



# Possibilities of Cognitive Behavioral Therapy Intervention in Posttraumatic Stress Disorder Patients with Interpersonal Trauma: An Integrative Review of Complex PTSD

Daniela Haertel<sup>1\*</sup>, Paula Oliveira Silva<sup>2</sup>, Silvia Helena Modenesi Pucci<sup>2</sup>

<sup>1</sup>Department of Psychology and Education, University of Sao Paulo, Brazil

<sup>2</sup>Department of Medical Sciences, University of Santa Casa de Sao Paulo, Brazil

## ABSTRACT

Trauma results from an emotionally intense experience and may cause lasting psychological disorders, including Post Traumatic Stress Disorder (PTSD). The complexity of PTSD has led to the recognition of a more severe form, Complex Post Traumatic Stress Disorder (CPTSD), which is associated with recurrent interpersonal trauma and Disturbances in Self Organization (DSO). The lack of consensus on diagnostic criteria between the DSM-5 and ICD-11 has created confusion regarding the accurate diagnosis of PTSD and CPTSD. This issue impacts scientific discussion, precise diagnosis, and treatment approaches. A primary distinction between PTSD and CPTSD is the presence of symptoms related to DSO and repeated interpersonal trauma. This study explored Cognitive Behavioral Therapy (CBT) interventions for patients with CPTSD. An integrative literature review was conducted using the PICO strategy across the most prominent health databases. The results yielded only twenty articles with varied methodological approaches. In terms of treatment, the most frequently referenced approach was trauma-focused CBT, often in combination with other therapeutic strategies. However, scientific literature suggests that additional strategies are necessary to address the specific needs of CPTSD treatment, mainly to encompass DSO symptoms. This study revealed the scarcity of research on CBT strategies for patients with CPTSD in specialized peer-reviewed journals within the most prominent health databases. Achieving consensus on both the concept and diagnostic criteria of CPTSD is essential to advance scientific understanding of effective treatment methods and to prevent under diagnosis, which impedes effective care for patients worldwide, many of whom are in highly vulnerable conditions due to interpersonal trauma.

**Keywords:** Complex post-traumatic stress disorder; Post-traumatic stress disorder; Interpersonal trauma; Cognitive behavioral therapy

## INTRODUCTION

Trauma results from extremely unpleasant emotional experiences and causes various psychological disorders, leaving a lasting mark on the individual's mind. Among the disorders caused by trauma are Posttraumatic Stress Disorders (PTSD). Its symptoms, according to the DSM 5-TR, include re-experiencing the traumatic event, enduring avoidance of

trauma-associated stimuli and negative alterations in cognition and mood, and increased excitability [1]. Patients with PTSD present excessively negative evaluations of the traumatic event and its consequences, in addition to poor elaboration and contextual integration of the autobiographical memory of the trauma, resulting in a fragmented and distorted memory that causes intense psychological distress. This fragmented memory corresponds to a pathological memory that involves

<b>Received:</b>	13-November-2024	<b>Manuscript No:</b>	IPAP-24-21970
<b>Editor assigned:</b>	15-November-2024	<b>PreQC No:</b>	IPAP-24-21970 (PQ)
<b>Reviewed:</b>	29-November-2024	<b>QC No:</b>	IPAP-24-21970
<b>Revised:</b>	04-December-2024	<b>Manuscript No:</b>	IPAP-24-21970 (R)
<b>Published:</b>	11-December-2024	<b>DOI:</b>	10.36648/2469-6676-10.12.111

**Corresponding author** Daniela Haertel, Department of Psychology and Education, University of Sao Paulo, Brazil, E-mail: danihaertel.pro@gmail.com

**Citation** Haertel D, Silva PO, Pucci SHM (2024) Possibilities of Cognitive Behavioral Therapy Intervention in Posttraumatic Stress Disorder Patients with Interpersonal Trauma: An Integrative Review of Complex PTSD. Act Psycho. 10:111.

**Copyright** © 2024 Haertel D, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

erroneous associations of stimulus, response, and meaning, with a strong component of anxiety, fear, and re-experience. The cognitive components of PTSD include erroneous beliefs and evaluations of the trauma and dysfunctional recoveries from it, with the appraisal of fear generally associated with the belief of vulnerability and the idea that the world is dangerous [2-6,10].

PTSD is often associated with other psychological disorders, constituting a complex condition that can be associated with significant morbidity, disability, and impairment of vital functions. PTSD symptoms generally worsen and are associated with different disorders, including depression, specific phobias, personality disorders, anxiety disorders, and panic disorders [6]. Many PTSD researchers have referred to Chronic PTSD or Complex PTSD (CPTSD) to characterize these conditions with several comorbidities and realized that the aggravated symptoms of PTSD are related to an etiological origin different from that found in the DSM 5. Cases of CPTSD are strongly correlated with a history of multiple and recurrent traumatic stressors of an interpersonal nature, such as neglect, sexual abuse, physical violence, and psychological violence [4,6-12].

In this context, also the diagnosis of PTSD from the DSM-5 has been heavily criticized since the group of symptoms was considered too broad. Many combinations of symptoms can lead to the diagnosis of PTSD so that very different patients receive the same diagnosis. In addition, many comorbidities contribute to reducing its clinical usefulness. At the same time, several clinicians and researchers worldwide associated with the WHO have collected experiences that corroborate the complexity of CPTSD cases and their different etiological causes [10]. Confirming the specificity of CPTSD symptoms, many authors reported that prolonged exposure to interpersonal trauma, whether single or multiple, combined with individual vulnerabilities, can lead to CPTSD. In other words, patients with CPTSD not only exhibit known symptoms of PTSD but also manifest symptoms of Disturbances in Self Organization (DSO), such as emotional dysregulation, a negative self-concept, and relational disturbances [9,10]. It is important to note that since the 1990s, CPTSD has been recognized in the scientific academic community as a disorder caused by multiple and aggravated traumas of an interpersonal nature [6,8]. The symptomatology includes pathological dissociation, emotion dysregulation, somatization, and altered core schemas about the self, relationships, and sustaining beliefs [11,12]. The diagnostic boundaries are distinct from PTSD, and although there are overlaps with the symptoms of Borderline Personality Disorder (BPD), CPTSD has a distinct etiological origin and lacks specific characteristic symptoms found in BPD, such as an intense fear of abandonment or rejection of the tendency to alternate between idealizing and devaluing others [11,12]. The scientific and clinical discussion of CPTSD has become even more complicated because there is no consensus on the symptoms of PTSD. In May 2019, during the World Health Assembly, there was an attempt to standardize the diagnosis of PTSD in the DSM-5 and ICD-11. In contrast to the expectations of scholars and clinical specialists in the field, this consensus has not been reached, and some significant differences in the concept of PTSD have been highlighted. Additionally, confusion has arisen regarding the diagnosis of CPTSD proposed by the International

Classification of Disease (ICD)-11 [10]. Unfortunately, these differences hinder the accurate diagnosis of PTSD and create confusion regarding the diagnosis of CPTSD, both in clinical and academic fields, leading to numerous consequences for patients suffering from these two disorders [7,9,10,13]. The difficulty in diagnostic accuracy, in turn, hampers the correct treatment of many people worldwide. Notably, the CPTSD is still not included in the updated DSM-5-TR and remains only in ICD-11. The conceptual differences between the diagnoses of PTSD and CPTSD can be seen in the following **Table 1**.

**Table 1:** Differences in PTSD diagnosis

	Symptoms
PTSD-DSM 5 TR	(1) Re-experiencing, (2) persistent avoidance, (3) negative changes in mood and cognition
PTSD-IDC 11	(1) Re-experiencing, (2) persistent avoidance, (3) feeling of current threat.
CPTSD-ICD 11	(1) Re-experiencing, (2) persistent avoidance, (3) feeling of current threat, (4) affective dysregulation (5) negative self-concept and (6) disturbances in relationships.

**Table 1** shows that the differential diagnosis between PTSD and CPTSD involves assessing the DSO: Affective dysregulation, negative self-concept, and disturbances in relationships. Therefore, a patient with CPTSD will exhibit both PTSD symptoms and DSO symptoms. Moreover, accurate differential diagnosis requires acknowledging that a person cannot be diagnosed with both PTSD and CPTSD simultaneously. Additionally, individuals with PTSD generally experience fewer comorbidities and less functional impairment. Finally, while the nature of trauma is a risk factor, it is not decisive for differential diagnosis [10]. The ICD-11 diagnosis of CPTSD was designed to be easy for clinical use, in line with the WHO's development goals. Moreover, it has demonstrated good psycho diagnostic properties in various studies, including effective discrimination between CPTSD and BPD [10-12]. The diagnostic structure of PTSD and CPTSD has several limitations, especially in cases of interpersonal trauma, such as recurrent maltreatment during childhood and adolescence, sexual abuse, physical abuse, and domestic violence, due to the difficulty in understanding the most critical factors that may have led to the disorder. Patients with such histories present a wide range of highly stressful relational and interpersonal problems, which are difficult to diagnose and treat [6].

## Treatment

The most used treatment for PTSD is Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). Narrative exposure is a central procedure and aims to revisit traumatic memories to restructure maladaptive beliefs related to the trauma. The CBT-FT has three main goals: (1) To modify adverse assessments of the trauma and its outcomes; (2) to reduce re-experiencing by elaborating on trauma memories and discriminating triggers; and (3) to abandon dysfunctional behaviors and cognitive strategies [5]. The primary goal is to modify overly negative evaluations of trauma. This involves carefully exploring critical trauma memory aspects ("hot spots") and identifying an alternative convincing assessment. The new review is then integrated into the trauma memory through written narratives and imaginal re-experiencing. Additionally, revisiting the

trauma site can help the patient understand why the trauma occurred, mainly if they believe it could have been prevented [5]. To accomplish the second goal, it is necessary to reduce re-experiencing by working through traumatic memories and recognizing triggers. The psychotherapist supports the patient in constructing a coherent narrative that places the trauma in context. This process helps prevent intrusive memories. The key techniques include writing a detailed account of the event, imaginatively re-experiencing to evoke sensations and emotions, and revisiting the trauma site to reinforce the understanding that the event is in the past [5].

In the case of CPTSD or severe forms of PTSD, such as those with dissociative symptoms, a phased approach to treatment is necessary. The treatment should begin with a stabilization phase, focusing on emotional regulation skills, enhancing social interaction competencies, and grounding techniques to reduce dissociative symptoms before moving on to the trauma-focused part of the therapy [14,15]. The exposure narrative may encompass the patient's entire life story. During this narrative, the psychotherapist helps the patient bring in as many details as possible and provides psycho education about the traumatic context or event and the associated symptoms [14,15]. There is growing consensus that treatment for this type of patient should involve multiple intervention strategies over an extended period [6,12,15].

## METHODS

This study explored the intervention possibilities of CBT in patients with CPTSD diagnosis. As such, the following research question was posed: What are the different intervention possibilities of CBT for patients with CPTSD? To address this question, the following specific objectives were presented:

- Identify the presence of CPTSD in the scientific literature;
- Examine the specificities of CBT interventions in patients with CPTSD.

The PICO strategy was used to conduct this integrative literature review. This strategy is the most used in clinical research for evidence-based literature searches, as a well-formulated research question allows for the clear identification of the necessary evidence for clinical investigations. The PICO strategy enables the retrieval of relevant information from databases, focuses the research within the appropriate scope, and prevents unnecessary searches [16]. In this study, the PICO acronym was applied as follows: The participants (P) are patients with CPTSD; the intervention (I) refers to different CBT strategies; the control (C) is not applicable; and the outcome (O) corresponds to the results of this analysis [16]. For this research, we utilized several leading peer-reviewed databases in the health field, including PsycInfo, PubMed, Scopus, and Web of Science. The descriptors used were health research descriptors (DeCS) and focused on patients with CPTSD and treatment interventions using CBT [17]. According to the PICO strategy designed for this study, the Boolean operators used were: "Complex Posttraumatic Stress Disorder" OR "CPTSD" AND "Cognitive Behavior Therapy" OR "CBT." However, due to the lack of consensus on the concept and diagnostic criteria for CPTSD, which hinders scientific discussion on this topic, we also included the Boolean operators "Post-traumatic

Stress Disorder" OR "PTSD" and Booleans operators related to interpersonal trauma, aiming to identify additional articles that might reflect the underdiagnosis of CPTSD. Using this strategy, twenty articles with different methodology approaches were found in May 2024. To better organize the search in the specific peer-reviewed scientific databases, the Boolean operators were defined to encompass interpersonal traumas, and they were categorized according to the respective health descriptors, as shown in **Table 2** below.

**Table 2:** Descriptors for interpersonal trauma in databases

Interpersonal trauma	Health descriptors (DECS)
Neglect	"Neglect" OR "maltreatment"
Physical violence	"Physical abuse" OR "physical maltreatment" OR "physical violence" OR "maltreatment"
Psychological violence	"Psychological abuse" OR "emotional abuse"
Sexual violence	"Sexual abuse" OR "sexual molestation" OR "sexual trauma" OR "sexual violence"

This procedure was necessary because interpersonal trauma does not specifically correspond to a health descriptor. Therefore, we listed each type of interpersonal trauma according to the scientific literature (neglect, physical violence or abuse, psychological violence or abuse, and sexual violence or abuse) as Boolean operators based on their respective health descriptors. The Boolean operators used were "Post Traumatic Stress Disorder" OR "PTSD" AND "Cognitive Behavior Therapy" OR "CBT" AND "Neglect" OR "Maltreatment" OR "Physical Abuse" OR "Physical Maltreatment" OR "Physical Violence" OR "Maltreatment" OR "Emotional Abuse" OR "Psychological Abuse" OR "Sexual Abuse" OR "Sexual Molestation" OR "Sexual Trauma" OR "Sexual Violence" OR "Trauma" OR "Traumatic". After the stage of the search in the most important scientific databases in health, we included articles that reported CBT intervention protocols with patients with CPTSD or PTSD with interpersonal trauma within the last 5 years. The following requirements were considered:

- Articles addressing the treatment of patients diagnosed with CPTSD;
- Articles addressing patients diagnosed with PTSD with a history of interpersonal trauma;
- Articles published within the last 5 years;
- Different types of studies, such as meta-analyses, randomized clinical trials, case reports, and cohort studies.

We adopted the criterion of including only articles published after 2019 since the ICD-11 was first published in 2018. However, it is worth noting that the topic and criteria for the diagnosis of CPTSD had already been discussed long before 2018 [7,8,11,14,18]. For the analysis of the articles obtained from the results of this research, it was considered that the differential diagnosis between PTSD and CPTSD is based on the presence of DSO: Affective dysregulation, negative self-concept, and disturbances in relationships. According to experts in the field, the type of trauma is a risk factor but not a determinant for differential diagnosis [10]. When analyzed together, the presence of PTSD, interpersonal trauma, and

severe comorbidities could suggest the presence of CPTSD and the possibility of underdiagnosis. For this reason, it was necessary to reread all the articles in their entirety multiple times based on the listed criteria. The main criterion considered was the presence of symptoms related to DSO. As observed in prior literature, interpersonal trauma is viewed as a risk factor [10]. In analyzing the potential for underdiagnosis of CPTSD, the initial step involved identifying the presence of DSO, and in the second step, the presence of interpersonal traumas, whether single or multiple, but prolonged. Various types of studies and methodologies approaches were accepted since as, including different study designs, it was possible to develop a wider view of the relevance of CPTSD in the scientific literature.

## RESULTS

This study aimed to explore treatment possibilities for CPTSD within CBT. In reviewing the scientific literature, we decided to include articles in our search that addressed PTSD alongside interpersonal trauma (Table 1). It was considered that the presence of a PTSD diagnosis, along with interpersonal trauma and severe comorbidities, may indicate CPTSD under diagnosis. It is necessary to summarize and qualitatively analyze the information from the articles according to the level of evidence presented [16]. The selected papers are presented below in a flowchart, with the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) tool. This tool aims to assist in reporting methods and results. It was developed by an

international group of methodologists, clinicians, and journal editors [19]. Based on these adopted criteria, we developed the following flowchart, in which 26 articles were identified in the selected databases. In the abstract phase, six articles were excluded (Figure 1). Two of them did not address treatment in CBT [20,21], two were systematic reviews with analyzed articles published before 2019 [22,23], and one did not address interpersonal trauma [24]. Finally, a correction of an article was also excluded [25].

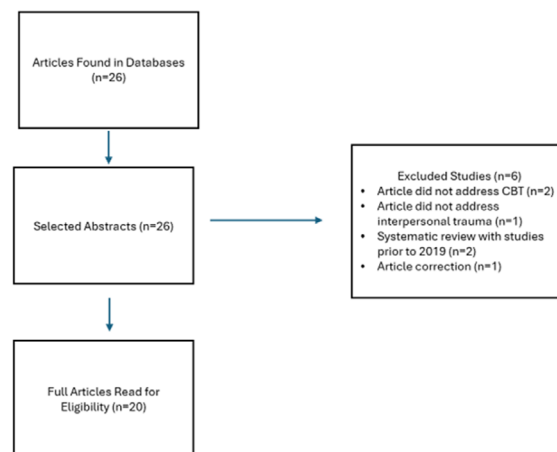


Figure 1: From this total of 20 preselected articles, the stage of reading the full articles began. The results obtained can be verified in the following Table 3.

Table 3: Articles that address CBT with patients with complex PTSD or PTSD with interpersonal trauma

	Year of publication	Type of scientific study	Population	Type of trauma	Scope of the article addresses CPTSD	Treatment	DSO e trauma interpersonal
[26]	2024	Systematic review	Children and adolescents from Sub-Saharan Africa	Violence, sexual violence, war trauma	No	FT-CBT	The objective of this systematic review was to evaluate the treatment with TF-CBT in children and adolescents who suffered abuse, sexual violence, and war trauma. CPTSD is not part of the scope of this study; however, there was articles within the review that address recurrent interpersonal trauma: Girls who suffered sexual abuse during the war in Congo, girls who were sexually abused by primary caregivers, and child soldiers in the war in Congo. The patients' symptoms were not described, as this was also not part of the scope of the article.
[27]	2022 a	Randomized clinical trial	Children aged between 8 and 16 years	Psychological abuse, physical abuse, domestic violence, neglect	No	FT-CBT	The objective of this clinical trial was to evaluate possible differences in the efficacy of TF-CBT according to gender in children and adolescents aged 8 to 16 with a PTSD diagnosis. The article does not mention CPTSD but explains that the patients sample had poly-trauma.

[28]	2022 b	Clinical trial	Children aged between 8 and 16 years	Psychological abuse, physical abuse, domestic violence, neglect	No	FT-CBT	<p>The objective of this clinical trial was to evaluate the gradual exposure conducted through trauma narrative among 16 children diagnosed with PTSD. Symptoms and comorbidities were not reported. However, the article clarifies that all the children were victims of interpersonal trauma: Maltreatment perpetrated by primary caregivers and multiple forms of abuse, such as psychological abuse, physical abuse, domestic violence, and neglect. It is important to note that the article did not use the term CPTSD in the abstract, objective, keywords, or the main text. In the text, the terms complex trauma, poly-trauma, and multiple trauma were used.</p> <p>The objective of this case report was to describe the treatment of a 10-year-old girl of Iranian origin diagnosed with PTSD. The patient's history includes recurrent interpersonal trauma: Physical and emotional abuse, parental divorce, separation from her mother, and displacement from her homeland. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Other comorbid diagnoses were present: Encopresis, anxiety, and depression. Additionally, the girl experienced symptoms of headaches and gastrointestinal problems.</p>
[29]	2023	Case report	Girl aged 10 years	Physical and emotional abuse	No	FT-CBT online	<p>The objective of this systematic review was to evaluate research conducted between 1991 and 2021 with men and women aged 18 and older diagnosed with PTSD, who were victims of abuse or sexual violence. The sample is quite heterogeneous and broad (n=3992), consisting of individuals who were victims of interpersonal trauma: Abuse and sexual violence. It does not specify if the trauma was repetitive and chronic</p>
[30]	2019	Systematic review	Men and women aged 18 and older	Sexual abuse and sexual violence	No	Prolonged exposure, Cognitive Processing Therapy (CPT), and EMDR	

[31]	2023	Meta-analysis	Children and adolescents under the age of 18	Sexual abuse	No	CBT and psychodynamic psychotherapy	<p>The objective of this meta-analysis was to evaluate the efficacy of different psychotherapy modalities in children and adolescents under the age of 18 with PTSD. Assessing CPTSD was not part of the article's scope, and CPTSD was not included in the search criteria for the reviewed articles. The search for articles was conducted across various databases, with a cut-off date of November 2022.</p> <p>There is no information regarding the recurrence of the evaluated interpersonal trauma, sexual abuse, nor any details on the severity of PTSD symptoms or other comorbidities.</p> <p>This review with a clinical vignette aims to compare the treatment outcomes of women diagnosed with PTSD who underwent EMDR, psychodynamic psychotherapy, or TF-CBT.</p>
[32]	2020	Review with a clinical vignette of guidance	Individuals who have experienced sexual abuse or sexual violence	Sexual abuse or violence in adulthood	No	TF-CBT, EMDR, and psychodynamic psychotherapy	<p>The patients' histories report multiple and recurrent interpersonal trauma, such as sexual abuse. The paper lacks detailed information regarding whether the patients had severe comorbidities, thereby hindering the assessment of the presence of symptoms consistent with DSO.</p>
[33]	2021	Neuroimaging Analysis	Children and adolescents aged between 10 and 17 years	Physical abuse, sexual abuse, witnessing violence, or other forms of maltreatment	No	FT-CBT	<p>The objective of the article was to analyze before and after TF-CBT, the neuroimaging of children and adolescent aged between 10 and 17 years diagnosed with PTSD, who had experienced trauma from maltreatment or violence. The trauma history of the children who participated in the study indicates recurrent interpersonal trauma: they were victims of physical abuse, sexual abuse, other forms of maltreatment, or witnessed violence.</p> <p>The symptom description includes, in addition to PTSD, other severe symptoms. The article reports that at least 80% of the children had other severe comorbid disorders, such as anxiety and depression.</p>

[34]	2024	Neuroimaging Analysis	Children aged between 7 and 12 years	Maltreatment	No	FT-CBT	<p>The objective of the article was to analyze neuroimaging of children aged between 7 and 12 years diagnosed with PTSD who were victims of maltreatment, both before and after undergoing TF-CBT. The trauma history of the children who participated in the study indicates recurrent interpersonal trauma: The children were institutionalized in an NGO due to severe maltreatment perpetrated by their parents. The symptom description includes, in addition to PTSD, depression and anxiety.</p> <p>The objective of this case report was to describe the treatment of a woman with PTSD and specific phobia. The patient's history indicates recurrent interpersonal trauma: Domestic physical violence and life-threatening situations perpetrated by her former husband. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances. Other diagnoses were also present, including depression and suicidal ideation, consistent with DSO</p>
[35]	2021	Case report	Woman with late-onset PTSD and specific phobia	Recurrent domestic physical violence	No	FT-CBT	<p>The objective of this clinical trial was to evaluate the effect of TF-CBT in reducing behavioral and cognitive problems in a sample of ten male and female children, aged between 11 and 16 years, who were victims of sexual abuse and diagnosed with PTSD. There is no additional information regarding the recurrence of sexual abuse or whether it was perpetrated by primary caregivers. However, the study states that most of the children had lost one or both parents and were living with other relatives. The study also reports that the children were admitted to the psychiatric hospital of a city in Pakistan. The study indicates that the children with PTSD exhibited anger, fear, aggression, frustration, and difficulty in interpersonal relationships, consistent with DSO</p>
[36]	2020	Clinical Trail	Children and adolescents aged between 11 and 16 years	Sexual abuse	No	FT-CBT	<p>The objective of this clinical trial was to evaluate the effect of TF-CBT in reducing behavioral and cognitive problems in a sample of ten male and female children, aged between 11 and 16 years, who were victims of sexual abuse and diagnosed with PTSD. There is no additional information regarding the recurrence of sexual abuse or whether it was perpetrated by primary caregivers. However, the study states that most of the children had lost one or both parents and were living with other relatives. The study also reports that the children were admitted to the psychiatric hospital of a city in Pakistan. The study indicates that the children with PTSD exhibited anger, fear, aggression, frustration, and difficulty in interpersonal relationships, consistent with DSO</p>

[37]	2019	Case report	A man who experienced sexual abuse in childhood	Sexual abuse in childhood and adulthood	No	Cognitive Processing Therapy (CPT)	<p>The objective of this case report was to describe the treatment for PTSD in a man with hypersexualized behavior who experienced sexual abuse during childhood. The patient's history indicates recurrent interpersonal trauma, including childhood sexual abuse, maltreatment, complex family relationships during childhood and sexual abuse in adulthood. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Other comorbid diagnoses were present, including anxiety, depression, and suicidal ideation.</p>
[38]	2020	Case report	Girl aged 14 years	Human traffick, sexual abuse, sexual exploitation, pregnancy at age 14, psychological abuse	No	FT-CBT	<p>The objective of this case report was to describe the treatment of a 14-year-old Guatemalan girl diagnosed with PTSD. The patient's history indicates recurrent interpersonal trauma: human traffick, sexual abuse, sexual exploitation perpetrated by her stepfather, two pregnancies, one at age 11 and another at age 14, when she gave birth to a daughter. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Other comorbid diagnoses were present, including depression and suicidal ideation.</p>
[39]	2024	Systematic review	Men and women who have experienced sexual abuse or sexual violence	Sexual abuse in childhood	Yes	DBT	<p>The objective of this systematic review was to present DBT as a treatment for PTSD and CPTSD, highlighting the importance of this approach in the treatment of BPD.</p>
[40]	2022	Randomized clinical trial	Women aged 18 years and older	Sexual abuse and sexual violence in childhood	Yes	EMDR and TF-CBT for complex trauma in an online group	<p>The objective of this article was to present a systematic review that will be conducted to compare the treatment outcomes of women diagnosed with PTSD who will undergo EMDR with those of women diagnosed with PTSD who will undergo TF-CBT for CPTSD. Although CPTSD is not mentioned in the title, abstract, or method, the procedure described in the article indicates that the TF-CBT protocol used is specifically for complex PTSD</p>



[41]	2019	Clinical trial	Homo-sexual men who have experienced sexual abuse	Sexual abuse in childhood	No	TF-CBT and CBT for self-care for AIDS	<p>The objective of this clinical trial was to evaluate the effects of TF-CBT and TS-CBT for trauma and self-care in men who have sex with men (MSM) with a history of Childhood Sexual Abuse (CSA) and risky behavior for HIV. The study mentions that the patients were victims of interpersonal trauma, but it does not specify whether these were multiple and/or recurrent. The study also did not provide information on the severity of symptoms or the presence of comorbidities; however, it addressed patients who may be at risk of contracting AIDS due to a lack of self-care.</p>
[42]	2022	Randomized clinical trial	Young people aged between 15 and 25 years	Sexual abuse, physical violence, neglect, and psychological violence	No	FT-CBT	<p>The objective of this clinical trial was to evaluate the increase in distress, self-harm, suicidal ideation, and suicidal behavior in twenty young people aged between 15 and 25 years, diagnosed with PTSD, at a community treatment center for youth in Melbourne. The study mentions that the patients were victims of interpersonal trauma, but it does not specify whether these were multiple and/or recurrent. The patients exhibit symptoms such as self-harm, suicidal ideation, and suicidal behaviour, consistent with DSO.</p> <p>The objective of the article was to describe the treatment of a woman with PTSD. The patient's history indicates recurrent interpersonal trauma, including sexual abuse perpetrated by primary caregivers during childhood. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Several comorbidities were present. dissociative Identity Disorder, alcohol use disorder in remission, anorexia nervosa in remission, and depression in remission.</p>
[43]	2021	Case report	Woman with PTSD and Dissociative Identity Disorder	Sexual abuse	No	TF-CBT, EMDR, Prolonged Exposure, and identity farewell	<p>The objective of this clinical trial was to evaluate the increase in distress, self-harm, suicidal ideation, and suicidal behavior in twenty young people aged between 15 and 25 years, diagnosed with PTSD, at a community treatment center for youth in Melbourne. The study mentions that the patients were victims of interpersonal trauma, but it does not specify whether these were multiple and/or recurrent. The patients exhibit symptoms such as self-harm, suicidal ideation, and suicidal behaviour, consistent with DSO.</p> <p>The objective of the article was to describe the treatment of a woman with PTSD. The patient's history indicates recurrent interpersonal trauma, including sexual abuse perpetrated by primary caregivers during childhood. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Several comorbidities were present. dissociative Identity Disorder, alcohol use disorder in remission, anorexia nervosa in remission, and depression in remission.</p>

[44]	2021	Case report	Woman who have experienced sexual violence	Sexual violence	Yes	CBT, psychodynamic psychotherapy, and hypnosis	<p>The objective of this case report was to describe the treatment of a woman with chronic pain and a diagnosis of late-onset complex PTSD. The patient's history indicates recurrent interpersonal trauma, specifically sexual violence. The symptoms described include affective dysregulation, negative self-concept, and relationship disturbances, consistent with DSO. Other comorbid diagnoses were present, including anorexia, chronic pain, and suicidal ideation.</p> <p>The objective of this clinical trial was to evaluate the effect of TF-CBT on a sample of 91 men diagnosed with PTSD who had experienced sexual abuse during childhood. The trauma history indicates that these patients suffered interpersonal trauma in childhood specifically sexual abuse. No further information is provided regarding the patients' comorbidities.</p>
[45]	2020	Clinical trial	Men who experienced sexual abuse in childhood	Sexual abuse	No	FT-CBT	

## LITERATURE REVIEW

### Specific Objective 1-CPTSD in the Literature

**Table 3** shows that among the 20 articles analyzed, only two included a diagnosis of CPTSD within the scope of the article [39,44]: A systematic review aimed at presenting the efficacy of DBT-CBT for the treatment of patients diagnosed with PTSD and CPTSD [39] and a case report on the treatment using multiple psychotherapeutic strategies-including FT-CBT-of a patient with late-onset CPTSD and chronic pain [44]. One article, which is a randomized clinical trial, did not mention complex PTSD in the abstract or objectives but explicitly stated that the treatment for the study patients was FT-CBT for complex trauma [40]. The remaining seventeen articles did not mention CPTSD in their scope, but they addressed patients diagnosed with PTSD and interpersonal trauma. Among them, 6 were case reports [29,35,37,38,43,44] in which patients were diagnosed with PTSD or recurrent interpersonal trauma, some of which were perpetrated by primary caregivers [29,37,38,43]. Upon repeated reading of the articles, it was possible to observe that symptoms of DSOs were present, causing severe impairments for patients [29,35,37,38,43,44]. Some patients diagnosed with PTSD are children who suffer severe interpersonal trauma, such as a girl who was taken from her family and country [29] and a girl who suffered from human trafficking [38]. Other adult patients also experienced severe interpersonal traumas, such as domestic violence and near-death experiences [35], a man with hypersexualized behavior who was abused in childhood [37], and two women whose stories are reported in two different case reports, both having suffered recurrent sexual

violence in childhood [43,44].

Several adult patients had severe comorbidities and reports that could be associated with DSO, such as suicidal ideation [35,37,38,44]. Another patient had Dissociative Identity Disorder (DID), remission-stage alcohol use disorder, remission-stage anorexia, and depression in remission [43]. When analyzing another type of study, such as clinical trials and the presence of PTSD and CPTSD, four clinical trials [28,36,41,45] and 3 randomized clinical trials [27,40,42] were found in the databases. Among them, six did not mention CPTSD in their scope but addressed patients diagnosed with PTSD and interpersonal trauma (**Figure 1**). One of these reported PTSD in patients with polytrauma [27]. Another two clinical trials reported the presence of recurrent interpersonal traumas but did not provide sufficient information regarding the symptoms of DSO of the analyzed patients [28,36]. Two other articles reported cases of patients with PTSD and a history of interpersonal trauma. Still, they did not mention the recurrence of trauma, the severity of comorbidities, or the presence of DSO [41,45].

Finally, one clinical trial addressed the treatment of patients diagnosed with PTSD and interpersonal trauma but did not report the recurrence or multiplicity of the traumas suffered. However, it did describe patients with DSOs who reported symptoms such as self-harm, suicidal ideation, and behavior [42]. Two systematic reviews were identified [26,30], and one meta-analysis [31] was among the articles that did not mention CPTSD in their scope. The meta-analysis assessed the efficacy of different psychotherapy modalities in children and adolescents up to 18 years of age with PTSD and interpersonal trauma

from sexual abuse; however, it was not within the scope of the article to evaluate the recurrence of trauma and symptoms of DSO [31]. A systematic review was conducted addressing war trauma and multiple types of abuse and violence in Sub-Saharan Africa. Although CPTSD was not within the scope of the article's search, some studies in the sample mentioned CPTSD [26]. The other systematic review consisted of a review of studies on men and women aged 18 and older diagnosed with PTSD who were victims of abuse or sexual violence. Due to the broad sample size and heterogeneity, it was difficult to analyze the presence of DSO [30]. Finally, among the sample of the systematic review, there was a study that presented DBT as a treatment for PTSD and CPTSD, highlighting the importance of this approach in the treatment of BPD [39]. It was possible to verify, in the present study, two neuroimaging analysis studies [33,34] that evaluated the effects of TF-CBT in children or adolescents who were diagnosed with PTSD and had a history of interpersonal trauma; however, these studies were outside their scope for assessing the recurrence and multiplicity of trauma and/or the presence of symptoms of DSO [33,34].

In one of the neuroimaging analysis studies, it was possible to verify that symptoms of DSO and recurrence and a multiplicity of traumas were present in the patients' histories; the article reported that at least 80% of the children had other severe comorbid disorders, such as anxiety and depression, and moreover, the history of the children who participated in the research referred to recurrent interpersonal trauma: They were victims of physical abuse, sexual abuse, other mistreatment, or witnessed violence [33]. In the other neuroimaging analysis studies, PTSD patients had a history of recurrent and multiple types of trauma. These patients were institutionalized by an NGO due to severe mistreatment by their parents, but there were no reports of DSO symptoms [34]. Finally, a review with a clinical vignette was conducted comparing the treatment outcomes of women diagnosed with PTSD who underwent EMDR, psychodynamic psychotherapy, or TF-CBT. These patients experienced recurrent interpersonal traumas—specifically sexual abuse—but the article does not report the presence of DSO [32].

### Specific Objective 2-Treatment of CPTSD

Regarding the treatment, as observed in Table 3, the analysis of the articles indicated that the most commonly used therapeutic strategy for patients diagnosed with CPTSD or PTSD with a history of interpersonal trauma was TF-CBT alone. Of the twenty studies, eleven identified TF-CBT as the sole treatment [26-28,33-36,38,42,45] with one implementing online group TF-CBT [29]. Three studies presented TF-CBT combined with other modalities [41,43,44]. The first was a clinical trial that combined TF-CBT with self-care CBT for AIDS, involving several homosexual patients [41]. The second was a case report describing a treatment that combined TF-CBT with EMDR for a woman diagnosed with PTSD and dissociative identity disorder [43]. The third was a case report of a woman with PTSD and dissociative identity disorder who received treatment combining TF-CBT with psychodynamic techniques and hypnosis [44]. Some studies, including a systematic review [30], a meta-analysis [31], a review featuring a clinical vignette for guidance [32], and a clinical trial [40], compared

TF-CBT with other modalities. The systematic review compared prolonged exposure, Cognitive Processing Therapy (CPT), and EMDR among men and women with PTSD who have a history of interpersonal trauma, such as sexual abuse and sexual violence [30]. The meta-analysis compared TF-CBT with other psychotherapeutic modalities in patients up to 18 years of age who have a history of sexual abuse [31]. A review featuring a clinical vignette compared the use of TF-CBT, EMDR, and psychodynamic psychotherapy in the case of a woman with a history of multiple and recurrent interpersonal traumas, such as sexual abuse [32]. The clinical trial analyzed the use of TF-CBT compared with EMDR in a sample of women aged 18 years and older diagnosed with CPTSD [40]. And finally, two studies did not use CBT-TF. In one of them, a case report, Cognitive Processing Therapy (CPT), was used to treat a male patient with PTSD and a history of interpersonal–sexual abuse, maltreatment, and complex family relationships during childhood, as well as sexual abuse in adulthood [37]. There was also a clinical trial using DBT for the treatment of men and women with CPTSD who experienced sexual abuse or sexual violence [39].

## DISCUSSION

### Specific Objective 1-CPTSD in the Literature

This present study explored the treatment possibilities for CPTSD within CBT strategies. To achieve this goal, 2 subgoals were established: Identifying the presence of CPTSD in the scientific literature and examining the specificities of cognitive behavioral therapy interventions for patients with CPTSD. Due to the lack of consensus on the concept and diagnosis of CPTSD, which hinders scientific discussion [10], we added the Boolean operators “PTSD” and “interpersonal trauma” to those related to “CPTSD” (see [Table 2](#)). Articles addressing PTSD and interpersonal trauma were included to identify potentially underdiagnosed cases of CPTSD. Importantly, in identifying potential underdiagnosis of CPTSD, the primary criterion considered was the presence of symptoms related to DSO. Interpersonal trauma was regarded only as a risk factor, as noted in previous literature on this topic [10].

Therefore, a detailed review of all articles was conducted, focusing primarily on the identification of DSO symptoms and, secondarily, on the presence of recurrent and/or multiple interpersonal traumas. Nonetheless, a relatively small sample of 20 articles was obtained from specialized health databases. We accepted various types of studies and methodologies approaches, as we believed that by including different study designs, we would gain a broader perspective on the relevance accorded to the topic in the scientific literature.

Regardless of the type of study, few articles mentioned CPTSD within the scope of the study: Only one systematic review on the use of DBT in the treatment of CPTSD [39] and a case report of a patient with a diagnosis of CPTSD and chronic pain [44]. Some articles have used related terms to designate CPTSD, such as polytrauma, interpersonal trauma, and multiple traumas [27,28,33,42]. Many articles did not address CPTSD in their scopes but described patients diagnosed with PTSD who exhibited symptoms of DSO [29,35-38,42-44], and all the articles presented patients with a history of recurrent and/

or multiple interpersonal traumas. As previously discussed, the symptoms of PTSD and symptoms of DSO are configured as the central criterion for the diagnosis of CPTSD, and the history of interpersonal trauma is considered a risk factor [10]. Many articles did not mention essential details regarding the recurrence and severity of the interpersonal traumas that patients experienced [36,40-42,45]. One of them mentioned that the child suffered sexual abuse but did not provide crucial information, such as whether the trauma was recurrent or if it was perpetrated by primary caregivers [36]. Some articles presented severe comorbidities in cases of recurrent trauma, such as severe substance abuse or dependence [43], acute suicidal ideation [35,38,42,44], anorexia [37,43,44], depression [29,35,38,43] and anxiety [29,33]. However, these articles did not mention a diagnosis of CPTSD, and no differences were observed regarding the mention of CPTSD when considering adult versus child patients. Two studies were case reports revealing the situations of two children in extreme vulnerability: A 10-year-old Iranian girl removed from her mother and her country of origin after her parents' divorce, highlighting issues of gender violence [29], and a 14-year-old Guatemalan girl exposed to international child trafficking and sexual slavery in the United States [38]. Unfortunately, the severity of these cases highlights the impact of the lack of consensus on the concept and diagnostic criteria for CPTSD, hindering the recognition of this disorder in both the scientific and clinical communities [9] and harming patients who are in situations of psychological and social vulnerability. The results support that the absence of conceptual clarity and consensus on the diagnosis of CPTSD causes confusion in both the clinical and academic fields [9,10,13], leading to numerous consequences for patients with the disorder. These include imprecise diagnoses, which compromise evidence-based treatment for many people worldwide.

### Specific Objective 2-Treatment of CPTSD

When we analyzed the treatment provided to patients with CPTSD or PTSD with interpersonal trauma, we found that among the twenty studies, eleven used TF-CBT only [26-28,33-36,38,42,45], and one of them reported the use of online group TF-CBT [29]. Previous research states that the TF-CBT aims to alter excessively negative evaluations of the trauma and its aftermath, as well as reduce re-experiencing by processing trauma memories and discriminating triggers, and assist the patient in relinquishing maladaptive behaviors and cognitive strategies [5]. This integrative review has demonstrated that TF-CBT is widely used and effective in treating patients with PTSD and/or CPTSD. The analyzed studies revealed that TF-CBT, both in individual and online group formats, is a predominant approach with positive results in reducing symptoms of PTSD and/or CPTSD. However, the efficacy of TF-CBT may vary depending on the degree of trauma. TF-CBT, combined with other therapeutic strategies, yielded positive outcomes for patients with interpersonal trauma. It is widely recognized that TF-CBT is notable as a robust intervention, but the complexity of CPTSD symptoms requires careful consideration in applying therapies to maximize positive outcomes. However, it is known that more effective treatments described in scientific literature encompass important techniques for treating DSO. Even so, it is likely that such treatments were not found among the articles

in this integrative review, possibly due to underdiagnosis. Although the patients were considered to have PTSD and other comorbidities, and despite having severe comorbidities and symptoms that could be related to DSO, the diagnosis of CPTSD was not considered or mentioned. As a result, they may not have received appropriate treatment. Nonetheless, more comprehensive strategies for treating CPTSD are known to exist, combining CBT-TF with emotional regulation strategies. The results of this study corroborate the lack of conceptual clarity and the absence of consensus regarding the diagnosis of CPTSD, causing confusion in both the clinical and academic fields [10] and impacting the correct diagnosis and evidence-based treatment of many people around the world. Potentially traumatic events are common occurrences worldwide and cause tremendous psychological impact on individuals and communities, representing a global burden for public health [46-48]. Epidemiological research supports empirical data on the severe consequences of trauma disorders [15].

## CONCLUSION

This study explored the treatment possibilities for CPTSD using CBT. Two objectives were defined to attain this goal: Identifying the presence of CPTSD in the scientific literature and examining the specificities of CBT interventions for patients with CPTSD. Regarding the first specific objective, it was found that the literature on CPTSD in specialized, peer-reviewed health databases is scarce. Given the existing literature and the lack of consensus on this topic, Boolean operators were used to encompass CPTSD, and additional Boolean operators for PTSD and interpersonal trauma were also included. After that, a complete reading of all the articles was conducted to identify potential underdiagnoses of CPTSD. Using this strategy, the search yielded a small sample of 20 articles, suggesting that CPTSD may be underrepresented in the peer-reviewed scientific literature.

Their incidence is not uniformly distributed across the global population, as demonstrated in several articles of this sample of this integrative review, reporting interpersonal trauma in dramatic situations like human trafficking, war trauma, rape, etc. Trauma exposure constitutes a significant global public health issue, necessitating prioritized efforts toward its prevention and management. Regarding the second specific objective, most of articles in the sample identified TF-CBT as an effective treatment for patients with CPTSD or PTSD with a history of interpersonal trauma. In some cases, TF-CBT was combined with other therapeutic strategies. There are important specificities in the treatment of CPTSD or PTSD with a history of interpersonal trauma that were not addressed in the articles of this sample. This finding underscores the negative consequences of the absence of consensus on the diagnosis of CPTSD, making it difficult for people suffering from the disorder around the world to receive appropriate clinical treatment.

A consensus on the diagnosis of CPTSD provides many benefits:

1. Facilitates Diagnosis and eliminates underdiagnosis: Patients with CPTSD are frequently diagnosed with PTSD and other severe comorbidities. The diagnosis of CPTSD is more precise for these patients and helps to avoid overmedication. With the correct diagnosis,

patients can receive appropriate treatment and effective psychotherapy.

2. Standardized terminology: The absence of consensus regarding the diagnoses of CPTSD culminates in the use of inconsistent terms in scientific research, such as polytrauma and multiple traumas. Consequently, the clinical field also lacks clear and consistent information.
3. Social Focus: New research could investigate the causes of CPTSD and its worldwide situation, underlining the impact of social issues on CPTSD, such as maltreatment, violence, and neglect, particularly in underdeveloped countries.
4. Exploring the correlation between multiple types of trauma and psychotherapeutic management: It could be helpful in understanding the differences in the manifestation of CPTSD symptoms in response to different types of interpersonal trauma, such as sexual abuse, maltreatment, and neglect. It is crucial to determine whether the type of interpersonal trauma accentuates a specific cluster of CPTSD symptoms and whether every type of interpersonal trauma requires a specific management approach in TF-CBT.

The specific peer-reviewed scientific literature on CPTSD is still scarce, and the absence of consensus concerning diagnosis and concept harms patients with CPTSD worldwide through the occurrence of underdiagnosis, overmedication, and the use of ineffective psychotherapeutic strategies. More research and standardization are necessary in this area. Future studies should involve larger research groups, given the complexity of the data presented in this research, including the underdiagnosis of CPTSD and its significance in the study, diagnosis, and treatment of interpersonal traumas, which often intersect with political and socioeconomic issues. Further studies could investigate if there are necessary different psychological approaches for each kind of interpersonal trauma, such as maltreatment, sexual abuse, physical abuse, etc.

## ACKNOWLEDGEMENT

We would like to express our deep gratitude to Dr. Roseli Lage de Oliveira and the Faculty of Medical Sciences at Santa Casa de Sao Paulo for providing the necessary resources for conducting this study. We also wish to thank Professor Monica Goncalves de Melo Teixeira, a faculty member at the Faculty of Medical Sciences at Santa Casa de Sao Paulo. Together, they offered numerous contributions and suggestions for the preparation and review of this study. We also extend our thanks to the librarians of the School of Psychology at the University of São Paulo, especially Lucila Borges de Assis, who provided valuable contributions and suggestions to optimize the search for articles for this integrative review. We also thank the reviewers and readers who took the time to provide constructive feedback, helping us improve the quality of our paper. Finally, we express our gratitude to our families and friends for their constant encouragement and understanding during this period of dedication to the study.

## CONFLICT OF INTEREST

The author's declared that they have no conflict of interest.

## REFERENCES

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5-TR. 5th ed. Washington, DC: American Psychiatric Publishing.
2. Foa EB, Rothbaum BO (1998) Treating the trauma of rape: Cognitive-behavioral therapy for PTSD. New York: Guilford Press.
3. Ehlers A, Clark DM (2000) A cognitive model of posttraumatic stress disorder. *Behav Res Ther.* 38(4):319-345.
4. Foa EB, Hembree EA, Cahill SP, Rauch SAM, Riggs DS, et al. (2005) Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: Outcome at academic and community clinics. *J Consult Clin Psychol.* 73(5):953-964.
5. Ehlers A, Clark MD, Hackmann A, McManus F, Fennell M (2005) Cognitive therapy for posttraumatic stress disorder: Development and evaluation. *Behav Res Ther.* 43(4):413-431.
6. Forbes D, Bisson JI, Monson CM, Berliner L (2020) Effective treatments for PTSD. Guilford Publications.
7. 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(1):1-12.
8. Herman JL (1992) Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *J Trauma Stress.* 5:377-391.
9. Hyland P, Shevlin M, Brewin CR (2023) The memory and identity theory of ICD-11 complex posttraumatic stress disorder. *Psychol Rev.* 130(4):1044-1065.
10. Bisson JI, Berlin CR, Cloitre M, Maercker A (2020) Diagnosis, assessment, and screening for PTSD and complex PTSD. Guilford Press. 49-68.
11. Ford JD, Courtois CA (2014) Complex PTSD, affect dysregulation, and borderline personality disorder. *Borderline Personal Disord Emot Dysregul.* 1-9.
12. Ford JD, Courtois CA (2021) Complex PTSD and borderline personality disorder. *Borderline Personal Disord Emot Dysregul.* 8:16.
13. Maercker A (2021) Development of the new CPTSD diagnosis for ICD-11. *Borderline Personal Disord Emot Dysregul.* 8:7.
14. Cloitre M, Petkova E, Wang J, Lu F (2012) An examination of the influence of a sequential treatment on the course and impact of dissociation among women with PTSD related to childhood abuse. *Depress Anxiety.* 29(8): 709-717.
15. Cloitre M, Cohen LR, Ortigo KM, Jackson C, Koenen KC (2020) Treating survivors of childhood abuse and interpersonal trauma: STAIR narrative therapy. Guilford Publications.
16. Schardt C, Adams MB, Owens T, Keitz S, Fontelo P (2007)

- Utilization of the PICO framework to improve searching pubmed for clinical questions. *BMC Med Inform Decis Mak.* 7:16.
17. 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.* 2013(12):CD003388.
  18. Cohen JA, Mannarino AP, Kliethermes M, Murray LA (2012) Trauma-focused CBT for youth with complex trauma. *Child Abus Negl.* 36:528-541.
  19. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, TC Hoffmann, et al. (2021) The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Syst Rev.* 10(1):89.
  20. Barron IG, Bourgaize C, Lempertz D, Swinden C, Darker-Smith S (2019) Eye movement desensitization reprocessing for children and adolescents with posttraumatic stress disorder: A systematic narrative review. *J EMDR Pract Res.* 13(4):270-283.
  21. De Ribera OS, Trajtenberg N, Christensen LS (2020) Evaluating the quality of meta-analytical reviews using the AMSTAR-2: A systematic review of meta-analytical reviews regarding child sexual abuse interventions. *Child Abuse Negl.* 104:104463.
  22. Bennett RS, Denne M, McGuire R, Hiller RM (2021) A systematic review of controlled-trials for PTSD in maltreated children and adolescents. *Child Maltreat.* 26(3):325-343.
  23. Rijkers C, Schoorl M, van Hoeken D, Hoek HW (2019) Eating disorders and posttraumatic stress disorder. *Curr Opin Psychiatry.* 32(6):510-517.
  24. Unterhitzberger J, Sachser C, Rosner R (2020) Posttraumatic stress disorder and childhood traumatic loss: A secondary analysis of symptom severity and treatment outcome. *J Trauma Stress.* 33(3):208-217.
  25. Shamseddeen W, Asarnow JR, Clarke G, Vitiello B, Wagner KD, et al. (2020) Impact of physical and sexual abuse on treatment response in the treatment of resistant depression in adolescent study (TORDIA). *J Am Acad Child Adolesc Psychiatry.* 50(3):293-301.
  26. Michalowska S, Chec M (2024) Dialectical behavior therapy in the treatment of trauma. *Arch Psychiatry Psychother.* 1:26-32.
  27. Weisfeld CC, Dunleavy K (2021) Strategies for managing chronic pain, chronic PTSD, and comorbidities: Reflections on a case study documented over ten years. *J Clin Psychol Med Settings.* 28(1):78-89.
  28. Zafra MM, Lafont MMT, Jimenez HMJ, Marin PM (2022) Psychological intervention in women victims of childhood sexual abuse: An open study-protocol of a randomized controlled clinical trial comparing EMDR psychotherapy and trauma-based cognitive therapy. *Int J Environ Res Public Health.* 19(12):7468.
  29. Bogdanski E (2023) The Effects of virtual reality telemedicine with pediatric patients diagnosis with posttraumatic stress disorder: Exploratory research method case report. *JMIR Form Res.* 7:e34346.
  30. Hanafi A (2022) A case report of home-based cognitive-behavioral treatment for late onset post-traumatic stress disorder, triggered by mask-wearing in the context of the COVID-19 pandemic. *Clin Case Stud.* 21(6):588-605.
  31. Larsen SE (2019) Hypersexual behavior as a symptom of PTSD: Using cognitive processing therapy in a veteran with military sexual trauma-related PTSD. *Arch Sex Behav.* 48(3):987-993.
  32. Marquez YI, Deblinger E, Dovi AT (2020) The value of trauma-focused cognitive behavioral therapy (TF-CBT) in addressing the therapeutic needs of trafficked youth: A case study. *Cogn Behav Pract.* 27(3):253-269.
  33. Van Minnen A, Tibben M (2021) A brief cognitive-behavioral treatment approach for PTSD and Dissociative Identity Disorder, a case report. *J Behav Ther Exp Psychiatry.* 72:101655.
  34. Ascienzo S, Sprang G, Royse D (2022) My bad experiences are not the only things shaping me anymore: Thematic analysis of youth trauma narratives. *J Child Adolesc Trauma.* 15(3):741-753.
  35. Ascienzo S, Sprang G, Royse D (2022) Gender differences in the PTSD symptoms of polytraumatized youth during isolated phases of trauma-focused cognitive behavioral therapy. *Psychol Trauma.* 14(3):488-496.
  36. Hasan S, Qasim A, Yasmeen R (2020) Trauma focused cognitive behavior therapy for sexually abused children with co-occurring psychological problems. *Pak Pediatr J.* 44(1):51-60.
  37. O'Cleirigh C, Safren SA, Taylor SW, Goshe BM, Bedoya CA, et al. (2019) Cognitive behavioral therapy for trauma and self-care (CBT-TSC) in men who have sex with men with a history of childhood sexual abuse: A randomized controlled trial. *AIDS Behav.* 23(9):2421-2431.
  38. Peters W, Rice S, Cohen J, Murray L, Schley C, et al. (2021) Trauma-focused cognitive-behavioral therapy (TF-CBT) for interpersonal trauma in transitional-aged youth. *Psychol Trauma.* 13(3):313-321.
  39. Yun SH, Fiorini L (2020) Exploration of mental health outcomes of community-based intervention programs for adult male survivors of childhood sexual abuse. *Groupwork.* 29(2):58-84.
  40. Amedu A, Dwarika V (2024) Enhancing the mental health of children, students, and adolescents with trauma and PTSD through TF-CBT. *Arch Trauma Res.* 13(1):1-11.
  41. Brown SJ, Khasteganan N, Brown K, Hegarty K, Carter GJ, et al. (2019) Psychosocial interventions for survivors of rape and sexual assault experienced during adulthood. *Cochrane Database Syst Rev.* 10(10):CD013456.
  42. Caro P, Turner W, Caldwell DM, Macdonald G (2023) Comparative effectiveness of psychological interventions for treating the psychological consequences of sexual

- abuse in children and adolescents: a network meta-analysis. *Cochrane Database Syst Rev.* 6(6):CD013361.
43. Garrett AS, Abazid L, Cohen JA, van der Kooij A, Carrion V, et al. (2021) Changes in brain volume associated with trauma-focused cognitive behavioral therapy among youth with posttraumatic stress disorder. *J Trauma Stress.* 34(4):744-756.
  44. Alemany GE, Ostrosky F, Lozano A, Lujan A, Perez M, et al. (2024) Brain structural change associated with cognitive behavioral therapy in maltreated children. *Brain Res.* 1825:148702.
  45. Cowan A, Ashai A, Gentile JP (2020) Psychotherapy with survivors of sexual abuse and assault. *Innov Clin Neurosci.* 17(1-3):22-26.
  46. Ross SL, Patel SK, Brown EJ, Huntt JS, Chaplin WF (2021) Complex trauma and trauma-focused cognitive-behavioral therapy: How do trauma chronicity and PTSD presentation affect treatment outcome? *Child Abus Negl.* 111:104734.
  47. Karatzias T, Murphy P, Cloitre M, Bisson J, Roberts N, et al. (2019) Psychological interventions for ICD-11 complex PTSD symptoms: Systematic review and meta-analysis. *Psychol Med.* 49(11):1761-1775.
  48. Mew EJ, Koenen KC, Lowe SR (2022) Trauma as a public health issue: Epidemiology of trauma and trauma-related disorders. *Springer Cham.* 13-40.