Original Article

Treatment of Comorbid Disorders, Syndromes, and Symptoms of Posttraumatic Stress Disorder Related to Childhood Maltreatment with STAIR-NT

Clinical Recommendations and Challenges

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Abstract: *Background:* Early interpersonal traumatic events, such as childhood maltreatment, increase the risk of developing complex posttraumatic stress symptoms. The biphasic treatment program STAIR-NT (Skills Training for Affective and Interpersonal Regulation with Narrative Therapy), developed specifically for this patient group, combines interventions to improve emotion regulation and interpersonal skills with narrative therapy. *Objective:* Many affected patients with PTSD after childhood maltreatment also suffer from various comorbid mental disorders and symptoms that can affect and impede the course and outcome of treatment with STAIR-NT. *Method:* Based on experience from a current treatment study, we provide recommendations for integrating treatment of comorbid mental symptoms into STAIR-NT. *Results / Conclusion:* Training affective and interpersonal regulation skills in the first treatment phase offers various interventions to efficiently adapt transdiagnostic mechanisms such as emotion dysregulation. In cases of severe comorbid mental disorders or symptoms, adding disorder-specific interventions to STAIR-NT may be indicated.

Keywords: STAIR-NT, childhood maltreatment, posttraumatic stress disorder, complex posttraumatic stress disorder

Behandlung komorbider Störungen, Syndrome und Symptome der Posttraumatischen Belastungsstörung nach Missbrauchserfahrungen in der Kindheit mit STAIR-NT. Klinische Empfehlungen und Herausforderungen

Zusammenfassung: *Hintergrund:* Frühe interpersonelle traumatische Erfahrungen, wie Misshandlung und Missbrauch in Kindheit und Jugend, erhöhen das Risiko eine komplexe posttraumatische Belastungssymptomatik zu entwickeln. Das zwei-phasische Therapieprogramm STAIR-NT (Skillstraining zur affektiven und interpersonellen Regulation mit narrativer Therapie), das speziell für diese Gruppe von Patient_innen entwickelte wurde, kombiniert Interventionen zur Verbesserung der Emotionsregulation und der interpersonellen Fähigkeiten mit einer narrativen Therapie. *Fragestellung:* Viele der Betroffenen mit einer PTBS nach Misshandlung und Missbrauch in der Kindheit leiden unter einer Vielzahl komorbider psychischer Symptome, die den Verlauf und das Ergebnis der Behandlung mit STAIR-NT beeinflussen und behindern können. *Methode:* Basierend auf den Erfahrungen aus einer aktuellen Therapiestudie werden hier Empfehlungen für die Integration der Behandlung komorbider psychischer Symptomatik in STAIR-NT gegeben. *Ergebnis / Schlussfolgerung:* Vor allem das Training affektiver und interpersoneller Regulationsfähigkeiten in der ersten Therapiephase bietet vielfältige Interventionen zur Veränderung störungsübergreifender Mechanismen wie Emotionsdysregulation. Bei besonders schwerwiegender komorbider Symptomatik kann die zusätzliche Anwendung von störungsspezifischen Interventionen zur STAIR-NT indiziert sein.

Schlüsselwörter: STAIR-NT, Misshandlung und Missbrauch in der Kindheit, Posttraumatische Belastungsstörung, komplexe Posttraumatische Belastungsstörung

The experience of severe repeated traumatic events – particularly early interpersonal trauma like childhood maltreatment or sexual abuse (CM) – poses a major risk factor for the development of complex posttraumatic stress symptoms (Cloitre et al., 2013). In addition to the core PTSD symptoms (reexperiencing the trauma, avoidance of trauma-related stimuli, hyperarousal), people with PTSD related to CM (PTSD-CM) often fulfill symptoms of a complex PTSD (cPTSD) according to ICD-11, i.e., a profound dysregulation in self-organization (DSO). The DSO symptoms comprise the three clusters *deficits in emotion regulation*, *interpersonal relationships*, and *negative beliefs about the self and others* (Maercker, 2019). Complex posttraumatic stress symptoms are associated with significantly higher rates of severe comorbid mental disorders compared with (non-c)PTSD or other mental disorders (Brenner et al., 2019; Gekker et al., 2018; Karatzias, Hyland et al., 2019). This further exacerbates symptom complexity and severity in affected individuals. Accordingly, conventional trauma-focused psychotherapy (e.g., exposure-based CBT, EMDR; see Coventry et al., 2020) might be considered challenging or insufficient in this particular patient group, despite showing moderate to large effect sizes for treatment efficacy (see Coventry et al., 2020; Ehring et al., 2014; Karatzias, Murphy et al., 2019) in individuals with PTSD-CM or cPTSD. However, empirical evidence shows that patients with PTSD-CM or cPTSD benefit significantly less from established trauma-focused treatments (e.g., diminished improvement in DSO symptoms) and drop out more often from therapy than PTSD patients traumatized in adulthood (Dorrepaal et al., 2014; Karatzias, Murphy et al., 2019; Oprel et al., 2021). This means that many individuals with PTSD-CM or cPTSD continue to suffer from impairing symptoms or, if they have responded to treatment, are at higher risk of relapse.

The Skills Training in Affective and Interpersonal Regulation and Narrative Therapy (STAIR-NT) was specifically developed to treat individuals with PTSD-CM caused by caregivers (Cloitre et al., 2020). STAIR-NT is a phase-based treatment approach designed to improve emotion regulation and interpersonal skills prior to a narrative therapy; it focuses on maladaptive inter- and intrapersonal schema. Thus, STAIR-NT is especially suitable for individuals with various complex PTSD symptoms, compared to other phase-based approaches (e.g., Dialectical Behavior Therapy for PTSD, DBT-PTSD; Bohus et al., 2013) that address a more specific patient group (borderline personality disorder with PTSD) with primarily self-harming tendencies or behavior that endangers treatment. The first treatment phase (STAIR) analyzes, modifies, and trains emotion-regulation strategies and interpersonal schemas. The second treatment phase (NT) comprises detailed narratives of key traumatic events to reorganize memories, modify associated dysfunctional interpersonal beliefs, practice emotion-regulation skills, and strengthen the patient's self-efficacy (see the detailed treatment description in Cloitre et al., 2020; Rojas et al., 2022). Indeed, recent studies showed varying effect sizes regarding the treatment efficacy of STAIR-NT for PTSD symptoms (e.g., Cohen's d = 0.31 to 2.48; Lorbeer et al., 2022) and DSO-symptom reduction (e.g., Hedges' g = −0.7 to −1.4; Karatzias, Murphy et al., 2019) as compared to usual care.

Treatment of Patients With PTSD Related to CM

Focusing on Comorbid Disorders, Syndromes, and Symptoms Associated With Emotion Regulation and Interpersonal Problems

Prior research has shown that most patients with complex posttraumatic stress symptoms were diagnosed with at least one comorbidity, such as depression (up to 89 %), generalized anxiety disorder (up to 86 %), or alcohol abuse (up to 58.8 %; Karatzias, Hyland et al., 2019; Brenner et al., 2019; Briere et al., 2008), as well as comorbid personality disorders, eating disorders, obsessive-compulsive disorders, dissociative disorders, and self-harming behavior (e.g., Briere et al., 2008). Early traumatization is associated with a profound loss of emotional and social developmental opportunities and resources, contributing to dysfunctional emotion regulation and maladaptive coping mechanisms (Cloitre et al., 2020). Thus, impaired emotion regulation was proposed as a transdiagnostic risk factor for the development of (comorbid) mental disorders caused by early traumatization (McLaughlin et al., 2011; Messman-Moore & Bhuptani, 2017). Similarly, persisting interpersonal problems are typically associated with early traumatization (DiLillo, 2001).

A major advantage of the STAIR-NT treatment for PTSD patients with comorbid mental disorders, syndromes, and symptoms lies in the integration of various emotion regu-

lation and interpersonal skills in the STAIR phase. This allows for flexible modulation and the adaption of skills according to individual symptom complexity and needs. STAIR facilitates efficiently addressing comorbid disorders and symptoms associated with impaired emotion regulation and interpersonal problems without calling for elaborate additional interventions.

The STAIR-NT treatment approach is currently being investigated in the study ENHANCE, which examines the psychological and neurobiological outcomes of trauma-focused psychotherapy among patients with PTSD-CM (see Leichsenring et al., 2020). For the diagnosis of mental disorders (including personality disorders and comorbid disorders) the Structured Clinical Interview for DSM-5 (SCID-5; First et al., 2015, 2016) was used. Despite excluding several mental conditions (e.g., psychotic disorders, risk of suicide, acute substance-related disorder, borderline personality disorder, dissociative identity disorder, organic mental disorders), the co-occurrence of other severe comorbid mental disorders and symptoms in the target population of the ENHANCE study posed a challenge for treatment with STAIR-NT. At the same time, it provided a unique opportunity to learn from treatment experiences, especially in individuals suffering from comorbid conditions such as depression, dissociation, personality disorders, self-harming behaviors, somatic symptoms and pain, body-image and eating disorders, or sexual and intimacy problems. Based on these experiences, we provide initial practical recommendations for clinicians to treat common and severe comorbid disorders, syndromes, and symptoms of PTSD-CM with STAIR-NT and discuss the assumption that this program works beyond trauma, namely, in terms of emotion regulation and interpersonal problems (Rojas et al., 2022).

Depressive Symptoms and Disorders

Depressive symptoms, syndromes, and disorders represent the most frequent comorbidity of PTSD-CM (Angelakis & Nixon, 2015; Kilpatrick et al., 2003; Kline et al., 2021). They are associated with more severe and persistent PTSD symptomatology before and after treatment (Green et al., 2006), a delayed or attenuated treatment response, and more frequent relapse (Kline et al., 2021) after (trauma-focused) CBT. Shared underlying transdiagnostic vulnerability pathways (maladaptive emotional and cognitive-behavioral regulatory processes) are assumed to affect both high comorbidity and symptom overlap (e.g., rumination, numbing, hopelessness) of depression and PTSD (Angelakis & Nixon, 2015).

Comorbid depressive symptoms may limit the processing of traumatic memories and impede emotion regulation, i.e., emotional numbness may hinder emotional perception and engagement during exposure therapy, and overgeneralized negative cognitions could impede the restructuring of trauma-related beliefs and feelings of self-efficacy (for details, see Angelakis & Nixon 2015; Hayes, 2015). Hence, they should be considered when planning trauma-focused therapy. Augmented trauma-focused CBT, such as STAIR-NT, with interventions explicitly targeting depressogenic emotional and cognitive processes (e.g., early behavioral activation, training in emotion-regulation strategies; see Angelakis & Nixon, 2015), may result in better outcomes for both PTSD and depressive disorders than treating depression or PTSD separately (Rosen et al., 2020; Cloitre et al., 2017). Moreover, it could reduce the risk of a relapse after the end of trauma-focused treatment (Cloitre et al., 2017).

STAIR-NT explicitly includes interventions addressing the shared dysfunctional emotional and cognitive-behavioral processes underlying PTSD and depression. The STAIR phase aims at the regulation of unpleasant (e.g., anger, anxiety) and pleasant affective states (e.g., joy) to counteract maladaptive self-regulation (concealment, suppression, avoidance), negative affect, and negative self-concepts. Especially patients reporting affective dysregulation and negative affects (anhedonia, numbness, hopelessness, rumination) seem to benefit from monitoring emotions as well as associated cognitions, beliefs, and behaviors in the STAIR's emotion diary. Repeated training of adaptive affective coping strategies (e.g., breathing techniques, dampening of aversive affects with opposite action) helps to establish the functional handling and regulation of emotions. Regarding anhedonia and depressive mood, specific behavioral activation skills are implemented, similar to behavioral activation in CBT for depressive disorders. Patients treated with STAIR-NT are taught to integrate pleasurable activities and exercises and to increase self-care, i.e., satisfaction of primary needs, reduction of disruptive factors, implementation of a healthy lifestyle regarding interpersonal difficulties, in particular avoidance and feelings of being disconnected from others. First evidence (Cloitre et al., 2017) and our clinical experience within ENHANCE suggest that improving interpersonal skills and integrating social interactions in the STAIR phase further support behavioral activation and intensify pleasant emotions. Role plays or behavioral experiments help to gain flexibility and security in relationships and increase engagement with the environment. This, in turn, allows for corrective interpersonal experiences, promotes the building of helpful alternative beliefs about oneself and others, and strengthens self-efficacy. Interventions to increase stress tolerance (e.g., "What can I do to feel better when I'm distressed"), another focus of the STAIR phase, can help patients to better tolerate the subsequent

NT phase and can also be used in the context of stressors in patients' daily lives. All these processes and interventions also have an anti-depressive effect. Experience shows that depressive symptoms decrease during the STAIR phase, and that the following NT phase can be successfully and effectively implemented. However, if depressive symptoms are severe (e.g., psychotic symptoms, suicidality, anhedonia) and / or persist during STAIR, we recommend considering treatment of depression before starting STAIR-NT or the NT phase, respectively, as the successful implementation of the NT phase can be affected.

Severe Dissociation and Dissociative Disorders

Dissociation refers to "a disruption of and / or discontinuity in the normal, subjective integration of one or more aspects of psychological functioning, including – but not limited to – memory, identity, consciousness, perception, and motor control" (Spiegel et al., 2011, p. E19). Despite their transdiagnostic prevalence (Lynn et al., 2022), dissociations are linked to PTSD both peritraumatically, increasing the risk of developing a PTSD (Lensvelt-Mulders et al., 2008; Ozer et al., 2003), and as a symptom reported by people suffering from PTSD (12-month prevalence rate of dissociative symptoms of 14.4 % in PTSD; Stein et al., 2013). Early trauma, including CM, seem to increase the risk of dissociative symptoms in PTSD (Kim et al., 2019; Stein et al., 2013). The DSM-5 thus differentiates between PTSD with and without dissociative symptoms and recommends first determining whether the criteria for PTSD with dissociative symptoms are met before assigning both PTSD and a comorbid dissociative disorder. There are conflicting findings in relation to the effects of dissociative symptoms on treatment success for PTSD (Bailey & Brand, 2017; Hoeboer et al., 2020); anyway, they are burdensome and possibly harmful for affected patients (Krause-Utz et al., 2021). A potentially higher risk of revictimization, especially in people with more severe dissociative symptoms, because of reduced responsiveness during dissociations, should also be taken into consideration. Furthermore, dissociation during treatment could lead to decreased engagement in trauma memory and reduced processing of traumatic experiences during narrative exposure because of parallel affective overmodulation (Lanius et al., 2010).

A study by Cloitre et al. (2012) suggested that patients with PTSD with dissociative symptoms after CM could especially benefit from STAIR-NT as a biphasic treatment. Interventions and skills (especially sensory-based skills, e.g., the skills that promote self-soothing, "soothing the senses") that can prevent and stop dissociations are taught and practiced in the STAIR phase. Further, the STAIR phase aims to strengthen emotional awareness and regulation, which may counteract the impaired self-regulation and inhibition of negative affects and meta-consciousness observed in people with dissociative symptoms (Lynn et al., 2022). Further interventions, such as increasing awareness of early signs of dissociation, observation, and regulation of high levels of tension, and discrimination training (characteristics of the current situation vs. the traumatic event; Ehlers & Clark, 2000), can be integrated into this treatment phase. Although a complete remission of dissociative symptoms is not required to proceed to the NT phase, patients with dissociative symptoms should have gained sufficient control over the dissociations via skills to fully process the exposure components. Nevertheless, both the therapist and the patient should carefully observe signs of dissociative symptoms during the NT phase. Skills should be readily available if dissociative symptoms occur during treatment sessions or exposure to cues at home. However, individuals with very severe dissociative symptoms or dissociative identity disorder (DID; excluded in ENHANCE), might be better treated in a setting other than STAIR-NT (e.g., inpatient treatment or other outpatient treatment approaches; Cloitre et al., 2020; see Dorahy et al., 2014, for a review on current perspectives on DID).

Case Example "Dissociative Symptoms"

A young patient with PTSD after physical violence by a caregiver suffered from severe (up to 30 minutes) and frequent (daily) dissociative symptoms, which inter alia occurred when confronted with triggers of PTSD. Because these symptoms also occurred in public, e.g., on public transportation, and because there was a danger of revictimization, the patient also avoided several everyday activities, which severely limited her quality of life. The therapist decided to address the dissociative symptoms very early and to identify the first signs and triggers of dissociative symptoms. Several typical situations in which dissociative symptoms frequently occur were worked on together to better recognize these signs (e.g., gaze fixation on stable points, response reduction) and to train the use of antidissociative skills (e.g., sensory skills (hot spices, ammoniac), discrimination technique to differentiate between early traumatic situations and current "safe" situations). During the NT phase and the implementation of narrative exposures in treatment sessions, dissociative symptoms occurred less frequently and intensely. However, the patient reported still suffering from more severe dissociative symptoms when listening to the exposure recordings at home. To analyze these situations, the therapist conducted simple behavior analyses, refined the skills, and reproofed the warning signs. Despite the

described improvements, the patient still partly described problems in noticing the triggering of dissociative symptoms and in sufficiently using respective skills; thus, complete remission of the dissociative symptoms was not achieved during treatment.

Personality Accentuations and Disorders

There is some indication that a comorbid personality disorder may reduce treatment effects for PTSD (Snoek et al., 2021), emphasizing the need for further consideration in trauma-focused therapy. A meta-analysis by Friborg et al. (2013) reported that the mean proportion (p) of people with PTSD additionally suffering from any personality disorder is moderate (p = .35; personality disorder if PTSD). The highest comorbidity rates were reported for cluster C (avoidant, dependent, obsessive-compulsive; p = .69), followed by cluster A (paranoid, schizoid, schizotypical; p = .29) and cluster B (antisocial, borderline, histrionic, narcissistic; p = .27) personality disorder. Because of symptom overlap (e.g., emotion dysregulation), research focuses primarily on comorbidity and differentiation between borderline personality disorder (BPD) and cPTSD (e.g., Ford & Courtois, 2014).

Several patients in the ENHANCE study meet the criteria for a personality disorder or exhibit strongly accentuated personality traits that are often typical of cluster C or paranoid personality disorder. Acute BPS is an exclusion criterion for ENHANCE; therefore, we only included people currently displaying some symptoms that overlap with those of BPD and PTSD (e.g., affect dysregulation) but do not meet all criteria of BPD. Other specific treatment options should be chosen for people who meet both BPD and PTSD criteria and may also show severe impulsive, self-harming, or suicidal behavior (e.g., DBT-PTSD; Bohus et al., 2013).

For all other comorbid personality disorders observed in the ENHANCE study cohort, especially avoidant, obsessive-compulsive, and paranoid personality disorders, the decision to include their treatment in STAIR-NT depends on their severity and burden. We found that particularly severe personality disorders that massively interfere with STAIR-NT interventions probably need to be prioritized. This could apply to people with very strong paranoid assumptions that counteract engagement in therapy and a working alliance or to people with very strong anxious beliefs and obsessive-compulsive behaviors that impede the implementation of emotion regulation and interpersonal skills during STAIR. Furthermore, the ENHANCE study restricts the number of usable treatment sessions (24); in routine outpatient care, it could be necessary to increase the session number to treat both PTSD and personality disorder. If personality disorders or personality traits are less severe, integration during STAIR-NT is possible. Especially interventions on self-concept and interpersonal interactions in STAIR (e.g., defining and changing relationship patterns) seem beneficial for this patient group. Here, connections should be made between traumatic experiences, the development of self-related and interpersonal beliefs, and corresponding paranoid, fearful-avoidant, or obsessive-compulsive thinking / acting. "New" (interpersonal) behaviors incongruent with previous trauma-related schemas and beliefs (e.g., communicating personal boundaries when someone has a trauma-related belief that the person does not have the right to do so) should be practiced in role plays. The subsequent NT phase provides another possibility to process traumatic experiences that have contributed to personality traits while changing personality disorder-related cognitions and behaviors. For example, in the case of a person with an avoidant personality disorder, the association between the respective traumatic experiences and the current negative self-image and self-concept should be elaborated in the NT phase; in each NT session, the narrative on one traumatic experience is followed by the explication of one interpersonal schema based on an associated current situation, where patients can practice "new" behavior. Furthermore, patients should monitor their interpersonal behavior and self-related cognitions between the NT sessions and practice newly developed cognitions and behaviors.

Case Example "Personality Accentuations and Disorders"

A middle-aged male patient with PTSD because of repeated physical maltreatment by his father during childhood and youth suffered from comorbid avoidant personality disorder. He avoided closeness with others because he felt inadequate and worthless and was afraid to communicate his needs because he expected to be criticized by others. The symptoms strongly constrained his personal relationships, occupational functioning, and quality of life. During the STAIR phase, the patient first learned to monitor (emotion diary) and regulate negative emotions (skills), especially before, during, and after interpersonal situations. Second, his maladaptive interpersonal beliefs that others are overly critical and rejecting and his persistent beliefs that he is inadequate were addressed with cognitive restructuring using the interpersonal schemata sheets and role plays. In the subsequent NT phase, the patient recognized that these fears and beliefs were related to the traumatic experiences with his father and had generalized to other, nontraumatic relationships. His father criticized him almost daily for not doing well enough (e.g., at school) and then beat him.

The patient benefited from processing these experiences during the NT phase and discussing the effect of these experiences on current interpersonal situations after each narrative. By the end of treatment, his PTDS symptoms and interpersonal-avoidant as well as self-critical personality patterns had significantly decreased.

Substance Use Disorders (SUDs)

SUDs are frequently reported in people with PTSD (estimated prevalence of 46 %), with even higher rates in patients with cPTSD (Karatzias, Hyland et al., 2019; Pietrzak et al., 2011). Substance use can represent an attempt to cope with PTSD symptoms and avoid trauma-associated feelings; additionally, substance use is often linked to behaviors that increase the risk of (re-)traumatization, thus representing a risk factor for developing PTSD (Stewart, 1996).

Several evidence-based treatment approaches were developed for the treatment of people with both cPTSD and acute SUD (e.g., Najavits & Schäfer, 2009; Schäfer et al., 2011). Detailed recommendations for clinical decision-making in treating patients with cPTSD and substance abuse can be found in Litt (2013). Depending on the severity of the SUD, detoxification and rehabilitation prior to trauma-focused treatment may be necessary. According to German psychotherapy guidelines, abstinence within ten psychotherapeutic sessions is mandatory for substance dependence (Gemeinsamer Bundesausschuss, 2020). Both specific cognitive-behavioral SUD-related interventions (e.g., motivational interviewing, contingency management, identification of risk situations for substance use) and adjunctive approaches such as drug counseling and support groups can be very beneficial and should be implemented (Hildebrand et al., 2015).

Based on the literature (e.g., Litt, 2013; Schäfer et al., 2011) and our experiences in ENHANCE, we recommend the following: Patients who do not meet the diagnostic criteria for a severe SUD but still display maladaptive consumption patterns should receive psychoeducational information about the possible detrimental effects of ongoing consumption at an early stage of therapy. After psychoeducation, patients should be motivated to replace substance use with adaptive emotion-regulation strategies trained within STAIR. Improving emotion-regulation and interpersonal skills in the STAIR phase seems crucial for people with maladaptive substance use or a comorbid SUD (regardless of severity), especially given the increased risk of relapse during trauma exposure. As the STAIR-NT manual does not comprise explicit anticraving skills, we recommend integrating strategies from other treatment approaches (e.g., DBT; Bohus & Wolf-Arehult, 2017) if necessary. Thus, we recommend several anticraving skills, including avoiding triggers for substance use and "surfing" on cravings, i.e., accepting and increasing self-efficacy to cope with craving. It should be clarified how patients can receive support for severe craving and which skills they should apply. To ensure application in challenging situations, patients should write down the skills and carry them as an "emergency card." Additionally, one should constantly monitor substance use and craving in the emotion diary. Regarding interpersonal skills, further emphasis can be placed on asserting one's abstinence towards others who invite consumption. Finally, it is recommended that a therapeutic contract is signed with the patient which includes personalized strategies for coping with stress and craving as well as the consequences for therapy, especially for NT, if the patient continues to consume substances (e.g., pausing therapy for a defined time, negative tests for substances).

Case Example "SUD"

A patient with a PTSD-CM and drug abuse reported that she initially started using crystal meth to cope with demanding work conditions such as long hours and night shifts. After rehabilitation, she realized that drug abuse had also helped suppressing trauma-related emotions and memories. After losing this dysfunctional coping mechanism during rehabilitation, the patient felt overwhelmed. After her inclusion in the study, we placed special emphasis on training new emotion-regulation skills to cope with upcoming trauma-related emotions and to reduce the risk of relapse. We trained and established both general and specific craving-related skills during the STAIR phase. We additionally recapitulated and refined psychoeducational elements, identified risk situations, and trained emotion-regulation skills, which had already been implemented during rehabilitation. Before entering the NT phase, we established an emergency card to enable coping with severe craving. Furthermore, we continuously monitored craving during the STAIR and especially the NT phase.

Suicidality and Self-Harming Behavior

Similar to substance abuse, self-harm and suicidal ideation can be interpreted as maladaptive coping strategies to regulate inner tension and negative trauma-associated emotions (e.g., suppression / avoidance of feelings such as shame, guilt, hopelessness, fear, anger) or as a form of self-punishment (e.g., I'm to blame for what happened; I'm worthless; I'm a burden; Klonsky, 2007). Regarding PTSD, self-harm is commonly used to end dissociative states and flashbacks (Kamphuis et al., 2007). Self-injurious behavior and suicidality in individuals with CM or

complex posttraumatic stress symptoms are related to deficits in emotion regulation, a negative self-concept, and overgeneralized feelings of shame, guilt, remorse, or regret (Sekowski et al., 2020; Petermann & Nitkowski, 2008).

The immediate positive impact of self-injurious behavior, such as releasing tension, feeling in control, and being calm and relaxed, is often rapidly followed by secondary negative assumptions and emotions (e.g., self-blame or self-hatred; Lloyd-Richardson et al., 2007; Petermann & Nitkowski, 2008), inducing a cycle of self-injurious behavior. Monitoring suicidal and self-harming tendencies, on the one hand, and learning how to tolerate and regulate negative affect, on the other hand, are therefore essential to reducing self-risk and successfully modifying and managing trauma-related emotions and memories during STAIR-NT.

We suggest sensitive but precise exploration and monitoring of (previous) suicidal ideation or even suicide attempts and any other form of self-harming behavior, including risk and resilience factors (e.g., quality/size of social network) during STAIR-NT. A comprehensive guideline for exploring and managing suicidality and self-harming behavior may facilitate the monitoring process of these disruptive behaviors as well as the following of treatment strategies (see Teismann, 2016, for detailed information on exploration and treatment of suicidality/self-harm). As symptom severity may increase throughout treatment (especially at the beginning and during the NT phase), suicidality and self-harm urges should be carefully monitored when patients enter challenging treatment phases (e.g., NT). As STAIR does not provide an explicit tool/intervention to identify and monitor suicidality, self-harm, or other highly dysfunctional behaviors, additional diary cards may be helpful (see Bohus & Wolf-Arehult, 2017). These allow continuous monitoring of suicidal and self-harm urges and the use of (mal)adaptive coping strategies. Monitoring should be complemented by a thorough analysis based on the emotion diary in the STAIR phase, as this provides information about the context, accompanying thoughts and emotions, and the use of coping strategies related to self-harm and suicidal tendencies. Finally, alternative helpful emotion-regulation skills are learned, practiced, and established in the STAIR phase. These could be integrated into a suicidality emergency plan, which should be developed at a very early stage of treatment in relevant cases and should include, for example, a life contract (or antisuicidality contract), a list of helpful skills, a list of supportive caregivers, and support systems in acute suicidal emergencies.

Somatic and Pain Symptoms

First evidence suggests that CM and PTSD are associated with the perception of somatic symptoms and chronic pain, including different medical conditions and related mental disorders such as Somatic Symptom Disorder (Asmundson et al., 2002; Fishbain et al., 2016; Gupta, 2013; Kulich et al., 2000; Moeller-Bertram et al., 2012; Otis et al., 2003).

There is some evidence that the association is bidirectional (Ravn et al., 2018): PTSD seems to intensify pain and increase the risk for chronic pain syndromes, whereas pain and somatic symptoms seem to negatively affect the PTSD symptom development. The co-occurrence of both has been linked to reduced quality of life and other psychological comorbidities such as depression and anxiety disorders as well as substance use (Asmundson et al., 2002; Benedict et al., 2020; Kulich et al., 2000; Otis et al., 2003). Apart from overlapping symptoms (e.g., hypervigilance) and vulnerability factors (e.g., anxiety sensitivity; Asmundson et al., 2002), biological alterations after trauma (e.g., in the immune system; Hitzler et al., 2019) are discussed as shared underlying mechanisms for this comorbidity. Joint psychological mechanisms, e.g., cognitive (e.g., attention biases; Tsur & Talmon, 2021) and behavioral processes (e.g., (fear) avoidance; Vlaeyen et al., 2016), probably maintain and intensify both. Somatic and pain symptoms also serve as triggers for intrusions and subsequent avoidance behavior, thus requiring joint consideration and treatment (Asmundson et al., 2002; Otis et al., 2003; Sharp, 2004).

Many participants of the ENHANCE study also report different medical conditions, severe somatic complaints, and pain symptoms. While STAIR does not primarily target this overlap of PTSD and somatic symptoms, it does provide several interventions and ways to include other specific approaches: Some patients already seemed to benefit from psychoeducation about the joint mechanisms of somatic/pain symptoms and PTSD as well as about associations between PTSD-related emotions, dissociative symptoms, and bodily sensations through monitoring their emotions (emotion diary) during the STAIR phase. In addition, it has been proven helpful to consider somatic symptom burden when establishing behavioral skills (i.e., defining activities that do not lead to symptom reinforcement) while working to reduce related avoidance behavior (i.e., implementation of behavioral experiments). Several emotion-regulation skills proposed in STAIR-NT (e.g., focused breathing) can further reduce somatic distress. During NT, the therapist should discuss the patient's fears of increasing somatic/pain symptoms during exposure. Nevertheless, somatic symptom

burden should not become an avoidance mechanism during STAIR-NT.

After STAIR-NT, further specific interventions could be added; these include establishing a flexible attentional focus or conducting interoceptive and in vivo exposures (in the fear-avoidance framework). As some patients with PTSD-CM avoid medical and especially bodily examinations because of related fears (e.g., fears of gynecological examinations after sexual abuse), consideration and restructuring of these fears and therapist-guided in vivo exposures (including discrimination techniques) are sometimes necessary to obtain required medical care.

Body Image Disturbances (BID) and Eating Disorders (ED)

Individuals with a history of CM show increased body dissatisfaction (Boedicker et al., 2021) and diminished body-related self-esteem compared to individuals without CM history (Kilimnik & Meston, 2016). As body-related comments of the perpetrator can be internalized (Dyer et al., 2015; Fairbrother & Rachman, 2004; Gibb, 2002), specific body parts become linked to trauma-related memories and aversive emotions (e.g., shame, disgust), especially in patients with PTSD after sexual abuse. Because these body parts and sensations are often avoided (Borgmann et al., 2014), body- and self-care can be impaired. Unsurprisingly, CM is also a nonspecific risk factor for the development of EDs (Brewerton, 2007), which are frequently reported in PTSD patients (prevalence ranging from 0.1% to 57.1%; Ferrell et al., 2020). Patients who fulfill the criteria for both ED and PTSD show more severe ED symptoms than people without PTSD or any traumatic experiences (Scharff et al., 2021), with symptoms being more severe even after ED treatment (Hazzard et al., 2021). Disordered eating behavior may be an attempt to deal with overwhelming emotions related to trauma and to (re)gain a feeling of control (Nelson et al., 2022; Rorty & Yager, 1996). Thus, trauma-focused therapy can positively affect underlying vulnerability factors (e.g., emotion / impulse regulation, interpersonal distrust; Mitchell et al., 2012).

In cases of a substantial self-risk because of, for example, ED-related severe underweight, treatment of ED must be prioritized. As some ED symptoms represent a dysfunctional coping strategy for trauma-related emotions, training in emotion-regulation skills during STAIR is crucial. In severely obese patients, behavioral activation in STAIR should be adapted to individual abilities, whereas in patients with anorexia or bulimia nervosa, possible maladaptive use of behavioral activation as a compensatory behavior should be monitored. In some cases, STAIR-NT should be supplemented with other ED-specific interventions. These include monitoring and modifying eating behavior (e.g., contract management to increase body weight), cognitive restructuring of restrictive eating and dietary concepts and ED-related beliefs, and improving body image (e.g., mirror exposures to change an inappropriate body image; see Tuschen-Caffier & Florin, 2012). To address self-disgust and feelings of being contaminated, cognitive restructuring and image modification techniques to establish an image of a skin / cell renewal could be beneficial (Jung et al., 2011). Furthermore, adjacent body-oriented therapy (e.g., training of body awareness, increasing body connection) could be applied (Price, 2005).

Case Example "BID and ED"

A patient who had been sexually and emotionally abused in her youth now suffered from both PTSD-CM and BID. Already at the beginning of treatment, it became evident that she had strongly internalized her parents' negative body-related comments, which they made very often. Consequently, she considered herself "fat" and "ugly" and avoided all physical activity to conceal her body. This impeded behavioral activation during STAIR. Thus, the therapist decided to first conduct a mirror-exposure exercise and restructure body-related thoughts to encourage physical activity and behavioral activation. Afterward, the patient could engage in behavioral activation and establish it as a sufficient emotion-regulation skill to increase distress tolerance for the following NT phase and intensify positive emotions.

Impairments With Sexuality and Intimacy

Impairments / problems with sexuality and intimacy (e.g., romantic relationship, closeness, comfort, affection / tenderness, trust) are common in patients with PTSD-CM and often underestimated (Aaron, 2012; Büttner et al., 2014; Büttner, 2018; Noll et al., 2003). Experiencing sexual abuse by a caregiver can have detrimental effects on sexual development, as it can lead to internalized dysfunctional beliefs about sexuality and intimacy (e.g., viewing sexuality as repulsive, violent, or as currency for affection, closeness, or safety) and contribute to a negative (sexual) self-concept and diminished affective coping competencies (Finkelhor & Browne, 1985). Further influencing factors include loss of trust (e.g., violation / no protection by a trusted person), helplessness (e.g., emotional and socioeconomic dependence on the perpetrator), and stigmatization (e.g., sexual devaluation, verbal abuse, humiliation; Büttner, 2018; Noll et al., 2003; Schnarch, 2010).

Sexual or intimate situations can contain many triggers, evoking trauma-associated intrusions and emotions (shame, fear, helplessness, disgust, anger, or guilt; Finkelhor & Browne, 1985; Maltz, 2002). When confronted with sexual situations, affected individuals often report dissociative symptoms and somatic reactions, which serve to avoid confrontation with adverse trauma-related aspects.

First studies show that treatment for PTSD alone is insufficient to significantly improve trauma-associated impairments in sexuality and intimacy and associated avoidance behavior (Büttner, 2018; O'Driscoll & Flanagan, 2016). In line with the literature (Büttner, 2018; Kehlet Lins, 2020), we encourage clinicians to actively offer the possibility to talk about sexuality and intimacy (e.g., "For many people with childhood maltreatment, sexuality and intimacy are relevant issues. Maybe it is an issue for you as well. I invite you to talk about it whenever you want to."). Impairments/problems in sexuality and intimacy are associated with negative trauma-related beliefs and cognitions about oneself, others, and the own sexuality. Although not explicitly included within STAIR interventions, they may be best addressed when working on intra- and interpersonal schemas and flexibility in relationships as well as emotions such as shame and guilt. During the STAIR phase, developing positive self-perception and self-confidence (e.g., becoming aware of and verbalizing one's wishes and needs, saying no, protecting boundaries) can help to gain self-competencies and to better cope with issues of sexuality and intimacy. Especially trauma-associated negative beliefs about sexuality and intimacy can be processed during STAIR and replaced with alternatives (e.g., "I must not say no to sex" vs. "My no must be accepted"; or "Sex is an abuse of power" vs. "Sex must always be consensual"). For patients who have experienced sexual abuse processing traumatic memories may be more tolerable if they refrain from sexual intercourse with their partner during NT. This should be discussed in advance with the patients and their partners. For patients with significant impairments in sexuality and intimacy, complementary trauma-sensitive interventions (e.g., physiotherapy, body therapy, integrative sexual therapy) may be beneficial. These interventions (including therapeutic approaches according to Büttner, 2018) can already be integrated during the trauma-focused therapy. However, as these interventions rely on patients' narratives and trauma-related experiences, in most cases they should preferably be implemented after several narratives have been conducted based on the corresponding traumatic experiences, i.e., probably after STAIR-NT. For a comprehensive theoretical and practical overview of trauma-sensitive sexual therapy we recommend Büttner (2018).

Case Example "Sexuality and Intimacy"

A middle-aged female patient with PTSD-CM following repeated sexual abuse by her father suffered from severe anxiety, disgust, and negative beliefs (feeling worthless, viewing intimacy and sexuality as hurtful, violating, and devaluating) regarding any form of physical (and emotional) intimacy. She avoided (physical) closeness with her family and (if possible) avoided contact with any other person as well, which severely constrained her quality of life. Establishing self-care (e.g., touching herself to moisturize her skin) and allowing family members to touch her body to help her with self-care were formulated as first therapy goals. During the STAIR phase, the patient learned to monitor (emotion diary) and regulate associated emotions, e.g., using discrimination techniques between the trauma and non-trauma world. Her maladaptive interpersonal beliefs of men being hurtful and that she is inadequate and disgusting were addressed (cognitive restructuring, role plays, and imagery techniques). Before the NT phase started, she had already practiced more self-care and had allowed more (physical and emotional) intimacy within her family (e.g., her daughter and husband were allowed to help her moisturize her neck and back; showing herself naked in front of the husband). Furthermore, she learned to set boundaries, clarify who she wants to be touched by and how, and talk to her husband when sexual or intimate situations evoke negative feelings in her. During NT, she was able to use her husband's presence and closeness as a resource when confronted with a trigger, instead of withdrawing from him. Because of these experiences, she increasingly started to enjoy and trust in physical closeness.

Conclusion and Summary of Clinical Recommendations

Individuals affected from PTSD-CM or cPTSD frequently suffer from comorbid mental disorders (Brenner et al., 2019; Karatzias, Hyland et al., 2019) and symptoms impeding trauma-focused treatment and outcomes (Brenner et al., 2019). STAIR-NT as a phase-based trauma-focused treatment approach for PTSD-CM integrates emotion regulation and interpersonal skills as well as narratives of traumatic events. Compared to other phase-based approaches, such as DBT-PTSD, STAIR-NT specifically focuses on trauma-associated interpersonal and intrapersonal beliefs and schema and thus targets explicitly individuals with these issues (e.g., individuals with complex PTSD, ICD-11). As dysfunctional emotion regulation and interpersonal problems are considered a transdiagnostic vulnerability

factor for PTSD and its psychiatric comorbid conditions, in our experience, the STAIR phase in particular seems crucial to addressing joint vulnerability pathways. That is, STAIR provides various skills to improve emotion regulation and interpersonal behavior. These skills can be flexibly adapted depending on the symptom complexity and needs of the individual. Thus, the STAIR phase facilitates effective treatment of comorbid disorders associated with impaired emotion regulation and interpersonal problems. Further, STAIR-NT can be easily complemented with interventions or strategies from other treatment approaches that focus on specific symptoms and comorbidities (e.g., self-harming tendencies in DBT-PTSD; Bohus et al., 2013), should STAIR interventions not be sufficient. In line with Rojas et al. (2022), an extension of therapy sessions to adequately treat comorbid mental disorders, syndromes, and symptoms might be indicated in some cases. If treatment integration of the comorbid mental disorder or problem in STAIR-NT is impossible (e.g., because of very severe comorbid mental disorders) or if adjunctive interventions are needed, the therapist should give some thought to an appropriate treatment order. Sometimes it can be necessary to give priority to the comorbid mental disorder before STAIR-NT, especially if the comorbid mental disorder or problem significantly impedes patients' well-being and the STAIR-NT process. Furthermore, treatment order considerations should reflect patient preferences, etiological and pathogenetic aspects (e.g., comorbid mental disorder following "primary" PTSD-CM), and the possibility of achieving rapid treatment success in relation to symptomatology.

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