Stress, Trauma and IBS



What is Stress?

Stress was originally an engineering term, defined as the force acting on a body to cause deformation or strain. It was the physiologist, Dr Hans Selye¹, who originally applied it to medicine to indicate the forces that act on our bodies to cause us to feel ill. Infection, starvation, injury and cold are all forms of physiological stress, but the stress that most of us think of, and has slipped into common usage, is psychological or emotional stress.

We all experience stress on a daily basis; it is part of life. Indeed, we might say that life without stress, is no life. Stress is change; any novel situation. Meeting somebody for the first time, going away on a journey, a new job, are all potentially stressful, but are probably not experienced as such.

What upsets us most are negative stressors; such as a difference of opinion, an awkward encounter; trying to decide what best to do; concerns about our children. These are the ones that accelerate our pulse, tense our muscles and tense and wrench our gut out of kilter. If they continue or other things happen that challenge us, then we might become exhausted and stressed out. This doesn't mean that we are neurotic or weak. Everybody gets stressed when life situations challenge them.

Not all stress is induced by external events. All too often we put ourselves under pressure through feelings of obligation and responsibility or we harm ourselves by guilt and self-criticism.

Occasionally however, a situation may occur that is so devastating, it completely undermines our sense of identity and may even threaten our very existence. This may be the death of a close relative, a bad injury, a physical assault, sexual abuse or the collapse of a love affair. Any of these may be best regarded as life trauma and may leave us devastated and feeling ill.

Such extreme stress may persist as a post-traumatic stress disorder (PTSD) and may take some time to get over; if indeed we ever fully recover. In the meantime, it may leave us particularly sensitised to the physical and emotional effects of everyday stress. We may function with apparent normality, but the body remembers² and reacts to anything that reminds us with an illness like IBS. Trauma sensitises a person to everyday stress and may be responsible for many cases of IBS.

How our body responds to stress

Our stress reactions are orchestrated by changes in the activity of the autonomic nervous system and the release of the stress hormone cortisol³. They vary according to severity and are described below using traffic lights.



Many of us can take most everyday stress in our stride. We have been in similar situations before and can respond with confidence

and the support of others. The green or 'go' response is mediated by the dorsovagal component of the parasympathetic nervous system. This regulates digestion, growth, repair after injury and pregnancy and is active during rest and sleep as well as relaxed attention and activity. While under its influence, you are more likely to think stress through and deal with it.



Some situations 'press our buttons' and cause us to react with what may be recognised as a stress response. This is mediated by the sympathetic

limb of the autonomic nervous system. Commonly known as the fight or flight system, it releases adrenaline from the adrenal glands and prepares the body for action. This accelerates the heart, raises the blood pressure, increases the rate and depth of respiration, arrests digestion, mobilises our natural immune responses and makes us more alert and focussed. The amber reaction commands our attention. It is a warning. We are under threat and everything else is put on hold while we deal with the situation. Then, once it is dealt with, we can return to the green zone, get the thinking brain back on line and repair whatever damage has been done. The experience of coping gives us the self efficacy to cope better next time.

Not all stressful situations can be dealt with so quickly. Think of an ongoing argument with a colleague, feeling trapped in an unhappy relationship; unrealistic demands at work with no respite or reward or an unfolding crisis. Situations of ongoing threat, especially when associated with loss, recruits the stress hormone cortisol. This prepares us for a siege by mobilising energy resources, increasing blood sugar, breaking down muscles for protein and energy and laying down accessible stores of abdominal fat. It also has complicated effects on the immune system, enhancing the autoimmune or allergic responses while suppressing immune defences against infection⁴. Repeated stress can suppress responses to cortisol, provoking an inflammatory response against our own tissues and leading to disorders that might include IBS. People can survive lives of repetitive stress for years, but at a cost.



People who are traumatised by situations that threaten their very existence or identity may disengage and go into a dissociated or freeze response.

Any attempts to resist are abandoned and they give up. This is the same response that animals exhibit when faced with inescapable danger (playing possum). It may save their lives because predators tend to lose interest in prey that is not resisting. The freeze response uses the ventral vagal component of the parasympathetic nervous system and is accompanied by a flood of endogenous opioids, numbing pain. Cortisol levels drop very low during this response. After repetitive trauma, people can become so conditioned that they lose the ability to react to stress and freeze even in response to minor stress. This is known as learned helplessness⁵.

Persistent amber and red responses are toxic and can cause long term illness. Recovery requires being able to redefine ourselves by letting go of the effects of what happened and living our lives in the present.

Why do some people get ill in response to stress and others don't?

It often depends on what has happened. If something has traumatised us, we may become extremely sensitised and react to any perceived threat with a stress response. As a result, we may live our lives protected from novelty and change.

Our reactions to life stress may also depend on how well we were conditioned early in life. When we were much younger, our parents or caregivers protected us while at the same time allowing us sufficient freedom to gain the confidence in dealing with situations ourselves. If, however, we were left exposed to stress that we could not handle, or we were overprotected from life, then we may become so sensitised to the everyday adversities and responsibilities of life that we could become anxious and ill.

Why is stress expressed in the body?

When things happen, we feel them in the body. A tight sensation in the chest, a lump in the throat, watery eyes, 'butterflies in the stomach' an urgent need to go to the toilet, headache, backache, flushing of the face, even penile erection or vaginal secretion are all common bodily expressions of emotion.

Any physical symptom; pain or a reaction like diarrhoea or vomiting, may be a meaningful response to what has happened. Bringing it to mind usually resolves the emotion and the feeling abates. If, however, what has happened is so shocking that it cannot be brought to mind or if the emotion is so powerful, it cannot dissipate, then the feeling may remain locked in the body as long term symptoms. This then becomes the cause of the distress and is taken to the doctor as an illness.

So trauma that cannot be remembered; unhappy, coercive or abusive relationships that cannot be talked about; neglect or abuse that happened early before the development of explicit memory or language, can all be expressed as bodily symptoms. During severe stress and trauma, the thinking part of the brain (the frontal cortex) goes off line while the body reacts through the alarm system in the brain stem⁶. The things we can't think about affect us and cause pain and illness.

Symptoms may vary according the coping mechanism. I have frequently observed that diarrhoea is an expressive symptom, often associated with uncontained anger or anxiety, while constipation is more associated with resistance and withdrawaL

Why does stress go to the gut?

• Memory This may be explained by the rekindling of what happened by something that recalls the context. For example, about

10% of people develop persistent symptoms of diarrhoea after an outbreak of gastroenteritis⁷. A similar proportion of women develop persistent abdominal pain after they have had a hysterectomy. In both cases, anxiety, depression and severe life changes occurring at the time of the original infection or surgery predicts whether the symptoms persist. This is of course more likely to occur if some traumatic event instigated the bodily symptoms, as when the sudden death of a spouse causes a severe gut reaction. Implicit or bodily memories are registered in the amygdala, the nuclei in the brain stem that react to stress. They are implanted during traumatic events, while the explicit, contextual memory system in the hippocampus is suppressed. The amygdala never forgets; the hippocampus often does. Implicit memories warn us of danger, but since the suppression of the hippocampus obliterates the context, we may not know why.

Research shows that people with IBS are more likely to have experienced more fundamental life changes and traumatic events than those with other gut diseases. This may sensitise them to react to everyday events with symptoms that cannot be explained.

• Meaning Gut symptoms not only express the memory of what happens, they also express the meaning. The gut is very eloquent. Think of how frequently we all use gut feelings as metaphors to express our emotions. *"I cannot swallow that", "I am sick of that", "It gives me the runs"* or *"I am gutted"* are all 'gut expressions' and are based on actual gut feelings. People with constipation often report feeling *"bunged up"* or *"up-tight"* while those with diarrhoea may feel out of control.

Dealing with stress

• Mindfulness The resolution of a stressful situation requires time and the space to think, and, if necessary, talk about what has happened. It requires living life in the present, not re-enacting the past.

After traumatic events, too much of our time is spent going over those past events.

'Mindfulness', an application of age-old Buddhist philosophy, is not just a matter of sitting in a darkened room with josticks and thinking beautiful thoughts; it is about engagement and focus, activity and creativity, relaxed attention and routines. It might be thought of as 'getting in the zone' and 'engaging with everyday life'⁸. There are many routes to mindfulness, but the best is to immerse yourself in something you enjoy doing, like writing or drawing, or jogging, swimming, or even cooking or helping your children or grandchildren find something that captures their interest.

Mindfulness takes you away from the frustrations and worries of life. soothes the pain and discomfort and quietens the inner turmoil while getting the thinking brain back on line so that our preoccupations can be seen in context and relinquished. Allocating sufficient time for rest and focussed activity allows you to see the situations that upset you in context by bringing them back to mind. It helps you gain control of your body reactions and gives you health confidence and hope. No matter what is wrong with you, what illness you may have, these very basic aspects of healthy living will make you feel better. So make mindfulness a vital component of your life and as you begin to feel better, your worries and regrets will slip away.

 Exercise Trauma deprives you of any sense of agency or power, so that everything can seem impossible. Exercise restores that confidence and power in your body, allows you to escape from the enormity of the trauma and the myth of victimisation. Exercise is a key component of mindfulness. When you have been traumatised, it is like your body has taken control, occupying your thoughts in an obsessive spiral of illness. Exercise helps you be present in your body, feeling its experience and marking trauma as 'over'. Just half an hour a day of physical activity gets you back into the present, gives you control of your body's reactions and puts what has happened into context.

Changing our understanding and behaviour

To help deal with your attacks of IBS, it is important to gain some insight into what might be bringing them on. So when mindful meditation helps you feel more in touch, ask yourself:

- what was happening when my symptoms first started?
- what brings my symptoms on?
- what takes my symptoms away?
- what do they mean for me?

Listen to your body, what is it trying to say? If this helps you to identify what underlies your illness, try to think of strategies that might help you deal with the fears, anger or depression that are causing your symptoms.

Coping with fear

You can't cure fear but you can learn to tolerate it better, which in turn means it will automatically reduce.

- Acknowledge your fear: try to understand of what it is you are frightened
- Take time out to relax and think
- If you begin to panic, concentrate on something else and describe it to yourself, letting your brain slow down
- Be prepared. If you are frightened of doing something, plan it out beforehand; get it into perspective.

Do you fear needing to go to the toilet urgently when you are out?

- Prepare yourself
- Familiarise yourself with your journey or the situation; have a dummy run
- Find out where the toilets are located
- Carry a spare towel, baby wipes, plastic bag and underwear in your car or handbag, (see https://www. theibsnetwork.org/shop/ for an Emergency Kit bag)
- Take your Can't Wait card (and international Travel card) with you and use it to help you gain access toilets in offices or stores, (see above online shop address)
- Prepare a socially acceptable excuse to leave meetings
- Try to sit at the end of the row.

Some hints to avoid anxiety and stress:

- lower your expectations
- don't take on too much
- prioritise. Do the most important things first
- learn to say 'No'
- lighten up. Don't take yourself too seriously
- ban 'should', 'ought' and 'must' from your vocabulary or use them sparingly
- don't procrastinate. Make a start
- resist needing to check what you have done

- *be good enough. You don't have to be perfect*
- don't be harsh on yourself if you make a mistake
- *if work is not completed, leave it to the next day*
- don't agonise over decisions. You have a 50% chance of being right.

Ask yourself, "What is the worst that can happen?" "How can I deal with it?" and "Does it really matter?"

Dealing with anger

Anger is often irrational, unreasonable and creates more anger and conflict. Acting it out only makes things worse. Deal with your anger in private before challenging the other person. Try the following strategies to calm it down before tackling the cause.

- Physical release. If you feel the need to hit out, beat a cushion or your bed, go for a run or play an active game with family or friends
- Shout or swear; preferably somewhere where you can't be heard
- The angry letter. If somebody has annoyed you, write a letter to them, get it all down, then throw the letter in the bin.
- Ask yourself, of what are you frightened? Anger often conceals fear.

And when you have calmed down, try to see the other person's point of view. There are two perspectives to any conflict. Where might they be coming from? Where might you?

Understanding hopelessness and helplessness

All too often, we tend to undermine ourselves with feelings of guilt, shame and unworthiness. This may help us get things into perspective initially, but it is important not to let it define us and makes us ill.

Challenge your negative thoughts:

- am I making things worse than they really are?
- why do I always assume the worst will happen?
- do I mistrust confidence and happiness? Will it inevitably go wrong?
- why do I need to punish myself?
- why do I think others don't like me? Is this just my own self hatred?
- does it really matter if I am not perfect? Just as long as I am good enough.

It is important not to take ourselves too seriously, to accept that we are not always right and can make mistakes, but to understand why and forgive ourselves and do it better next time.

Ever tried? Ever failed? No matter. Try again. Fail again. Fail better. Samuel Beckett

Can counselling and psychotherapy help?

If the stress of an unresolved difficult life situation is worsening your symptoms it will insist on doing so despite treatment with the most potent drugs. Psychotherapy can:

- help you make the link between your illness and what has happened
- help you understand the events and situations that upset you and how these relate to your personal biography
- provide the space to think about what has happened, to get it into perspective and work out the best way to resolve it

- allow you to feel understood through a shared perception of the situation
- give you strategies to deal with the situations that upset you
- help you resolve feelings of shame or guilt
- provide a sense of expectation and hope.

Trials have shown that psychotherapy can be effective in up to 80% of people referred to hospital with IBS.

Psychotherapists vary in their approach

In cognitive behavioural therapy (CBT)⁹, you will be encouraged to change the way you interpret bodily sensations and alterations in gut function by seeing them not so much as symptoms of a disease but more as expressions of anxiety associated with particular life events.

Cognitive behavioural therapists encourage connections to be made between life situations and episodes of illness, helping people gain control over their symptoms. In essence, it is an exercise in problem identification and solving, helping patients take responsibility for finding a healthier way of dealing with what has happened.

Psychodynamic or Psychoanalytic Psychotherapists¹⁰ explore memories, feelings and dreams as well as symptoms. This will reveal the context of what might have happened and help people understand what the symptoms may represent in the light of changes in their life and their key relationships. Insights gained from this approach can result in lasting changes in attitudes and behaviour.

Counselling can incorporate aspects of both CBT and Psychoanalytical Psychotherapy but are essentially supportive, allowing you to explore what has happened and offering suggestions of how you might think about it and how it might be resolved. More therapists these days work with the body using dance, movement and drama as well as eye movements and repetitive tapping to help people relax, focus and recall what has happened.

In practice many therapists practice their own eclectic brand of therapy using elements from several sources. The key factor in predicting a successful outcome seems to be the nature of the relationship with the individual therapist than any particular therapy.

How can I access a psychotherapist?

Psychotherapists and counsellors are not allowed to practice unless they have undergone extensive training and are registered with professional bodies.

These are:

The United Kingdom Council for Psychotherapy (UKCP)

Email: info@psychotherapy.org.uk Website www.psychotherapy.org.uk

The British Association of Counsellors and Psychotherapists (BACP)

Email: bacp@bacp.co.uk

Website: www.bacp.co.uk

The British Association for Behavioural and Cognitive Psychotherapies (BABCP)

Website: www.babcp.com

Registers of accredited therapists in your area can be obtained through the above organisations.

Positive Outcomes for Dissociation Survivors (PODS)

Website: www.pods-online.org.uk/

Stress, Trauma and IBS



Further Reading

- 1. Selye, Hans (1907 1982) The Birth of Stress. http:// www.stress.org/about/hans-selye-birth-of-stress/
- 2. Van der Kolk, Bessel (2012). The Body Keeps the Score. Mind, brain and body in the transformation of trauma.
- Porges, S. W. (2007). The polyvagal perspective. Biological psychology, 74(2), 116-143.
- Segerstrom, SC and Miller GE (2004). Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry. Psychol Bull; 130: 601–630.
- Seligman, M (1972) Learned Helplessness. Ann Rev. Medicine 23: 407-412
- Peters, S (2012) The Chimp Paradox: The Mind Management Programme to Help You Achieve Success, Confidence and Happiness.
- Gwee, K. A., Read, N. W., Graham, J. C., McKendrick, M. W., Collins, S. M., Marshall, J. S., & Walters, S. J. (1996). Psychometric scores and persistence of irritable bowel after infectious diarrhoea. The Lancet, 347(8995), 150-153.
- Garland, E. L., Gaylord, S. A., Palsson, O., Faurot, K., Mann, J. D., & Whitehead, W. E. (2012). Therapeutic mechanisms of a mindfulness-based treatment for IBS: effects on visceral sensitivity, catastrophizing, and affective processing of pain sensations. Journal of behavioral medicine,35(6), 591-602.
- Hawton K, Salkovkis P M, Kirk J and Clark D M. Cognitive Behavioural Therapy for Psychiatric Problems. A Practical Guide. Oxford Medical Publications 1989.
- Guthrie E, Creed F, Dawson D and Thompson D. *A control trial of psychological treatment for the Irritable Bowel Syndrome*. Gastroenterology (1991) 100: 450 – 457

Other Useful Reading

Jeffers, Susan (2007). *Feel the Fear and Do it Anyway.* Random House

Mate, Gabor (2013) When the body says no; exploring the stress disease connection.

Read, Nick (2005), Sick & Tired: Healing the Illnesses Doctors Cannot Cure. Weidenfeld and Nicholson. 2005

Rowe, Dorothy (2003), *Depression; The Way out of Your Prison*. Routledge. www.headspace.com

About this factsheet

This Factsheet was written by Professor Nick Read, M.A., M.D, F.R.C.P Medical Adviser to The IBS Network, July 2016.

It is published by The IBS Network, the national charity supporting people living with Irritable Bowel Syndrome, as a service to those with IBS, and healthcare professionals.



No part of this publication may be reproduced in any form as this deprives The IBS Network, a registered charity, of essential funds. Further copies of this and other fact sheets can be ordered by post, or online from The IBS Network. Whilst every attempt has been made to provide accurate information, we cannot be held responsible for any mistakes or errors contained in this fact sheet. Published by The IBS Network © The IBS Network 2016-All rights reserved.