mediating role in the relationship between negative experiences in childhood and mental health problems, especially PTSD (Alpay et al. 2017, Messman-Moore and Bhuptani, 2017, Crow et al. 2021). With the definition of complex PTSD in a classification system, complex PTSD should be investigated in future studies. Emotion regulation should be considered a criterion for this diagnosis rather than a precursor of PTSD, especially due to the neglect and abuse experienced in childhood.

However, empirical studies of complex PTSD are scarce, although it has been studied for a long time. One of the most important reasons for this low interest is the lack of measurement tools to evaluate this diagnosis. After defining complex PTSD in ICD-11, Cloitre et al. (2018) developed a scale called the International Trauma Questionnaire to evaluate this disorder. The scale is currently translated into 28 languages, including the Turkish version of the scale (https://www.traumameasuresglobal.com/itq). Many recent studies (Hyland et al. 2017a, Vallières et al. 2018, Redican et al. 2021) show that this assessment tool is a valid and reliable measurement tool.

It is believed that this diagnosis is essential. Because many methods used in the treatment of PTSD have been shown to be ineffective in the treatment of this disorder, Brenner et al. (2019) highlight the need to develop and evaluate new interventions in rehabilitation that address the complexity of the new disorder with greater psychopathological burden and more intense impairments in functionality in stigmatized PTSD compared to PTSD. Some intervention modalities have been suggested to be effective in the treatment of complex PTSD. However, there is limited research on the effectiveness of these methods. More randomized controlled studies should be conducted on this subject, and the effectiveness of these treatments should be scientifically proven. In our country, it is seen that these treatments have not been translated into Turkish yet. These treatment methods must be translated into Turkish and applied.

Many studies with adults show that complex PTSD emerges from various traumatic experiences (especially negative experiences and multiple traumas in childhood). However, studies on children and adolescents are very limited. There are no studies on how this disorder begins in childhood and the protective factors and risk factors in the development of the disease. It is recommended that researchers conduct studies on the impact of complex PTSD and how it develops in child and adolescent samples. As a result of these studies, it is thought that the treatments can be done much earlier with the preparation of early intervention programs.

To sum up, the number of empirical studies showing that Complex PTSD, a very new diagnosis, is associated with recurrent, long-term, and interpersonal traumatic events is very limited. More empirical studies are recommended to increase the scientific evidence required for this diagnosis. Thus, clinicians need to distinguish these symptoms first and refer patients with this diagnosis to treatment programs recommended for the treatment of complex PTSD. Especially with the increase in studies on Complex PTSD in our country, it is recommended to separate these patients from PTSD patients and to apply for appropriate treatment programs.

**Authors Contributions:** *The authors attest that she has made an important scientific contribution to the study and has assisted with the drafting or revising of the manuscript.*

**Peer-review:** *Externally peer-reviewed.*

**Conflict of Interest:** *No conflict of interest was declared by the authors.*

**Financial Disclosure:** *The authors declared that this study has received no financial support.*

## References

Alpay EH, Aydın A, Bellur Z (2017) The mediating role of the emotion

regulation difficulties on the relationship between childhood traumas, post traumatic stress symptoms and depression. J Clin Psychiatry, 20:218-226.

Achterhof R, Huntjens RJC, Meewisse ML, Kiers HAL (2019) Assessing the application of latent class and latent profile analysis for evaluating the construct validity of complex posttraumatic stress disorder. Eur J Psychotraumatol, 10:182-198

Afzali MH, Sunderland M, Teesson M, Carragher N, Mills K, Slade TA (2017) Network approach to the comorbidity between posttraumatic stress disorder and major depressive disorder: The role of overlapping symptoms. J Affect Disord, 208:490-496.

American Psychological Association (2012) International Society for the Study of Trauma and Dissociation. Complex Trauma Treatment Guidelines.

American Psychiatric Association (1980) Diagnostic and Statistical Manual of Mental Disorders 3rd edition, (DSM-III). Washington, American Psychiatric Association.

American Psychiatric Association (2000) Diagnostic and Statistical Manual of Mental Disorders 4th edition Text Revision (DSM-IV-TR). Washington, American Psychiatric Association.

American Psychiatric Association (2013) Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5). Washington, American Psychiatric Association.

American Psychiatric Association (2022) Diagnostic and Statistical Manual of Mental Disorders 5th edition Text Revision (DSM-5-TR). Washington, American Psychiatric Association

Badour CL, Adams TG (2018) Contaminated by trauma: Understanding links between self-disgust, mental contamination, and post-traumatic stress disorder. In The Revolting Self: Perspectives on the Psychological, Social, and Clinical Implications of Self-Directed Disgust (Eds PG Overton, PA Powell, J Simpson) 127-149. New York, Routledge.

Ball JS, Links PS (2009) Borderline personality disorder and childhood trauma: evidence for a causal relationship. Curr Psychiatry Rep, 11:63-68.

Barbano AC, van der Mei WF, deRoon-Cassini TA, Grauer E, Lowe SR, Matsuoka YJ (2019) International Consortium to Prevent PTSD. Differentiating PTSD from anxiety and depression: Lessons from the ICD-11 PTSD diagnostic criteria. Depress Anxiety, 36:490-498.

Ben-Ezra M, Karatzias T, Hyland P, Brewin CR, Cloitre M, Bisson JI et al. (2018) Posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) as per ICD-11 proposals: A population study in Israel. Depress Anxiety, 35:264-274.

Blalock JA, Minnix JA, Mathew AR, Wetter DW, McCullough JP, Cinciripini PM (2013) Relationship of childhood trauma to depression and smoking outcomes in pregnant smokers. J Consult Clin Psychol, 81:821.

Bicanic I, De Jongh A, Ten Broeke E (2015) Stabilisation in trauma treatment: necessity or myth?. Tijdschr Psychiatr, 57:332-339.

Bisson JI, Roberts NP, Andrew M, Cooper R, Lewis C (2013) Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. Cochrane Database Syst. Rev, 12:CD003388

Brenner L, Köllner V, Bachem R (2019) Symptom burden and work-related impairment among patients with PTSD and complex PTSD. Eur J Psychotraumatol, 10:1694766.

Brewin CR, Cloitre M, Hyland P, Shevlin M, Maercker A, Bryant RA et al. (2017) A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. Clin Psychol Rev, 58:1-15.

Brown NR, Kallivayalil D, Mendelsohn M, Harvey MR (2012) Working the double edge: Unbraiding pathology and resiliency in the narratives of early-recovery trauma survivors. Psychol Trauma, 4:102.

Bruckmann P, Haselgruber A, Sölva K, Lueger-Schuster B (2020). Comparing rates of ICD-11 and DSM-5 Posttraumatic Stress Disorder in Austrian children and adolescents in foster care: prevalence, comorbidity and predictors. Eur J Psychotraumatol, 11:1767988.

Cattane N, Rossi R, Lanfredi M, Cattaneo A (2017) Borderline personality disorder and childhood trauma: exploring the affected biological systems and mechanisms. BMC Psychiatry, 17:221.

Charuvastra A, Cloitre M (2008) Social bonds and posttraumatic stress disorder. Annu Rev Psychol, 59:301-328.

Classen CC, Pain C, Field NP, Woods P (2006) Posttraumatic personality disorder: A reformulation of complex posttraumatic stress disorder and borderline personality disorder. Psychiatr Clin North Am, 29:87-112.

Cloitre M, Stovall-McClough KC, Nooner K, Zorbas P, Cherry S, Jackson CL et al. (2010) Treatment for PTSD related to childhood abuse: A randomized controlled trial. Am J Psychiatry, 167:915–924.

Cloitre M, Courtois CA, Charuvastra A, Carapezza R, Stolbach BC, Green BL (2011) Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. J Trauma Stress, 24:615-627.

Courtois CA, Ford JD, Cloitre M (2000) Best practices in psychotherapy for adults. In: Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide (Eds CA Courtois, JD Ford). New York, Guilford Press.

Cloitre M, Garvert DW, Brewin CR, Bryant RA, Maercker A (2013) Evidence for proposed ICD-11 PTSD and complex PTSD: A latent profile analysis. Eur J Psychotraumatol, 4:20706.

Cloitre M, Garvert DW, Weiss B, Carlson EB, Bryant RA (2014) Distinguishing PTSD, complex PTSD, and borderline personality disorder: A latent class analysis. Eur J Psychotraumatol, 5:25097.

Cloitre M, Hyland P, Bisson JI, Brewin CR, Roberts NP, Karatzias T et al. (2019) ICD-11 posttraumatic stress disorder and complex posttraumatic stress disorder in the United States: A population-based study. J Trauma Stress, 32:833-842.

Cloitre M, Miranda R, Stovall-McClough KC, Han H (2005) Beyond PTSD: Emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. Behav Ther, 36:119-124.

Cloitre M, Shevlin M, Brewin CR, Bisson JI, Roberts NP, Maercker A et al. (2018) The international trauma questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. Acta Psychiatr Scand, 138:536-546.

Cook JM, Riggs DS, Thompson R, Coyne JC, Sheikh JI (2004) Posttraumatic stress disorder and current relationship functioning among World War II ex-prisoners of war. J Fam Psychol, 18:36-53

Courtois CA, Ford JD (2009) Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide. Guilford Press, New York.

Courtois CA (2010) Understanding complex trauma, complex reactions, and treatment approaches. https://www.aaets.org/traumatic-stress-library/understanding-complex-trauma-complex-reactions-and-treatment-approaches (Accessed 11.09.2021)

Crow TM, Levy KN, Bradley B, Fani N, Powers A (2021) The roles of attachment and emotion dysregulation in the association between childhood maltreatment and PTSD in an inner-city sample. Child Abuse Negl, 118:105139.

Cyr G, Godbout N, Cloitre M, Bélanger C (2022) Distinguishing among symptoms of posttraumatic stress disorder, complex posttraumatic stress disorder, and borderline personality disorder in a community sample of women. J Trauma Stress, 35:186-196.

D'Andrea W, Pole N. (2012) A naturalistic study of the relation of psychotherapy process to changes in symptoms, information processing, and physiological activity in complex trauma. Psychol Trauma, 4:438-451

De Jongh A, Amann BL, Hofmann A, Farrell D, Lee CW (2019) The status of EMDR therapy in the treatment of posttraumatic stress disorder 30 years after its introduction. J EMDR Pract. Res, 13:261-269.

De Jongh, AD, Resick PA, Zoellner LA, Van Minnen A, Lee CW, Monson CM

et al. (2016) Critical analysis of the current treatment guidelines for complex PTSD in adults. Depress Anxiety, 33:359-369.

DePrince AP, Chu AT, Pineda AS (2011) Links between specific posttrauma appraisals and three forms of trauma-related distress. Psychol Trauma, 3:430.

Dorrepaal E, Thomaes K, Smit JH, Van Balkom AJL, Van Dyck R, Veltman, DJ et al. (2010) Stabilizing group treatment for complex posttraumatic stress disorder related to childhood abuse based on psycho-education and cognitive behavioral therapy: A pilot study. Child Abuse Negl, 34:284-288.

Dvir Y, Ford JD, Hill M, Frazier JA (2014) Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. Harv Rev Psychiatry, 22:149-161.

Foa EB, Chrestman KR, Gilboa-Schechtman E (2009) Prolonged Exposure Therapy for Adolescents with PTSD Emotional Processing of Traumatic Experiences, Therapist Guide. London, Oxford University Press.

Ford JD, Courtois, CA, Steele K, Hart OVD, Nijenhuis ER (2005) Treatment of complex posttraumatic self- dysregulation. J Trauma Stress, 18:437-447.

Ford JD, Courtois CA, Cloitre M (2009) Best Practices in Psychotherapy for Adults. Treating Complex Traumatic Disorders: Scientific Foundations and Therapeutic Models. New York, Guilford Press.

Ford JD, Courtois CA (2013) Treating Complex Traumatic Stress Disorders in Children and Adolescents: Scientific Foundations and Therapeutic Models. New York, Guilford Press.

Frewen P, Zhu J, Lanius R (2019) Lifetime traumatic stressors and adverse childhood experiences uniquely predict concurrent PTSD, complex PTSD, and dissociative subtype of PTSD symptoms whereas recent adult non-traumatic stressors do not: Results from an online survey study. Eur J Psychotraumatol, 10:1-10

Friedman MJ (2013) Finalizing PTSD in DSM- 5: Getting here from there and where to go next. J Trauma Stress, 26:548-556.

Galatzer-Levy IR, Bryant RA (2013) 636,120 ways to have posttraumatic stress disorder. Perspect Psychol Sci, 8:651-662.

Glück,TM, Knefel M, Tran US, Lueger-Schuster B (2016) PTSD in ICD-10 and proposed ICD-11 in elderly with childhood trauma: prevalence, factor structure, and symptom profiles. Eur J Psychotraumatol, 7:9700.

Herman JL (1992a) Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. J Trauma, 5:377-391.

Herman JL (1992b) Trauma and Recovery. New York, Basic Books.

Hyland P, Shevlin M, Fyvie C, Karatzias T (2018) Posttraumatic stress disorder and complex posttraumatic stress disorder in DSM- 5 and ICD- 11: Clinical and behavioral correlates. J Trauma Stress, 31:174-180.

Hyland P, Shevlin M, Cloitre M, Karatzias T, Vallières F, McGinty G et al. (2019) Quality not quantity: loneliness subtypes, psychological trauma, and mental health in the US adult population. Soc Psychiatry Psychiatr Epidemiol, 54:1089-1099.

Hyland P, Shevlin M, Brewin CR, Cloitre M, Downes AJ, Jumbe S. Roberts, NP (2017a) Validation of post- traumatic stress disorder (PTSD) and complex PTSD using the International Trauma Questionnaire. Acta Psychiatr Scand, 136:313-322.

Hyland P, Shevlin M, Elklit A, Murphy J, Vallières F, Garvert DW et al. (2017b) An assessment of the construct validity of the ICD-11 proposal for complex posttraumatic stress disorder. Psychol Trauma, 9:1-10

Jepsen EK, Langeland W, Heir T (2013) Impact of dissociation and interpersonal functioning on inpatient treatment for early sexually abused adults. Eur J Psychotraumatol, 4:13-32

Karatzias T, Murphy P, Cloitre M, Bisson J, Roberts N, Shevlin M et al. (2019a) Psychological interventions for ICD-11 complex PTSD symptoms: systematic review and meta-analysis. Psychol Med, 49:1761-1775.

Karatzias T, Cloitre M (2019b) Treating adults with complex posttraumatic stress disorder using a modular approach to treatment: rationale, evidence, and directions for future research. J Trauma Stress, 32:870–876.

Knefel M, Garvert DW, Cloitre M, Lueger-Schuster B (2015) Update to an evaluation of ICD-11 PTSD and complex PTSD criteria in a sample of adult survivors of childhood institutional abuse by Knefel & Lueger-Schuster (2013). A latent profile analysis. Eur J Psychotraumatol, 6:25290.

Knefel M, Lueger-Schuster B (2013) An evaluation of ICD-11 PTSD and complex PTSD criteria in a sample of adult survivors of childhood institutional abuse. Eur J Psychotraumatol, 4:22608.

Kulkarni J (2017) Complex PTSD–a better description for borderline personality disorder? Australas Psychiatry, 25:333-335.

Lewis KL, Grenyer BF (2009) Borderline personality or complex posttraumatic stress disorder? An update on the controversy. Harv Rev Psychiatry, 17:322-328.

Lewis C, Roberts NP, Andrew M, Starling E, Bisson JI (2020) Psychological therapies for post-traumatic stress disorder in adults: Systematic review and meta-analysis. Eur J Psychotraumatol, 11:1729633

Levitt JT, Cloitre M (2005) A clinician's guide to STAIR/MPE: Treatment for PTSD related to childhood abuse. Cogn Behav Pract, 12:40-52.

Lonergan M (2014) Cognitive behavioral therapy for PTSD: The role of complex PTSD on treatment outcome. J Aggress Maltreat Trauma, 23:494-512.

MacIntosh HB, Godbout N, Dubash N (2015) Borderline personality disorder: Disorder of trauma or personality, a review of the empirical literature. Can Psychol, 56:227-241.

Maercker A, Brewin CR, Bryant RA, Cloitre M, van Ommeren M, Jones LM et al. (2013) Diagnosis and classification of disorders specifically associated with stress: proposals for ICD- 11. World J Psychiatry, 12:198-206.

Maughan A. Cicchetti D (2002) Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. Child Dev, 73:1525-1542.

McNally RJ (2009) Can we fix PTSD in DSM-V? Depress Anxiety, 26:597–600.

Mendes DD, Mello MF, Ventura P, de Medeiros Passarela C, de Jesus Mari J (2008) A systematic review on the effectiveness of cognitive behavioral therapy for posttraumatic stress disorder. Int J Psychiatry Med, 38:241-259.

Messman-Moore TL, Bhuptani PH (2017) A review of the long- term impact of child maltreatment on posttraumatic stress disorder and its comorbidities: An emotion dysregulation perspective. Clin Psychol, 24:154-169.

National Collaborating Centre for Mental Health (2005) Post-Traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care. Leicester, UK, Gaskell.

O'donnell ML, Alkemade N, Nickerson A, Creamer M, McFarlane AC, Silove D et al. (2014) Impact of the diagnostic changes to post-traumatic stress disorder for DSM-5 and the proposed changes to ICD-11. Br J Psychiatry, 205:230-235.

Oe M, Ito M, Takebayashi Y, Katayanagi A, Horikoshi M (2020) Prevalence and comorbidity of the ICD-11 and DSM-5 for PTSD caseness with previous diagnostic manuals among the Japanese population. Eur J Psychotraumatol, 11:1753938.

Redican, E., Nolan, E., Hyland, P., Cloitre, M., McBride, O., Karatzias, T et al. (2021) A systematic literature review of factor analytic and mixture models of ICD-11 PTSD and CPTSD using the International Trauma Questionnaire. J Anxiety Disord, 79:102381.

Pollak SD, Cicchetti D, Hornung K. Reed A (2000) Recognizing emotion in faces: developmental effects of child abuse and neglect. Dev Psychol, 36:679-688.

Powers A, Dixon HD, Conneely K, Gluck R, Munoz A, Rochat C et al. (2019) The differential effects of PTSD, MDD, and dissociation on CRP in trauma-exposed women. Compr Psychiatry, 93:33-40.

Resick PA, Bovin MJ, Calloway AL, Dick AM, King MW, Mitchell KS et al. (2012) A critical evaluation of the complex PTSD literature: Implications for DSM- 5. J Trauma Stress, 25:241-251.

Shevlin M, Hyland P, Roberts NP, Bisson JI, Brewin CR, Cloitre M (2018) A psychometric assessment of Disturbances in Self-Organization symptom indicators for ICD-11 Complex PTSD using the International Trauma Questionnaire. Eur J Psychotraumatol, 9:1419749.

Shevlin M, Hyland P, Vallières F, Bisson J, Makhashvili N, Javakhishvili J et al. (2018) A comparison of DSM- 5 and ICD- 11 PTSD prevalence, comorbidity and disability: An analysis of the Ukrainian Internally Displaced Person's Mental Health Survey. Acta Psychiatr Scand, 137:138-147.

Southam-Gerow MA, Kendall PC (2002) Emotion regulation and understanding: Implications for child psychopathology and therapy. Clin Psychol Rev, 22:189-222.

Sloan DM, Lee DJ, Litwack SD, Sawyer AT, Marx BP (2013) Written exposure therapy for veterans diagnosed with PTSD: A pilot study. J Trauma Stress, 26:776-779.

Spitzer RL, First MB, Wakefield JC (2007) Saving PTSD from itself in DSM-V. J. Anxiety Disord. 21:233-241.

Stein H, Allen JG (2007) Mentalizing as a framework for integrating therapeutic exposure and relationship repair in the treatment of a patient with complex posttraumatic psychopathology. Bull Menninger Clin, 71:273-290.

Temes CM, Magni LR, Fitzmaurice GM, Aguirre BA, Goodman M, Zanarini MC (1991) Prevalence and severity of childhood adversity in adolescents with BPD, psychiatrically healthy adolescents, and adults with BPD. J Ment Health, 11:171-178.

Terr LC (1991) Childhood traumas: An outline and overview. Am J Psychiatry, 148: 10–20.

Tummala-Narra P (2014) Cultural identity in the context of trauma and immigration from a psychoanalytic perspective. Psychoanal Psychol, 31:396.

van Dijke A, Ford JD, Frank LE, Van der Hart O (2015) Association of childhood complex trauma and dissociation with complex posttraumatic stress disorder symptoms in adulthood. J Trauma Dissociation, 16:428-441.

Van der Kolk BA, Roth S, Pelcovitz D, Sunday S, Spinazzola J (2005) Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. J Trauma Stress, 18:389-399.

van Der Kolk B, Ford JD, Pinazzola J (2019) Comorbidity of developmental trauma disorder (DTD) and post-traumatic stress disorder: Findings from the DTD field trial. Eur J Psychotraumatol, 10:1562841.

Walsh K, Fortier MA, DiLillo D (2010) Adult coping with childhood sexual abuse: A theoretical and empirical review. Aggress Violent Behav, 15:1-13.

Weiss DS (2012) Introduction to the special feature on complex PTSD. J Trauma Stress, 25:239-240.

Wilson JP (2001) An overview of clinical consideration and principles in the treatment of PTSD. Treating Psychological Trauma and PTSD (Eds JP Wilson, MJ Friedman, JD Lindy):59-94. New York, Guilford Press.

Wisco BE, Marx BP, Miller MW, Wolf E.J, Krystal JH, Southwick SM et al. (2017) A comparison of ICD-11 and DSM criteria for posttraumatic stress disorder in two national samples of US military veterans. J Affect Disord, 223:17-19.

WHO (1992) The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva, World Health Organization.

WHO (2018) International Statistical Classification of Diseases and Related Health Problems (11th Revision). Geneva, World Health Organization.

Yen S, Shea MT, Battle CL, Johnson DM, Zlotnick, C, Dolan-Sewell R et al. (2002) Traumatic exposure and posttraumatic stress disorder in borderline, schizotypal, avoidant, and obsessive-compulsive personality disorders: Findings from the Collaborative Longitudinal Personality Disorders Study. J Nerv Ment Dis, 190:510-518

Vallières F, Ceannt, R, Daccache, F, Abou Daher R, Sleiman J, Gilmore B et al. (2018) ICD- 11 PTSD and complex PTSD amongst Syrian refugees in Lebanon: the factor structure and the clinical utility of the International Trauma Questionnaire. Acta Psychiatr Scand, 138:547-557.