Acute stress reaction

Synonyms: acute crisis reaction, acute reaction to stress, shock, psychic shock, battle fatigue

What is acute stress reaction?

An acute stress reaction is a psychological condition that can develop after exposure, and as a response, to a stressful event.

There are some challenges around the diagnosis related to differences between the International Classification of Diseases 11th edition (ICD-11) and the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5). DSM-5 recognises a condition called 'acute stress disorder'. The Royal College of Psychiatrists has highlighted that the DSM classification is a system used in the USA for diagnosis but that outside the USA it is primarily used for research purposes. In general, psychiatrists in Europe refer to the ICD. In the UK, ICD-11 is the official classification system for mental health professionals working in NHS clinical practice.[1]

There is no condition of 'acute stress disorder' in ICD-11 and an acute stress reaction is described as:

The development of transient emotional, somatic, cognitive or behavioural symptoms as a result of exposure to an event or situation (either short or long-lasting) of an extremely threatening or horrific nature.[1]

Traumatic events and risk factors

Traumatic events may vary hugely and are specific to the individual. Usually the precipitating event is, or is perceived as, life-threatening. The point about perception is clear - a replica gun couldn't kill someone but if someone felt they were at risk of being shot this would very likely be a traumatic event to them.

Other typical examples include serious accidents, natural or man-made disasters, combat, torture, physical and sexual assaults and rarer events such as terrorist incidents. It can also result from witnessing the threatened or actual injury or death of others in a sudden, unexpected, or violent manner; and learning about the sudden, unexpected or violent death of a loved one. The trauma can be ongoing such as in the cases of domestic violence or recurring sexual abuse. People experiencing acute traumatic stress may be injured as a result of the event, or they may be witnesses to the traumatic event.

There were over 128,000 people reported as road casualties of all severities in the UK in 2021.[2] These individuals are at direct risk of acute stress reactions but many more people will have been involved but uninjured. Others may have also been indirectly affected as witnesses and could be at risk of acute stress reactions.

Refugees and asylum seekers are more likely to have experienced the sort of trauma that could lead to acute stress reactions. Subsequently, they are then at much higher risk of PTSD than the general population in their new countries of settlement.[3] [4]

First responders - eg, police, ambulance personnel, firefighters - are by definition more likely to be exposed to traumatic events and are known to be at increased risk of PTSD.[5] Within these groups there may be some self-selection for inherent resilience but this cannot be assumed to be protective. Military personnel are at risk of exposure to potential precipitating events and this is known to place them at risk of PTSD.[6]

Diagnosis

Acute stress reaction symptoms typically refer to symptoms of intrusion, avoidance and hyperarousal. These then lead to impairment of social functioning and daily life. Acute traumatic stress is generally limited to the first month after a potentially traumatic event. If symptoms last more than one month, a diagnosis such as Adjustment Disorder or PTSD should be considered. The pattern of symptoms is described in ICD-11:

The response to the stressor may include transient emotional, somatic, cognitive or behavioural symptoms such as being in a daze, confusion, sadness, anxiety, anger, despair, overactivity, inactivity, social withdrawal, amnesia, depersonalization, derealisation, or stupor. Autonomic signs of anxiety (eg. tachycardia, sweating, flushing) are common and may be the presenting feature. [1]

Other typical symptoms of acute stress reactions include:

- **Intrusion**. This is often described as 're-experiencing'. The person will have spontaneous memories of the traumatic event, or there may be recurrent dreams and/or flashbacks. Typically these are intense and cause psychological distress.
- **Avoidance**. The person will try to avoid expressing thoughts or feelings which will trigger reminders of the event.
- **Hyperarousal**. This could be expressed through reckless or aggressive behaviour. This can be self-destructive. There may be sleep disturbance and people can be hyper-vigilant - for instance, this may be demonstrated when they are easily startled.
- **Mood-related**. This may involve negative thoughts and mood or feelings - they may feel estranged from others, blame themselves, or have reduced enjoyment and interest in activities.

Differential diagnosis

There are a number of conditions that could present similarly to an acute stress reaction. They may also co-exist in someone who has an acute stress reaction:

- Generalised anxiety disorder.
- PTSD.
- Social anxiety disorder.
- Panic disorder.
- Obsessive-compulsive disorder.

Other conditions that may need to be considered include:

- Depression. Anxiety and depression frequently co-exist and low mood is a common feature of an acute stress reaction.
- Schizophrenia. Occasionally, psychotic disorders such as schizophrenia may initially present with anxiety. Any abnormal thoughts and ideas should be explored.
- Dementia. This can be associated with both anxiety and depression. See the separate Screening for Cognitive Impairment article for examples of simple and well-validated tests.
- Alcohol misuse. This can co-exist in any person who has an anxiety or psychological disorder and may also be the cause of anxiety-like symptoms if withdrawal symptoms are experienced.

Acute stress reaction treatment and management

No treatment may be required, as symptoms may abate within hours and days of the stressful event. Some people will experience more severe and prolonged symptoms which will require further help.

There is still little evidence on which to make definite recommendations on the benefits of problem-solving counselling or psycho-education in adults or children and adolescents.[7]

Trauma-focused cognitive behavioural therapy (TF-CBT)

TF-CBT usually involves exposure treatment and/or direct challenge of those negative and often unhelpful trauma-related thoughts. The World Health Organization (WHO) recommends that CBT with a trauma focus should be considered in adults with acute traumatic stress symptoms that are causing significant impairment in daily functioning.[7] It can also be helpful when used in a community setting.[8]

Eye movement desensitisation and reprocessing (EMDR)[9]

This therapy is based on the idea that unprocessed memories are the cause of negative thoughts and feelings. It is an integrative psychotherapy approach with a set of standardised protocols, principles and procedures. One technique uses eye movements to help the brain process traumatic events, although this is only one part of the entire therapy. The goal of EMDR is to reduce distress in the shortest period of time. It should only be conducted by an appropriately trained therapist. The WHO felt there was still insufficient evidence to make a specific recommendation on its use in acute traumatic stress in the first month after a potentially traumatic event in adults or children and adolescents.[7]

Medication

WHO guidelines from 2013 state that benzodiazepines should not be offered to adults to reduce acute traumatic stress symptoms in the first month after a potentially traumatic event. They also suggest that appropriate advice on relaxation techniques and sleep hygiene should be given to those with insomnia and that hypnotics should not be offered.[7]

The British National Formulary states that benzodiazepines are indicated for the **short-term relief of severe anxiety** only. They should be used in the lowest possible dose for the shortest period of time.[10] In general, their use should be avoided given the risks of tolerance and dependence.

Beta-blockers can help relieve some physical symptoms of acute stress. Beta-blockers are not addictive, are not tranquillisers and do not cause drowsiness or affect performance; they can be taken as required.

Prognosis

Most people affected will experience short-lived symptoms which will abate within a few days and will not go on longer than a month.

Evidence from the use of the DSM-5 classification for 'acute stress disorder' has shown that it has a reasonably good predictive power for PTSD - the majority of people with a diagnosis of 'acute stress disorder' will go on to develop PTSD. However, it also has low sensitivity - ie most people with PTSD would not have been diagnosed with 'acute stress disorder' at first.[11] [12]

In any case, acute stress reaction is not based on the same criteria as 'acute stress disorder' and it is not possible to comment on the percentage of people who will have chronic problems. However, there are short-term evidence-based interventions to help people with acute stress reactions that can be considered if someone presents with an acute stress reaction.

Further reading

- EMDR UK & Ireland

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