Identifying patients with complex PTSD

AUTHORS
Dr Alastair M Hull
MD FRCPsych
Consultant Psychiatrist in Psychotherapy Multidisciplinary Adult Psychotherapy Service & Veterans First Point Tayside, Perth Royal Infirmary, Perth, UK

Honorary Senior Clinical Lecturer, Institute of Medical Sciences, University of Dundee, Dundee, UK

Dr Frank M Corrigan
MD FRCPsych
Consultant Psychiatrist, Argyll and Bute Hospital, Lochgilphead, Argyll, UK

Dr Stephen A Curran
MB BCh BAO MRCPsych
Consultant Psychiatrist, Perth CMHT, Cairnwell, Perth Royal Infirmary, Perth, UK, Honorary Senior Clinical Teacher, Institute of Medical Sciences, University of Dundee, Dundee, UK

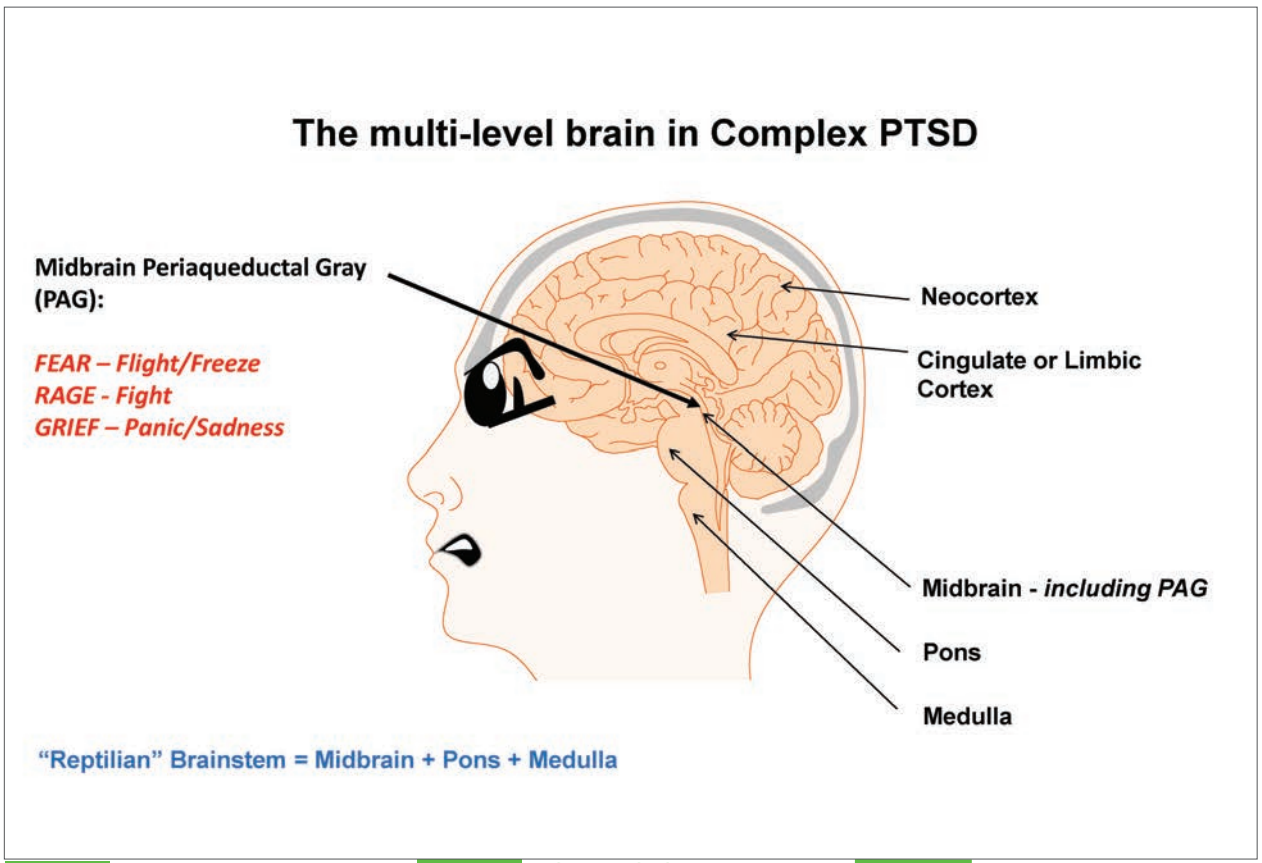

FIGURE 1
The multi-level brain in complex PTSD

How do patients present with complex PTSD?

POTENTIALLY TRAUMATIC EVENTS (PTEs) TAKE MANY FORMS AND THERE IS NO SINGULAR EXPERIENCE of trauma. While the common perception is of an individual suffering from a single traumatic event clinicians need to be aware of those exposed to multiple PTEs, perhaps in secret, in childhood during critical stages of development. These experiences may undermine function in many domains and impede the development of resilience for future adversity.

PTEs vary across several dimensions including magnitude, complexity, frequency, duration, predictability and controllability.[1] Despite this complexity PTEs can be categorised as either type 1 (single, sudden, well defined and often public events) or type 2 trauma, see table 1, p32.[2] Type 2 or complex traumas, are repetitive, multiple, serial traumas occurring over extended periods. The subjective experience of the individual is a crucial determinant of psychological outcome.

How should patients be assessed?

'Complex trauma is often associated with other adversity and stressors such as neglect, loss or deprivation'

What are the management options?

Complex trauma is often associated with other adversity and stressors such as neglect, loss or deprivation.

For many, though crucially not all, these traumas also occur at a developmentally vulnerable time with the perpetrator often in a caregiving role. Thus the trauma incorporates a betrayal of trust. Families with children who have experienced adversity such as maltreatment, abuse or neglect often have other risk factors such as poor living conditions, social isolation or parents with a mental health disorder.[3]

Complex trauma is associated with a 3-4 fold greater risk of developing PTSD.[4,5] »

REACTIONS TO COMPLEX (TYPE 2) TRAUMA

Trauma complexity, i.e. the experience of a number of different types of PTE, correlates with the occurrence of an increased diversity of symptoms beyond the core PTSD criteria, see table 2, p33. This includes difficulties with emotional regulation, interpersonal problems, dissociation, somatisation, alcohol and/or substance misuse, and suicidality.[6]

Trauma complexity leads to symptom complexity in both adults and children with the strongest predictor of this association coming from cumulative complex trauma in childhood.[7] A worse outcome is evident when there are multiple adversities alongside complex trauma.

In a vulnerable individual complex PTSD can occur after a single PTE,[8] but, crucially, there may be no disorder found in resilient individuals despite prolonged and repetitive exposure to PTEs in an adverse environment.[8] What makes one child robustly resilient and another, with a similar trauma history, polysymptomatic is not known but cumulative complex trauma impairs the ability to acquire resilience though this may be domain specific.

A hundred years ago the military understood the need to rotate troops; there are limits to tolerance which should not be exceeded.[9]

The adverse childhood experiences study demonstrated a strong, and graded correlation between the number of adverse experiences in childhood and an increased risk of alcohol or drug problems, smoking, poor physical health, obesity, sexual promiscuity and sexually transmitted disease, poor mental health and deliberate self-harm in adulthood.[10,11,12] PTSD, complex PTSD or dissociative disorders are important potential outcomes but so too are: major depression, generalised anxiety disorder, panic disorder, alcohol dependence, drug dependence and bulimia nervosa – all found to have a dose-response relationship with childhood sexual abuse.[13]

There are a number of significant and important neurobiological changes demonstrated after complex trauma which are beyond the scope of this article.[14,15]

OCCURRENCE, COURSE AND DURATION

The best estimate for current prevalence of PTSD in the UK as a whole is 3%[16] with the higher 12-month prevalence of 5.1% in Northern Ireland[17] suggesting an impact from living under more prolonged threat; a potential complex trauma. The prevalence of dissociative disorders in the general population was found to be 1-3%, confirming that complex post-traumatic reactions are not rare.[18]

Table 1

Examples of type 1 and type 2 (complex) trauma

Type 1 trauma	Type 2 complex trauma
Fire or explosion	Childhood sexual abuse
Car accident	Childhood physical abuse
Industrial accident	Repeated domestic violence
Physical assault	Captivity ● Kidnapped ● Abducted ● Held hostage ● Prisoner of war ● Concentration camp
Sexual assault	Sex trafficking or slave trade
Sudden violent death ● Homicide ● Suicide	Exposure to genocide or other forms of organised violence
Single event combat trauma	Prolonged exposure to war as civilian or military veteran

Disasters are not included as they are so variable in terms of their characteristics

Type 2 traumas are prevalent, affecting between 1 in 10 and 1 in 7 children, typically occurring cumulatively over time and in combination.[19] It has been described as a silent epidemic.[20]

PRESENTATION

It is vital to ask about the occurrence of traumatic events as otherwise post-traumatic conditions such as PTSD or complex PTSD will be missed.[21] Disclosure can be a problem particularly with complex trauma such as sexual abuse or domestic violence, and is often incremental as trust with the clinician is formed. Many factors contribute toward this, including: fear of disclosure; threats made by the perpetrator; previous experience of reaction to disclosure; dissociative amnesia, or avoidance of talking about events because of the distress caused or the perceived shameful nature of events.

GPs are in a unique position which may help limit these concerns as they may have known the individual for many years either before the event(s) or subsequently and are more likely to have formed a trusting relationship.

It is worthwhile offering examples of traumatic events as this increases disclosure, with free checklists available e.g. the life events checklist for the CAPS.[22] This is important in certain populations such as refugees. It is worthwhile enquiring about the experience of trauma in frequent attenders with either unexplained minor physical symptoms or what might appear relatively minor problems.[23]

ASSESSMENT

Many complex PTSD presentations are so enmeshed in comorbid factors that the traumatic antecedents can be readily neglected by clinicians who do not ask about PTEs. The issue of what constitutes a PTE is of fundamental importance as it acts as a gatekeeper for the diagnoses of PTSD and complex PTSD (see table 1, left). As subjective perception of whether an event is traumatic or not is crucial, the patient may be the best judge of what has been traumatic.

Post-traumatic and dissociative symptoms, and the history of complex trauma, may all emerge gradually and partially until a degree of safety is achieved. Sensitive assessment is needed as trauma victims can find it hard to articulate their experience and reassurance that an exhaustive description is not needed is helpful.

Complex PTSD will be included in ICD-11[8] but has been omitted from

DSM-5[24] although a dissociative subtype of PTSD is included.

Key features of complex PTSD are summarised below. GPs would not be expected to undertake specialist assessment, but knowledge of the symptomatic responses to complex trauma helps to limit misunderstanding and misdiagnosis. For example, dissociative symptoms may be misinterpreted as evidence of psychosis, or emotional numbing considered part of a depressive disorder, when the complex trauma history is not taken into account.

Patients who have experienced complex trauma should be assessed for the core symptoms of PTSD, see table 2, below, which are set out more fully in our earlier article in this journal.[25]
In addition, specific areas that should be assessed include disturbances in the following three domains:

- Affect dysregulation, which may manifest as emotional sensitivity, heightened emotional reactivity, lack of emotion or dissociative states. Behavioural manifestations may include reckless or violent outbursts, or self-destructive behaviour
- Negative self-concept, with persistent negative beliefs about self, with pervasive feelings of shame, guilt or failure
- Interpersonal disturbances, including affiliative problems, often with avoidance of social engagement or an expressed lack of interest in it.

Other domains which must be assessed in the context of complex trauma are:

- Alterations in attention and consciousness leading to amnesia, depersonalisation and dissociation
- Somatic distress and/or medical problems that relate to the type of trauma suffered or may in a diffuse way involve all body systems
- Recurrence of particular responses echoing the obstructed survival impulses to the original trauma. The body may react to triggers reminiscent of the original event with the somatic residues of the fight, flight, freeze responses which likely failed to complete effectively at the time. These may be accompanied by physiological states of hyper- and/or hypo-arousal.

Assessment strategies, screening or self-report measures for complex PTSD per se are currently less widely available although those previously noted for PTSD[25] will cover the symptoms where the two sibling diagnoses overlap, see table 2, below. An additional helpful screening instrument for the presence of pathological (i.e. trauma-based) dissociation, especially when the trauma taxon calculation is employed, is the Dissociative Experience Scale (DES).[26]

Research has shown higher suicide risk in post-traumatic conditions,[27] with or without major depression; the earlier the onset of childhood sexual abuse the greater the suicidal intent.[28]

REFERRAL

Disclosure of the complex trauma history to the GP may be easiest for individuals when they feel safe enough to do so. However, a sense of confidence in others has been frequently »

Table 2

Proposed ICD-11 symptoms for PTSD and complex PTSD[8]

PTSD	Complex PTSD
Traumatic event (TE)	**Traumatic event (TE)**
Re-experiencing the TE (e.g. intrusive memories, flashbacks, or nightmares)	**Re-experiencing the TE** (e.g. intrusive memories, flashbacks, or nightmares)
Avoidance (of thinking about the TE, or of activities or situations reminiscent of the TE)	**Avoidance** (of thinking about the TE, or of activities or situations reminiscent of the TE)
Perception of current threat (e.g. hypervigilance or enhanced startle response)	**Perception of current threat** (e.g. hypervigilance or enhanced startle response)
Symptoms for at least several weeks	**Symptoms for at least several weeks**
Significant impairment in domains of function, e.g. personal, social, occupational etc	**Significant impairment** In domains of function, e.g. personal, social, occupational etc
	Emotional dysregulation Increased emotional reactivity, violent outbursts, reckless or self-destructive behaviour or prolonged dissociative states when stressed May also have emotional numbing, inability to experience pleasure or positive emotions
	Negative self-concept Persistent beliefs about oneself as diminished, worthless or defeated. Can be accompanied by pervasive shame or guilt
	Interpersonal disturbances Persistent difficulties sustaining relationships

shattered in the childhood of those with complex PTSD. Also, there may be current occupational disadvantages and environmental adversities such as housing needs not being met in a way that promotes a sense of safety. There may be domestic violence or abuse, deliberate self-harm, alcohol or substance misuse or risk-taking behaviour. The perceived lack of safety will require the individual's protective and defensive strategies to continue, limiting the space for disclosure of an abuse history and engagement in treatment.

The risk of emotional overwhelm will be too great, especially if the responses of healthcare personnel have been experienced previously as judgemental or dismissive. Having the clinical features resulting from complex trauma attributed to an innate personality disorder can feel invalidating and discourage further disclosure.

Options include referral to appropriate services or advice in terms of who to contact; these include non-statutory services or support groups. For refugees integration into a new society is a massive challenge which may be made all the more complicated by the sequelae of complex trauma, though clearly refugees may have a range of disorders or none at all. Consideration of their PTEs is important, though a primary consideration may well be more pragmatic issues such as housing or separation from family.

The management of complex PTSD is challenging at many levels, of long duration, and will likely require the input of specialist mental health services, especially if these are trauma-informed. Ongoing engagement with general practice is invaluable as therapy can itself destabilise individuals; an understanding of this and the provision of additional support may be beneficial.

'For some people post-trauma there will be a need to bear witness i.e. to give testimony and to have it heard'

For some people post-trauma there will be a need to bear witness i.e. to give testimony and to have it heard.[29,30] It may feel compelling for a GP who knows the patient to perform this role.[29] However, the role of the listener is very significant and complex, with therapists undertaking this role requiring clinical experience and good supervision to ensure they are not drawn into unhelpful reactions. Testimony can be considered to have elements of exposure and cognitive restructuring and similar training and cautions should apply.

MANAGEMENT

There have been a number of guidelines which are relevant to the treatment of adults with complex post-traumatic

Table 3

Classification dualism: changing post-trauma diagnoses in ICD and DSM

International Classification of Diseases (WHO)

ICD-10 [47]
- Contained the diagnoses: PTSD, and enduring personality change after catastrophic experience (EPCACE)

ICD-11[46] **due to be published in 2018**
- Working group has proposed sibling diagnoses of PTSD and complex PTSD. Acceptance that complexity of reaction to prolonged PTEs was not captured by EPCACE or PTSD
- Echoes the accruing research evidence of replicated differences after type 1 and type 2 trauma
- Narrowing of current PTSD diagnostic frame, focused on relatively small group of symptoms
- Traumatic stressor as gate criterion, with PTSD and complex PTSD in a horizontal relationship

Diagnostic and Statistical Manual (American Psychiatric Association)

DSM-IV [47]
- Contained diagnosis of PTSD
- 7 core symptoms organised across 3 criteria
- Included disorders of extreme stress not otherwise specified (DESNOS) under associated features of PTSD not as a distinct complex variant

DSM-5 [24]
- 20 core symptoms organised across 4 criteria
- Inclusion of a dissociative subtype
- Conservative review parameters quite different from the ICD-11 approach

Implications and complications of changing criteria

ICD-11 is not yet formally published - complex PTSD is a proposal
- Individuals likely to meet the diagnostic criteria for one classification system and not the other
- Different classification systems being used among mental health services/professionals and among research groups creating confusion
- Concern that many with severe complex trauma do not describe core symptoms of PTSD and therefore will not meet the diagnosis for complex PTSD
- Implications for psychological service provision as therapy approaches vary

reactions, see table 4, below. It is not surprising given its absence from psychiatric taxonomy that there have been few guidelines specifically addressing treatment for complex PTSD. Trauma specialists have been aware of the concept of complex PTSD since Herman's original description[31] and without specific guidelines until 2012 have often had to enter territory effectively beyond the guidelines.

The NICE guidelines[23] focused on PTSD which shares its core symptoms with complex PTSD; however, NICE notes its guideline does not apply to enduring personality change after catastrophic experience (EPCACE) or to dissociative disorders (i.e. complex post-traumatic reactions).

A phase-based approach is viewed by a majority of expert clinicians as integral to the treatment of complex PTSD[3] (see below), although crucially not all. [33,34]

Psychological therapies

Complex PTSD is polysymptomatic and requires approaches incorporating stabilisation, resourcing, processing of traumatic memories, and integration to enable healing. While NICE guidelines[23] recommend that all PTSD sufferers should be offered a course of either trauma-focused CBT (TF-CBT) or eye movement desensitisation and reprocessing (EMDR) the limitations of the empirical studies guiding this recommendation included the exclusion of complex reactions to trauma and the clinical effectiveness for TF-CBT having not been established for complex PTSD.[35] A number of expert-led therapies consistent with the existent neurobiological understanding of complex trauma sequelae have shown real promise [15,35] but empirical proof is needed. Modifications to treatment protocols of therapies such as EMDR allow its application beyond single-event PTEs.[36]

Phase-based treatment for complex PTSD is organised around three stages: safety and stabilisation; processing of traumatic memories, and reintegration. However, flexibility is key and processing can lead to more stabilisation being needed. The phase-based approach has obvious appeal as it emphasises the need not to activate overwhelming emotions if there is no safety net in place. Emerging therapies specifically designed to offer more robust scaffolding of stabilising supports allow earlier processing of trauma memories than a phased approach.[34]

Psychological therapies for complex PTSD are delivered by a wide range of staff both within the NHS and the non-statutory sector with the latter often organised around specific needs and groups of patients (e.g. victims of torture, rape, or childhood sexual abuse). Non-statutory services often offer diverse and skilled input, and those accessing these services are frequently those most disadvantaged, least likely to make use of NHS services or those who have had aversive experiences with the NHS. The latter may be related to their presentation being misunderstood (e.g. after self-harm [37]), the wrong treatment choice or limited sessions being offered[15,35] or appropriate services for complex PTSD not being available in the NHS.[15,35] The therapeutic relationship is crucial and challenging for all clinicians involved, and the loss of trust in authority figures may be a barrier to treatment or to referral to specialists.

'Phase-based treatment is organised around three stages: safety and stabilisation; processing of traumatic memories, and reintegration'

There is widely available training in emerging therapies for complex post-traumatic reactions, such as sensorimotor psychotherapy[38,39] or the comprehensive resource model.[34]

Therapy for complex PTSD will be extended by comparison with the 12-20 sessions suggested for less complex clinical PTSD presentations and rarely will meaningful work be completed in brief clinical contact. The duration of therapy will likely be 18-24 months; roughly analogous to that demonstrated as effective for borderline personality disorder.[40] Typically outpatient sessions will be weekly with more frequent or prolonged sessions when memory processing is occurring. There is a paucity of specialist inpatient units and admission to standard psychiatric units for more than risk management is unlikely to be helpful and may be experienced as invalidating.

Pharmacotherapy

The use of medication in complex PTSD tends to be in combination with psychotherapy, or when psychotherapy has been less than fully effective,[23] or through personal choice with some individuals both desperate for help and terrified of undertaking therapy.

Clinicians will need to be patient as typically finding the right medication, appropriate dose and/or combination takes careful titration and time. Individuals with complex PTSD may derive little or no benefit from SSRIs.

While information about medication prescription for PTSD or complex PTSD in the UK is not available NICE suggests that the most common prescriptions were for SSRIs and other antidepressants but also atypical antipsychotics. A survey in the USA[41] reported 41% of patients being prescribed benzodiazepines and 17% atypical antipsychotics.

Analysis has suggested some efficacy for the atypical antipsychotic olanzapine but not risperidone[42] but guidance is clear that benzodiazepines should be avoided.[42] Prazosin, a post-synaptic alpha-1 antagonist, may be helpful in reducing hyperarousal thus facilitating therapy as well as promoting improvement in sleep.[3] High arousal may be a factor in the suicidality of »

Table 4

Guidelines relevant to complex post-traumatic reactions

Complex PTSD
ISTSS Expert Consensus Treatment Guidelines for Complex PTSD in Adults[49]
PTSD (but relevant to complex PTSD)
● NICE. CG26[23]
● International Society for Traumatic Stress Studies[50]
● Clinical Resource Efficiency Support Team (CREST), part of the Northern Ireland Health Service[51]
● Australian Centre for Posttraumatic Mental Health, 2007 [52]
Dissociative disorders
International Society for the Study of Trauma and Dissociation[18]

key points

SELECTED BY

Dr Phillip Bland
GP with an interest in mental health, Dalton-in-Furness

While the common perception of post-traumatic stress disorder is of an individual suffering from a single traumatic event, clinicians need to be aware of those people who have been exposed to multiple potentially traumatic events (PTEs). Type 2 or complex trauma results from multiple or repeated traumatic events occurring over extended periods.

Complex trauma is often associated with other adversity and stressors such as neglect, loss or deprivation. For many, these traumas occur at a developmentally vulnerable time with the perpetrator often in a caregiving role; thus the trauma incorporates a betrayal of trust.

Disclosure can be a problem particularly with complex trauma such as sexual abuse or domestic violence, and is often incremental as trust with the clinician is formed. Sensitive assessment is needed as trauma victims can find it hard to articulate their experience and reassurance that an exhaustive description is not needed is helpful.

Patients who have experienced complex trauma should be assessed for the core symptoms of PTSD. In addition, patients should be assessed for disturbances in the three domains of emotional dysregulation, negative self-concept and interpersonal disturbances.

The management of complex PTSD is challenging and will normally require the input of specialist trauma-informed mental health services. Ongoing engagement with general practice is invaluable as therapy can itself destabilise individuals; an understanding of this and the provision of additional support may be beneficial.

Psychological therapies for complex PTSD are delivered by a wide range of staff both within the NHS and the non-statutory sector with the latter often organised around specific needs and groups of patients (e.g. victims of torture, rape, or childhood sexual abuse). The therapeutic relationship is crucial and challenging for all clinicians involved, and the loss of trust in authority or authority figures may be a barrier to treatment or to referral to specialists.

The use of medication in complex PTSD tends to be in combination with psychotherapy, or when psychotherapy has been less than fully effective, or for those who are desperate for help but terrified of undertaking therapy. Individuals with complex PTSD may derive little or no benefit from SSRIs but there is some evidence that olanzapine may be effective.

some patients although low arousal, low mood states may also be relevant.

The capacity to fluctuate rapidly and uncontrollably between extremes of physiological activation means that pharmacological interventions need to be monitored carefully for their impact on suicidal thinking and behaviour.[44]

MONITORING AND FOLLOW-UP

The NICE guidelines[23] advocate chronic disease management models for individuals who achieve only partial or negligible improvement with treatment. The guidance suggests regular routine contact with members of the primary care team and regular, if not frequent, reviews from the GP.

There would appear to be at least three caveats to this. First, primary care should consider a discussion with specialist services about review as treatment evolution continues and emerging therapies may offer considerable benefits for often the most ill patients. Second, the guidelines are not specifically for complex PTSD, and third the lack of effectiveness of therapy models not designed to meet the challenges of complex PTSD or dissociative disorders is hardly surprising and would not truly represent treatment resistance. NICE guidelines note that a lack of improvement during treatment does not label the individual as a poor responder or resistant to treatment; rather, it may be that they have been offered the wrong treatment or combination of treatments.[23] The wrong therapist, using the wrong therapy at the wrong time may in fact be psychonoxious. GPs will also have a crucial role in assessing the impact on the family.

CONCLUSION

The 'theoretical umbrella' of PTSD[45] is to be expanded to include complex PTSD. The impact on many physical, psychological, functional and interpersonal domains means that primary care will have a crucial and central role in identifying and assisting these patients in accessing support, care and treatment. It is to be hoped that the inclusion of complex PTSD in ICD-11 [45] will be of substantial direct clinical importance but may also help the organisation and evaluation of clinical services as the interventions, their duration, and the therapeutic skills required are markedly different by comparison with PTSD. The current status of evidence for complex PTSD is one of experimentation to discover the most effective therapies, and for whom they work best.

REFERENCES

1 Weathers F, Keane T. The criterion A problem revisited. *J Traum Stress* 2007;20:107-121
2 Terr LC. Childhood traumas: An outline and overview. *Am J Psychiatry* 1991;148 (1):10-20
3 Schmid M, Petermann F, Fegert JM. Developmental trauma disorder: pros and cons of including formal criteria in the psychiatric diagnostic systems. *BMC Psychiatry* 2013;13:1-12
4 Copeland W, Keeler G, Angold et al. Traumatic events and posttraumatic stress in childhood. *Arch Gen Psych* 2007;64:577-84
5 Kessler RC, Sonnega A, Bromet E et al. Post-traumatic stress disorder in the national comorbidity survey. *Arch Gen Psych* 1995;52(12):1048-60
6 Cloitre M. The "one size fits all" approach to trauma treatment: should we be satisfied? *Eur J Psychotraumatol* 2015 May 19;6:27344. doi: 10.3402/ejpt.v6.27344
7 Cloitre M, Stolbach BC, Herman J et al. A developmental approach to complex PTSD: childhood and adult cumulative trauma as predictors of symptom complexity. *J Traum Stress* 2009;22:399-408
8 Cloitre M, Garvert D, Brewin C et al. Evidence for proposed ICD-11 PTSD and complex PTSD: A latent profile analysis. *Eur J Psychotraumatol* 2013 May 15;4. doi: 10.3402/ejpt.v4i0.20706
9 Corrigan G. Mud, Blood and Poppycock: Britain and the Great War. Cassell Military Paperbacks: Weidenfeld Military. 2007
10 Dube SR, Anda RF, Felitti VJ et al. Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from the adverse childhood experiences study. *JAMA* 2001;286:3089-96
11 Edwards VJ, Holden GW, Felitti VJ et al. Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the adverse childhood experiences study. *Am J Psychiatry* 2003;160:1453-60
12 Felitti VJ, Anda R, Nordenberg D et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *Am J Prev Med* 1998;14:245-58
13 Kendler KS, Bulik CM, Silberg J et al. Childhood sexual abuse and adult psychiatric and substance use disorders in women: An epidemiological and cotwin control analysis. *Arch Gen Psych* 2000;57(10):953-59
14 Lanius UF, Paulsen S, Corrigan FM. Neurobiology and treatment of traumatic dissociation: towards an embodied self. Springer Publishing. New York. 2014
15 Corrigan FM, Hull AM. Recognition of the neurobiological insults imposed by complex trauma and the implications for psychotherapeutic interventions. *Br J Psych Bull* 2015;39:79-86
16 McManus S, Meltzer H, Brugha T et al. Adult psychiatric morbidity in England in 2007: results of a household survey. The NHS Information Centre for Health and Social Care. 2009
17 Ferry F, Bolton D, Bunting B et al. The economic impact of post traumatic stress disorder in Northern Ireland: A report on the direct and indirect health economic costs of PTSD and the specific impact of conflict in Northern Ireland. 2011. www.nictt.org
18 Chu JA, Dell PF, Van der Hart O et al. International Society for the Study of Trauma and Dissociation guidelines for treating dissociative identity disorder in adults, Third Revision. *J Trauma Dissociation* 2011;12:115-87
19 Finkelhor D, Ormrod R,Turner H. Poly-victimisation: A neglected component in child victimisation. *Child Abuse Neglect* 2007;31:7-26
20 Kaffman A. The silent epidemic of neurodevelopmental injuries. *Biol Psych* 2009;66:624-26
21 Solomon SD, Davidson JRT. Trauma: prevalence, impairment service use and cost. *J Clin Psychiat* 1997;58:5-11
22 Blake DD, Weathers FW, Nagy LM et al. The development of a clinicians-administered PTSD scale. *J Traum Stress* 1995;8:75-90
23 National Institute for Health and Care Excellence CG26. Post-traumatic stress disorder: The management of PTSD in adults and children in primary and secondary care. NICE. London. 2005
24 American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. American Psychiatric Association: Washington, DC. 2013
25 Hull AM, Curran SA. Be vigilant for post-traumatic stress reactions. *Practitioner* 2016;260(1793):19-23
26 Bernstein EM, Putnam FW. Development, reliability, and validity of a dissociation scale. *J Nerv Ment Dis* 1986;174(12):727-35
27 Kessler RC. Post-traumatic stress disorder: The burden to the individual and to society. *J Clin Psychiat* 2000;61(5):4-12
28 Lopez-Castroman J, Guillaume S, Olié E et al. The additive effect on suicidality of family history of suicidal

behavior and early traumatic experiences. *Arch Suicide Res* 2015;19(2):275-83
29 Hull AM. A long-term follow-up study of survivors of the Piper Alpha Oil Platform Disaster. Doctoral Thesis: University of Aberdeen. 2013
30 Cienfuegos AJ, Monelli C. The testimony of political repression as a therapeutic instrument. *Am J Orthopsychiat* 1983;53:43-51
31 Herman JL. Complex PTSD: a syndrome in survivors of prolonged and repeated trauma. *J Traum Stress* 1992; 5:377-391
32 Cloitre M, Courtois CA, Charuvastra A et al. Treatment of Complex PTSD: Results of the ISTSS Expert Clinician Survey on Best Practices. *J Traum Stress* 2011;24:615-627
33 De Jongh A, Resick PA, Zoellner LA, et al. Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depress Anxiety* 2016;00:1-11
34 Schwarz L, Corrigan F, Hull AM, Raju R. The Comprehensive Resource Model: Effective therapeutic techniques for the healing of complex trauma. Routledge. London & New York. 2016
35 Corrigan FM, Hull AM. Neglect of the complex: why psychotherapy for post-traumatic clinical presentations is often ineffective. *Br J Psych Bull* 2015;39:86-89
36 Paulsen S. Looking through the eyes of trauma and dissociation: an illustrated guide for EMDR therapists and clients. Booksurge Publishing.Charlston, South Carolina, USA. 2009
37 Hull AM, Corrigan FM. Self harm and the emergency department. *BMJ* 2016; 353:i1150
38 Ogden P, Minton K, Pain C. Trauma and the body. A sensorimotor approach to psychotherapy. W.W. Norton and Company. New York. 2006
39 Ogden P, Fisher J. Sensorimotor psychotherapy: interventions for trauma and attachment. WW Norton & Co. New York. 2015
40 Bateman A, Fonaghy P. Eight-year follow-up of patients treated for borderline personality disorder. Mentalisation-based treatment vs. treatment as usual. *Am J Psychiat* 2008;165:631-638
41 Mellman TA, Clark RE, Peacock WJ. Prescribing patterns for patients with posttraumatic stress disorder. *Psych Serv* 2003;54:1618-1621
42 Bisson JI, Cosgrove S, Lewis C, Roberts NP. Post-traumatic stress disorder. *BMJ* 2015; 351:h6161
43 George KC, Kebejian L, Ruth LJ et al. Meta-analysis of the efficacy and safety of prazosin versus placebo for the treatment of nightmares and sleep disturbances in adults with posttraumatic stress disorder. *J Trauma Dissoc* 2016;17(4):494-510
44 Corrigan FM, Fisher JJ, Nutt DJ. Autonomic dysregulation and the window of tolerance model of the effects of complex emotional trauma. *J Psychopharmacol* 2011;25(1):17-25
45 Joseph S, Williams A, Yule W. Understanding post-traumatic stress: A psychological perspective on PTSD and treatment. John Wiley Ltd. Chichester. 1997
46 Maercker A, Brewin CR, Bryant RA et al. Diagnosis and classification of disorders specifically associated with stress: proposals for ICD-11. *World Psychiatry* 2013;12(3):198-206
47 World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders. Clinical descriptions and diagnostic guidelines. WHO. Geneva. 1992
48 American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. American Psychiatric Association. Washington, DC. 1994
49 Cloitre M, Courtois CA, Ford JD et al. The ISTSS expert consensus treatment guidelines for complex PTSD in Adults. 2012 https: www.istss.org/
50 Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies. Eds. EB Foa, TM Keane, MJ Friedman, JA Cohen, 2015. Guilford Press. New York & London. 2015
51 Clinical Resource Efficiency Support Team, part of the Northern Ireland Health Service (CREST): The management of post traumatic stress disorder in adults. CREST Secretariat: Belfast. 2003
52 Australian Centre for Posttraumatic Mental Health. Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder: Practitioner Guide. National Health and Medical Research Council: Australian Government. 2007

Useful information

The UK Psychological Trauma Society
The UKPTS provides a wide range of resources and a list of trauma services in the UK
www.ukpts.co.uk

Trauma Training in Scotland (TTIS)
TTIS provides a wide variety of training opportunities for therapists interested in psychological trauma
www.ttis.org.uk

We welcome your feedback

If you would like to comment on this article or have a question for the authors, write to:
editor@thepractitioner.co.uk