Understanding Effects of Trauma and PTSD

What Trauma is

Trauma can have effects across the spectrum of mental health conditions. A clear example is Post-traumatic stress disorder, or PTSD, which is a pattern of distress that can develop after experiencing, witnessing, or being exposed to something overwhelming, frightening or threatening. It is common, it is recognised the world over, and it can improve. I have focused on PTSD in this document as it illustrates how humans process trauma and what can help. It is based on my own experience and not intended to be exhaustive or a definitive guide – it is simply what I would share if I had unlimited consultation time.

What counts as trauma

PTSD reflects the way the brain and nervous system respond when an experience is too much to take in and make sense of at the time.

Trauma is not defined only by extreme or dramatic events. What matters most is how an event was experienced by the person living through it, not how it might look from the outside. It can include:

- accidents, injuries or medical emergencies
- physical or sexual assault
- domestic abuse
- military combat
- sudden loss or bereavement
- childhood neglect, bullying or repeated exposure to threat or fear

Two people can go through the same event and be affected very differently.

Common features

PTSD usually shows as a combination of the following. Not everyone has all of them, and they can change over time.

Re-experiencing. Intrusive memories or images, nightmares, flashbacks, or strong emotional and physical reactions when something brings the event to mind.

Avoidance. Staying away from places, people, conversations or thoughts linked to what happened, and sometimes feeling numb or cut off.

Feeling on guard. Being constantly on edge, jumpy or easily startled, struggling to sleep, and feeling irritable or quick to anger.

Changes in mood and thinking. Guilt, shame or self-blame, persistent fear or low mood, difficulty trusting others, or feeling detached from yourself and the people around you.

What's happening in your brain and body

When something overwhelming happens, your brain and body react to protect you — usually before you have had a chance to think. A part of the brain that works like an alarm system picks up on danger and sets off a whole-body response: your heart beats faster, your breathing quickens, your muscles tense, and stress hormones such as adrenaline flood your system. This is the 'fight, flight or freeze' response, and it has helped humans survive for as long as we have existed. It happens automatically. You do not choose it, and you cannot simply choose to switch it off.

While the alarm system is doing its job, other parts of the brain — the ones that usually help you think clearly, make sense of what is happening, and keep track of time and place — are temporarily turned down. This is one reason overwhelming events can feel confusing, dreamlike or unreal while they are happening, and why afterwards it can be so hard to put what happened into words or into order.

This explains many of the physical symptoms of PTSD, not just the emotional ones. A racing heart, tight chest, churning stomach, disturbed sleep and feeling constantly wound up are not signs that something is physically wrong with you. They are the alarm system still running — sometimes long after the danger has passed — because it has not yet learned that it is safe to stand down.

There is a good evolutionary reason it works this way. Imagine one of our distant ancestors was attacked by a sabre-toothed tiger near a particular cave. It would do them little good to store the memory as 'a tiger attacked me once'. Far more useful for survival was to store the sharpest details — the shape of the entrance, the smell, the light at that time of day — so that going anywhere near a similar-looking cave in future set off instant alarm, before there was time to think it through. The brain treats trauma the same way. Rather than filing the experience away as something finished, it keeps the sharpest fragments — sounds, images, smells, body sensations — close to the surface, primed to fire again the moment something resembling them turns up. This is called pattern-matching, and it explains a great deal of what PTSD feels like day to day.

Nightmares and flashbacks are those same fragments intruding, because they were never filed away as something that is over — they are stored as live warnings rather than as memories of the past. Hypervigilance, and that constant sense of being on edge, is the alarm system staying switched on and scanning for anything that might match the pattern, so you notice exits, sounds or other people's moods before you have consciously decided to look for them. Avoidance happens because the brain would rather steer you away from anything that resembles the original threat than risk missing a real one — so places, people, conversations, or even certain feelings, get avoided, often before you are aware of having made a choice. And the background anxiety many people describe is this same system running in the present, treating an ordinary day as though it might, at any moment, turn out to resemble the previous danger.

None of this means anything has gone wrong with you. It means your brain and body are doing exactly what they evolved to do when faced with something too much to take in at once — matching patterns rather than reading each new situation afresh, and erring on the side of alarm rather than risking a missed danger. The difficulty is that the same system that once kept your ancestors alive can, in the modern world, keep firing at patterns that are no longer dangerous. That same alarm response is also what affects specific memories in PTSD

A metaphor

Imagine being given far more food than you could possibly eat in one sitting and you store what you can in the fridge to deal with later.

Traumatic experiences can work in a similar way. When too much happens too fast, the brain may not have the capacity to process and integrate it all at the time, so, as we have seen, parts of it — sights, sounds, sensations, feelings — are stored in a raw, unprocessed form. Later, when something reminds the system of that experience, it can be as if the fridge door swings open unexpectedly: the memory is not recalled as something that happened, but re-lived as if it were happening again.

Sometimes the brain processes it given time; sometimes additional help is needed to aid that processing, and to deal with the effects that living through that event, or that period of time, has had.

Trauma also changes what we expect

Trauma is not only about memory. That same alarm system also recalibrates what your nervous system expects, learning to anticipate threat more broadly — which can leave the body tense, alert or on edge even when nothing in the moment is actually dangerous. This is adaptation, not malfunction — and like any learning, it can be updated.

Single events and prolonged trauma

Some people develop PTSD after a single overwhelming event, such as an accident, an assault or a sudden loss, with symptoms centred on that event. For others, trauma happened again and again, or went on for years — through abuse, neglect, violence, or growing up somewhere that was never safe. Especially when this happens in childhood, it can shape not only memory but how safe the world, and other people, come to feel. This is sometimes called complex PTSD.

Alongside the usual features, people often notice a lasting wariness of others, difficulty trusting or letting anyone close, deep shame or self-blame, a sense of being fundamentally different from everyone else, swings between feeling overwhelmed and feeling numb, and difficulty even knowing what they feel. This reflects the same pattern-matching system described earlier, but calibrated by a world in which danger was constant and there was no way out — so instead of matching one specific trigger, it learns to treat people and relationships in general as potentially unsafe. Recovery from prolonged trauma tends to be slower than recovery from a single event, and there is more about what that involves further on.

When it comes back years later

If something overwhelming happened a long time ago and the reactions have returned — perhaps after months or years when they were quiet — that does not necessarily mean they are unconnected to it.

Reminders are not only sights, sounds and places. Dates are reminders too, and they are among the most powerful of all. An anniversary, a birthday, the time of year — any of these can match the pattern the system stored. And sometimes the feelings and reactions return without an obvious cause.

Numbness is one of the reactions people find hardest to accept in themselves, particularly after a loss. It can feel like a sign that you have stopped caring, or that you are grieving in the wrong way, or that something is damaged. It is actually because when feelings become stronger than the system can

manage, it turns the volume down: emotions flatten, the world can seem distant or unreal, and the body itself can feel strange — heavy, far away, not quite your own. This is designed to be protective and isn't a sign of indifference. It comes and goes with how much is going in life, and often eases as stressors reduce.

PTSD in children and young people

Children can develop PTSD too, and it can look different depending on their age. Younger children may not have the words for what they feel, so it often shows in other ways: re-enacting parts of what happened in their play, becoming clingy or fearful of separation, going back to earlier behaviours such as bed-wetting, having nightmares, or becoming withdrawn, irritable or hard to settle. Older children and teenagers may look more like adults, but may also become angry, take risks, or blame themselves.

The most powerful thing for a child is a calm, reassuring and predictable adult who takes them seriously and helps them feel safe. Routine, patience and honest, age-appropriate explanation all help. Trauma-focused therapy works well for children, and is the recommended approach. Medication is generally not used for PTSD in under-18s in primary care, though in some cases it is prescribed by specialist services.

What can help

Recovery is about helping the brain and nervous system safely process and update what was stored, rather than just suppressing the symptoms. A few things can help:

Trauma-focused therapy first. The recommended treatments are trauma-focused talking therapies. The two with the strongest evidence are trauma-focused cognitive behavioural therapy (CBT) and EMDR (eye movement desensitisation and reprocessing). Both help you revisit the memory in a safe, supported and controlled way, so the brain can recognise that the danger is over and the memory can settle into the past. The aim is not to relive the trauma, but to take it out of 'storage,' make sense of it, and put it back in a form that no longer overwhelms you.

Trauma-focused CBT. You work through what happened with a therapist in a structured way — often building an account of it in words, sometimes in writing, deliberately going back over the worst moments rather than around them, but with you in control of the pace. Much of the work is on what the event made you believe: that you should have seen it coming, that it was your fault, that you cannot be safe. Those beliefs are examined against what was actually true at the time. It usually runs to eight to twelve sessions for a single event, and longer where there is more than one.

EMDR: what actually happens. You bring the memory to mind while following the therapist's fingers with your eyes, or tapping, or listening to alternating tones. You are not required to describe what happened in detail, which some people find a great deal easier, particularly where there is shame. Sessions are usually longer than standard therapy — often sixty to ninety minutes — and the memory tends to become less vivid and less charged as you go.

A word on how it should feel. Trauma therapy can sometimes stir things up. It is normal to feel raw on the day, and sometimes for a day or two afterwards. But it should not repeatedly overwhelm you. You should be able to slow down, pause, and come back to the present at any point, and a competent therapist will make sure you can before going anywhere near the difficult material. If therapy is

regularly leaving you overwhelmed, unable to function, or steadily worse over weeks, that is not evidence that it is working and you must push through, but more likely that the pacing is wrong or the therapy is stirring up memories without then reducing the emotional intensity of them. At any stage you can express any concerns about how you are feeling, or the process, or the pace of the therapy.

The person matters as much as the method. Across all types of therapy, the single most consistent predictor of whether it helps is the quality of the relationship. If you do not feel comfortable with the person in front of you, that is important information and it is worth raising.

If the first attempt does not work. It does not mean you can't be helped. It far more often means it came too early, moved too fast, was too short, was the wrong fit, or occurred at a time when too much else was going on.

If the trauma was prolonged or repeated

When trauma was lived through over a period of years, especially in early childhood, recovery is often slower than it is after a single event.

The work often happens in phases rather than in one push. Often the first is steadying — sleep, routine, safety, ways of settling your body when distress rises, and a relationship with someone who you feel comfortable with. Then, usually, going towards the memories themselves, gradually, to reduce the emotional intensity of them, whilst then working towards hoped for outcomes in life.

Progress is rarely a straight line. There are sometimes stretches where nothing seems to move, and setbacks that arrive without warning. That said, beneficial change often happens even for people who have dealt with PTSD for decades. It is often gradual and cumulative rather than sudden.

Other things that help

Some people find briefer techniques helpful. Approaches such as the rewind technique and 'tapping' (EFT) are used by some practitioners; early research on the rewind technique is encouraging. They have less formal evidence behind them than trauma-focused CBT and EMDR, and like any therapy they do not help everyone.

Settling the nervous system — including while you wait. Therapy often involves a wait, and there are other things that can help in the meantime. Anything that lowers the body's background alarm makes the later work more possible: gentle movement and exercise, regular sleep, cutting back alcohol, contact with people who feel safe, and simple ways of settling the body when distress rises — slow steady breathing, feeling your feet on the floor, naming what is around you. Slow-paced breathing and heart-rate-variability biofeedback (one well-known version is HeartMath) help some people feel calmer and more in control. None of this processes the trauma on its own, but it helps create the conditions in which the rest of the work becomes more accessible.

Medication. Medication is not the first-line treatment for PTSD, but it can help some adults, particularly where sleep is badly disrupted or there is significant depression or anxiety alongside. An antidepressant such as sertraline is the usual choice, and there are specific options that can help with trauma-related nightmares. Medication does not process the memory itself, and benefits vary from person to person, so it is best seen as support rather than a cure. It is generally not used for PTSD in children and young people. There is a separate leaflet about antidepressant medication.

Recovery is possible

PTSD can feel overwhelming and permanent, but it can improve. With the right support, most people find that intrusive memories become less frequent, sleep and concentration improve, reminders lose some of their charge, and a sense of safety and control returns. Recovery does not mean forgetting, and it does not mean that what happened stops mattering. It means the memory takes its place in the past instead of hijacking the present.

For some people, particularly after prolonged trauma, the change is slower and more partial than that. A good initial outcome may for example be to have the capacity to feel what you feel without being swept away by it, and to begin to reestablish some steps in the direction you'd like life to take rather than just getting through each day managing the effects of what happened.

The symptoms are signs of adaptation — of a nervous system that learned to survive something overwhelming and has not yet been given the chance to update that learning.

When to seek help

It is worth speaking to a clinician if memories, nightmares, avoidance, sleep problems or feeling constantly on edge are affecting your daily life, your relationships or your work — particularly if this has gone on for more than a month, or if you have been treated for anxiety or low mood without the benefit you would expect. The same is true for a child whose behaviour, mood or sleep has changed after a frightening experience.

Please seek help sooner if you are struggling with thoughts of harming yourself, or feel unable to cope. You can contact your GP, NHS 111, local crisis services, or emergency services.

There is a fully referenced version of this material, if you'd like to read further into any of it.