



Trauma-informed care and practice for eating disorders: personal and professional perspectives of lived experiences

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Abstract

Background Learning about the life stories of patients who have experienced a severe eating disorder (ED), but also traumas that led to PTSD, dissociative disorders, and other comorbidities, has great value to clinicians in their efforts to deliver trauma-informed care (TIC). Many investigators have been researching and writing about these issues for years, and strong scientific evidence has emerged, indicating that trauma is a significant risk factor for the development of EDs, particularly in its bulimic forms.

Purpose Peer-reviewed literature contains scarce input from people with “lived experiences”. Hearing and “sitting with” such individuals are extremely useful in clinical practice and research. Further, encouraging patients to put words to their pain has recognized therapeutic effects. These lived experiences are often demonstrative of key elements of what professionals need to know about evaluating and treating patients with EDs and co-occurring trauma-related disorders.

Method/results The principal author invited two courageous recovered ED advocates and writers (June Alexander and Jenni Schaefer), who have gone public about their ED–PTSD experiences, to recount their life stories and treatment experiences (both positive and negative). Dr. Brewerton then offers his professional perspectives on the course of their treatment experiences put in the context of ongoing relevant clinical research.

Conclusion Their and other patients’ experiences have great power to guide professionals toward trauma-informed care, more integrated practice, and theoretically improved outcomes.

Level of evidence Level V.

Keywords Eating disorders · Anorexia nervosa · PTSD · Dissociative disorders · Patients · Professional–patient perspectives · Comorbidity · Treatment

“The cave you fear to enter holds the treasure you seek.”-
Joseph Campbell

Dr. Brewerton: introduction

Listening to and/or reading the life narratives of my patients who have experienced a severe eating disorder (ED) and one or more “big T” traumas, i.e., exposure to actual or

threatened death, serious injury, or sexual violence, that led to the development of posttraumatic stress disorder (PTSD), dissociative disorders, and other comorbidities, has greatly influenced my career and practice [1]. Trauma has been increasingly recognized as a significant risk factor for the development of EDs, particularly bulimic forms [2–10]. However, the mental health community has heard little from people with “lived experience”. Their stories are inevitably demonstrative of what professionals need to know about treating patients with EDs, co-occurring PTSD and other trauma-related disorders, including increasing awareness of and developing mastery over emotional reactions and countertransference issues. This paper relates the life stories of two courageous individuals and established authors/advocates who have publicly shared their ED-trauma-PTSD experiences. Their stories have great power to guide us as professionals toward improved, more integrated trauma-informed

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care and practice. They also teach that despite obstacles and mistakes, remission and recovery are possible.

June Alexander's perspective

Healing from an ED and trauma that starts in childhood is possible, even when the opportunity for early intervention is missed and family support is not forthcoming. Traumatic factors adding complexity to my ED include birth trauma, childhood sexual abuse (CSA), emotional abuse and physical injuries from a severe motor vehicle accident (MVA). It is important to place the early childhood phase in context. I have no direct memory (dissociative amnesia) of the sexual abuse when I first sought help for my mental state at age 28 in 1979, the impact of this was buried under layers of secrecy, shame, and stigma. At age 11, I became intensely anxious and developed anorexia nervosa, restricting type (AN-R). Eighteen months later I transitioned to a binge-purge-restrict pattern, gained weight and was considered 'normal'. Yet, my brain was not healed [11].

At age 16, in 1967, a man won my heart, but I remained insecure. For the first time, 'I'm depressed' appeared in my diary. Calorie counting was my sole tool for managing daily life. I became engaged at 19 and married at 20. Anorexia nervosa (AN) came too.

One morning, shortly after the wedding, I binged on ten scones to numb anxiety before leaving for work. Lacking concentration while driving, I collided with a large truck, losing consciousness and sustaining cervical spine injuries. Apart from physical injuries, other symptoms, immediate and long-term, included: nightmares; helplessness; night sweats, broken sleep, panic attacks; hypervigilance and flashbacks. Medication was ineffective, and no counseling was offered. I became withdrawn and detached from others who misread this avoidance as self-centeredness. Mood swings worsened. I was self-harming, unable to settle, and suffered severe headaches. Nightmares continued for several years; the other symptoms, for decades (16 years later, one neurologist attributed ongoing problems to the MVA, another blamed stress, another suggested migraines). Nobody suggested PTSD.

There was no correct diagnosis and no counseling. I looked okay, was expected to be okay. Every day was a battle with my secret friend and coping tool, the ED. My first pregnancy was unplanned, and I proceeded to bear four babies within 4 years. Pregnancy provided a milepost in my mind and diary: 9 months to get myself 'in order', cease bingeing, eat normally, be normal; but following each birth, the binge-starve cycle worsened, and depression and anxiety increased. In line with my experience, pregnancy has been documented to be protective in pregnant women [12]. A tubal ligation was scheduled following baby number

4, and thereafter, at age 26, descent into chronic depression and anxiety was swift. This was my darkest time. At age 28, fearing a diagnosis of madness but compelled by deep love for my children, I disclosed my suicidal thoughts with a doctor for the first time. Four years of misdiagnosis and incorrect treatment ensued, and symptoms worsened when, at age 30, my sister, in marital crisis, described how a cousin had entered our bedroom and raped us when she was eight and I was five (see Table 1). Apart from two life-like dreams in adulthood, this period has remained blocked out in my memory (dissociative amnesia). When my sister, who refused professional help, insisted we keep the secret from our parents and authorities, my self-harming increased.

Shortly after, a referral to a Melbourne psychiatrist marked the start of my recovery. He diagnosed AN, chronic anxiety and depression. Despite assessment of my recovery chances as only 'fair,' I immediately felt hopeful and that I could trust 'Prof'. I credit him with saving my life, partly by calming my brain with medication, allowing time to work through layers of issues, and to learn new thinking processes and coping skills. The process was slow and grueling, with the loss of my marriage and family of origin becoming part of the price for gaining my life.

I was 47 years old when a dietician, trained in mindfulness, explained the concept and offered guidance in identifying and separating illness thoughts from true thoughts. This critical insight relieved much shame and self-loathing for until now I had believed I was responsible for all of my thoughts, which confirmed daily that I was a weak person. The dietician explained externalization, and also recommended the book, 'Goodbye Ed Hello Me', by Jenni Schaefer, which strongly connected with my experience and strengthened my desire for recovery. Slowly I overcame guilt and fear to eat three meals and snacks daily. After 30 years of struggle, this was remarkable. Sessions with this dietician (1998–2008) assisted in silencing the ED voice through gradual adaptation to regular nutrition and led to marked decline in anxiety and mood swings.

In 1998, technological advancements enabled an operation that relieved 27 years of chronic pain attributed to the 1971 MVA. A titanium rod was buttressed in my cervical spine. Importantly, the neurosurgeon, besides repairing spine and body, cared about my mind. He liaised with my psychiatrist, insisted I repeat 'I deserve to be treated with respect', as a mantra. He cared about my state of mind and safety, insisted I resume driving to bolster independence, and to 'walk tall' to deflect stigma in the workplace. With each obstacle overcome, self-belief strengthened. Instead of self-doubt and self-harm, my diary began to record acts of self-love, like going for a swim. For decades, pieces of my life jigsaw appeared unexpectedly, triggering relapse. The diary proved to be a means for communication and reflection with my psychiatrist.

Table 1 June's timeline

1950: Birth (6 weeks premature; long, difficult labor—mother unable to have more children)
1954–1956: Cousin rapes sister and myself during summer vacation; no conscious memory
1960–1962: Teacher/cousin lodges in family home; is my teacher, age 9–11. Anxiety increases menstruation starts age 11—anxiety intensifies when school doctor visit is announced
1962: AN (restrictive) develops; after doctor visit I remain too afraid to eat
1965+: AN-R (restrictive) transitions to AN-BP (binge/purge)
1971: Marriage. Serious road trauma, cervical spine injury/concussion—no counseling
1972–1976: Four babies; post-partum depression, anxiety, ED intensifies
1979: Suicidal, reveal ED/depression secret to GP for first time
1979–1983: chronic hypoglycemia diagnosed; misdiagnosis of underlying PTSD and ED
1983–2007: diagnosis of AN, chronic anxiety + chronic depression—treatment comprises psychodynamic psychotherapy/psychopharmacology
1984: divorced. Regular sessions (sometimes thrice weekly) with psychiatrist, plus GP, dietician trained in mindfulness, minister of religion. Caregivers are my children, their dad, best friends
1998: 6 cm titanium rod insert C4-T1—alleviating long-term physical pain (1971 road trauma)
2000: Learn parents knew about child sexual abuse but no action taken; progressively alienated
2002: Hashimoto's Disease diagnosis/medication prescribed; mood regulation improves
2006: Ease off all medication reanxiety and depression; cease regular psychiatric counseling
2007–2017: Involved in disorder advocacy, as patient's voice. Write memoir and eight books on ED
2009–2010: thyroid operation; parents die relief—no longer hoping for acceptance
2016: Resume small-dose anxiety medication, occasional psychiatric counseling
2017: complete PhD, enjoying physical, emotional and mental health; http://www.thediaryhealer.com

There is hardly a right time to disclose long-held secrets. At age 49, I learned the truth about the CSA but after momentary disclosure, my family clammed up again. My mother said: 'what makes you think you are so special, it happens to other people too'. To hear her describe the sexual abuse in this way was shattering. Without the self-healing work achieved with my treatment team to that point and the intense therapeutic support offered in the months following, I might not have survived the shock of the rape revelation. Family rejection and alienation had triggered deep unworthiness and led to entrenched ED symptoms over many years. I had binged and starved to avoid and suppress painful emotions. Now, however, the therapy helped me see I was not 'the problem in the family', I was not the bad person, after all. Renewed intensive counseling helped to prevent fresh regression. As well, my children, now in their 20 s, offered emotional support, helping me to look beyond the pain of family of origin rejection and focus on beauty and places that I had expressed desire to see. The rapist would remain free. To write down my traumatic experiences, place them in the context of my life and process pain, I wrote, a lot, using the diary as a reflection and healing tool with my treatment team, family and friends [13].

Beside regular sessions with a psychiatrist, dietician, minister, and neurosurgeon, my children had now joined their dad as my carers. At age 52, medication for the autoimmune condition, Hashimoto's Disease, further advanced general feelings of wellness. Development of mindfulness skills to confront fears and set boundaries at my daughter's wedding

in 2005, led to an epiphany in which I became aware that, 44 years imprisoned in AN, I had reconnected with 51 percent authentic 'me'. From this point, healing accelerated and the birth of my first grandchild further nurtured acceptance, bonding and unconditional love with self and others. I now felt ready to write a memoir as healing for myself and possible inspiration for others. To write my memoir, I wanted to be as authentically 'me' as possible. With Prof's guidance over 7 months, I eased off 30 years of anti-depressant medication. The process of writing *A Girl Called Tim* was both cathartic and healing [11]. By now, the psychiatrist–patient relationship was transitioning to one of enriching discussion. I became an advocate and wrote more books.

Due to severe and enduring AN and early traumas (see Table 1), I had missed out on normal child-adolescent-young adult development, so my healing journey involved granting myself permission to experience these vital phases of thought and social development 40 years later [14]. Prof gave assurance that making mistakes was okay. This was all part of the learning process.

By 2015, both 'Prof' and my neurosurgeon had retired when I found a friend, unconscious, at the bottom of a staircase, blood oozing from a head wound. The experience of calling emergency services, waiting for paramedics, visiting ICU, seeing my friend wearing a cervical collar, like I wore following my MVA, triggered flashbacks. I could not sleep. Neuropathic pain developed, causing loss of use of my right arm. After 4 months in the hospital without a diagnosis and feeling depressed, I contacted my retired neurosurgeon.

He said ‘you are over-medicated, you have been in hospital far too long; and are rapidly becoming an invalid’. Other specialists disagreed and insisted symptoms were not psychosomatic, but when my original neurosurgeon said ‘June, you’re okay’, I began to think more positively. This was what my body and mind needed to hear. They synced and did a U-turn. Gradually I ceased all medication, and movement in my arm returned. The physical pain and incapacitation had been my body’s way of coping with shock and anxiety, similar to when AN developed at age 11.

Today, my children and treatment team are convinced my emotional pain manifests in physical symptoms. They are right. Another example was development of chronic urticaria. Following the PTSD episode and observing the effect on my children, I began to see a new psychiatrist in 2016, who prescribed agomelatine for anxiety. Interpersonal relationships remain a work in progress with advancement reflected in greatly improved health, wellbeing and vitality.

I believe if my PTSD and dissociative symptoms had been noted sooner, my health challenges might have been treated more quickly and effectively. None of the specialists early on inquired about CSA or other trauma, which contributed greatly to my anxiety and ED. In my experience, the therapeutic alliance, that is, the trust that forms between therapist and patient is as important as the treatment itself, which has been identified as a crucial common factor in psychotherapy [15]. For me, writing a diary has helped to maximize the benefits of this trust [13]. Writing about the traumas and discussing this with my treatment team allowed painful events

and experiences to be revealed, processed and revised to promote self-growth [16, 17].

Jenni Schaefer’s perspective

June’s and my stories are similar—yet different. We both endured birth traumas and suffered with high anxiety at a young age (see Table 2). Also, similar to June, throughout my teens and early twenties, I developed AN, binge–purge type (AN-BP). Unfortunately, also like June, my ED was missed and dismissed for far too many years. My trauma and subsequent PTSD was missed and dismissed for much longer (see Table 3) [18–20].

One of the biggest differences in June’s and my journeys is that my sexual trauma—a rape at the hands of a boyfriend—occurred 5 years after being in outpatient treatment for my ED. Important to note, prior to the rape, I had experienced five solid years of continuous ED treatment with clinicians practicing evidence-based treatment. ED recovery is not a straight line, so I was not fully recovered when the trauma occurred.

In fact, my trauma happened in the middle of an ED relapse when I was feeling hopeless and depressed after bingeing and purging. I was numb. In retrospect, I was dissociated. This is when my boyfriend raped me. It took 10 years for me to say that word, i.e., “rape”. A turning point in my eventual treatment would be to own that word, to speak it out loud. This was my first experience with sexual intercourse.

Table 2 Jenni’s timeline

1976:	Birth trauma due to failure to administer RhoGAM (needed for Rh-negative mothers)
1978:	Highly anxious
1980:	First negative body image thoughts
1982:	Begin to restrict high calorie foods
1988:	More eating disordered behaviors develop, including bingeing
1990–1994:	EDNOS, although did not seek help (high school)
1994–1998:	AN (binge/purge type), although not diagnosed (college)
1999:	Seek help for AN (b/p)
2003:	Rape occurs, although not identified as a trauma (not fully recovered from AN)
2003:	Bingeing/purging intensifies immediately after trauma
2004:	No longer relapsing into ED behaviors; significantly recovered
2006:	Nineteen sessions of EMDR, although therapist never uses the word “rape” or PTSD
2006–2012:	Therapy with various professionals regarding dating (describing PTSD symptoms yet not diagnosed; misdiagnosed)
2009:	Fully recovered from ED
2012:	Begin dating future husband
2012–2013:	Full-blown PTSD; married 2013
2013:	Somatic experiencing therapy
2013:	Diagnosed self with PTSD
2014:	Prolonged exposure therapy (with CPT)
2015:	Added DBT and ACT and other alternative therapies; PTSD remission
2016:	Enjoying physical, emotional and mental health; http://www.jennischaefer.com

Table 3 Common reasons why some providers avoid screening and/or treating eating disorder patients for trauma and PTSD

Reluctance to inquire about traumatic events and symptoms because these questions are not a part of the clinician's or program's standard intake procedures
Underestimation or lack of appreciation of trauma's impact on physical and mental health
Distorted perception of what qualifies as sexual assault (e.g., rape, molestation) or other forms of trauma
Failure to recognize common symptoms associated with PTSD
Belief that treatment of the substance use disorder (SUD) and/or ED issues needs to occur first and exclusively, before treating other disorders
Belief that treatment should focus solely on presenting symptoms rather than exploring the potential origins or aggravators of symptoms
Lack of training and/or feelings of incompetence in treating trauma-related problems
Not knowing how to respond therapeutically to a report of trauma
Fear that a probing trauma inquiry will be too disturbing (clinician's avoidance)
Not using common language that will elicit a report of trauma (e.g., asking if they were abused as a child without describing what is meant by abuse)
Concern that if disorders are identified, treatment will be required that the therapist/program does not feel capable of providing [21]
Insufficient time for assessment to explore trauma histories or symptoms
Untreated trauma-related symptoms of the clinician, other staff members, and administrators

Like countless women, I denied the rape. This was easy to do when several therapists minimized, one referring to it as “the incident”. Others said, “It sounds to me like a guy who just wanted to have sex with his girlfriend”, and, “You must have been abused as a child, which is why you put yourself in that situation”. Not all individuals with EDs have been abused as children. This lack of trauma-informed care is dangerous to patients who already lack the capacity to come to terms with their own traumas.

Today, thanks to concepts I learned from reading about cognitive processing therapy (CPT), an evidence-based treatment for PTSD, I better understand my denial of the rape [22, 23]. At the time, it was easier for me to change the event—to make the sexual encounter okay—than to face that fact that I live in a dangerous world where someone I love can hurt me on such a deep level. Since I made the event okay, I stayed in the abusive relationship, being re-traumatized. My brain registered: intimate relationships are dangerous.

The only reason I can write and speak about my trauma now is because of my eventual treatment for PTSD, which focused on prolonged exposure (PE) therapy—a robust evidence-based PTSD treatment [24, 25]. PE taught me that I do not need to be afraid of a memory.

Sharing my trauma as a part of PE for the first time was excruciatingly difficult. I hyperventilated and had a panic attack. The only other time I have hyperventilated and had a panic attack was an attempt to skydive. Many might say that is an adaptive response. But, why did my body react to a decade-old memory in the same way as plunging out of an airplane?

PTSD can scientifically be looked at as a pathological fear reaction [26–28]. For over 10 years, I had not processed the trauma, so my injured, hypervigilant brain had labeled benign objects, people, and places as dangerous. Anything

that reminded me of the rape—in the slightest way—set off a fire alarm. Receiving wedding invitations was a frightening, anger-filled experience. Why did my brain register an alarm for a benign piece of paper? Why did I startle? Because I had planned to marry that boyfriend, my trauma-injured brain labeled weddings and all things related as dangerous. So, I avoided, and this long-term, ongoing avoidance perpetuated fear and anxiety.

After the rape, I used my ED behaviors to mitigate the painful emerging symptoms of PTSD. I binged more; I purged in more violent ways. Even so, due to plenty of psycho-education and learning numerous self-coping skills, I eventually transitioned into a more solid recovery from my ED. Looking back, I see why: (1) I broke up with the abuser, so I was no longer re-traumatizing myself; (2) I released my first book, *Life Without Ed* [29], marking the biggest step in accountability in my recovery. (3) To heal from certain PTSD symptoms, like the startle response, I received eye movement desensitization and reprocessing (EMDR), another evidence-based treatment for PTSD [30, 31].

Importantly, full recovery from ED is possible and I want to emphasize that I did not—during the intense work of trauma treatments—relapse into my ED. This finding has been supported in a recent pilot study [32].

The life event that ultimately triggered full-blown PTSD was a wedding engagement and subsequent marriage. Why did I develop PTSD when only 8–20% of those exposed to trauma develop the disorder? Some predisposing factors for PTSD are similar to those for EDs, including prior mental illness (e.g., generalized anxiety disorder, ED), and exposure to prior trauma (e.g., birth trauma, child maltreatment). A family history of mental illness is also a predisposing factor; my grandmother suffered from bipolar disorder. Women are twice as likely to develop PTSD as men (predisposing). And, we know that EDs more often affect women than men.

The fear circuitry in people with EDs is turned up [10]. Piling fear upon fear is an excellent recipe for PTSD (predisposing). To add further risk in my situation, rape, a strong precipitating factor, is one of the most likely events to lead to PTSD. The list of why I was vulnerable to developing PTSD goes on and on. I was dissociated during the trauma (precipitating); post-trauma, I had negative appraisals of the rape, a common perpetuating factor. I am a horrible person, I am gross. I stayed in the situation where I was being abused (perpetuating). Another perpetuating factor is that I battled physical illnesses as a direct result of the rape. While social support is protective against developing mental illness, I did not have the level I needed (perpetuating factor). Well-meaning doctors and therapists made mistakes, missing some symptoms and dismissing others. Underdiagnosis and misdiagnosis of PTSD are common [18–20]. Again, trauma-informed care is crucial [10].

Why did my ED treatment team miss the trauma? One reason was we were focusing on the necessary job of re-feeding and nourishing my brain. I had not walked into anyone's office saying specifically that I had been raped. In denial. I needed someone to ask questions about the experience like, "Was the sex consensual?" No one did. I went to sessions completely distraught, expressing negative appraisals like extreme guilt and sadness, but clinicians blamed this on my upbringing in a particular church. Now, I know that attentional bias is common in mental healthcare and that widening our gaze, getting curious and seeing beyond our tunnel vision, is essential for solid treatment.

During my ED treatment, years prior to the rape, I was sent to a hypnotherapist to "find the trauma", again, assuming it must exist if I battled AN. Later on, another therapist—in a higher level of care setting specializing in PTSD—said that, like her, I must have been abused as a child and was just coming to the age to remember it. Apparently, I was at the age that she was when she remembered CSA. To manage symptoms, one clinician suggested that I drink more alcohol!

Ten years of therapy passed before someone said I had been raped. Ten years passed before I realized I had PTSD. My EMDR therapist chose not to use these words, because she said that she likes to use the words that the patient walks in with. I did not have the words to use. PTSD can impact Broca's area in the brain that negatively affects word usage. I needed someone to give me a language, so I could start getting better.

Many clinicians told me that it was "better to do it" without medication, but for both my ED and PTSD I needed medication. Interestingly, the same medication was helpful for both problems. I took an anti-psychotic ziprasidone for 3 months each time, 12 years apart. Similar to June, I had thyroid issues. The endocrine system gets perturbed with PTSD [33, 34]. My thyroid medication dosage, which had

been stable for years, tripled in less than 9 months despite regular eating. Finding the right thyroid dosage improved my mood and led me closer to healing.

How did I finally realize I had PTSD? Dr. Google. I searched online for the words "exaggerated startle response", and was astounded by the multiple references to PTSD. For me, a diagnosis points to treatment. Again, trauma-informed care might have provided me with this answer much earlier. With a diagnosis, I knew to seek evidence-based treatments and learned about PE. In my treatment, PE was accompanied by alternative treatments like acupuncture and massage. Of course, I believe the early round of EMDR helped as well. My PTSD recovery was a puzzle. While PE was a large puzzle piece, others included acceptance and commitment therapy, dialectical behavior therapy, and somatic experiencing [35–37].

There may be a problem with dissemination of PE because people see how distressing it can be at first with clients [38]. As much as I disliked hyperventilating in that first session, I felt relief afterward. I faced the memory and was still okay. When my therapist and I got off track with PE, I even pleaded with him to get back on track. Here is my journal entry about PE: "Listening to my trauma script reminds my brain that this happened in the past. My brain feels like it's actually rewiring. It's like the trauma script is keeping my brain on line".

My PE therapist measured my physiological reactions, including skin conductance and heart rate. He showed diagrams of how my arousal level increased during exposures, but, importantly, would proceed to decrease. A key part of PE is continuing the exposure until anxiety decreases. With physiological measures, I could see that not only is PTSD real but also that I was getting better.

Today, I am healthier, stronger, and happier than ever before. The nightmares are gone. I have experienced significant posttraumatic growth [39–41]. I am no longer afraid.

Dr. Brewerton's commentary

Like June, I grew up in the 1960s, and in my lifetime, I have witnessed countless changes in the field, including an emerging awareness of the stark realities of child abuse and trauma. When I was in medical school (1974–1978), Freedman and Kaplan's Textbook of Psychiatry stated that incest was rare and did not occur more often than 1 in 1.1 million people [42]. Child sexual abuse (CSA) was essentially not acknowledged by psychiatry. Freud had retracted the seduction hypothesis of hysteria in favor of Oedipal issues and fantasy (1896) [43, 44]. Not until the late 1970s and 1980s was the reality of CSA rediscovered. Since then, this field has exploded, and we have realized that violence is all around us, especially interpersonal [45–47]. Yet violence

remains secretive and shameful. Accordingly, we still do not know the true prevalence of child maltreatment and sexual abuse, because many victims do not disclose. Nearly three-quarters of child victims do not tell anyone for at least a year. Forty-five percent do not tell anyone for at least 5 years [48, 49]. And we know from good retrospective studies that it is common to hide trauma from self and others for internal and external reasons [50]. One in four women and one in six men have a history of CSA before 18 years old [51, 52]. The prevalence is probably more common than that, because it tends to remain shame-based and hidden. Additionally, there is the phenomenon of dissociative amnesia in the context of “betrayal trauma”, which was the case for June in that her cousin and parents betrayed her, failed to protect her, and were callous to its effects [53]. However, had her sister and parents not confirmed her CSA, she still may not have known. Notably, upon June learning of the truth, she developed delayed PTSD. We have learned that there are many “big T” traumas that may trigger PTSD or PTSD symptoms, e.g., sexual abuse/harassment, physical abuse/neglect, emotional abuse/neglect, combat, witnessing violence, domestic violence, teasing/bullying, racial discrimination, disasters, and accidents, which June noted [45]. The Substance Abuse and Mental Health Services Administration defines trauma in terms of the three “E’s”: Event(s), Experience(s), and Effect(s) [54]. These effects are essentially the psychiatric disorders, including EDs and their symptoms that are now known to be significantly higher in traumatized individuals.

Trauma and PTSD are highly associated with the binge-purge forms of EDs and not as much with AN-R [6, 9]. Notably, both June and Jenni developed binge-type symptoms. As Jenni noted, not all people with EDs have been traumatized, but nevertheless clinicians need to be “trauma-informed” and have a high index of suspicion of trauma-related disorders. One of the problems that both June and Jenni note is that some clinicians did not ask them about traumatic events, experiences or effects. Having talked to many clinicians over the years, it is clear that many are afraid to ask. Sometimes programs are collectively afraid to ask, because they do not want to “open a can of worms.” They are afraid that ED symptoms or self-harming behaviors/suicidality will worsen or that they would not be able to cope (see Table 3) [55].

How does this fit with evidence for both genetic and biological factors that predispose to EDs? Evidence supports a nature AND nurture interaction across the developmental continuum [56]. The predisposition for EDs appears to be related to heritable personality traits of perfectionism, obsessive-compulsiveness, high harm avoidance, and premorbid anxiety, which turn out to also be predisposing risk factors for the development of PTSD [2]. It has been argued that traumatic experiences lead individuals toward a binge-type form while those without tend to stay in the “purer” form, i.e., AN-R [2, 3, 6, 45]. Impulsivity and novelty seeking are

also heritable, premorbid factors that increase the odds for a binge-type ED, and which often worsens with the advent of PTSD.

With our enhanced knowledge about the neuroscience of EDs, the perception of and reaction to threat may be greater in individuals with and prone to AN and other EDs [2, 10]. This amounts to a propensity to develop PTSD in the face of trauma. The impaired cognitive processing that accompanies weight loss and nutritional dysregulation impairs ability to process trauma and to comprehend the “big picture”. Birth traumas and birth complications are recognized risk factors for development of both AN and BN, and both June and Jenni note these [57, 58]. This historical point is important for clinicians to investigate, especially given the emerging recognition that epigenetics plays a major mediating role that shapes trauma’s effects [59–61].

The *DSM-5* criteria for PTSD recognizes a dissociative subtype, which is characterized by the presence of significant dissociative symptoms, such as depersonalization, derealization, and amnesia for traumatic events [1]. June had significant dissociative amnesia for early CSA, and Jenni reported depersonalization and derealization symptoms. Dissociation has been shown to be a marker of PTSD severity and associated comorbidity [62–66]. Jenni discussed predisposing, precipitating and perpetuating factors. She also makes the point that the semi-starvation of AN is likely an important predisposing risk factor for the development of PTSD, as well as a perpetuating factor [2, 14]. Nutritional dysregulation clearly impairs cognitive processing and may prevent recovery from trauma.

I have learned the importance for myself, as well as “us” collectively as clinicians, of being aware of “all-or-nothing” thinking. For example, if a patient meets several of the criteria for PTSD but not all, the clinician may conclude the patient does not have PTSD and these symptoms are not treated. The ED field has dealt with this issue for many years, in which the diagnosis of ED not otherwise specified (EDNOS) now called unspecified feeding and ED (UFED) was used in such cases that fell short of full criteria. *DSM-5* has such a condition for subthreshold or partial PTSD (pPTSD) called Unspecified Trauma-and Stressor-Related Disorder (UTSRD), which can be just as disabling as PTSD [2, 6, 45]. Thus, “big T” traumas and subsequent PTSD/pPTSD are highly relevant to the development and/or perpetuation of other comorbid psychiatric disorders, i.e., mood, anxiety, dissociative, somatoform, substance use/addictive, impulse control, disruptive behavioral, and personality disorders, (especially Cluster B). The odds ratios (ORs) for the development of these disorders is on the order of 2.5–4.5 [6, 7, 67].

In summary, the development of EDs, PTSD and related comorbidities is the collective result of multiple predisposing, precipitating and perpetuating factors, including

genetics, epigenetics, temperament, dose and timing of trauma, disclosure experiences, and social supports [26, 59, 68–70]. PTSD tends to be a chronic condition with over one-third of individuals meeting full criteria after 10 years [71, 72]. In addition, PTSD is a risk factor for the subsequent development of further trauma and PTSD [73]. When trauma and its disorders are not addressed, this likely perpetuates symptoms and may retard the recovery process from an ED [2, 5, 10, 14, 74, 75]. A detailed discussion of treatment principles is beyond this article's scope and is reviewed elsewhere [6, 7, 10, 32, 74]. Nevertheless, listening carefully to the lived experiences of patients with EDs and traumatic sequelae holds great power to guide professionals toward trauma-informed care, more integrated practice, and theoretically improved outcomes.

Compliance with ethical standards

Conflict of interest Dr. Brewerton, Dr. Alexander, and Jennifer Schaefer receive book royalties from authored/edited books. Dr. Brewerton is a consultant for Monte Nido & Affiliates. Jenni Schaefer is a consultant for The Meadows.

Ethical approval This article does not contain any studies with human participants performed by any of the authors.

Informed consent All identifying information included in this article is that of the authors. For this type of study formal consent is not required

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