Phoenix AUSTRALIA

Complex PTSD

Introduction

The scope of these Guidelines has been expanded to include consideration of complex PTSD (CPTSD), a new diagnosis in ICD-11[1] applicable to adults, adolescents and children who have experienced prolonged, repeated or multiple forms of traumatic exposure such as childhood abuse or torture (e.g.[2]). We have explored in Chapter 2 the approach taken by the DSM-5 to accommodate more complex presentations of PTSD, through an expansion of PTSD diagnostic criteria to include a fourth symptom cluster related to negative alternations in cognition and mood (creating a total pool of 20 items), and the addition of a dissociative subtype.[3] The ICD-11 has gone in the opposite direction, restricting the diagnostic criteria for PTSD to six potential symptoms (with one required from each of three symptom clusters) and including the additional diagnosis of CPTSD. This divergence may ultimately lead to differences in treatment recommendations.

Although the construct of CPTSD is associated with prolonged or repeated trauma, such as that often involving interpersonal violation, the ICD-11 diagnostic criteria do not specify a certain type of trauma as a necessary condition for the diagnosis to be made. The ICD-11 diagnosis of CPTSD consists of six symptom clusters: the three PTSD criteria of re-experiencing of the trauma, avoidance of trauma reminders, and heightened sense of threat (hypervigilance, startle response), and three disturbances of self-organisation (DSO) symptoms defined as emotional dysregulation, interpersonal difficulties, and negative self-concept. A CPTSD diagnosis requires that all PTSD diagnostic criteria are met (exposure to at least one traumatic event and one symptom from each of the three categories) along with at least one symptom from each of the three DSO symptom clusters. In addition, functional impairment is explicitly identified as a requirement for the disorder. Only one diagnosis (PTSD or CPTSD) can be made; if CPTSD diagnostic criteria are met, this supersedes the diagnosis of PTSD.

The DSO elements of the ICD-11 diagnosis of CPTSD reflect the impact that trauma can have on systems of self-organisation in emotional regulation, relational domains and self-concept. Thus the ICD-11 conceptual frame of CPTSD includes both interpersonal and resource loss models[4] (a loss of emotional, psychological, and social resources) to explain traumatic stress reactions, in addition to the conditioned fear response represented by the three core PTSD criteria.

The new CPTSD diagnosis addresses a longstanding concern in the field that chronic/recurrent interpersonal traumas and abuses have wider ranging impacts on mental health beyond the limits of PTSD

as previously defined. However the ICD does not specify the traumatic stressor criterion and includes broad criteria for DSO symptoms, leading to the potential for inflated prevalence and over-diagnosis.

The recognition of CPTSD in ICD-11 may have broader social and economic cost implications. Adverse experiences in childhood are common and they have strong long-term associations with a wide range of adult health risk behaviours, health status, and diseases. Under the current health service delivery models, the care received by people with CPTSD is likely to be fragmented and lacking in coordination, exacerbated by likely presentation to multiple health services over time. There will be a need for increased attention to primary, secondary, and tertiary prevention strategies, with an emphasis on treatment integration and principles of trauma-informed care. The implementation of alternative models of care with trauma-informed principles and practice may avoid unintentional re-traumatisation of those with CPTSD, and provide more coordinated assistance towards recovery.

Conceptualising CPTSD

The DSM-5 workgroup on PTSD critically evaluated the then existing literature on CPTSD and, largely on the basis of a lack of current evidence and validity,[5] decided not to include CPTSD as a separate diagnosis. Instead, many of the disturbances of self-organisation (DSO) symptoms were incorporated into the broader diagnostic criteria of PTSD. The Disorders of Extreme Stress Not Otherwise Specified (DESNOS) criteria (included in the Appendix to DSM-IV and subsequently included as associated features of PTSD in DSM-5 – see Chapter 2) have been shown to be linked to childhood exposure to interpersonal trauma. Results from the DSM-IV field trial investigating DESNOS revealed substantially higher rates of endorsement of symptoms representative of disturbances in affective, self, and relational domains among those with childhood maltreatment relative to those with other types of trauma history.[6] The field trial also found that nearly all of those who met criteria for DESNOS also met criteria for PTSD.[7]

Since then, continued scientific efforts have been made to substantiate the concept, assessment measures, and clinical characteristics of CPTSD,[8] with a review of the empirical literature supporting the distinction between PTSD and CPTSD, leading to the inclusion of CPTSD in ICD-11. The ICD-11 diagnosis has been shown to capture the symptom presentation of survivors of more complex interpersonal trauma, such as child maltreatment[9]. Typically, child maltreatment (abuse and other childhood adversities) results in impairment in developmental processes related to the growth of emotion regulation and associated skills in effective interpersonal behaviours.[10] Such impairments are thought to form the neurodevelopmental basis for a range of mental health problems.[11]

Further support for the ICD-11 CPTSD diagnosis comes from cross-cultural studies[e.g12,13] and the Adverse Childhood Experiences (ACE) literature. The ACE study has been undertaken in a primary care setting to assess both retrospectively and prospectively the long-term relationship of childhood experiences to important medical and public health problems.[14] Over time it has found that childhood adverse experiences impact neurobiology, mental, and physical health throughout the lifespan.[15] A key finding is the extent to which adult health problems on the part of those who had adverse experiences as children stem from strategies, coping mechanisms, and behaviour which were initially protective attempts to deal with the adversity experienced. A review by Herzog and Schmahl (2018) extrapolates structural and functional brain alterations, psychosocial consequences, and adverse somatic consequences (such as chronic pain) associated with ACE.[15] They note that during certain vulnerable developmental phases, the risk for subsequent ACE-related disorders (such as depression, PTSD, BPD and substance abuse) is

increased. Herzog and Schmahl (2018) suggest that people with a history of ACE who present with a mental disorder vary from individuals with the same diagnosis without ACE,[16] consistent with the ICD-11 shift to separate diagnostic categories for CPTSD and PTSD.

Diagnostic issues

There is significant overlap between symptoms of CPTSD (as currently defined in ICD-11) and other disorders including PTSD (as defined in DSM-5), major depressive disorder (MDD), and borderline personality disorder (BPD). It has been argued that these and other disorders should be considered a spectrum of stress related disorders along the dimensions of symptom severity, nature of the stressor and response to trauma.[17] The intersection of CPTSD and BPD symptoms is most likely to raise diagnostic questions. As borderline personality disorder (BPD) shares similar features to DSO presentations and is commonly associated with PTSD, there is debate as to whether and how CPTSD is distinct from PTSD comorbid with BPD. Recent findings support the construct of a CPTSD diagnosis as a separate entity, although BPD symptoms overlap greatly with CPTSD symptoms.[18]

The diagnostic requirements for CPTSD include several features that are distinctly different from BPD. While there is overlap of symptoms related to problems in emotion regulation, in other symptom domains they are more clearly differentiated. Brewin and colleagues (2017)[8] note that BPD is typically characterised by emotionally intense and unstable relationships that shift between idealising and denigrating perceptions of others and by an unstable sense of self that alternates between highly positive or negative self-evaluation. CPTSD in contrast is characterised by perceptions of relationships as difficult and best avoided and a stable, albeit extremely negative, sense of self.[19] BPD and CPTSD are also distinguished by the fact that CPTSD requires the presence of trauma-specific PTSD symptoms for diagnosis, including a traumatic event or events, while BPD does not. Further, suicide attempts and other self-harming behaviours are part of the diagnostic criteria for BPD but not CPTSD.

Assessment issues

Assessment of CPTSD should include an evaluation of diagnostic symptoms, associated biopsychosocial symptoms (including substance use, self-harm, relationship challenges, dissociation, guilt, and shame), a family and personal history including past and current life challenges and stressors (which are common in CPTSD), as well as interpersonal resources, strengths and social supports. As there is substantial symptom overlap between the CPTSD presentation and other disorders, assessment should also include a thorough differential diagnosis with a focus on symptoms of PTSD, depression, anxiety, and BPD in particular.

A useful tool to assist in assessing CPTSD is the International Trauma Questionnaire, a brief, self-report measure that has been developed for the assessment of ICD-11 and CPTSD diagnoses.[20] The International Trauma Interview (formerly the ICD Trauma Interview[21]) is also under development.

Principles of management

Primary care practitioners and mental health nurses will often be key care providers for people with CPTSD, whether or not they are receiving specialist trauma treatment. Principles of management in primary care and generalist mental health services should be based on trauma informed care. Trauma-informed care is not a treatment, but an approach to providing services that takes into account the needs of people who have been affected by trauma. A widely accepted conceptualisation of trauma informed care is provided by Hopper, Bassuk & Olivet (2010),[22] "Trauma-informed care is a strengths based

framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasises physical, psychological and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment".

At the agency level, the following practices are consistent with trauma informed care:

1. Trauma awareness
    - Provide training and supervision to ensure staff understand the impacts of trauma and recognise presenting symptoms and behaviours
    - Undertake routine screening for histories of trauma
    - Actively support staff self-care and resilience
2. Emphasis on safety
    - Build physical and emotional safety for service users and providers
    - Ensure clear roles, responsibilities and boundaries
    - Respect privacy, confidentiality, cultural differences and diversity
3. Opportunities to rebuild control
    - Importance of choice to promote efficacy and personal control
    - Ensuring predictable environments
4. Strengths based approach
    - Support the development of skills to support psychosocial stability and recovery

At the level of the individual practitioner, the following principles should guide care:

- promote safety
- promote hope and recovery
- promote calm
- promote connectedness
- promote self-efficacy
- focus on strengths and resources
- focus on your own self-care

Treatment

As CPTSD is a new diagnosis there is currently no direct evidence about how to treat it in adults, children or adolescents. There has been debate in the literature about whether current evidence-based treatments for PTSD are effective for those with CPTSD or require modification.[23,24] Briere and Scott note that the multidimensional nature of complex trauma presentations makes outcome research into this area particularly challenging, with comorbidities, such as medical problems, ongoing domestic violence and other maltreatment, substance use, suicidal ideation, and dissociation, typically excluded from treatment outcome studies.[25]

Psychological treatment

A recent meta-analysis which retrospectively assessed 51 PTSD treatment trials to see if they included patients with CPTSD found beneficial effects of standard trauma-focused treatments such as CBT, exposure therapy, and EMDR in reducing PTSD symptoms in those with CPTSD.[26] That review also indicated that CBT and exposure therapy reduced the distinctive CPTSD symptoms including negative self-concept and relationship disturbances, although there was insufficient evidence to draw inferences about their effects on emotion dysregulation. Further, the meta-analysis found that the effectiveness of psychological therapies was lower than for non-specific therapies (such as counselling), leading the authors to suggest that non-specific effects may account for a large proportion of therapeutic change in symptoms of CPTSD in the trials.

The ISTSS Guidelines *Position Paper on CPTSD in Adults* notes that as CPTSD is comprised of greater number and diversity of types of symptoms relative to PTSD, its treatment may involve greater diversity of treatment interventions and/or longer duration.

It has been suggested that current trauma-focussed therapies for PTSD are not likely to be optimal for CPTSD patient populations, particularly given the potential for the DSO symptoms to disrupt engagement.[27] Several adaptations or alternatives to established PTSD treatments have been developed. For example, Cloitre outlines a sequential approach to improve CPTSD treatment outcomes in adults. The phase-based intervention (STAIR; Skills Training in Affective and Interpersonal Regulation) first addresses DSO symptoms and related problems in day-today functioning (e.g., establishment of a sense of safety, emotional regulation, and social skills) with trauma memory processing introduced subsequently.[28] It is unclear whether the initial stabilisation phase is necessary, and it has been posited that it might lead to unhelpful delays in using the more trauma-focused interventions people may benefit from.[24] De Jongh and colleagues posit that the evidence does not currently support providing a stabilisation phase prior to providing trauma-focussed treatment for CPTSD.[24] However, Cloitre argues that the data indicates that treatment dropout and symptom exacerbation are reduced when treatments are sequenced with skills training interventions preceding trauma memory processing.[29] That is, the DSO symptoms interfere with engagement in treatment, and need to be addressed before treating the core PTSD symptoms. Ultimately, this is an empirical question that requires further clinical research to answer.

An integrative CPTSD treatment framework may also yield treatment advances. For example, an RCT completed amongst Rohingya refugees shows Integrative Adaptation and Development After Persecution and Trauma (ADAPT)Therapy is effective for the treatment of CPTSD (and other comorbid disorders).[30] Dialectical Behaviour Therapy (DBT), an empirically supported treatment for BPD which has been shown to help prevent self-harm and enhance interpersonal functioning may also improve treatment outcomes for those with CPTSD. However it does not show greater effectiveness than treatment as usual with core CPTSD symptoms of guilt, shame, anger suppression, anxiety and impulse control in people with borderline personality disorder.[31] An adaptation of DBT has been proposed with a modified form of Prolonged Exposure (PE) which, although not explicitly tested on those with a CPTSD diagnosis, may have potential to enhance treatment outcomes in that population.[32]

For adolescents, there have been several programs developed specifically for treating adolescents with complex trauma presentations[33,34]. These have also not been explicitly tested with the CPTSD diagnosis.

On the basis of current data, specific trauma-focussed psychological interventions such as CBT, exposure therapy, and EMDR appear to be effective in treatment of several of the CPTSD symptom clusters.[26] However systematic trauma-focussed approaches may not be well tolerated in some CPTSD populations (such as torture survivors) for whom an integrated supportive framework may be more appropriate. In summary, given that CPTSD is a relatively new diagnosis it will take more time before an evidence base emerges about how best to treat it in adults, children and adolescents.

Pharmacological treatment

There are currently no evidence-based treatments on the pharmacotherapy of CPTSD. With standard PTSD treatments, there has been some suggestion that a history of child maltreatment may predict a negative response to medication for PTSD.[35] Consistent with the current treatment recommendations for PTSD, it is unlikely that any of the contemporary range of psychopharmacological medications will prove curative in treating CPTSD; they would optimally be used in conjunction with psychotherapy. The treatment of complex trauma presentations should be adapted from the literature on treating PTSD, BPD, and dissociation. Pharmacotherapy for adults is likely to be most useful at the stabilisation/safety stage of treatment (assuming this is a component of a person's treatment plan).

As indicated in the Guidelines for the treatment of PTSD, the SSRIs, and specifically fluoxetine, paroxetine, and sertraline, are generally considered first-line pharmacological treatments. Venlafaxine has shown similar promise. In contrast, benzodiazepines have been shown to be unhelpful in reducing the symptoms of PTSD. They should be prescribed with even more caution in CPTSD, given their potential for producing tolerance and addiction.[34] Although the evidence for the effectiveness of antipsychotics for PTSD is limited – and there is no evidence supporting their use in CPTSD – they are used with some frequency in clinical practice to treat individuals with these disorders, especially in settings where there is a high level of agitation or aggression.

Future research

Research is needed to determine how to optimise treatment outcomes for those diagnosed with CPTSD. Worthwhile areas of focus include identifying which treatment interventions are most effective for specific symptom clusters, which interventions are most acceptable to patients, investigation of adverse effects, and the optimal duration of different types of interventions. Further research into treating CPTSD across cultures (including in the Aboriginal and Torres Strait Islander context) is necessary given the presumed high rates of CPTSD in populations exposed to intergenerational trauma, torture and other forms of human rights abuses. Research to clarify presentations and treatments relating to CPTSD in children and adolescents is also needed.

In light of current debates in the literature, Karatzias and colleagues advocate exploring the usefulness of phased versus non-phased interventions and individual versus group interventions for CPTSD.[26] The ISTSS Guidelines Position Paper on CPTSD for Adults presents a number of future research directions to help identify optimal treatments for CPTSD. These include: (i) comparing standard treatments for PTSD with protocols that add components that target the DSO symptoms cluster; (ii) testing the order in which multi-component interventions are delivered; and (iii) testing the benefits of delivering multi-component treatments in a flexible way targeting the most salient symptoms for a specific patient (ISTSS Guidelines Position Paper on Complex PTSD in Adults, 2019).

Research underway

A search of the clinical trial registries revealed that much of the international research underway focuses on the effectiveness of interventions designed to stabilise complex trauma symptoms.
A number of different populations are considered, including refugees,[36] female offenders,[37] children in home-based care,[38] and people in inpatient[39] and outpatient[40] settings. The studies consider various individual and group treatment interventions. Interventions being tested include the stabilisation program STAIR[36,41,42], NET[36] (Narrative Exposure Therapy, often applied in the refugee context), a version of the Connect parent program,[38] psychoeducational material for complex and interpersonal trauma,[43] and other add-ons or adaptations to conventional treatment for PTSD.[39]

The usefulness of phased versus non-phased interventions is also under consideration. One study conducted in an inpatient clinic in Norway is comparing phase-oriented treatment (STAIR plus Narrative Therapy) with two non-phased treatments (Prolonged Exposure and STAIR).[41] In the Netherlands, there is a study looking at the effectiveness of EMDR alone versus EMDR preceded by STAIR[42] for adults with CPTSD. The psychometric properties (e.g., validity, reliability) of CPTSD assessment tools are also being currently evaluated, with a Swiss study testing the International Trauma Interview (ITI) - German version.[44]

References

1. World Health Organisation. International Classification of Diseases, 11th Revision (ICD-11). Geneva, Switzerland: World Health Organisation; 2018.
2. Karatzias T, Shevlin M, Fyvie C, et al. Evidence of distinct profiles of posttraumatic stress disorder (PTSD) and complex posttraumatic stress disorder (CPTSD) based on the new ICD-11 trauma questionnaire (ICD-TQ). *Journal of Affective Disorders.* 2017;207:181-187.
3. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders (DSM-5).* Washington DC: American Psychiatric Association; 2013.
4. Hobfoll SE, Mancini AD, Hall BJ, Canetti D, Bonanno GA. The limits of resilience: Distress following chronic political violence among Palestinians. *Social science & medicine.* 2011;72(8):1400-1408.
5. Resick PA, Bovin MJ, Calloway AL, et al. A critical evaluation of the complex PTSD literature: Implications for DSM-5. *J Trauma Stress.* 2012;25(3):241-251.
6. van der Kolk BA, Roth S, Pelcovitz D, Sunday S, Spinazzola J. Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *J Trauma Stress.* 2005;18(5):389-399.
7. Roth S, Newman E, Pelcovitz D, Van Der Kolk B, Mandel FS. Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *J Trauma Stress.* 1997;10(4):539-555.
8. Brewin CR, Cloitre M, Hyland P, et al. A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clin Psychol Rev.* 2017;58:1-15.
9. Cloitre M, Garvert DW, Brewin CR, Bryant RA, Maercker A. Evidence for proposed ICD-11 PTSD and complex PTSD: A latent profile analysis. *European journal of psychotraumatology.* 2013;4(1):20706.
10. Kim J, Cicchetti D. Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of child psychology and psychiatry.* 2010;51(6):706-716.
11. Teicher MH, Samson JA. Annual research review: enduring neurobiological effects of childhood abuse and neglect. *Journal of child psychology and psychiatry.* 2016;57(3):241-266.
12. Tay AK, Rees S, Chen J, et al. Associations of conflict-related trauma and ongoing stressors with the mental health and functioning of West Papuan refugees in Port Moresby, Papua New Guinea (PNG). *PLoS One.* 2015;10(4):e0125178.
13. Tay AK, Rees S, Chen J, Kareth M, Silove D. The structure of post-traumatic stress disorder and complex post-traumatic stress disorder amongst West Papuan refugees. *BMC psychiatry.* 2015;15(1):111.
14. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine.* 2019;56(6):774-786.
15. Herzog JI, Schmahl C. Adverse childhood experiences and the consequences on neurobiological, psychosocial, and somatic conditions across the lifespan. *Frontiers in psychiatry.* 2018;9.
16. Teicher MH, Samson JA. Childhood maltreatment and psychopathology: A case for ecophenotypic variants as clinically and neurobiologically distinct subtypes. *Am J Psychiatry.* 2013;170(10):1114-1133.
17. Moreau C, Zisook S. Rationale for a posttraumatic stress spectrum disorder. *Psychiatric Clinics of North America.* 2002.
18. Jowett S, Karatzias T, Shevlin M, Albert I. Differentiating symptom profiles of ICD-11 PTSD, complex PTSD, and borderline personality disorder: A latent class analysis in a multiply traumatized sample. *Personality Disorders: Theory, Research, and Treatment.* 2019.
19. Cloitre M, Garvert DW, Weiss B, Carlson EB, Bryant RA. Distinguishing PTSD, complex PTSD, and borderline personality disorder: A latent class analysis. *European Journal of Psychotraumatology.* 2014;5(1):25097.

20. Cloitre M, Shevlin M, Brewin C, et al. The International Trauma Questionnaire: development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica.* 2018;138(6):536-546.
21. Powers A, Fani N, Carter S, Cross D, Cloitre M, Bradley B. Differential predictors of DSM-5 PTSD and ICD-11 complex PTSD among African American women. *European journal of psychotraumatology.* 2017;8(1):1338914.
22. K Hopper E, L Bassuk E, Olivet J. Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal.* 2010;3(1).
23. Cloitre M. The "one size fits all" approach to trauma treatment: should we be satisfied? *European journal of psychotraumatology.* 2015;6(1):27344.
24. De Jongh A, Resick PA, Zoellner LA, et al. Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and Anxiety.* 2016;33(5):359-369.
25. Briere J, Scott C. Complex trauma in adolescents and adults: Effects and treatment. *Psychiatric Clinics.* 2015;38(3):515-527.
26. Karatzias T, Murphy P, Cloitre M, et al. Psychological interventions for ICD-11 complex PTSD symptoms: systematic review and meta-analysis. *Psychological medicine.* 2019:1-15.
27. Cloitre M, Courtois CA, Charuvastra A, Carapezza R, Stolbach BC, Green BL. Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *J Trauma Stress.* 2011;24(6):615-627.
28. Cloitre M, Koenen KC, Cohen LR, Han H. Skills training in affective and interpersonal regulation followed by exposure: A phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology.* 2002;70(5):1067-1074.
29. Cloitre M, Stovall-McClough KC, Nooner K, et al. Treatment for PTSD related to childhood abuse: A randomized controlled trial. *Am J Psychiatry.* 2010;167(8):915-924.
30. Tay A, Miah M, Khan S, et al. Theoretical background, first stage development and adaptation of a novel Integrative Adapt Therapy (IAT) for refugees. *Epidemiology and psychiatric sciences.* 2019:1-8.
31. Neacsiu AD, Lungu A, Harned MS, Rizvi SL, Linehan MM. Impact of dialectical behavior therapy versus community treatment by experts on emotional experience, expression, and acceptance in borderline personality disorder. *Behav Res Ther.* 2014;53:47-54.
32. Bohus M, Dyer AS, Priebe K, et al. Dialectical behaviour therapy for post-traumatic stress disorder after childhood sexual abuse in patients with and without borderline personality disorder: a randomised controlled trial. *Psychotherapy and psychosomatics.* 2013;82(4):221-233.
33. Briere JN, Lanktree CB. *Treating complex trauma in adolescents and young adults.* Sage; 2011.
34. Habib M, Labruna V, Newman J. Complex histories and complex presentations: Implementation of a manually-guided group treatment for traumatized adolescents. *Journal of Family Violence.* 2013;28(7):717-728.
35. Laddis A. Medication for complex posttraumatic disorders. *Journal of Aggression, Maltreatment & Trauma.* 2011;20(6):645-668.
36. Psychological Treatment of Posttraumatic Stress Disorder in Refugees.
37. The effectiveness of a stabilising group treatment in females with complex PTSD patients: A Multicenter Randomised Controlled Trial.
38. A trial of a trauma- and attachment-based intervention in kinship and foster care.
39. Stabilizing Group Treatment of Complex Trauma: A Randomized Controlled Trial (STAB).
40. Emotional and Cognitive Self-regulation, an EEG Study (ECSR).
41. The Modum Bad Complex Posttraumatic Stress Disorder Study.
42. Phase-based treatment versus direct trauma-focused treatment in patients with Complex PTSD.

43. The effectiveness of a Stage 1 psychoeducational intervention versus waiting list to stabilise complex interpersonal trauma symptomatology in female offenders.
44. Psychometric Properties of the International Trauma Interview (ITI) for ICD-11 PTSD and CPTSD.