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Managing Trauma in Early Psychosis

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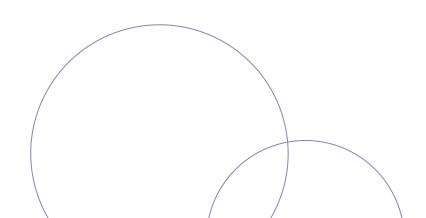
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'I had a young person say to me that they were very worried about having to talk about their traumatic experiences because they thought it would make it worse. They had all these memories that would haunt them night and day. When they finally started to trust me and speak about their experiences, they said they were having fewer nightmares and could sleep better.'

Senior clinician, EPPIC, Orygen Youth Health

Introduction

Many young people with early psychosis also have a history of trauma. These events often predate the onset of the psychosis, but the experience of the first episode itself may also be highly traumatic.

In response to such events, people may develop a range of distressing symptoms that adversely affect quality of life, relationships and occupational functioning. In most people, these symptoms settle in the months following the experience with the help of supportive family and friends. For some, however, the symptoms persist and can become significant mental health problems. The presence of these post-traumatic symptoms in someone with a psychotic illness can create particular challenges in diagnosis, intervention and management.

Clinicians are often reluctant to raise the issue of trauma, fearing it may upset the young person and perhaps precipitate a deterioration. While care is certainly required, avoiding the issue is in no-one's best interest. The simple act of acknowledging the trauma is often important and effective treatments are available for more persistent problems.

Once the acute psychotic symptoms have been addressed, the most effective intervention for trauma-related mental health issues in young people with early psychosis is trauma-focused psychological treatment. This approach is designed to help the person better understand and manage the symptoms before moving on to address the traumatic memories in a safe and controlled manner. The intervention should be tailored to the specific needs, values, and goals of the individual, with the aim of enhancing wellbeing, and optimising social and occupational recovery.

About this manual

Managing trauma in early psychosis is one of a series of manuals produced as part of the EPPIC National Support Program (ENSP) to support the implementation of the Early Psychosis Prevention and Intervention Centre (EPPIC) Model in early psychosis services. The EPPIC Model of specialised early intervention in psychosis aims to provide early detection and developmentally appropriate, effective, evidencebased care for young people (aged 12-25 years) at risk of, or experiencing, a first episode of psychosis. It has been developed from over 20 years of experience within the clinical program at Orygen Youth Health and further informed by the National Advisory Council on Mental Health's Early Psychosis Feasibility Study (2011), which sought international consensus from early psychosis experts from around the world. This manual is aimed at clinicians of all disciplines working in early psychosis services. Young people with trauma-related mental health problems in the context of early psychosis represent a complex group, therefore, involving senior clinicians with experience in working with trauma is recommended.

How to use this manual

This manual comprises four sections. The first provides background information about the nature of trauma and its effects, with particular reference to the role of trauma in first episode psychosis (FEP). The second section outlines key assessment issues. It is assumed that a comprehensive assessment has already been undertaken in the context of initial admission to the service. For more information, please see the ENSP manual entitled 'Let me understand' assessment in early psychosis. This section, therefore, focuses primarily on aspects of assessment that pertain specifically to trauma. The third section provides an overview of treatment, with particular reference to trauma-focused psychological treatment. The final section highlights issues to be considered in implementation and the importance of the whole system being prepared to embrace trauma-informed practice. Clinicians will find it useful to refer to other manuals in the ENSP series and reference is made to these where appropriate throughout the text.

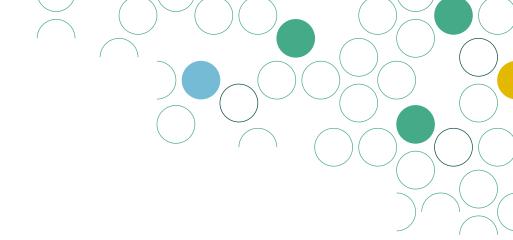
This is not a detailed treatment manual. Rather, it is designed to guide clinicians in the provision of trauma-informed care when working with young people with FEP. It is important that clinicians are aware of their own competencies, as well as their degree of comfort in working directly with trauma. Some will be able to deliver all the interventions outlined below, while others should select those components in which they feel confident. Clinicians interested in developing specialist skills in the treatment of trauma should avail themselves of the many training workshops and detailed treatment manuals that are available.

After reading this manual, clinicians will:

- Have a good awareness of the potential role played by trauma in the development and maintenance of current mental health problems.
- Have the confidence to raise this issue with the young person by sensitively and appropriately inquiring about trauma history (including experience of the first episode) and by exploring the potential effects.
- Be able, if post-traumatic stress disorder (PTSD) or a related condition is present, to offer trauma focussed therapy or to refer on to a specialist for this intervention.

More broadly, the manual will hopefully promote a higher level of awareness about trauma and its effects throughout the care system, with a view to promoting better outcomes for young people with FEP.





Backgroundand rationale

Terminology – what do clinicians mean by 'trauma'?

The word 'trauma' comes from the Greek word meaning injury. In a mental health context, clinicians use the word to mean an injury to the 'psyche', or a psychological injury, resulting from exposure to a very frightening or distressing experience. To confuse matters, however, the word trauma is often used to mean the event (as in 'he experienced a trauma' or 'she has an extensive trauma history'). Usually this alternative meaning from the context can be understood, but it's helpful to be more specific at times. In the next section, the kind of events that may result in a traumatic injury is discussed. Not everyone who is exposed to such events will develop a psychological injury, so those experiences are referred to as 'potentially traumatic events' (PTEs). Strictly speaking, they only become 'traumatic events' if they result in a psychological injury.

What are PTEs?

Although there is some debate about which events qualify as potentially traumatic, it usually involves some kind of physical threat to the self or others. In the criteria for PTSD, the DSM-5 defines the 'stressor event' (Criterion A) as: 'The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence'. (The full criteria appear in Resource 1).

PTEs have the potential to shatter fundamental beliefs we as individuals hold about the world, other people, and ourselves. Most of us live our lives assuming we are safe ('it won't happen to me') and that the people around us can be trusted. These beliefs allow us to live normal, comfortable lives without being in constant fear and on the look-out for danger. PTEs – particularly those involving interpersonal violence – have the capacity to challenge, or completely destroy, these assumptions. We can be left feeling vulnerable, frightened, and distressed.

Common examples of PTEs include sexual assault and other interpersonal violence, serious accidents, and major natural disasters. For some people with FEP, these events will have occurred at a young age. They may have experienced childhood neglect, abuse, or other violence during crucial developmental years. They may have grown up in an environment of war and conflict, coming to Australia as refugees or asylum seekers.



BEHAR

CASE SCENARIO

Behar was born in Iraq in 1996 at the height of Suddam Hussein's dictatorship. Being Kurdish, her family faced constant discrimination – they were banned from speaking their own language and her father found it very hard to get work. When Behar was six, her father was accused of supporting the Kurdish freedom fighters and the whole family – mother, father, Behar and her three siblings – were arrested and imprisoned. They spent the next 6 months in appalling conditions, surrounded by barbed wire. Behar was often separated from her father for weeks on end and constantly feared for his safety, as well as for her own and the rest of the family. After long negotiations, Behar and her family were finally released. Fearful of ongoing persecution, the family fled into Syria where they spent nearly 2 years in a UNHCR refugee camp before being accepted as refugees by Australia. Although it was a great relief to arrive in the comparative safety of Australia in 2007, it was a huge adjustment for Behar and her family. She continues to be haunted by the memories of her time in the prison and refugee camps.

Is a psychotic episode a PTE?

There is considerable evidence of a link between prior exposure to PTEs and psychosis. One question that has received increasing attention, however, is whether experiencing a first episode of psychosis can, itself, be considered a PTE. There is no doubt that it can be extremely frightening. A recent literature review on the subject1 reported that the most distressing symptoms were paranoid delusions or delusions of being controlled, threatening or critical voices, and the feeling of losing touch with reality. These internally generated experiences may be even more distressing than external events, as they are harder to objectify and understand, and they dramatically challenge the individual's view of themselves as 'sane' and stable.

The first episode is also likely to be associated with objectively frightening external experiences such as contact with the police and involuntary admission to a secure psychiatric facility. The same review¹ reported that high levels of distress were associated with aspects of treatment such as restraint, seclusion, sedation, and being forced to take medication, as well as the threat of physical and sexual assault by other patients and staff.

Although clinicians can debate whether experience of a first psychotic episode strictly meets the DSM-5 Criterion A, there is widespread consensus that it can result in PTSD. If other criteria are met, and the focus of the traumatic memories is the psychotic episode, PTSD is an appropriate diagnosis to inform treatment.

How common are PTEs?

Most people will experience at least one PTE over the course of their lives, with a substantial proportion experiencing many more. Around 75% of the Australian population report having experienced at least one event that meets the DSM Criterion A, with 74% of those reporting multiple PTEs.² The most common events were traumatic bereavement, witnessing violence, assault, and life-threatening accidents.

The prevalence of trauma exposure in people with psychosis is comparable. A recent study of 2608 people with psychosis reported that the prevalence of trauma exposure was 78%, with 56% reporting exposure to three or more traumatic incidents.³ It appears, however, that people with psychosis are more likely to report PTEs involving interpersonal violence that are known to result in high rates of PTSD. Indeed, around one-third of people with FEP report having experienced sexual or physical abuse in childhood.^{4,5}

What is the effect of experiencing a PTE?

Although most people who experience a PTE will recover without long-term negative effects, the evidence is clear that the experience of trauma, particularly in childhood, is a strong risk factor for the development of later mental health problems.^{6,7} These problems extend way beyond traditional notions of PTSD to include depression, anxiety, substance abuse, personality disorders and psychosis.⁸ These other disorders may occur independently or concurrently with PTSD.

PTSD, however, is the only disorder that is aetiologically linked to experience of a PTE. Since the PTSD symptom profile provides a useful structure to understand a traumatic stress reaction, the next section will describe that condition before going on to look at the role of PTEs in the development of psychosis.

PTSD and related conditions

The nature of PTSD

PTSD is characterised by three core symptom dimensions: intrusion and re-experiencing, active and passive avoidance, and hyperarousal. In place of passive avoidance, the DSM-5 has included an expanded symptom set labelled 'negative alterations in cognitions and mood'. The full DSM-5 criteria appear in Resource 1.

Re-experiencing is the hallmark symptom of a traumatic stress reaction. People with PTSD are haunted by the past horror, which invades consciousness and results in high distress. This may take the form of recurrent intrusive images, or other sensations such as smells and sounds. Nightmares are common, and the person is likely to become distressed and anxious when reminded of the experience. Dissociative flashbacks, in which the person believes the event is happening again, are rare but may occur in more severe forms of the disorder.

PTSD is primarily conceptualised as a fear disorder. Not surprisingly, then, the active avoidance symptoms are similar to those seen in other anxiety disorders such as phobias. The person tries to avoid things that might remind them of the trauma in an attempt to stop the memories coming back. This avoidance includes external stimuli, such as people, places, and activities, as well as internal stimuli such as thoughts and feelings.

The result of this avoidance is often one of flattened affect (difficulty experiencing any emotions, including positive feelings), withdrawal from normal activities, and social alienation. The DSM-5 includes these symptoms in the 'negative alterations in cognitions and mood' criteria, along with negative thoughts (e.g. 'I am bad', 'The world is dangerous', 'It's all my fault') and emotions (e.g. sadness, anger, and guilt). Many of these symptoms overlap with depression.

Hyperarousal constitutes the final group of symptoms – the person is tense and on-edge, constantly on the look-out for signs of possible danger. They may take unreasonable risks in dangerous activities or substance abuse. This group of symptoms includes hypervigilance and exaggerated startle response, which are reasonably specific to PTSD. It also, however, includes irritability, sleep disturbance, and poor concentration, all of which are also characteristic of depression (see Box 1).

BOX 1 THE SYMPTOMS OF PTSD

- A: Experience of a traumatic event
- **B:** Re-experiencing the trauma (e.g. intrusive memories, nightmares, distress when reminded of the event)
- **C:** Active avoidance (e.g. staying away from reminders of the event such as places, people, and activities, or blocking out thoughts and feelings)
- D: Negative cognitions and mood (e.g. dysphoric mood, negative self-beliefs, loss of interest in activities
- E: Persistent hyperarousal (e.g. irritable, easily startled, on the look-out for danger)
- **F:** Symptoms persist for more than one month
- **G:** Symptoms cause significant distress and/or impairment

In the DSM-5, there is an option to specify 'with dissociative symptoms', as well as an option to specify delayed onset if the full diagnostic criteria do not appear until more than 6 months after the event.

PTSD is a complex disorder and comorbidity in the form of depression, anxiety, and substance abuse is common. Some aspects of PTSD may also resemble positive or negative psychotic symptoms and differential diagnosis can be a challenge. With or without psychosis, PTSD can be a very disabling disorder with high levels of social and occupational impairment. Although around half of those who develop the disorder recover in the first 12 months or so, the remainder are likely to show a chronic course that may go on for many decades.⁹

Complex PTSD

The impact of trauma is often complex, resulting in mixed clinical presentations that do not fall easily into any specific diagnostic category. This is particularly true following repeated and prolonged interpersonal trauma such as childhood abuse and neglect. Following the seminal work of people like Judith Herman, 10 much has been written about the concept of complex PTSD. Although not included in the DSM,¹¹ it is a clinical presentation that is easily recognisable to clinicians working with multiple traumatised populations and those working in acute FEP settings. Complex PTSD is usually thought to comprise symptoms from the core PTSD clusters (re-experiencing, avoidance, hyperarousal) in conjunction with disturbances in self-regulation: emotion regulation difficulties, disturbances in interpersonal relationships, alterations in attention and consciousness (e.g. dissociation), modified belief systems about the self, others, and/or the world, and somatic symptoms. 12 Box 2 presents symptoms of complex PTSD.

Dissociative disorders

Dissociation is a 'disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behaviour' (DSM-5, p.291). That is, the core components of our consciousness - knowing who we are, where we are, differentiating the past and the present, being in touch with our current surroundings become disrupted and disintegrated. These symptoms may resemble aspects of the clinical presentation in FEP and create challenges for differential diagnosis. It is assumed that dissociation functions as a way of dealing with intolerable stress, allowing the person to 'cut off', or dissociate, from the horrific reality. Severe dissociation, however, can have serious functional consequences in adolescence and adulthood, particularly in terms of relationships. It can be especially unhelpful when routinely used as a coping strategy for dealing with day-to-day stress in interpersonal and occupational settings.

The DSM-5 dissociative disorders category includes three specific diagnoses: dissociative identity disorder, dissociative amnesia and depersonalisation/derealisation disorder. Of primary interest here, are depersonalisation and derealisation since they are specified as potential associated features of PTSD in the DSM-5. Depersonalisation is the experience of being an outside observer of, or detached from, oneself (e.g. feeling as if 'this is not happening to me' or as if one were in a dream). Derealisation is the experience of unreality, distance, or distortion of surroundings (e.g. 'things are not real'). It is important to assess for the presence of these symptoms since they have the potential to adversely affect successful treatment for PTSD.

BOX 2 THE SYMPTOMS OF COMPLEX PTSD

- Symptoms from B, C, D and E of the PTSD diagnosis
- · Emotion regulation difficulties
- · Disturbances in interpersonal relationships
- Alterations in attention and consciousness (e.g. dissociation)
- Modified belief systems about the self, others, and/or the world
- · Somatic symptoms

Risk and protective factors

The reasons why some people develop PTSD and others do not are complex and varied, but can be broadly subsumed under three interacting dimensions:¹³ pre-trauma, peri-trauma and post-trauma.

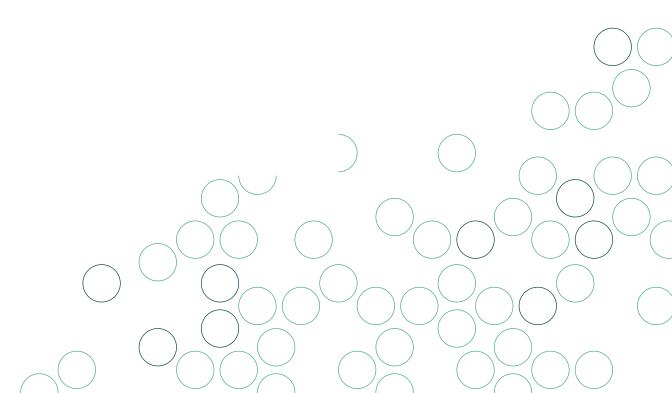
In terms of pre-trauma, genetic factors appear to interact with trauma exposure to increase risk for PTSD.¹⁴ A history of trauma, particularly in childhood, is a powerful risk factor and the more PTEs the person has experienced, the more likely it is that they will develop PTSD following subsequent exposures.¹³ People with a psychiatric history are more vulnerable to PTSD following exposure to a PTE. Conversely, a secure and stable early childhood, and a history of good psychological health, are likely to be protective.

In terms of peri-trauma, the severity of the event (e.g. degree of physical threat or exposure to the suffering of others) is a consistent predictor. Not surprisingly, the more severe the experience the harder it is for people to adjust. An additional peri-trauma factor is the person's response at the time. The evidence suggests that persistent hyperarousal or high levels of dissociation are predictors of poor subsequent adjustment. 15,16

In terms of post-trauma factors, the two most powerful predictors of PTSD are ongoing life stress and social support. The more stress that the person is experiencing (e.g. financial, relationships, health), the fewer resources they have left to deal with their traumatic experience. Similarly, good social support is consistently found to act as a buffer against stress and to facilitate recovery. In the context of trauma, negative social support (e.g. criticism, excessive demands) tends to predict poor recovery, especially in women. There is some evidence that larger social networks, even if the relationships are not especially close, tend to be most helpful.

Prevalence of PTSD

PTSD is relatively common, with around 7% of Australians meeting criteria at some stage in their lives and 4% meeting criteria in the last 12 months. 19 Rates are consistently much higher for women (10% lifetime, 6% 12-month) than for men (5% lifetime, 3% 12-month). This gender difference has been the focus of much interest. Although there are several possible biological, psychological and social explanations, the most likely relates to the nature of the trauma. Women are more likely than men to be victims of interpersonal violence perpetrated by someone they know and trust, such as violent assault by spouse or partner, rape and sexual assault, or stalking.^{2,20} This type of PTE is strongly associated with the development of PTSD for both men and women.



Trauma and psychosis

Several questions are important when considering the association between trauma and psychosis:

- Does a prior trauma history increase the risk of psychosis?
- Does a trauma history increase the risk of developing PTSD following FEP?
- How common is PTSD among people with FEP?
- Does a trauma history and/or the presence of comorbid PTSD influence the clinical presentation of psychosis?

Box 3 summarises the research evidence around trauma and psychosis.

BOX 3 RESEARCH EVIDENCE AROUND TRAUMA AND PSYCHOSIS

The research evidence suggests that:

- a history of trauma, particularly in childhood, is a risk factor for the development of psychosis
- people with a past history of trauma are more likely to develop PTSD following their first psychotic episode
- around 40% of people with FEP develop PTSD as a result of their first experiences of psychosis
- a history of childhood trauma, and the presence of comorbid PTSD, both influence the clinical picture in FEP.

A substantial body of research suggests that exposure to PTEs, particularly in childhood, may increase the risk of subsequent psychosis.21-23 There is also evidence of a cumulative, 'dose-response' relationship: the more exposures, the greater the risk of subsequent psychosis.23 There is strong evidence from the general population that interpersonal violence, compared with other types of PTE, carries a high risk for the development of PTSD. This is presumably because it shatters fundamental beliefs about safety, trust, and intimacy, and, in childhood, impairs the development of secure and stable attachment styles. Not surprisingly, the risk for psychosis is also greater following PTEs characterised by prolonged interpersonal violence.24 Of particular importance in FEP, a history of sexual trauma significantly increases the risk of conversion to psychosis in young people at a prodromal stage of the illness.²⁵

Previous experience of trauma in both childhood and adulthood is a strong predictor of later PTSD in the general population.¹³ Consistent with this, not only does a history of trauma increase the risk of developing a psychosis, but it also increases the risk that a first episode will function as a Criterion A event. Bendall and colleagues²⁶ found that people with a history of childhood trauma had 27 times the risk of developing PTSD in response to the first episode.

Rates of PTSD in early psychosis are surprisingly high: around 39% of people with FEP also have PTSD triggered by their psychotic experiences. 1,27-29 This figure is comparable with PTSD rates in combat veterans and only slightly lower than rates among rape victims in the general population. Given the high levels of distress and functional impairment associated with PTSD, these findings highlight the importance of identifying and effectively managing the condition in people with FEP.

There is good evidence that a history of trauma may influence the clinical presentation in FEP, with certain types of childhood adversity more likely to be associated with particular psychotic symptoms. Large epidemiological studies from the UK³⁰ and the US³¹ suggest that childhood sexual abuse tends to be associated with increased risk of hallucinations. This is presumably because childhood sexual abuse interferes with the

source-monitoring mechanisms required to differentiate between external and self-generated stimuli, an interference likely to be exacerbated by dissociation at the time.32 Childhood physical abuse and neglect, on the other hand, are more likely to be associated with paranoid delusions. This may be because the disempowerment and disrupted attachment relationships characteristic of childhood physical abuse are likely to be associated with heightened expectancy of threat and a tendency to attribute adverse events to external sources. Clinical experience suggests that the actual content of these hallucinations and delusions (e.g. whose voice is heard or which people feature in the delusion) often relates directly or indirectly to the earlier trauma.32

The impact of comorbid PTSD on the clinical picture is predictable, with consistent relationships found between the presence of PTSD and the severity

of depression and anxiety in FEP.¹ As for other populations, there is also evidence that a comorbid diagnosis of PTSD may increase the risk of suicide in FEP.²9

As a final point in this discussion, it is worth noting that definitions of the 'stressor event' in the DSM are quite strict. It must involve demonstrable physical threat to the self or others to qualify for a PTSD diagnosis. It is widely recognised across the psychiatric literature that general life stress is associated with poorer mental health outcomes. Longden and colleagues, 33 in a study of childhood adversity and psychosis, report a strong dose-response relationship: the total number of adversities significantly predicted the total number of psychotic symptoms. The two adversities showing the largest association with psychotic symptoms were poverty and being fostered or adopted.



PATRICK

CASE SCENARIO

Patrick is a 19-year old man who presented with a 4-month history of persistent auditory hallucinations of a male telling him he is wicked and will go to hell. The voices started quite suddenly when he heard that the priest from his parish had been charged with sexual offences against children. Prior to that, he had been functioning quite well although he had always been somewhat socially withdrawn. He has not attended his University course or any church services since the voices started and has become more isolated.

During assessment, Patrick reported that the auditory hallucinations were of the priest from the church where he had been an altar boy. He stated that he had not consciously remembered any inappropriate contact with the priest until the last few months. Since then, he has been troubled by regular images and physical sensations of giving and receiving oral sex. He reported being confused about whether these were real memories or his mind playing tricks on him. Either way, they lead to powerful feelings of guilt, reinforced by the voices, and he frequently thinks of suicide. He is too ashamed to tell anyone about the content of the voices or the intrusive images and sensations. He stays at home most of the time but, if he has to go out, makes extreme efforts to avoid the area around his church. He reports powerful physical reactions (heart racing, sweating) if he hears reference to child sexual abuse on the media. He reports several symptoms of anxiety and depression, along with high levels of agitation.

Why is it important to address trauma in FEP?

By now, it should be obvious that trauma and adversity make an important contribution to the development and clinical picture of FEP. As clinicians, we know that a history of trauma and adversity, particularly in childhood, increases the risk of developing psychosis. We know that it affects the clinical presentation, increasing complexity and potentially influencing the content of hallucinations and delusions. It is well known that PTSD is relatively common in the aftermath of FEP. Since it plays such an important role, it is reasonable to assume that actively addressing the trauma history is important in a comprehensive treatment approach to FEP. Although treatment guidelines have been slow to address trauma in psychosis, there is increasing recognition of its importance. The 2014 NICE guidelines for psychosis, for example, make a strong research recommendation as follows:34

'PTSD symptoms have been documented in approximately one-third of people with psychosis and schizophrenia. The absence of PTSD symptoms in this context predicts better mental health outcomes, lower service use and improved life satisfaction. Two-thirds of the traumatic intrusions, observed in first episode and established psychosis, relate to symptoms of psychosis and its treatment (including detention). One study has demonstrated proof-of-principle in first episode psychosis for trauma reprocessing, focusing on psychosis-related intrusions. Replication of the study will fill a major gap in treatment for this population and may have other benefits on psychotic symptoms and service use.

The suggested programme of research would use an adequately powered, multi-centre randomised trial to test whether a cognitive—behavioural therapy (CBT)-based trauma reprocessing intervention can reduce PTSD symptoms and related distress in people with psychosis and schizophrenia. The trial should be targeted at those with high levels of PTSD symptoms, particularly traumatic intrusions, following FEP. The follow-up should be up to 2 years and the intervention should include 'booster' elements, extra sessions of CBT-based trauma reprocessing interventions, and a health economic evaluation' (CG178, Recommendation 2.5).

There is no doubt that clinicians are reluctant to inquire about trauma histories, with research suggesting that around two thirds of psychiatric patients are not asked about trauma.35 John Read and colleagues³⁵ provide several possible explanations for this reluctance, many of which stem from a lack of training (see Box 4). Clinicians may fear offending, upsetting, or re-traumatising the person, potentially opening a 'Pandora's Box' and being unable to contain the affect. There may also be a fear of eliciting 'false memories' of trauma and a lack of confidence about how to deal with that situation. It may stem from assumptions that the trauma history is irrelevant, either because of beliefs regarding the aetiology of psychosis (e.g. adherence to a purely biogenetic cause) or because of the young person's characteristics (e.g. male gender or age). It may simply stem from a clinical decision that there are other more pressing concerns (which, of course, may be correct at the time).

BOX 4 POTENTIAL BARRIERS TO ASKING ABOUT TRAUMA

- · A lack of training and confidence
- Fear of offending, upsetting, or re-traumatising the young person
- Fear of eliciting 'false memories' of trauma
- Assumptions that trauma history is irrelevant either because of strong biogenetic causal beliefs or characteristics (e.g. gender, age)
- · Other more pressing clinical concerns

Whatever the explanation, it is important that clinicians working with FEP feel confident about raising the issue and inquiring about trauma histories. While it may be distressing for the young person (and the case manager), particularly if handled insensitively, there is no evidence that asking psychiatric patients about trauma history causes any serious or permanent damage and most respond positively to being asked.³⁶ Only by sensitively raising the issue of trauma in FEP when it is appropriate to do so, and working with the clinical impact of those experiences when indicated, can clinicians provide a comprehensive and effective treatment for FEP populations.

Theoretical models of trauma

The aetiology of traumatic stress reactions is complex. Biological elements, psychological elements, and social elements all interact and combine in varying proportions to explain the clinical picture. A detailed description of the many theoretical models that have been proposed to explain traumatic stress reactions in general, and trauma and psychosis in particular, is beyond the scope of this manual. It is, however, important to be able to explain to survivors of trauma what is happening to them and why. It gives the person a model to understand their own reactions, as well as forming a basis for the treatment rationale. To that end we provide a lay person's overview below. For those interested in more detail, considerable literature is available on empirically supported biopsychosocial models in PTSD (e.g. Friedman et al 2015³⁷). The theoretical underpinnings of trauma in psychosis by Read et al 201438 essentially draw on the same concepts.

The summary provided below is written in a form designed to be accessible to young people and to be used as part of a treatment rationale. Obviously, ensuring that they understand is crucial: it may be necessary to adapt the language and concepts to suit the developmental and intellectual capacity of the listener. If appropriate, the following section (which appears in Resource 2) can be copied and provided to the young person as part of a psychoeducational package.

'At first, I was really concerned about talking to young people about their trauma experiences of psychosis. But I learned that as long as you are genuine and interested, you can engage them in this discussion when they're not acutely unwell. You can see that they are grateful for a chance to talk about their experience.'

Senior clinician, EPPIC, Orygen Youth Health

How and why do people develop PTSD?

The problems that people report after a very frightening or distressing experience probably have their roots in our evolutionary survival. It is thought that PTSD started out as a kind of 'program to escape danger'. As individuals, if we have faced a life threatening event, perhaps narrowly escaping death or serious injury, it is very important for the survival of the species that we recognise that situation immediately if we come across it again – and that we react very quickly.

In PTSD, that process has become exaggerated. We often remember every single detail of the threatening situation, 'just to be sure' that we don't miss it next time. We might be constantly on the look-out for signs of danger, overreacting to loud noises or the slightest suggestion of threat. We respond with high levels of fear and tension - not only to the external sights, sounds and smells that may indicate threat, but also to the memory (as if it was happening again). These reactions are very useful if we are actually fighting the threat (a tiger, for example) or running away, but very unpleasant if we are just sitting at home. To understand how these signs and symptoms develop, we need to think about biological aspects, psychological aspects, and social aspects.

Biological aspects

This 'program to escape danger' affects the way our brain operates. The primitive part of the brain responsible for detecting and responding to threat (the amygdala) is over-active in people with PTSD - constantly 'firing' when there is no real threat there. At the same time, the part of the brain responsible for dampening down the amygdala (the prefrontal cortex or PFC) - the part that puts the brakes on and reminds us to 'relax, everything's OK' - is under-active in people with PTSD. So the amygdala is constantly reacting to the slightest sign of possible threat and the PFC is not able to control it.

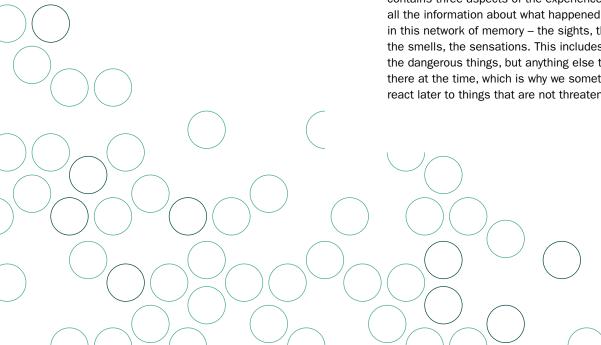
There may be too much, or too little, of all sorts of brain chemicals, particularly the ones associated with stress. These cause the body to be constantly hyped up, with high levels of physical arousal, resulting in increased heart rate, blood pressure, muscle tension and so on. Again, this is good for fighting or running away, but not for feeling relaxed. There may be high levels of hormones such as adrenaline, which helps to gear us up for the 'fight/flight/freeze' response and also causes us to retain detailed memories of the danger. Underpinning much of this may be a genetic vulnerability: some people may be more likely than others to develop PTSD following trauma.

Psychological aspects

Several things are also happening from a psychological perspective. First, when we are frightened and in danger we learn to associate things that were there at the time with threat. We call this 'fear conditioning' (or classical conditioning). We learn to have a fear reaction to things we saw, heard or smelled, even if they're not actually dangerous. For example, if we are involved in an armed hold up in a bank, we might become frightened when we go into a bank in the future, even though there is no danger there. A more complex example is that if we are hurt by someone we trust, we might become frightened of trusting anybody in future - we might assume (or have learned) that trusting someone is associated with being hurt.

Not surprisingly, we avoid the situations we associate with danger. When we avoid, we feel less anxious. This acts as a powerful reward, or reinforcement, and makes us avoid even more. This is called operant conditioning. Although there are times when this is sensible (i.e. when there is genuine threat), the problem with avoidance is that we never get a chance to learn that the situation is actually not dangerous. If we never go into a bank again, we will not have the chance to remind ourselves that they are actually very safe places. We will continue to become anxious any time we are near a bank. Similarly, if we never pluck up the courage to trust someone again, we will never have the opportunity to find out that most relationships are safe and that most people can be trusted not to hurt us.

When someone goes through a traumatic experience, a 'traumatic memory network' is formed. This is a big chunk of memory that contains three aspects of the experience. First, all the information about what happened is stored in this network of memory - the sights, the sounds, the smells, the sensations. This includes not only the dangerous things, but anything else that was there at the time, which is why we sometimes react later to things that are not threatening.



Second, the memory network contains all our responses – our physiological reactions (e.g. high arousal and tension), our emotional reactions (e.g. fear, guilt, sadness or anger), and our behaviour (e.g. wanting to escape and avoid). Finally, the network contains our interpretations and appraisals of what happened – what does it say about other people (e.g. 'they cannot be trusted'), about the world (e.g. 'it is dangerous'), and about me (e.g. 'I'm a bad person, it was all my fault').

When the memory network is activated, all this comes to the surface and we experience the typical PTSD symptoms. The memories come flooding back, often in a vivid and detailed way. We re-experience the reactions associated with the experience, like emotions of fear and guilt, high arousal (e.g. heart racing, sweating), and a need to escape. And the old interpretations and appraisals come back (e.g. 'I'm weak ... it's all my fault ... it proves that I'm worthless ... I'll never be safe again').

Social aspects

From a social perspective, the culture and environment in which we live can shape the way we respond to severe stress in our lives. We also know that social support – having people around who care about you and are willing to help you – is of great importance in recovering from traumatic events. So the context in which we grow up, and in which we live, may influence whether we develop PTSD after a traumatic event and, if we do, what specific problems emerge.

Putting it together ...

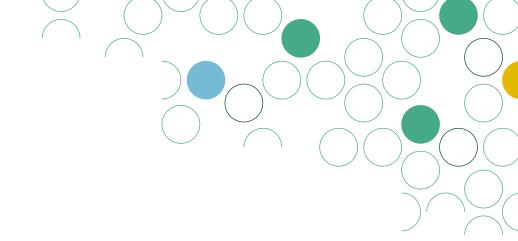
These biological, psychological, and social mechanisms all work together to create the symptoms of traumatic stress or PTSD. Later, how this model forms a basis for treatment will be discussed.

Theoretical considerations in trauma and FEP

The strong association between trauma history and subsequent psychosis does not necessarily imply causation. By no means all people who experience trauma in childhood (or adulthood) go on to develop PTSD or psychosis, and not everyone with psychosis has a significant trauma history. These differences are probably explained by a combination of genetic vulnerability and other early life experiences. It does, however, suggest that the experience of trauma, especially in childhood, may generate biopsychosocial vulnerabilities (neurobiological changes, cognitive impairments, disrupted attachments, impaired social networks, etc.) that, in turn, increase the risk of psychosis.

These mechanisms are, of course, not specific to psychosis. This highlights the importance of not viewing the pathogenesis of psychosis from a purely biological perspective. Rather, the aetiology of psychosis is just as influenced by prior life experience as are other mental health problems such as anxiety and depression. The biological impact of trauma and childhood adversity is essentially the same in psychosis as it is in other disorders including PTSD. Future research will hopefully shed light on the differential pathways that lead from childhood adversity to psychosis rather than to other disorders.





Assessment and formulation

A thorough description of how to conduct an assessment is provided in another ENSP manual ('Let me understand ...' assessment in early psychosis). Several detailed recommendations also appear in the Australian clinical guidelines for early psychosis second edition. The detailed approach to assessment outlined in those two publications is fundamental to case formulation and treatment planning, and must be a precursor to any attempt to address the sequelae of trauma. This section will be limited to issues specifically associated with assessing the history and impact of traumatic experiences. One obvious point to make at the outset is the importance of safety: the clinician's first assessment priority should be to ensure that the young person is safe and is not currently at risk of ongoing victimisation.

Taking a history of traumatic events

Why ask about traumatic events?

The purpose of collecting the trauma history (i.e. the list of PTEs to which the young person has been exposed) is to inform the clinician about powerful experiences in the young person's life that may have contributed to their current mental health and clinical presentation, along with the developmental stage at which those events occurred. This is crucial in adequately formulating the case and in effective treatment planning. Whether some or all of the experiences will end up being a focus for trauma treatment is a decision to be made later. At this point, clinicians simply need to know what they are dealing with.

When to ask about traumatic events

Although clinicians should not be reticent about exploring the trauma history, it is inevitably a sensitive area and it is wise to leave such inquiries until later in the assessment process when a level of rapport and trust has been developed. In many clinical presentations of FEP there will be more pressing issues to focus on during assessment and initial intervention. In such cases, a discussion of trauma should usually wait until the acute clinical issues have stabilised.

How to ask about traumatic experiences

It is unwise to go into any detail in the initial exploration of trauma and it is helpful to state this explicitly to the young person in your introductory comments. There will be plenty of opportunity to go into detail when trauma focussed treatment is started. Remember that the young person may never have revealed the experience to someone else – now is not the time to elicit the painful details, nor is it the time for ventilation or powerful emotional reactions.

The way in which this stage of the assessment is introduced will depend to some extent on what is already known of the young person's history. If the clinician knows about likely traumatic events (e.g. if the young person is a refugee or has a history with child protection), explicitly noting that will often make it easier to discuss. Something like the following is appropriate:

'Many people who develop mental health problems have had some pretty tough times in the past. Finding out about these is important in helping us understand how you got to where you are today. I'd like to ask you about any very stressful or frightening events that have happened in your life. [You've already told me about ... I'm aware that ...]. I know it can be distressing to talk about these things, but I don't want to know any details at this stage – we'll have an opportunity to talk more about these experiences during our work together. For now, I would just like to get a broad idea of what you've experienced. This is important in working out how best to help you recover and get back to doing the things you want to do in life. Is it OK if I ask you about some things you may have experienced?'

If the young person refuses, gently explore their concerns. There are many possible reasons – shame, fear of becoming too distressed, anxiety about not being believed, or concern about upsetting the case manager, to name just a few. In each case, providing reassurance and answering questions or concerns is usually sufficient. If they still refuse, it will have to be left for another occasion when a greater level of trust and self-confidence has been developed.

It is then appropriate to gently prompt the young person with a series of questions. There is no right or wrong way to do this but it is common to cover the obvious categories such as life threatening accidents, disasters, sexual and physical assault, and witnessing violence or death. There is no need to ask about every category if you are reasonably confident that the answer is no. If, for example, you know that the young person has spent all their life in Australia, you may choose not to ask about combat, war zone, or refugee experiences. Examples of common questions, adapted from the Composite International Diagnostic Interview (CIDI)39 are shown in Box 5. The full CIDI list is substantially more comprehensive in its list of events, but it is designed for research purposes and is unnecessary in routine clinical practice.

When using this, or any other list of events, it is often best to make clear that you are reading the questions. Inquiring about rape, for example, is difficult; reading the exact wording provides a level of objectivity that most interviewers and responders appreciate when dealing with such a sensitive topic.

BOX 5 TYPICAL QUESTIONS TO ASK ABOUT PAST TRAUMA (ADAPTED FROM KESSLER AND USTUN³⁹)

- Have you ever been involved in a life threatening accident?
- Have you ever been involved in a major disaster a natural disaster like a serious bushfire or a manmade disaster like a terrorist attack?
- As a child, were you ever badly beaten up by your parents or the people who raised you?
- Have you ever been beaten up by anyone else?
- This question is about rape. Has someone ever had sexual intercourse with you,
 or penetrated your body with a finger or object, when you did not want them to,
 either by threatening you or using force, or when you were so young that you
 didn't know what was happening. Did this ever happen to you?
- Other than rape, were you ever sexually assaulted, where someone touched you inappropriately, or when you did not want them to?
- Have you ever seen someone being badly hurt or killed, either when you were a child or more recently?
- Have you ever been in a war zone, either as a civilian or in combat?
- Are you a refugee?
- Have you experienced any other extremely traumatic or life-threatening event that I haven't asked about yet?

It is also useful to end with a general question along the lines of:

'Sometimes people have experiences they don't want to talk about. I won't ask you to describe it but, without telling me what it was, have you ever had a frightening or distressing experience that you didn't tell me about because you didn't want to talk about it?'

There may be an opportunity to come back to such an event towards the middle or end of treatment when trust has been established and the young person can hopefully recognise the benefits of dealing therapeutically with past trauma.

If the young person has an extensive trauma history, it can be helpful to assist them in constructing a 'life chart'. Age (from zero to current) is plotted across the bottom of the page(s), with events and/or periods of adversity mapped above in the appropriate points. The chart should not be limited to trauma and adversity – other significant life events (both positive and negative) should also be plotted at a different level on the Y-axis. This is not only a useful assessment tool, but is also likely to have a therapeutic effect by helping the young person to gain a sense of perspective and structure over their life experiences. It can also become a useful adjunct to treatment. The various coping strategies that the young person adopted - both adaptive and maladaptive - can be mapped against various life stages and adversities at a third level of the Y-axis, providing a historical context as a way of understanding why they are reacting as they are now. This can be a useful platform for discussing which strategies are still useful and which are no longer helpful.

Should clinicians use standardised lists of traumatic events?

For research purposes, it is important to use established, standardised lists of traumatic events when generating a trauma history. This is not usually necessary in routine clinical practice, however, and a more flexible approach along the lines described above is usually more appropriate. If clinicians wish to use established lists of events, plenty are available. The CIDI, as noted above, provides a comprehensive list of 28 events. The Life Events Checklist for DSM-5⁴⁰ is a simpler list of 17 events and is freely available from the US National Center for PTSD (www.ptsd.va.gov).

Should clinicians be concerned by 'false memories'?

This is an issue clinicians are often concerned about. It is, of course, always possible for someone to consciously or unconsciously fabricate, exaggerate, or distort reports of prior trauma. Sometimes people report vivid 'memories' of something that happened when they were unconscious or literally not present (e.g. images of the violent death of a loved one). While these are presumably 'fabrications' of some sort, they are functionally the same as the intrusive symptoms of PTSD: they invade consciousness, are the subject of nightmares, and cause great distress. As such, they are usually considered to be a legitimate focus for treatment even if they are not strictly representations of reality.

Small inconsistencies and errors in recall should not be a concern. The information was encoded at a time of extreme stress and, as a result, traumatic memory networks tend to be fragmented and confused. Human memory is, at the best of times, highly fallible. A memory of prior trauma that appears to have no basis in reality is of greater concern and the concepts of 'false' and 'recovered' memories have been the subject of substantial debate. That discussion is beyond the scope of this manual and readers are referred to more comprehensive texts on the subject. 41 It is worth emphasising, however, that 'recovered memory therapy' is both unethical and potentially highly damaging. This approach assumes that certain clinical presentations must be due to unconsciously repressed memories of childhood sexual abuse. The therapy is designed to 'uncover' these memories, of which the young person was previously unaware, with a view to then somehow resolving these past traumas. This approach is, of course, highly susceptible to the generation of false memories.



SIENA

CASE SCENARIO

Siena, a 16-year-old girl, was admitted for treatment of a first episode of psychosis after her father had committed suicide 6 months earlier. She reported multiple positive symptoms, including auditory and visual hallucinations (e.g. voices telling her to self-harm and seeing the devil in the corner of her room). She described several dissociative symptoms including depersonalisation and derealisation. She appeared to dissociate for several minutes at a time during the intake assessment, having conversations with herself and appearing totally unaware of her surroundings. The family had received extensive involvement from child protection over the years and Siena had spent several periods in foster care. The psychotic symptoms settled a little with an initial combination of psychological and pharmacological treatment, but did not disappear.

A later attempt to take a trauma history revealed chronic and repeated childhood sexual and physical abuse perpetrated by her father. She stated that she had been subjected to physical abuse (beatings) for as long as she could remember, but that the childhood sexual abuse started when she was eight. The abusive home life was interspersed with periods of relative stability in foster care where she seemed to have formed reasonable attachments with the foster mother and siblings. Although Siena was able to identify some specific incidents, the history was jumbled and confusing. The case manager worked with her to complete a life chart from ages 0 to 16 on which together they plotted specific incidents of abuse that she could remember, as well as periods in foster care and other significant events (e.g. starting school, moving house, her father's death). To the extent that she could remember when she started to use them, they also added the strategies that she had used to cope (specific kinds of dissociation, avoidance, self-harm, etc). By the end of this process, a substantial body of information had been collected to guide future treatment.

The issue has particular relevance in the context of comorbid PTSD and psychosis. It is presumably possible for memory of a prior trauma to be entirely delusional in a young person with a psychosis. If that is the case, clinicians would assume that the memory will disappear, or be recognised as false, if the psychosis can be successfully treated. The memory also may be distorted or exaggerated as a function of the psychosis; again, that may resolve if the psychosis can be treated.

In the final analysis, we probably should not be too concerned in clinical settings about the veracity of specific memories. If they disappear with successful treatment of the psychosis, all well and good. If not, and if they are functioning as an intrusive PTSD symptom, they should probably be considered a legitimate target for trauma-focused treatment regardless of whether they are entirely 'true'.

Assessing the symptoms of traumatic stress

Having ascertained that the young person has experienced one or more PTEs, the next step is to explore aspects of the clinical picture that may be aetiologically linked to that experience. Assuming a comprehensive clinical assessment has already been completed, consistent with the guidelines referred to above, most of this will have already been covered. In this section, however, the specific assessment of PTSD and related conditions will be briefly discussed.

Assessment of PTSD

In routine clinical practice, the most appropriate way to assess for the presence and severity of PTSD is a clinical interview. A thorough knowledge of the PTSD symptom profile described above will facilitate the interview, enabling questions to be phrased around each symptom. For example:

'You've told me about your experience of [trauma]. Have you had upsetting images or memories of what happened which you couldn't get out of your mind?' and 'Have you been having any nightmares about it or about similar things?'

The aim, of course, is not to elicit a simple yes or no, but to engage with the young person to explore their unique experience of the symptom. We would also inquire about frequency and associated distress. All of this will help us to build up a clear picture of the traumatic stress reaction which will then drive our treatment decisions. PTSD is a heterogeneous disorder that can manifest quite differently in different people. The specific clinical presentation will dictate the optimum treatments. Severe intrusive symptoms are a strong indicator for trauma focus work, for example, while severe symptoms of dysphoria may suggest more of a symptom management approach.

As noted above, many PTSD symptoms overlap with those of depression and other disorders. If these symptoms have been covered earlier in the diagnostic interview, there is usually no need to repeat them at this stage. If, for example, clinicians already know that the young person is not sleeping, has concentration difficulties, has lost interest in normal activities, and has repeated negative thoughts about themselves and the world (all core symptoms of depression), clinicians may choose not to repeat these when assessing for PTSD. Their presence, however, should be noted accordingly.

By using the DSM-5 algorithm (i.e. at least one Criteria B symptom, at least one C, and at least two each from D and E), clinicians can determine the presence or absence of a formal PTSD diagnosis. Clinically, however, they should not feel too constrained by the exact criteria. The goal is to develop a workable clinical diagnostic formulation that will drive effective treatment. If the young person does not quite make all the criteria but the clinical presentation is consistent with PTSD that should be enough to inform our treatment decisions. After all, DSM-5 is different to DSM-IV, ICD-10 is different to the proposed ICD-11, and the proposed ICD-11 is very different to the DSM.

Assessment of associated features and comorbidity

PTSD is routinely associated with comorbidity, both in terms of associated features and additional formal diagnoses such as depression, generalised anxiety disorder, substance abuse and, in the current context, psychosis. Most of these related conditions will hopefully have been covered as part of the initial comprehensive assessment. If not, now is the time to review the likely comorbid conditions with the young person.

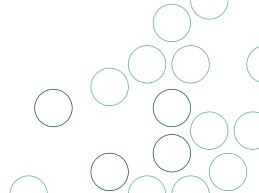
One associated feature of particular relevance is dissociation, since that has the potential to adversely affect treatment outcome (trauma-focused therapy will not be effective if the young person dissociates during the sessions). The two key phenomena to inquire about are: depersonalisation and derealisation. Simple questions phrased around the phenomenology should be sufficient, such as:

'Do you ever feel that you are 'not really here', like you are watching a movie of yourself?' (depersonalisation) or 'Do you ever feel that things around you are unreal or like a dream?' (derealisation).

Should clinicians use standardised measures to assess PTSD?

Although it is not usually necessary in routine clinical practice to adopt standardised measures, they can be useful in certain situations.

Self-report measures are particularly useful in monitoring gains during treatment, providing a basis for collaborative discussions with the young person about their progress. For medicolegal and related purposes, a structured clinical interview is a safe way to proceed. These interviews ensure that questions are asked in exactly the same way every time is administered, and that the young person's responses are scored in a consistent manner. They generally have very high inter-rater and retest reliability, as well as good clinical and construct validity.



Several structured interviews for PTSD are available. The most widely known, and often considered the 'gold standard', is the Clinician Administered PTSD Scale for DSM-5 (CAPS-5).⁴² Copies are available at no cost from the US National Center for PTSD (www.ptsd.va.gov). While the CAPS is useful for research, it is a long and cumbersome instrument and more detailed than is required in most clinical settings. A more clinically user-friendly structured interview is the PTSD Symptom Scale – Interview (PSSI).⁴³

Several self-report measures of PTSD are also available. One of the most widely used is the PTSD Checklist for DSM-5 (PCL-5),44 also available at no cost from the US National Center for PTSD. This is a simple symptom checklist on which the respondent is asked to rate how much they have been 'bothered by that problem in the last month' for each of the 20 DSM-5 PTSD symptoms. It is a quick and simple scale to administer, and can be used regularly (e.g. every month) during treatment to collaboratively monitor progress. Another widely used self-report scale is the 22-item IES-R.45 Although the IES-R covers the three broad PTSD domains of intrusion, avoidance, and arousal, the items are not linked to the DSM (or ICD) criteria making it slightly less useful for routine use.

Standardised measures for associated features and comorbid conditions are widely available, but beyond the scope of this manual.

Differential diagnosis

Psychiatric diagnosis is never a black and white issue and there are rarely unequivocally right or wrong answers. The symptoms defined within specific diagnoses often overlap with each other. This is especially true for PTSD, which has a high degree of symptom overlap with depression and some anxiety disorders. Further, many people present to clinical settings with multiple complaints, making for a complex diagnostic formulation. Most importantly, human beings are infinitely complex and unique: they do not fit easily into categories defined by committees. Diagnosis, therefore, is always a process of generating and constantly re-evaluating hypotheses.

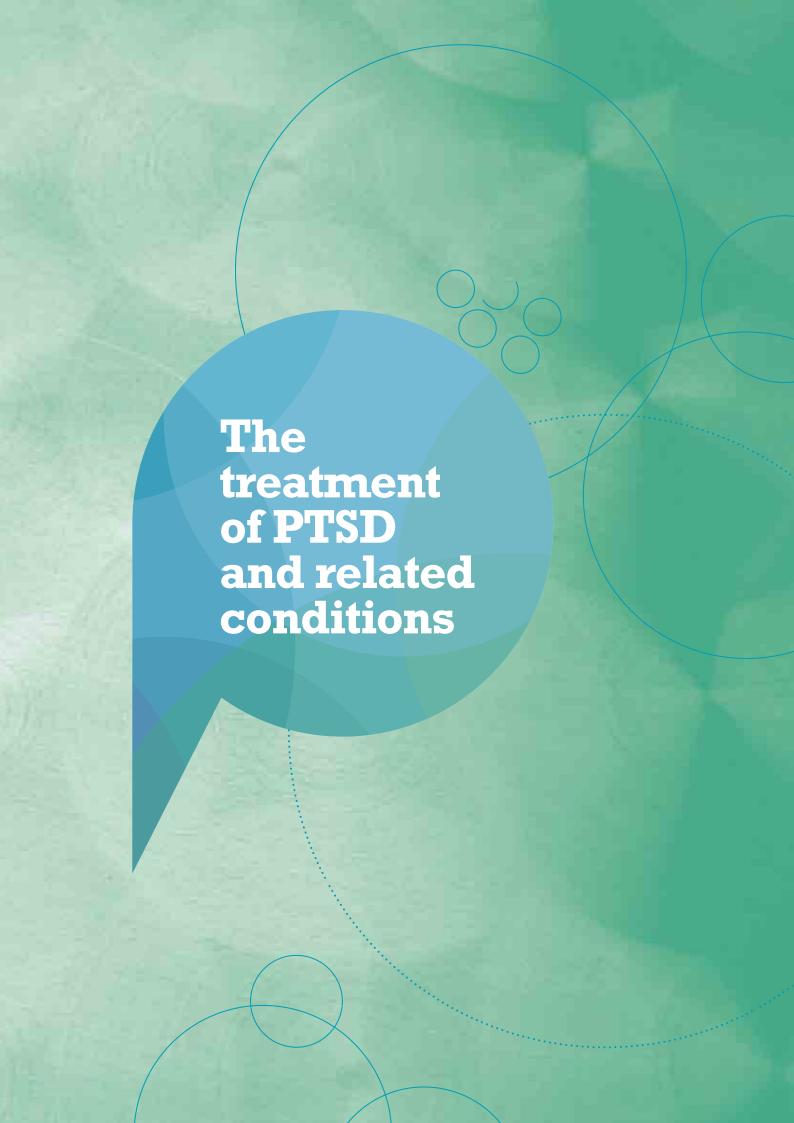
Of specific interest here is the differential diagnostic issues raised by comorbid PTSD and psychosis. As noted above, it is possible that the memory of trauma is entirely or partially part of a delusional system. The re-experiencing symptoms of PTSD, particularly the intrusive images and dissociative flashbacks, can sometimes appear to be psychotic in nature. There is no easy way of reliably making this differentiation and, indeed, there is no clear demarcation. The vividness or 'reality' of a genuine intrusive symptom of PTSD might be exacerbated by the presence of psychosis. Most people with PTSD are able to identify that these experiences are not actually happening ('it seemed real at the time, but I know it was my imagination playing tricks on me'), but young people with an active psychosis sometimes also show similar levels of insight. In the final analysis, it is up to the clinician to make a reasonable hypothesis as part of the formulation and to re-evaluate that hypothesis as treatment progresses.

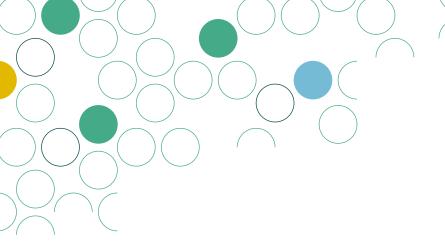
Formulation

Several other manuals in this series, notably 'Let me understand ...' assessment in early psychosis and Psychological interventions: why, how and when to use in early psychosis provide descriptions of how to conduct a case formulation. Only a brief description will be provided here, with specific reference to the role of trauma in the formulation.

Trauma has a potential role in each of the '5 P's' of case formulation. Are there trauma specific features among the **presenting** problems? Have prior trauma and adversity increased vulnerability as **predisposing** factors? Has a recent trauma, or re-activation of prior trauma, acted as a **precipitating** factor? Are on-going trauma, or traumatic stress symptoms, **perpetuating** the current problems? Finally, can clinicians draw on resilience strategies that the young person has used to cope with prior trauma and adversity as **protective** factors?

Bringing this information together into a coherent story will assist the young person and the clinician in collaboratively deciding on a treatment plan that has a high chance of success.





The treatment of PTSD and related conditions

The following sections outline a comprehensive approach to treatment. Several components overlap with treatment for other conditions and most clinicians will already have the training and skills to offer some of these interventions. The central pillar of treatment is 'trauma focus' work – all successful trauma treatments involve some opportunity to confront, or 'work through' the traumatic experience. These components are more challenging and clinicians without the necessary expertise may choose to refer on for those specialised interventions.

Before discussing the details of treatment, it is important to note that good clinical practice will go a long way to helping a young person with PTSD and psychosis. The formation of a trusted therapeutic relationship, common sense advice, and some simple coping strategies can have a profound impact. In combination with the effective treatment of comorbid conditions, including psychosis, they have the potential to improve the young person's mental state and sense of security to the point where they feel able to confront and work through the past trauma.

What does the evidence say?

As clinicians, we are informed in our work by the empirical evidence. Systematic literature reviews and clinical practice guidelines consistently nominate trauma-focused psychological treatment as the first line intervention for PTSD. This term covers various trauma-focused CBT approaches including prolonged exposure (PE) and cognitive processing therapy (CPT), as well as Eye Movement Desensitisation and Reprocessing (EMDR).

Further details can be found in the *Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder*⁴⁶ and the PTSD guidelines from the National Institute of Clinical Excellence in the UK.⁴⁷

Preliminary research evidence suggests that these trauma-focused interventions are also useful for the treatment of PTSD in people with psychosis. A recent Dutch study reported an open trial of 27 people with diagnoses of both psychosis and PTSD who were provided with 6 sessions of EMDR.48 Over 75% of participants who completed the study no longer met criteria for PTSD after treatment. PTSD symptoms, auditory verbal hallucinations, delusions, anxiety, depression, and self-esteem all improved significantly.⁴⁸ A later study, also from the Netherlands, randomly assigned ten people with diagnoses of both PTSD and psychosis to either PE or EMDR.⁴⁹ The two interventions were equally effective, with 70% of participants no longer meeting criteria for PTSD at follow-up. These response rates are largely comparable with studies of PTSD treatment in the general population. Importantly, no adverse events occurred in either study and no participants showed any worsening of psychotic symptoms, general psychopathology or social functioning. This latter finding is supported by a more recent larger study of 155 people with both PTSD and psychosis who were randomly allocated to either trauma focussed treatment (PE or EMDR; n=108) or a waitlist control (n=47).50 Adverse events and symptom exacerbation were rare but, when they did occur, this was predominantly in the WL condition.

There is reasonably strong research support for pharmacological interventions, particularly the selective serotonin reuptake inhibitors (SSRIs), for PTSD in the general population.⁴⁶ There is limited evidence to support symptom management strategies in their own right, although they are routinely provided alongside the trauma focussed interventions. The remaining treatment stages discussed here (e.g. engagement, psychoeducation, relapse prevention) are widely considered as good clinical practice but do not have an independent evidence base in the treatment of PTSD.

Engagement, assessment and stabilisation

Effective engagement is crucial in all mental health care. It is especially important when working with trauma, since clinicians are activating highly sensitive and distressing memories. Another in this series of ENSP manuals provides a wealth of valuable advice on how to engage young people with FEP (Get on board: engaging young people and their families in early psychosis). Suffice to say here that, without effective engagement, trauma-focused care is not possible.

The process of comprehensive assessment does much to facilitate engagement by demonstrating a caring, non-judgemental approach. It may be the first time the young person has had the opportunity to talk about these issues and to structure them into a coherent narrative. Depending on the service structure, the clinician who conducts the primary assessment may not take on the case for traumafocused treatment. In that scenario, the treating clinician should use the early sessions to conduct their own trauma-specific assessment even if it represents some repetition. It is important that the young person feels understood and accepted by the clinician to whom they will reveal the detailed aspects of their trauma history.

As part of engagement, clinicians need to ensure a level of stability. It is not possible to address trauma memories if the young person is, for example, suicidal, misusing substances, or is in the middle of life crises. In FEP, amelioration of acute psychotic symptoms will also be required. Unless they are actively interfering with treatment, other comorbid conditions such as depression are usually addressed after the PTSD because they often resolve once the trauma work is complete. It is important to remember that young people have to feel ready to address and work on their traumatic experiences. It is equally important that

clinicians feel confident to manage discussions about trauma experiences and enlist help from senior clinicians if they feel they need specialist skills when addressing certain symptoms.

Psychoeducation

In the early stages of treatment, clinicians should provide the young person with information about their condition (in this case, PTSD).

A handout is often useful and an example is provided in Resource 3. (Note that Phoenix Australia provides many useful handouts about trauma, available free at www.phoenixaustralia.org). Clinicians also provide an explanation of how and why these symptoms have appeared along the lines of the information provided under 'How and why do people develop PTSD' above. Finally, the clinician will introduce the treatment approach. A broad outline such as the following (adjusted to suit the individual) is a useful starting point:

'We talked earlier about why these trauma symptoms occur – the biological aspects, the psychological aspects, and the social aspects. Pulling these components together brings us to the best treatment for PTSD.

We'll address the biological aspects by teaching you strategies that help to reduce that constant sense of feeling tense and on edge. We'll address the social aspects by helping you to develop strong social networks and by teaching you how best to benefit from those relationships.

Most importantly, treatment needs to address the core of PTSD, the painful memories. By doing this, we can break the link between the memories and your current problems – the distress and the effect these painful memories have on your life. You will never forget what happened and it will always be a distressing memory – that is part of being a normal human being. The goal of treatment is to be able to remember what happened without being crippled by it, without being overwhelmed by painful feelings, without needing to withdraw into a shell to protect yourself. Does that make sense? Do you have any questions?'

Clinicians then go on to provide a more detailed overview of the treatment stages. This psychoeducation helps the young person understand more about their condition and about what treatment will involve, as well as further cementing the therapeutic relationship. The clinician is demonstrating that they understand something of what the young person is going through and that they have the skills to assist. Promoting a sense of positive expectancy about treatment, and a realistic optimism about recovery, is an important first step of treatment.

Symptom management

People with PTSD feel vulnerable, frightened by the memories, and unable to control their symptoms. Before addressing the memories, therefore, it is important to teach some symptom management strategies. The goal is not to make the symptoms go away but, rather, to reduce their frequency and intensity. This is about helping young people to manage their symptoms, rather than focusing on eliminating them.

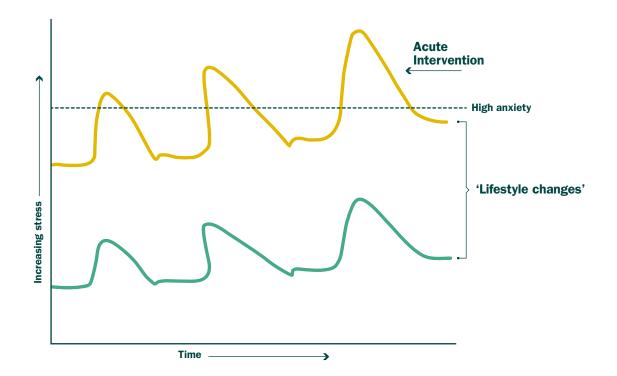
Clinicians aim to teach one or two strategies in each of the physical, behavioural, and cognitive domains. These interventions are by no means trauma-specific. On the contrary, they are used across most high prevalence mental health

conditions. The ENSP manual Psychological interventions: why, how and when to use in early psychosis contains many useful strategies and only a brief overview will be provided here.

In teaching these strategies, clinicians distinguish between longer-term 'lifestyle' changes and more acute anxiety/distress management techniques (see Figure 1). The former are designed to reduce chronic, habitual levels of tension and arousal. Clinicians explain that, if individuals are generally more relaxed and less tense, they will react less to everyday stressors. Even though they still react, they are coming off a much lower base. The latter are designed to deal with acute exacerbations of anxiety or distress. However good individuals become at the lifestyle changes, there will still be times when they become distressed so they use these strategies to achieve a more immediate effect.

Obviously, clinicians do not simply provide a list of suggestions. Rather, clinicians use their own clinical judgement and work with the young person to decide which ones they want to try (ideally a couple from each domain), developing a plan of action that can be reviewed at subsequent sessions. A key to success is regular practice in non-stressful situations – these are skills that must be learned. The more the young person is willing and able to practise a specific skill, the more useful it will be.





Subjective Units of Distress (SUDS)

The first step in symptom management is to help the young person quantify their level of discomfort. This becomes especially important when we progress to trauma-focused work but is also a useful anxiety management tool in itself. Clinicians use a SUDS scale or fear thermometer. This is well described in *Psychological interventions:* why, how and when to use in early psychosis (p.55) and will not be repeated here. (Note that they suggest 0–10, but clinicians use 0–100; either is acceptable). With practice, the young person will be able to report their SUDS without it distracting from what they are doing. Ask them to rate and record their SUDS on a regular basis, particularly before and after any intervention.

Physical interventions

In terms of physical interventions, long-term strategies will include basic self-care and adopting a healthy lifestyle. Regular aerobic exercise, healthy diet, reducing stimulant intake (e.g. coffee, nicotine), and getting plenty of rest are all very important. It might also include activities such as yoga, meditation, or daily relaxation exercises.

An effective acute intervention strategy in the physical domain is a simple controlled breathing exercise. A good description of a commonly used approach is provided in *Psychological interventions:* why, how and when to use in early psychosis (p.60). Vigorous exercise and isometric relaxation are also useful for some people as acute distress management strategies.

Behavioural interventions

Longer-term behavioural interventions include daily structure, meaningful activities, and social (re)integration, as well as reducing avoidance. Early in treatment, while symptoms remain high, these interventions may need to remain relatively modest. They should, however, emphasise structure through daily activity scheduling, aiming to achieve a range of activities each day (e.g. exercise, work/study, social contact, therapy homework, etc.). This may not be easy – young people with FEP often lead quite chaotic lives and may have unstable accommodation and work/study options. Nevertheless, structure helps people to feel more in control of their lives and remains an important goal.

Acute behavioural interventions take the form of 'self-soothing' activities –comforting and being kind to ourselves by focussing on our five senses. Examples include listening to soothing music, cooking, getting some special food as a treat, taking a bubble bath, and so on. Clinicians help the young person to identify their favourite ways to soothe and 'spoil' themselves.

Cognitive interventions

Longer-terms cognitive interventions involve simple cognitive restructuring – again, this process is well covered in *Psychological interventions: why, how and when to use in early psychosis* (p.72) and will not be repeated here. At this point, clinicians are not addressing trauma-related cognitions. Rather, clinicians help the young person to understand the role of thoughts and appraisals in generating emotions more generally in their daily lives. Teaching them how to identify and challenge unhelpful thoughts, and to replace them with more helpful alternatives.

Cognitive interventions to reduce acute escalations of distress and arousal will include grounding exercises, of which several are available (see Psychological interventions: why, how and when to use in early psychosis [p.62]). These are designed to bring the young person back to the here and now, rather than remaining absorbed in painful memories or distressing thoughts. Coping self-statements, generated by the young person with assistance from the clinician, can be written on a card to carry with them. These can be as simple as 'just relax', 'everything's OK', 'remember to breathe', or more complex such as 'I expect to feel a bit anxious in this situation, but that's OK, I can handle it. I won't make it worse by adding frightening thoughts. Just relax and slow down my breathing. Now, what is it that I have to do next?'

Trauma-focused treatment: an overview

Let's now move into the most challenging part of treatment, but also the most important: confronting the feared situations and traumatic memories. Remember that the evidence suggests trauma-focused psychological treatments for PTSD are effective in people with comorbid psychosis and that they are very unlikely to result in adverse events or symptom exacerbation.

Although these treatments are widely accepted as the best intervention for PTSD, many clinicians do not use them. While it is true that opportunities for training and supervision are limited, a more common reason is clinicians' lack of confidence in being able to contain the affect. As noted above, this may apply even to asking about the trauma history. Trauma-focused interventions require the clinician to go much further than that, actively probing to activate the memory network in its entirety for extended periods. Habituation of fear responses, as well as modification of traumarelated memories and beliefs, will only be possible if the network is activated for long enough, and often enough, for modifications to occur. Clinicians are also concerned about appearing 'voyeuristic' when they elicit these intimate details. This is understandable, but we need to be confident in the knowledge that this is the best treatment and overcome our reticence. Given the very low risk of iatrogenic effects or symptom deterioration, and the strong supporting evidence, clinicians are encouraged to conquer their fears and to engage in trauma focus work to the extent that their skills and training allow.

Trauma-focused treatment: *in vivo* exposure

A useful description of *in vivo* exposure appears in *Psychological interventions: why, how and when to use in early psychosis* (p.70), providing a useful adjunct to this section. *In vivo* ('in real life') exposure involves confronting activities, places, people, or objects that the young person has become frightened of since the trauma.

Theory and rationale

The potential for anxiety and distress frequently causes people to avoid situations, thoughts, memories, or feelings that are associated with the trauma – indeed, this is a core feature of PTSD. Some people believe they will 'lose control', 'go crazy', or have some other dire consequences if they confront the situation. At the very least, they believe that the unpleasant feelings will be intolerable. Although understandable, this is a major impediment to recovery. Avoidance and escape provide temporary relief – the anxiety reduces – but the next time the young person even thinks about confronting that situation again, they become anxious. The more the situation is avoided, the more difficult it becomes.

PE therapy demonstrates that these feared outcomes do not occur - or, at least, are manageable – by helping the young person to repeatedly confront the feared situation. This is done in a controlled and gradual fashion so that discomfort is manageable. The important thing to remember, and to emphasise to people with PTSD, is that the anxiety will come down if they stay there long enough. This is known as 'within session habituation'. There is no answer to the question of how long is enough. In some cases, the anxiety will drop substantially in 10-15 minutes. In other cases, it may take as long as an hour but it will reduce eventually. It is vital that clinicians encourage the young person to stay in the feared situation long enough for the anxiety to reduce. It is important to note also that anxiety often increases before it starts to drop (see Figure 2). This temporary increase is often enough to make people avoid or escape, so it is important to warn them that it might occur. If they leave the situation while the anxiety is high (the dotted line in Figure 2), there is a danger of incubating the anxiety - it might actually get worse. Figure 2 also highlights that the drop in anxiety is not smooth - there may be occasional small increases - but the general trend is downwards.

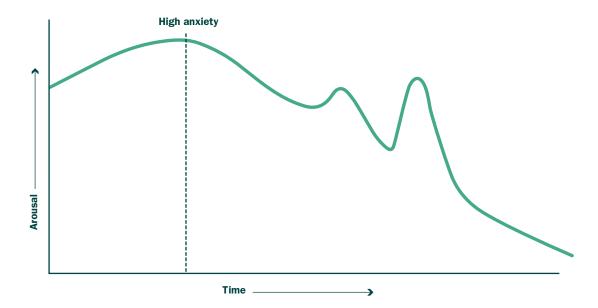
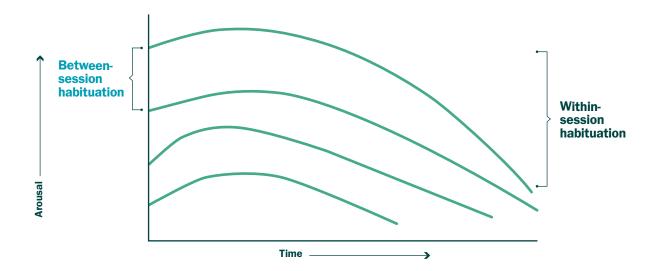


FIGURE 2. ANXIETY REDUCTION DURING EXPOSURE (WITHIN SESSION HABITUATION)

It is important to confront the same situation repeatedly – ideally on successive days or many times on a single day – until it evokes only minimal anxiety. Clinicians achieve better results doing massed exposures (e.g. several times on one day, or on successive days) than if spaced out (e.g. once a week). Generally speaking, each time the young person confronts the situation, the anxiety will be slightly less. This is called 'between session habituation' (see Figure 3). By building upon repeated successes in facing these feared situations, the young person will eventually be able to confront them without anxiety and will no longer avoid them.





Clinicians might help people to understand with something like the following:

'In many ways, this approach is common sense. Let's take an example of a little boy who is standing on the beach when a big wave knocks him over. He becomes very frightened of the sea and refuses to go to the beach the next day. How would his mother or father help? In order to overcome the fear, his parents may take him for a walk along the beach, staying away from the sea, holding his hand and reassuring him. Gradually, they walk closer and closer to the water's edge. Eventually, the boy is able to go into the sea again unaided. This is a simple example, but exactly the same process applies to confronting situations and activities that remind you of [the trauma]'.



BEHAR

CASE SCENARIO (CONTINUED FROM PAGE 8)

Although Behar continued to experience vivid and distressing memories of her experiences after her arrival in Australia, she was able to keep them mostly under control. She attended school regularly and had a part-time job. When she was 16, however, she was the victim of a racially motivated assault while she was walking alone in a park near her home. A man ran up behind her, hit her and kicked her several times when she fell to the ground. Throughout the assault he shouted abusive, racist slurs, and threatened her with future attacks. He ran off and was never arrested. Following this, she became fearful of going out alone, especially at night, and developed widespread avoidance. She was troubled by vivid and highly distressing intrusive memories of the assault, which became confused with memories of her time in Iraq and Syria. Over the next year, she became increasingly convinced that the man who attacked her was following her, to the point that her fearful beliefs became quite delusional. She started to hear his voice threatening her and repeating the insults he had shouted during the assault.

She had her first admission just before her 18th birthday and responded well to pharmacological interventions for her FEP. The PTSD symptoms, however, remained. She was engaged with a case manager and provided with psychoeducation and symptom management. She then began an *in vivo* exposure treatment, based on a hierarchy of feared and avoided situations. She responded well, gradually going out more.

Planning the program

All exposure treatments start with the case manager working with the young person to construct a hierarchy - a list of feared situations in order of difficulty. Treatment involves tackling each item, one at a time, and moving on to the next when the young person is confident to do so. More difficult items are broken into steps. The first task, therefore, is to collaboratively draw up a list of situations and activities that the young person would like to achieve, with particular emphasis on things that have been avoided since the trauma. These goals should be very specific and should vary from relatively easy to extremely difficult. For each goal, ask the young person to estimate (using the SUDS scale) how anxious or distressed they would be if they tried to do that item. Don't worry if the worst ones seem unachievable at the moment they will become easier as you progress through the others. List them in order of difficulty, starting with the easiest. Behar's hierarchy is presented below.

As a general rule, clinicians aim to confront situations that produce a SUDS level of around 70.

For the first one or two, however, clinicians should start with some easier ones (say, around 50) – it is important that the young person experiences early success. After that, encourage the young person to push themselves as hard as they feel able (within reason).

If something is too hard, break it into smaller steps. For example, the top item in Behar's hierarchy might be too difficult for her even when you've worked through the other items. So the first step for that one may be to go to the end of the street and look at the park from a distance. The second may be to go to the edge of the park, the third to walk into the park a short distance, and finally to go back to the spot where the assault occurred.

It's fine to work on more than one item at a time, provided that the young person does not become overwhelmed. When the young person has mastered each one (that is, can do it with minimal anxiety), move on to the next more difficult one. It is important to regularly monitor and review the hierarchy – clinicians can expect to make changes as they go along. Some things will be easier than expected, some more difficult, and clinicians can change the order or add/delete items as necessary.

TABLE 1. BEHAR'S HIERARCHY

TARGET ACTIVITY	EXPECTED SUDS
Going back to the park where I was assaulted	100
Going to the pub with friends for a drink	100
Catching the train into the city in the evening	100
Catching the train into the city in the day	90
Taking the dog for a walk around the streets	8 <i>5</i>
Walking to my local milk bar for some milk in the evening when it's dark	80
Going into the shopping centre and looking around	75
Catching the bus to the shopping centre	70
Walking to my local milk bar for some milk in the daytime	60

Implementing the program

Encourage the young person do at least one of their goals every day and preferably more. Remind them that avoiding something one day will build up the fear they are trying to reduce and set them back. Sometimes they will have bad days and feel they are not progressing. On those days, it is important to do something, even if it is just repeating steps they have already mastered. As a general rule, clinicians aim to do each item

three times in a row with only minimal anxiety – say, a SUDS of 40 or less – before moving on to the next one. It can help to have a friend or support worker accompany the young person as a first step to achieving a hierarchy item but they should move quickly to doing it alone.

Encourage the young person to keep careful records to monitor progress and to identify sticking points. Part of Behar's *in vivo* exposure record is presented below.

TABLE 2. BEHAR'S IN VIVO EXPOSURE RECORD

DATE	TARGET	TIME START	TIME END	MAX SUDS	END SUDS	COMMENTS
14/6	Train to city (daytime)	10.30	12.30	8 <i>5</i>	40	Went well! Did four trips in and out of city. Easier each time.
15/6	Train to city (daytime)	2.30	5.30	65	25	Easier today, feeling confident
15/6	Walk round Myers	3.00	3.30	65	30	Very busy, anxious at first, but got easier
16/6	Train to city (dusk)	6.00	8.00	90	70	4 return trips. Started OK, still light, but got worse as it got darker.
16/6	Walk around Myers	6.30	7.00	50	35	Went well – much easier than expected (but it was still light outside)
17/6	Train to city (dark)	7.00	8.30	75	50	A bit easier, feeling more confident
18/6	Train to city (dark)	6.30	8.30	60	40	Better. Trains busy. Anxious at first but soon came down.
18/6	Walk to/round Myers in dark	7.00	7.45	90	40	Very scared when saw group of young men, but they passed. Otherwise OK.

Practising the steps

The following reminders will help the young person when they are embarking on each step.

- Use the techniques we've discussed to get as calm as possible before you start.
- Mentally rehearse the activity. Go through
 it in your mind and work out strategies to
 deal with difficult aspects. Practise the coping
 self-statements that you will say to yourself
 when you become distressed. Good preparation
 will make success more likely.
- Go about the exercise in a slow and relaxed manner give yourself plenty of time.
- Keep an eye on your SUDS throughout the exercise. If they become too high (80 or more) before you've reached your goal, stop and wait until the anxiety comes down a bit. When you feel ready, move on again slowly.
- Try to stay in the situation until you feel yourself calming down. Ideally, the SUDS should reduce by half (e.g. from 70 to 35) but as long as they come down a reasonable amount that's okay. The longer you remain in the situation, the calmer you will become and the faster you will overcome your fears.
- Never leave the situation while your anxiety
 is still high. Try to face the fear, accept it, let
 it fade away, and then either move on or return.
 If you leave while the anxiety is still high it will
 be more difficult next time. Remind yourself
 that you have done really well to get this far;
 just hang in there until the anxiety comes down.
- Congratulate yourself for your achievements.
 This is very hard work and you deserve a pat on the back. Don't put yourself down by saying that you could do this kind of thing easily before the trauma or that anyone should be able to do it without getting upset. It's a vital part of your recovery.

Trauma-focused treatment: imaginal exposure

Although many items on the in vivo exposure hierarchy will be trauma-related, the real trauma work will focus on the distressing memories. This is called 'imaginal exposure'. The in vivo exposure helps the young person to confront feared situations, places, people, and activities. In PTSD, however, the most 'feared stimulus' is actually the painful memories of the traumatic experience. These memories are so frightening, and cause so much distress, that the young person tries to avoid or escape from them by blocking them out. Imaginal exposure treatments are used to help in confronting the memories. Exposure is only one term used to describe this process. Some people talk about 'trauma-focused work', 'working through the trauma', or 'coming to terms with the experience'. An excellent training manual and DVD on conducting imaginal exposure is available from Phoenix Australia (www.phoenixaustralia.org), and a therapist's manual by Foa and colleagues is also useful.51 Only a brief outline will be provided here.

Imaginal exposure is not for everybody. As a rule of thumb, if the young person is not troubled by memories of the trauma then imaginal exposure may not be the best approach. (Of course, if the young person has PTSD they are, by definition, being troubled by re-experiencing the trauma). The young person needs to be relatively stable, and the acute psychotic symptoms under control, before this is tried. The young person will also be more confident about managing the distress associated with the memories once they have mastered the symptom management techniques described above and had success with in vivo exposure. The young person also needs to feel safe in confronting the memories - secure in the therapeutic relationship and trusting the case manager to contain the process. Some case managers give the young person a signal to use if they feel overwhelmed, although it is important not to allow this to become a means of avoidance. Box 6 provides some points to consider when deciding whether to proceed with imaginal exposure.

BOX 6 CAUTIONS WHEN CONSIDERING IMAGINAL EXPOSURE

- If there are no traumatic memories, do not use imaginal exposure.
- Ensure current life crises (and especially suicide and homicide) are under control.
- Ensure substance misuse is under control, at least to the extent that they can come to sessions sober and not use alcohol/drugs to cope with distress.
- Ensure that the young person has strategies to tolerate high arousal /distress.
- Anger and guilt both interfere with imaginal exposure if they are a problem, consider cognitive therapy first.
- Consider whether comorbidity or functional impairment is sufficiently severe to interfere with effective treatment.

In the final analysis, it will be a clinical decision based on the current mental state and clinical presentation. If intrusive memories are a problem, however, the clinician should seriously consider some form of trauma-focused exposure. People with PTSD are often more keen to confront the memories than clinicians expect.

What is imaginal exposure?

Explaining the rationale and process of imaginal exposure at the outset is crucial, so allocate a couple of sessions for preparation. Several ways of presenting the rationale appear below – case managers should pick the ones with which they feel comfortable and practise the explanations. It is important to impart a sense of confidence and expectations of success.

Many analogies can be used to explain imaginal exposure and the following examples are useful.

'After a trauma, we may try to block out our memory of what happened, putting it to the back of our mind. It's as if we are trying to pack the event away into a box. We then make great efforts to keep the lid tightly closed and to leave it undisturbed. Over time, however, two things happen. Firstly, our strength begins to wane and it becomes more of an effort to keep it sealed (that is, to stop the memories from coming back). Secondly, the box begins to lose its shape under the pressure and small cracks begin to appear. When we have memories of the trauma or nightmares, it is like the content of the box spilling out through these cracks. This is usually very frightening, so we try to avoid anything that reminds us of the trauma. We try to stop thinking and talking about what happened and how we felt. In this way, the content of the box becomes a 'ghost' which we have learned to fear

and which we are terrified of confronting.

As part of therapy, we are going to open the box and inspect the content for what it really is.

We will talk through what happened and how you felt. We will be inspecting the 'ghosts' that have been created and throwing away any unhelpful and distressing beliefs you may have about the event. We find that, once the trauma has been dealt with in this manner, the memories become less severe and less frequent.'

Another analogy talks about the dentist:

'When dentists work on a decayed tooth, they don't just put the filling on top of the decay. If they did, it may be fine for a few weeks or months, but the problems would keep coming back as the tooth continued to deteriorate. Instead, they spend time drilling and scraping, cleaning out all the decay before putting the tooth back together. This is a very unpleasant and painful process, but we know it is worth going through this short-term pain for the long-term gain. Traumatic memories are a bit like tooth decay. We need to make sure that we have confronted all aspects of the trauma before we try to put the event behind us. We need to give ourselves time to face up to even the worst parts of the experience so that there are no skeletons in the closet to come and haunt us in the future. Like the dentist's drilling, it is a painful process but an important part of recovery'.

It is also worth outlining the potential benefits of confronting the memories (in language they can understand). The following list (adapted from Edna Foa's work) provides some useful pointers:

- Habituation and desensitisation: repeatedly confronting the painful memories for long periods of time will lower anxiety (in exactly the same way that in vivo exposure works)
- Emotional processing: repeatedly going over the trauma helps organise the memory and make sense of what happened
- Discrimination between remembering and being re-traumatised: remembering the trauma is not the same as experiencing the trauma again – clinicians need to break that link
- Increased mastery: exposure increases your sense of self-control and personal competence; it is particularly important that you learn to tolerate the unpleasant feelings (and not to avoid them if you can help it)
- Differentiation: exposure will decrease generalisation of fear from the specifics of the traumatic situation to similar but safe situations

The process of imaginal exposure

Implementing imaginal exposure involves a series of logical steps.

Step 1 Clinicians assume that a good therapeutic relationship already exists and that acute comorbidity (especially psychotic symptoms) has been addressed as far as reasonably possible. The first step is then to provide a rationale for, and description of, treatment. This will include discussing the underlying mechanisms and theory, along the lines outlined under 'How and why do people develop PTSD' above. It should include a detailed review of the rationale for, and explanation of, in vivo exposure, with particular reference to within and between session habituation. It will include the use of metaphors and the benefits of confronting the memories in a safe and controlled manner. It will include a discussion of feared consequences (what does the young person think will happen if they talk about the experience?) and the opportunity for questions. If the young person remains hesitant, some kind of motivational interviewing is often helpful. A reminder of the SUDS scale should be provided.

Step 2 Develop a hierarchy of traumatic memories with the young person in the same way as imaginal exposure. If there is only one event, that's fine. If there are multiple traumatic experiences, try to put them in some kind of order, starting with the least distressing. If the trauma was ongoing (e.g. prolonged and repeated childhood abuse), try to choose a small number of 'typical' episodes that characterise the overall period. You will constantly review this list as you progress through treatment, changing the order, adding, or deleting as necessary.

Step 3 Start with the lowest item on the hierarchy. Set the scene briefly, then ask the young person to describe the experience in detail from beginning to end. Although clinicians will need all the details by the time this item is finished, the young person can be allowed to skip through the worst aspects on the first presentation (see 'Grading the exposure' below). Take frequent SUDS ratings – every few minutes or whenever you think the distress is too high or too low. Remember that we are aiming to peak at around 70. Don't worry if it goes higher - even up to 100 (which it will on occasion) - but don't deliberately push it that high. If does go high, provide reassurance ('You're doing really well, just hang in there, stay with that image') and wait for it to come down before moving on. Apart from brief reassuring comments and probing questions as required, try not to talk too much this is not the time for comment or interpretation. Try to never terminate the session while anxiety is high, even if it means taking the young person on to a safer part of the memory more quickly than you would like. Try to continue through until the end of incident or until you reach a point of relatively safety. Repeat the same scene at the same level as often as necessary. If you have time, try to go through it two or three times during single session.

Step 4 After each run through, spend a short time reviewing the process: 'What was it like? What's still on your mind? Anything seem different now?'. At this point, you may wish to consider some brief cognitive restructuring (see below) or, at least, note potential targets for later. At the end of the session, it is important to prepare the young person for possible 'after-effects' – they may find the intrusive memories (and possibly nightmares) are worse for a day or two before getting better. This is a perfectly normal part of processing the experience. If appropriate, talk to their family, friends or significant supports and suggest the young person may need extra support at this time.

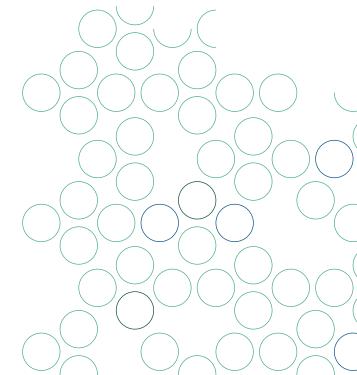
Step 5 If you are able to see the young person several times a week, allocating homework may not be necessary. Many sessions are weekly, however, (doing trauma focus work less frequently than weekly is not recommended) and treatment will progress faster if the young person continues the exposure on their own. This is best achieved by taping the in-session exposure (e.g. on the person's smartphone) for them to listen to at home. Guidelines for the young person on this process are included as Resource 4. If that is not possible, or you have concerns about the young person's ability to tolerate the distress of listening to the tape, a writing task may help (see below). Other homework tasks are likely to include continuing with the in vivo hierarchy and practising the symptom management strategies daily.

Grading the exposure and dealing with 'hot spots'

As noted above, clinicians are aiming for a maximum SUDS of about 70 but are also wanting to ensure that we eventually access even the most distressing parts of the memory. These are called 'hot spots': look for them as you go through the incident because in later sessions these elements will need to be the focus. Again, clinicians should encourage the young person to stay with those images, describing them in as much detail as possible, until the anxiety starts to come down. Use prompts if/as required, trying to focus on all senses to increase vividness and to access the entire memory network. Use both stimulus prompts (e.g. 'What's happening now? What can you see now? What can you hear? What does he smell like?') and response prompts (e.g. 'What are you thinking now? What are you feeling now? 'What's happening to your heart rate?'). Note that when clinicians say 'now', we mean now in the memory, not now in the consulting room.

Even if clinicians start low on the hierarchy, it can sometimes be difficult to keep the SUDS at an appropriate level and they need to consider how best to grade the exposure. Some strategies include:

- Allow the young person to skip over the worst aspects on the first presentation, but gradually build up to more detail on later exposures; before moving to the next item, clinicians want to elicit as much stimulus and response detail as possible.
- Ask the person to start with their eyes open for the first run through (or first few), but ask them to close their eyes in subsequent sessions.
- Allow the young person to tell the story in the
 past tense in early sessions (e.g. 'I was walking
 in the park when I heard his footsteps behind
 me'), but move to the present tense in later
 sessions (e.g. 'I am walking in the park and
 I can hear his footsteps behind me').
- Use focusing ('stay with that image') or probes ('what does the blood look like?') to increase engagement and SUDS.
- If the young person is struggling to keep
 the distress under control, even on initial
 exposures, try asking them to watch the scene
 as if it is on a TV screen on which they can
 turn down the volume or colour. Alternatively,
 suggest that they watch the scene from a safe
 position some distance away. These should
 be intermediate strategies only and, ideally,
 clinicians should move to the full exposure
 protocol when possible.



Should clinicians use symptom management during exposure?

The simple answer is no. Strategies to reduce acute anxiety and distress are very helpful to use after the exposure exercises. Ideally, however, clinicians should not encourage their use during the exposure. It is better to confront the full anxiety and allow it to reduce of its own accord than it is to use other strategies to bring it down. It is, however, important that the person does not feel overwhelmed. Despite the best intentions (carefully working through the hierarchy) the anxiety will sometimes be greater than expected. The first strategy is to stay with it, focusing on the image until the anxiety comes down. If it does not seem to be reducing, or the end of the session is approaching, it is reasonable to allow the person to use some symptom management strategies.

Managing potential difficulties in imaginal exposure

As noted above, exposure is usually not as difficult as people (case manager and survivor alike) fear and most people get an enormous sense of achievement when they have confronted the memory or other feared situation. If clinicians go through the process as described above, it is unlikely that difficulties will be encountered. Sometimes, however, difficulties arise and it is best to be prepared.



PATRICK

CASE SCENARIO (CONTINUED FROM PAGE 13)

The case manager worked with Patrick to increase his ability to manage symptoms of anxiety and depression. He responded particularly well to controlled breathing and simple self-statements. He has started an exercise program and enrolled in a photography course at his local community centre. He has commenced an *in vivo* exposure program, but has not yet got close to returning to the area where his church was located, nor has been to any other church.

Patrick was still troubled by intrusive memories of sexual interactions with the priest. Far from reducing along with his other positive symptoms, these had become more frequent, vivid, and distressing. He was increasingly sure that they are genuine, and believed there were several episodes when he was 6 or 7 years old (but none since then). Given the disturbing and intrusive nature of the images and sensations, the case manager decided to work on the memories without dwelling on whether they were true.

Patrick identified three discrete memories but was unable to differentiate them in severity, estimating all at a SUDS of around 90. He and the case manager picked one to be the focus for the first imaginal exposure session, at which they went through the incident three times. The SUDS started at 90, peaked at 100 for a while, and then gradually dropped to 75 on the first exposure, with similar patterns on the second and third run through. They recorded the session and Patrick listened to it four times during the week between sessions. The SUDS had reduced by the second session, so the case manager gently elicited more detail. This memory required four treatment sessions, with intervening homework, before the SUDS were reliably peaked at no more than 30. The remaining two incidents were much faster and the intrusions now have stopped completely. Patrick feels ready to try and return to church.

Over-engagement with the memory:

this is case managers' most common fear what if I cannot contain the distress? - but actually happens very rarely. Usually, even if the SUDS peak at 100, the young person is able to stay with it until it comes down. If it does not reduce, and particularly if the person seems to be dissociating (actually reliving the trauma without any reference to the here and now), it will not be therapeutic. In such situations, the case manager should temporarily terminate the exposure and use grounding strategies to orientate the person to the present time and place. Then discuss what happened and how to manage it in future. Ideally, clinicians can then continue the exposure but at a lower intensity (e.g. with eyes open). If these reactions persist, exposure might need to be put on hold for a while to go back to the symptom management strategies and, if necessary, try alternative approaches.

Difficulty engaging with the memory:

again, this is very rare but is important to address if it occurs. The young person needs to properly 'engage' with the memory – to activate the whole network – for modification to occur. If SUDS remain low during the exposure and/or there is little evidence of associated affect, it is important to increase prompts and probes. It can sometimes be helpful to ask the young person to visualise the scene for a while without talking. If this problem persists, it is important to stop the exposure and discuss it openly with the person. What do they think is happening? What are their fears and concerns (e.g. losing control, upsetting the case manager)? Hopefully, clinicians can then address those issues and resume exposure.

Intrusion of other memories during exposure:

in most *in vivo* tasks, clinicians have control over the level of exposure to the feared stimulus. It is not so easy with memories and, occasionally, clinicians will be working on a low hierarchy item when a higher SUDS memory intrudes. The memory networks are, after all, linked. In this scenario, clinicians would suspend the exposure and discuss the problem openly with young person (including highlighting common themes between the two memories). It may then be possible to simply let the new memory pass and continue the focus on the original memory. Failing that, clinicians would revise hierarchy and continue exposure with the new memory (with careful grading to keep the SUDS manageable).

Failure to habituate: very rarely, the SUDS do not seem to drop even after a prolonged period of exposure. Remember that, although clinicians would like a 50% drop, any reduction is acceptable. Recent research suggests that between session habituation is more important than within session habituation. In the very unlikely event that the SUDS do not reduce, it is acceptable, as noted above, to use anxiety management strategies. It is then important to explore what happened with the young person. The most likely explanation is failure to fully engage with the memory, perhaps because the young person is using covert strategies like distraction. Clinicians need to be clear that this is not therapeutic.

Trauma-focused treatment: cognitive restructuring

Exposure often brings to the surface unhelpful thoughts and beliefs associated with the traumatic experiences. To recover effectively, it may be necessary to challenge those thoughts and beliefs, and to replace them with something more rational and helpful. In PTSD, this process is best carried out in conjunction with exposure, modifying the unhelpful cognitions between exposures as they arise. It can be a useful initial step when there is significant guilt or anger, because both emotions seem to interfere with exposure. The general process of cognitive restructuring is discussed above. An adaptation for PTSD is cognitive processing therapy, which has a strong empirical evidence base. Detailed treatment manuals are available⁵² for clinicians interested in taking cognitive processing therapy further.

Following a traumatic experience, young people are often left with a range of negative thoughts about what happened, themselves and the world. They may experience guilt and shame, thinking that they are bad or evil for acting in the way they did or that what happened was their fault. They may see themselves as weak or inadequate for not coping better. They may be obsessed with blaming others. There may be elements of truth in these thoughts. Often, however, they are completely untrue or, at least, grossly exaggerated and they are not helpful for recovery. This kind of thinking leads to unpleasant emotions such as depression, guilt, fear, and anger. An important part of recovery involves identifying those unhelpful thoughts, challenging them and replacing them with a more helpful view of the self and the world.

The process of cognitive restructuring

It is beyond the scope of this manual to provide detailed instructions on cognitive restructuring. This section will simply discuss, briefly, how to go about identifying and challenging unhelpful thoughts with specific reference to trauma.

A useful starting task is to ask the person to write briefly about what their traumatic experience means to them. How has it changed or influenced their beliefs and ideas about themselves, other people, and the world? What views or beliefs have been strengthened? Which ones have changed? Particularly following trauma, it is useful to ask the person to focus on themes of safety, trust, power, control, self-esteem, and intimacy.52 Clinicians then work with the young person to identify which thoughts and beliefs lead them to feel unpleasant emotions. Which ones make you feel angry, frightened, guilty or sad? Clinicians then help the young person to re-evaluate whether the thoughts and beliefs are really true by encouraging them to answer a series of questions (see Box 7).

When the young person has written an answer to all (or most) of the questions, clinicians help them to go back and reconsider the original thought. Do they still believe it? Is it still a statement of reality? Is it helpful? If the young

person is hanging on to the unhelpful belief, try to introduce a different perspective. Obviously, all the negative thoughts will not disappear at once. It is hard work and the young person will need to go through the process many times to shift those ideas. It is important to remember that clinicians are not talking about positive thinking here that is just as unrealistic and fragile. We do not want to pretend that everything is rosy when it is not. Clinicians do not want to minimise what the person went through. Equally, clinicians do not want to over-emphasise the negatives. Life will not always be safe, but do not exaggerate the dangers. For example, if the original thought was 'all men are bad', a more rational alternative may be 'some men are bad, but by no means all – most men are actually caring, safe, friendly people'. If the original thought was 'I'm not safe anywhere' the rational alternative may be 'I am safe in most places most of the time - I will be careful not to put myself in dangerous situations, but I do not need to worry constantly about getting hurt again'.

BOX 7 USEFUL QUESTIONS FOR COGNITIVE RESTRUCTURING

Write the unhelpful thought at the top of the page (e.g. 'It was my fault I was raped'). Then try to answer some of these questions:

- What is the evidence for and against that statement? Is it really true?
- Is there another way of looking at it?
- · Am I thinking in all-or-nothing, black-and-white terms?
- Am I taking too much responsibility for things over which I do not have control?
- Am I looking only at the negative side and ignoring the neutral or positive things?
- Is this kind of thinking helping me to recover?

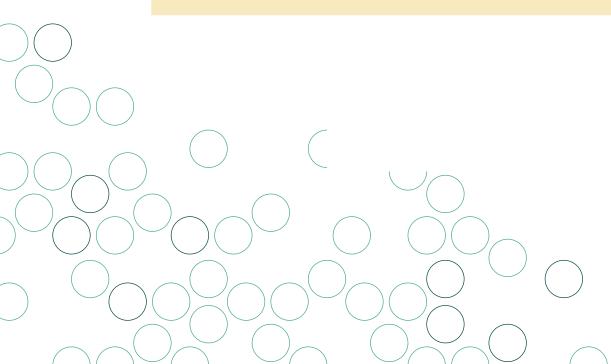


SIENA

CASE SCENARIO (CONTINUED FROM PAGE 22)

Siena reported several symptoms typical of PTSD, including repeated intrusive memories of the abuse, attempts to block out thoughts and feelings associated with the abuse, negative cognitions and mood, and several symptoms of hyperarousal. There was also substantial evidence of disturbances in self-regulation, including self-harm, unstable relationships, dissociation, and frequent somatic complaints. The most appropriate working diagnosis (in addition to the FEP) was complex PTSD.

The first component of treatment for the complex PTSD focused on a range of emotion regulation strategies, borrowing heavily from the Skills training in affective and interpersonal regulation (STAIR) manual and the ENSP manual A different way of thinking: working with borderline personality disorder in early psychosis. Some in vivo exposure was also started. For phase 2, Siena and her case manager decided to put imaginal exposure on hold for the time being and start with a cognitive approach. Siena wrote out a summary of her childhood experiences (without going into too much detail) and, together with her case manager, explored how those experiences had affected her views of herself, other people, and the world. She was able to come up with several core cognitions in domains including trust (e.g. 'It's not safe to trust anyone, they will only hurt you'), self-esteem (e.g. 'I'm damaged goods, I'm worthless'), and intimacy (e.g. 'I'll never have a loving sexual relationship' and 'No-one will ever want me'). Cognitive therapy started with the first of these ('It's not safe to trust anyone, they will only hurt you'), which Siena wrote at the top of the page. She rated the strength of this belief as 95 out of 100. She then wrote a paragraph or two under each of the challenging questions, starting with 'What's the evidence for that belief?' and 'What's the evidence against that belief?'. She repeated this process on several occasions, each time adding more detail and/or more convincing arguments for each question. The final question: 'Is this thinking helping me to recover? What will my life be like if I continue to think this way?' was particularly powerful for her. By the end of this process, the strength of this belief had dropped to 35 out of 100. Together, they then moved on to the next unhelpful thought.



Trauma-focused treatment: other approaches

Although the trauma-focused CBT approaches (exposure and cognitive restructuring) have the strongest evidence base, there may be other ways of achieving the same goal. This section comprises a brief discussion of the major alternative options.

Eye movement desensitization and reprocessing (EMDR)

EMDR has gained a strong following in the treatment of PTSD and related conditions. There is good research to support its use in PTSD and it is rated as a first line treatment in most evidence based guidelines. For some people affected by trauma, it can produce impressive results in a relatively short time. Training for EMDR is widely available and a detailed treatment manual has been produced by the originator of the approach, Francine Shapiro.⁵³

Briefly, EMDR consists of eight phases. Phase I involves taking a history and planning treatment, including identifying the distressing memories which will become the targets for reprocessing. Phase 2 covers some simple distress management techniques. In Phase 3 the young person is asked to visualise an image that represents the disturbing event, along with a negative thought associated with the image and a positive alternative cognition. The young person is asked to rate how strongly they believe the positive thought, to identify the accompanying emotion and where in the body it is located, and to rate the strength of that emotion using a SUDS scale.

In Phase 4 the young person is asked to focus on the disturbing memory for 20–30 seconds and to follow the clinician's finger which is moved rapidly left and right to produce lateral eye movements. Following each set, the young person is asked what 'came up' during the procedure and this new material usually becomes the focus of the next set of eye movements. This process is repeated many times during the session and continues until the young person no longer feels as distressed when thinking of the target memory. In Phase 5 the young person is asked to focus on the event, along with the positive thought, while the case manager continues with the eye movements. When the young person feels a high level of belief

in the positive thought, this installation phase is complete. In Phase 6 the young person is asked to think about the event and the positive belief, and to scan their body for tension or other unpleasant sensations. These are then targeted and diminished using the eye movements. In Phase 7 the young person is reminded to use their distress management strategies and to keep a diary of re-activations during the week for the next session. Phase 8 is re-evaluation. At each subsequent session, the previous session's work and the young person's coping through the intervening time is reviewed. The case manager can then decide whether to continue working on previous targets or move on to newer ones.

Writing about the trauma

There is a reasonable body of research evidence to support the using writing tasks in PTSD and related conditions (see *Written Exposure Therapy* for an example by Sloan et al.⁵⁴). Although there are minor differences in approach, all ask the young person to write about their traumatic experience in detail. As such, all are a form of trauma-focused exposure.

A writing task is the first step in cognitive processing therapy⁵² and more detail is available in the cognitive processing therapy treatment manuals. A useful way of introducing the task might be:

'Writing about the trauma can be important in helping you to sort out exactly what happened. Being able to 'put the pieces of the jigsaw puzzle together' and make sense of the experience is very important in recovery. It works in a similar way to the exposure we've done -the more you confront the painful memories and the bad feelings associated with them, the less powerful and distressing they become. Take a sheet of paper and write out a detailed account of exactly what happened. Include as many sensory details as possible (sights, sounds, smells, and so on). Also try to include all the thoughts and feelings that you had during the event. Don't stop yourself from feeling the emotions - although it's painful, that's part of the recovery process. If you become too distressed, you can stop writing for a while but try to continue again as soon as possible. It's important to keep writing until you reach the end (and a point of relative safety), even if that takes a long while. Make a note of your SUDS level in the margin every few minutes - this is important

to compare your levels when you re-read or re-write the account. You can re-write the account as often as you like, putting in more details or different perspectives as they come to you. On days when you do not re-write the account, read it to yourself at least once. Stick to the steps outlined above when you do this. If you have kept a note of the SUDS levels in the margin, you will notice them dropping over time as you repeat the process. You will need to repeat the task until your SUDS are reasonably low throughout (say, a maximum of about 30)'.

Cognitive processing therapy goes on to identify core themes (e.g. safety, trust, power, control, self-esteem, and intimacy) in the unhelpful thoughts and beliefs, before moving on to the cognitive restructuring described above.

A related approach, known as 'expressive writing', is based on the work of James Pennebaker.⁵⁵ The initial task is to write in detail about what happened (or any other issue that is bothering the person), and to repeat it every day for at least 4 days. Although the initial accounts may be largely factual, the young person is encouraged to add increasingly more in the way of thoughts and reflections on subsequent writings. These may include, for example, how the event or problem relates to, or affects, their life – their past experiences, their view of themselves, their family and relationships, their hopes for the future. A handout on expressive writing is included as Resource 5.

A phased approach for complex PTSD

Although the approaches outlined in this manual have long been accepted as the treatment of choice for PTSD, there was an initial reluctance to use them in what were deemed more complex cases, particularly those resulting from prolonged childhood abuse. An increasing body of literature, however, has demonstrated the effectiveness of these approaches with that population, provided that some modifications are made.

The International Society for Traumatic Studies (ISTSS) has recently released expert consensus guidelines for the treatment of Complex PTSD (available free from the ISTSS website at www.istss.org). They propose three integrated phases of therapy. Phase 1 is essentially emotion regulation (symptom management), with a heavy emphasis on grounding and stabilisation, along with attention to repairing disrupted interpersonal relationship skills. There are substantial similarities

between complex PTSD and borderline personality disorder in some people. Thus, the ENSP manual A different way of thinking: working with borderline personality disorder in early psychosis may also be useful for this phase of treatment. Phase 2 comprises the trauma-focused components. These can be provided along the lines described above, but would normally progress at a relatively slow pace with regular reinforcement of the emotion regulation and relationship skills taught in phase 1. Phase 3, reconnection, marks the transition out of therapy to greater engagement in community life. It involves supporting the young person to rebuild their life, with attention to plans for education, employment, recreation, social activities and meaningful hobbies. As such, it is much the same as should occur in any comprehensive mental health treatment plan.

An excellent evidence-based example of phase 1 is provided by STAIR, which is combined with exposure (phase 2) in the treatment of adult childhood sexual abuse survivors. A detailed treatment manual is available by Cloitre et al.⁵⁶

Pharmacological treatment

Currently, we are not aware of any randomised controlled trials of pharmacotherapy specifically targeting PTSD in the context of FEP. There is, however, a large evidence base to guide pharmacotherapy for PTSD in the broader population, with the evidence favouring the SSRIs as the first choice of medication.46 No single SSRI type consistently emerges as more efficacious than any other. Other new generation (and old generation) antidepressants are recommended as a second line medication where SSRIs have been ineffective or contraindicated. The atypical antipsychotics, such as risperidone and olanzapine, are being used for PTSD where arousal and agitation levels are high, but the evidence base is weak. There is some evidence to suggest that prazosin may be useful in the treatment of PTSD-related nightmares. Benzodiazepines should generally be avoided in PTSD due to the risk of dependence and the finding that they may interfere with exposure treatments.57

Many young people with FEP will be taking various forms of antipsychotic medication. It is beyond the scope of this manual to discuss the complexities of polypharmacy in comorbid PTSD and psychosis, but the potential for adverse drug interactions is obvious. Given the available evidence, it is reasonable to recommend that PTSD be treated with psychological interventions in this population wherever possible, rather than trying to introduce an additional drug to specifically target those symptoms.

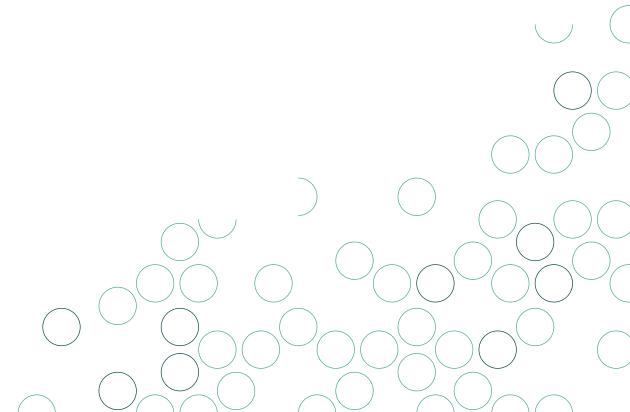
Relapse prevention

The final stage of treatment should address relapse prevention. Recovery is not just about getting better, it is about staying better. There are a few simple points to remember in relapse prevention.

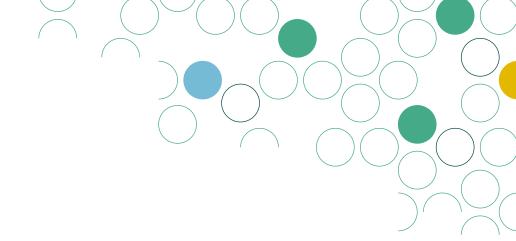
- Lapses are to be expected from time-to-time, particularly when reminded of the traumatic experience. This is part of a normal human reaction and, as long as it is not too severe or lasts too long, it should not be considered a problem. It is easier to cope with if the young person is prepared for it and does not feel that they are 'back to square one'.
- Just as clinicians do with any other disorder, it is important to be aware of the early warning signs of a relapse. As the young person becomes more aware of their PTSD, it will become easier to identify their personal symptom trajectory and to intervene early.

- Identify, and prepare for, high-risk situations. At the end of treatment, time should be spent thinking collaboratively about likely triggers and risk situations (e.g. anniversary of traumatic event). These may be powerful reminders or news of similar traumatic events, experiences that share similarities to the original trauma, and other life stressors such as financial or family problems.
- Generate a specific coping plan, incorporating strategies that have been helpful during recovery and contact details of appropriate support people (friends, family and professionals).
 If the relapse is too severe or lasts too long, this may involve returning to treatment (if only for a few booster sessions).

The risk of relapse is reduced if other areas of the young person's life are going well. Strong occupational and social functioning, reduced life stress, and good physical health will all go a long way to protecting against the risk of relapse.







Implementing trauma-informed care in early psychosis

An underlying principle of trauma-informed care is that mental health workers at all levels of the organisation recognise the impact of violence and victimisation on an individual's development and their coping capacity. Overtly expressing this understanding validates the young person's experience, increasing feelings of safety and optimism. The treatment system is then in a position to facilitate recovery from past trauma by providing a safe environment and offering therapeutic relationships where disclosure can happen. Access to trauma specific services within the treatment system is crucial. This definitely does not mean clinicians should force someone to confront their traumatic past. Rather, it is up to the individual to determine if and when they choose to address their experiences. Our role is to provide a service system in which that is possible when they are ready to do so.

It is important to remember that everyone is different; some young people might be ready to discuss and work on their traumatic experiences and some will not be ready and only have the capacity to cope with their psychotic symptoms. Clinicians need to be mindful of this and pace the therapy to the young person, and their needs and identified therapy goals.

Self-care for case managers

Increasing attention is being paid to the impact of trauma work on case managers and/or therapists. Terms such as 'burnout', 'compassion fatigue', and 'secondary traumatisation' have been used to describe the potential emotional and behavioural effects that may develop in case managers working with highly traumatised people. It is important to be aware of their reactions and to be responsible for their own self-care.

The first step is to establish appropriate supervision arrangements. Ideally, at least some of this will be individual but peer group supervision can also be helpful. Supervision has two broad aims: the first is to act as a form of peer review – getting a second opinion, and appropriate advice, on the nature and quality of our clinical practice. The second aim (particularly important in trauma work) is to provide an opportunity to reflect upon how the work is affecting us emotionally, cognitively, physically and behaviourally, and to explore how that might be affecting both their clinical practice and personal lives. Regular supervision can go a long way towards buffering clinicians from the potentially harmful effects of high-level trauma work.

The second key step is to limit the amount of trauma work clinicians are engaged with at any one time. There are no hard and fast rules, but no more than half their clinical work having a primary focus on trauma might be a starting point. This proportion might be reduced depending on what else is happening in their lives at the time.

The third aspect of self-care is the importance of remaining detached, especially during the trauma-focused work. If clinicians engage emotionally with the young person's distress, it will be very hard to continue with such work for any length of time. Their role is to be supportive, reassuring, and directive. It is not to share their distress. Good supervision will help maintain these therapeutic boundaries.

The remaining self-care steps are largely common sense. Clinicians should try to ensure a balance of different activities both within their work lives and between their personal lives. They should look after themselves physically (e.g. exercise, diet, rest), behaviourally (e.g. life balance, good relationships, enjoyable activities), and cognitively (e.g. being aware of trauma stories or related themes intruding when away from work, trying to maintain a reasonably optimistic outlook).

Concluding comments

It is important to recognise that working with past trauma can be difficult for both the clinician and the young person. We have tried to address concerns such as differential diagnosis, the fear of exacerbating symptoms, and the issue of false memories in the discussions above. None of these are good enough reasons to avoid recognising and addressing trauma in young people with FEP. The mounting empirical evidence and the international expert consensus is consistent in suggesting that we need to address trauma as part of a comprehensive approach to good clinical care in early psychosis.

'I had a young person say to me that they had great difficulty with their psychosis, that they couldn't trust anything – including their own senses. They said that they were really frightened all the time. It wasn't until they began to trust me and the therapy I was providing that they started to feel better and gain confidence in managing their own wellbeing. They're now really excited about their future, it took time but they're getting there.'

Senior clinician, EPPIC, Orygen Youth Health



DSM-5 diagnostic criteria for PTSD

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

- 1. Directly experiencing the traumatic event(s).
- 2. Witnessing, in person, the event(s) as it occurred to others.
- Learning that the traumatic event(s)
 occurred to a close family member or close
 friend. In cases of actual or threatened death
 of a family member or friend, the event(s)
 must have been violent or accidental.
- Experiencing repeated or extreme exposure
 to aversive details of the traumatic event(s)
 (e.g. first responders collecting human remains;
 police officers repeatedly exposed to details
 of child abuse).

Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

- 1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).
 - Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.
- 2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).
 - Note: In children, there may be frightening dreams without recognizable content.
- Dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)
 - Note: In children, trauma-specific reenactment may occur in play.
- Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
- 5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

- 1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
- Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).



- D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
 - Inability to remember an important aspect
 of the traumatic event(s) (typically due
 to dissociative amnesia and not to other
 factors such as head injury, alcohol, or drugs).
 - 2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g. 'I am bad,' 'No one can be trusted,' 'The world is completely dangerous,' 'My whole nervous system is permanently ruined').
 - Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
 - 4. Persistent negative emotional state (e.g. fear, horror, anger, guilt, or shame).
 - 5. Markedly diminished interest or participation in significant activities.
 - 6. Feelings of detachment or estrangement from others.
 - 7. Persistent inability to experience positive emotions (e.g. inability to experience happiness, satisfaction, or loving feelings).
- E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
 - Irritable behaviour and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.
 - 2. Reckless or self-destructive behavior.
 - 3. Hypervigilance.
 - 4. Exaggerated startle response.
 - 5. Problems with concentration.
 - 6. Sleep disturbance (e.g. difficulty falling or staying asleep or restless sleep).

- F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.
- G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The disturbance is not attributable to the physiological effects of a substance (e.g. medication, alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

Depersonalization: Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g. feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).

 Derealization: Persistent or recurrent experiences of unreality of surroundings (e.g. the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g. blackouts) or another medical condition (e.g. complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Information on PTSD theory

How and why do people develop PTSD?

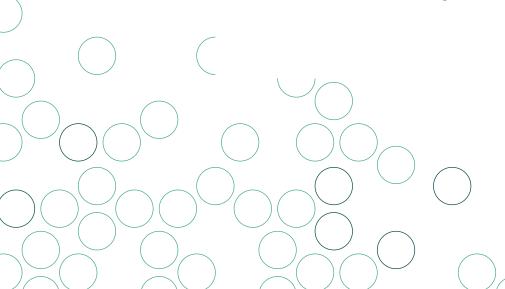
The signs and symptoms that many people experience after going through a frightening, or potentially life threatening, experience probably have their roots in evolutionary survival mechanisms. We sometimes think of traumatic stress disorders like PTSD as a 'program to escape danger'. If we have been confronted with a life threatening event, perhaps narrowly escaping death or serious injury, it is very important for the survival of the species that we recognise that situation immediately if we come across it again and that we react very quickly.

In PTSD, that process has become exaggerated. We tend to remember every single detail of the threatening situation, 'just to be sure' that we don't miss it next time. We tend to be constantly on the look-out for signs of danger, overreacting to loud noises or the slightest suggestion of threat. We respond with high levels of fear and arousal - not only to the external stimuli (sights, sounds and smells that may indicate threat) but also to the memory (as if it is happening again). These reactions are very useful if we are actually fighting the threat (e.g. a tiger) or running away, but very unpleasant if we are just sitting at home. To understand how these signs and symptoms develop, we need to think about biological aspects, psychological aspects, and social aspects.

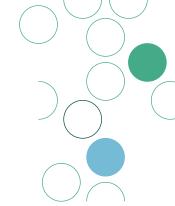
Biological aspects

From a biological perspective, this 'program to escape danger' affects the way our brain operates. The primitive part of the brain responsible for detecting and responding to threat (the amygdala) is over active in people with PTSD – constantly 'firing' when there is no real threat there. At the same time, the part of the brain responsible for dampening down the amygdala (the prefrontal cortex or PFC) – the part that puts the brakes on and reminds us to 'relax, everything's OK' – is under active in people with PTSD. So the amygdala is constantly reacting to the slightest sign of threat and the PFC is not able to control it.

There may be too much, or too little, of all sorts of brain chemicals, particularly the ones associated with stress. These cause the body to be constantly hyped up, with high levels of physiological arousal, resulting in increased heart rate, blood pressure, muscle tension and so on. Again, this is good for fighting or running away, but not for feeling relaxed. There may be high levels of hormones such as adrenalin, which helps to gear us up for the 'fight/flight/freeze' response. Adrenaline also consolidates memory, so we are much more likely to form detailed memories of things that happen when we are in danger. Underpinning much of this may be a genetic vulnerability: there is some evidence that some people may be more likely than others to develop PTSD following trauma.







Psychological aspects

Several things are also happening from a psychological perspective. First, when we are frightened and in danger we learn to associate things that were there at the time with threat. We call this 'fear conditioning'. It might be things we saw or heard or smelt. For example, if we are involved in an armed hold up in a bank, we might become frightened when we go into a bank in the future, even though there is no danger there. A more complex example is that if we are hurt by someone we trust, we might become frightened of trusting anybody in the future – we might assume (or have learnt) that trusting someone is associated with being hurt.

Not surprisingly, we avoid the situations we associate with danger. When we avoid, we feel less anxious. This acts as a powerful reward, or reinforcement, and makes us avoid even more. We call this operant conditioning. Although there are times when this is sensible (i.e. when there is genuine threat), the problem with avoidance is that we never get a chance to learn that the situation is actually not dangerous. If we never go into a bank again, we will not have the chance to remind ourselves that they are actually very safe places. We will continue to become anxious any time we are near a bank. Similarly, if we never pluck up the courage to trust someone again, we will never have the opportunity to find out that most relationships are safe and that most people can be trusted not to hurt us.

When someone goes through a traumatic experience, a 'traumatic memory network' is formed. This is a big chunk of memory that contains three aspects of the experience. First, all the information about what happened is stored in this network of memory – the sights, the sounds, the smells, the sensations. This includes not only the dangerous things, but anything else that was there at the time, which is why we sometimes react later to things that are not threatening. Second, the memory network contains all our responses – our physiological reactions

(e.g. high arousal and tension), our emotional reactions (e.g. fear, guilt, sadness or anger), and our behaviour (e.g. wanting to escape and avoid). Finally, the network contains our interpretations and appraisals of what happened – what does it say about other people (e.g. 'they cannot be trusted'), about the world (e.g. 'it is dangerous'), and about me (e.g. 'I'm a bad person, it was all my fault'). These appraisals are very important – if we don't appraise or interpret the experience as being bad or dangerous, we will not develop a traumatic stress reaction.

When the memory network is activated, we experience all the symptoms typical of PTSD. The memories come flooding back, often in a vivid and detailed way. We re-experience the reactions associated with the experience, like emotions of fear and guilt, high arousal (e.g. heart racing, sweating), and a need to escape. And the old interpretations and appraisals come back (e.g. 'I'm weak ... it's all my fault ... it proves that I'm worthless ... I'll never be safe again').

Social aspects

From a social perspective, we know that the culture and environment in which we live can shape the way we respond to severe stress in our lives. We also know that social support – having people around who care about you and are willing to help you – is of great importance in recovering from traumatic events. So the context in which we grow up and in which we live may influence whether we develop PTSD after a traumatic event and, if we do, what specific problems and symptoms emerge.

Putting it together ...

These biological, psychological, and social mechanisms all work together to create the symptoms of traumatic stress or PTSD. Later, we will look at how this model forms a basis for treatment.

PTSD information

PTSD and first episode psychosis

Many young people with first episode psychosis (FEP) also have a history of trauma. These events may have occurred in the past, perhaps during childhood, but the experience of the first episode itself may also have been highly traumatic.

What is PTSD?

PTSD is a set of reactions that can develop in people who have experienced or witnessed an event which threatened their life or safety, or that of others. Common traumatic experiences include childhood abuse, violent assaults, life threatening accidents, and natural disaster. The experience of psychosis can, itself, be very traumatic. Around 40% of people with FEP also have PTSD and about 5% of Australians have had PTSD at some point in their lives.

Anyone can develop PTSD following a traumatic event but people are at greater risk if the event involved physical or sexual assault, or if they have had repeated traumatic experiences such as prolonged childhood abuse or living in a war zone.

Signs and symptoms

The symptoms of PTSD often overlap with those of psychosis and we should not be too concerned about which problems are associated with which disorder. People with PTSD often experience feelings of panic or extreme fear which may resemble what they felt during the traumatic event. They are likely to have four main types of difficulties:

- Re-living the traumatic event through unwanted memories, images of the trauma, and nightmares. Sometimes it can be hard to work out whether these experiences are due to the PTSD, or are hallucinations or delusions that are part of the psychosis. There may be strong emotional or physical reactions, such as sweating, heart palpitations or panic, when reminded of the event.
- Being overly alert or wound up, including sleeping difficulties, irritability, lack of concentration, becoming easily startled, and constantly being on the look-out for signs of danger.

- Avoiding any reminders of the event such as activities, places, people, thoughts, or feelings associated with the event.
- Feeling depressed, anxious, or emotionally numb, with negative views of themselves and their future, losing interest in day-to-day activities, and feeling cut off and detached from friends and family.

People with PTSD can also have what we call 'dissociative experiences', such as 'It felt as though I wasn't really there', 'I felt like I was watching things happening from above', 'things didn't seem quite real'.

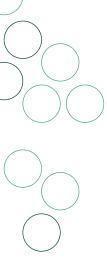
It is not unusual for people with PTSD to experience other mental health problems at the same time, particularly if the traumatic event occurred a long time ago. The most common associated problems are depression, anxiety, and misusing alcohol or drugs as a way of coping.

Impact of PTSD on relationships and day-to-day life

PTSD can affect people's ability to work, perform day-to-day activities, or relate to their family and friends. People with PTSD can often seem disinterested or distant as they try not to think or feel to block out painful memories. They may stop participating in family life, ignore offers of help, or become irritable. This can lead to loved ones feeling shut out. It is important to remember that these behaviours are part of the problem. People with PTSD need the support of family and friends but may not know that they need help.

Getting help

Several treatments are available to help people with PTSD. If you are receiving treatment for your FEP, talk to your case manager – they will be able to suggest the best way to proceed. The idea of trauma treatment might seem frightening to you. People with PTSD often want to push the painful memories away and not talk about it. Treatment may be difficult, but it will be worth it in the long run. If you don't deal with these past trauma problems, they will continue to trouble you into the future.



Guidelines for trauma-focused homework

Step 1 Preparation

- Plan an activity to do immediately afterwards:
 (e.g. go for a walk, visit or ring a friend,
 do an enjoyable absorbing activity; not an
 addictive activity like watching TV or drinking,
 or an emotional shutdown like hiding away
 on your own)
- Choose a private place with no interruptions (take the phone off the hook, let others know you are not to be disturbed)
- Identify two people you can contact immediately if you need help: keep their phone numbers handy
- Briefly relax yourself and try to clear your mind of other thoughts and worries: note down your SUDS level on a piece of paper

Step 2 Confront the memory and come back safely

- Listen to the tape and try to focus on what is being said: try not to imagine other, more frightening parts just concentrate on the tape
- Equally, try to imagine it happening as if you were experiencing it again: What can you see, hear, smell, touch, taste? What are you feeling and thinking?
- When reminded to do so on the tape, note your SUDS level. If they are above 90, take a moment to remind yourself where you are; you are safe here and now; you can feel as upset as you need to in the memory
- Don't stop the tape in the middle: stick with the memory through to the end
- If you do not have a tape, replay the event in your mind as if it were happening right now: continue through to the end, until you get to a safe place

Step 3 At the end of the tape, pause and open your eyes (if closed)

- Look around, move around, feel the chair, remind yourself where you are and that you are safe
- Note your SUDS level and use an arousal management strategy or relaxation exercise if necessary

Step 4 Process the memory but writing down some or all

- What new (or old) pieces of the memory did you discover or became clearer?
- Are you now thinking differently about any aspects?
- What feelings or thoughts are going through your mind right now?
- What parts of the memory are still too upsetting to remember or accept?
- What do you still want to change about the event or its aftermath?
 How can you achieve that?
- What did you do that you should be able to feel good about?

Step 5 Relax and do your planned activity

Expressive writing

(adapted from Pennebaker and Frank⁵⁵)

1. Don't try too soon

Powerful emotional reactions in the days following a highly distressing or frightening event are very common – they are part of the brain's natural way of sorting through the experience. But if you're still feeling very distressed several weeks or months later, and particularly if it is interfering with your relationships or your ability to carry out your normal role (e.g. work, parenting, studying), it is worth getting some help. We recommend seeing a properly trained mental health specialist, but if you are unable or unwilling to do that, writing often helps a great deal. (Even if you are, you can always do this as well but best to tell your therapist).

2. Make a commitment

This is not an 'instant cure'. (There are no instant cures!). So you need to make a deal with yourself to write about what happened and/or what is troubling you for 20 minutes each day for four consecutive days. You can do a bit more than 20 minutes each day if you want, but research suggests that this is a minimum. And you can do it for more than four days – there's really no limit there if you think it is still helping.

Find a time that suits you – when you won't be interrupted (turn off the phone), when you're not too tired, and when you'll have some free time afterwards to allow you to reflect on what you wrote. Many people find that the end of their 'work day' is best (and that includes parenting – if you have young children, you might choose to do it after they have gone to bed. Try to do it the same time each day so that it becomes part of your routine.

3. Write

Now that you've got a regular time, sit down and write about what's bothering you for 20 minutes straight. Don't worry about neatness or spelling or grammar, and don't worry about what anyone else might think – no-one else will read this. And you can throw it away as soon as you've finished writing it if you want to. Just write about what's troubling you and don't hold back. There is a little evidence that writing by hand (rather than on a computer) has a better effect, so you might want to get yourself an exercise book or lined notepad. But if you prefer typing, that is fine also.

You can write about the same event over and over again on each of the four days if you want. If you do that, try to add in a bit more detail each time (about what happened and/or your thoughts, feelings, reflections on what happened). Alternatively, you can write about different events on different occasions. But whatever you do, give yourself permission to explore your deepest thoughts, fears and feelings.

4. Getting the most out of it

If you've done the above, you will hopefully notice some positive effects after the four days. You may decide to keep doing it, either with the same issue or other concerns in your life. Here are a few hints that many people find help to make the process more effective.

- When you are writing, try to tie the issue into other areas of your life. How does the problem relate to your work? Your past experiences? Your family? Your relationships? Your hopes for the future? This is especially useful if you are writing about the same event repeatedly – it helps to put the experience into the context of your life more broadly.
- People tend to benefit most from expressive writing
 if they openly acknowledge emotions, so while
 you're writing be sure to build in thoughts and
 feelings that you had at the time and since the
 incident. These should not be all negative try
 to look for positive thoughts and feelings also.
- To recover from trauma, we need to create
 a narrative we need to tell the story. So, when
 you're writing, think about it as if you are telling
 a story, rich in detail, from your perspective.
 Like any good story, it should have a beginning,
 a middle, and an end.
- If you are writing about the same event repeatedly, try switching perspectives. Can you see the event

 and tell the story – through other people's eyes?

 This helps us to create a more rounded narrative of our experience.
- Remember that this is not a police statement or an official report, so make the writing personal.
 This is not about writing a detached, factual piece – it is about telling your own story how you saw it (and how you see it today).

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