

BURNOUT, VICARIOUS TRAUMATISATION AND SELF CARE

by **Dr Andy Harkin**



'Resources consist of whatever allows one to put a gap between environmental stress and personal distress ... When demands significantly outweigh resources over any extended period, burnout occurs'

Bessel Van Der Kolk

An overtaxed stress response lies at the heart of burnout leading to a wide range of both physical and psychological symptoms. An imbalance in the autonomic nervous system (ANS) lies at the heart of this overtaxed stress response.

Stephen Porges's (1) work clearly demonstrates that taking the traditional view of the ANS as having two main branches is a limited one. Nevertheless for purposes of simplicity this article will stick with a limited view.

In response to stress the sympathetic nervous system, through noradrenaline, contracts and accelerates. Heart and breath speed up, belly gets anxious, muscles tighten. This is balanced by the parasympathetic nervous system (mainly through the vagus nerve) which has the effects of helping us to 'rest and digest'. Where these complementary systems work in concert the result is a harmonious response to daily stressors.

With increasing stress this balance can be lost leading to symptoms and behaviours associated with burnout, some of which are laid out below:

1. **Excess noradrenaline:**
Racing thoughts, palpitations, panic attacks, anxiety, insomnia.
2. **Behaviours to manage this excess noradrenaline:**
substance misuse that calms e.g alcohol and/or cannabis, anti-anxiety medication, angry outbursts.
3. **Depletion of noradrenaline:** chronic fatigue, exhaustion, apathy.
4. **Excess parasympathetic:** numbness, hopelessness, depression, 'not present'.
5. **Behaviours to manage this feeling of shutdown:**
substance misuse that stimulates; antidepressant medication; self harm.

Working as therapists there are many meta-level reasons for burnout; too many sessions, inadequate support; isolation of the job, hostile work environment. We are only too well aware that we are also affected by our clients. It is this intrapersonal source of burnout I would like to discuss in more detail. What then is

the mechanism through which we are impacted in our offices, for good or ill?

According to Marco Iacoboni (2) the answer is found in his discovery of a new type of brain cell called mirror neurones. Neurones tend to either be sensory or motor in function. Sensory neurones deal with incoming information from the inside world such as pain, temperature, amount of oxygen in the tissues etc., and outside world through sight, sound, touch etc. Motor neurones cause an action to happen; for example, reaching, grasping, walking etc.

Mirror neurones are both sensory and motor which may not sound like much but led VS Ramachandran,(3) an eminent neuroscientist, to say that their discovery could prove to be as significant as that of D.N.A.

Anyway, what of their relevance to psychotherapy ?

Well if we consider emotions, for example, disgust. If I smell something disgusting then an area of my brain lights up. If I see disgust in someone else's face then that same area lights up. Furthermore, if I imagine something disgusting there is again a lighting up of this brain region. The only difference is one of degree. Brightest for doing, then less for seeing then least for imagining. As such it is suggested that mirror neurones form a neural basis for empathy.

Mirror neurones also apply where actions occur; again whether doing, seeing or imagining action; which explains why we are there kicking the ball along with our team. Iacoboni and colleagues go further and suggest that mirror neurones provide a mechanism through which we can also read the intentions of others.

While this resonance for emotions or actions or intentions has usefulness in providing grist for the therapeutic mill it is also clearly a pathway for impact on the therapist. With 60 percent of communication being non-verbal mirror neurones provide a brain to brain template for how this communication can be impactful.

In further discussing body to body communication I would like to turn now to two other areas of the body that are rich in nerve cells and neurochemicals, so much so that they are considered mini-brains (also known as semi-autonomous nerve plexi).

The heart (cardiac plexus)

This doughty organ has an average rate around 70 beats per minute. However, as stated, this is an average and there is beat to beat variation called heart rate variability (HRV). This HRV can be measured in terms of its coherence, meaning that when I am more stressed its graphic depiction looks more jagged. Fibres from the heart communicate this lack of coherence to the centres of the brain responsible for regulation of emotion and arousal (limbic region a.k.a. the emotional brain). Conversely, if I am in a calmer state then the pattern is more coherent and in turn this provides bottom up regulation of the brain.

Furthermore, when we look at heart based emotion such as joy and compassion they are opening and coherent. On the other hand we have anger and anxiety which are contractile and incoherent. Interestingly these words share a common root with the word angina; ang.

The waves generated by the heartbeat extend at least 6 feet off the body. (Pearsall,4). When sitting with a client we are sitting within a relational field that includes the individual signatures of both our heartbeats. It is not a stretch to imagine this has both beneficial and less than beneficial effects.

The gut brain (coeliac plexus)

Sensory fibres also run from around the stomach to the limbic brain. We can look at our gut condition in terms of healthy, anxious and shutdown.

To get a sense of healthy think of a nursing baby finishing a feed; the full belly breath (vagus) and blissful satisfaction (oxytocin). No stress, no threat, no danger. Excess adrenaline, however, leads to transient gastrointestinal symptoms such as 'butterflies in the stomach', nausea and a change in gut motility.

Excess parasympathetic leads to shutdown, with numbness often being felt in the abdomen.

There is a constant two-way influence between top down and bottom up processes in our bodies. For example, if I start having stressful thoughts this is reflected in my stressful gut. Conversely, if I feel stressed in my gut I am likely to have stressed thoughts. Sidestepping the chicken or egg question for a moment, it is known that one effect of stress is to change the composition of our natural gut bacteria (flora).

Researchers in Cork (5) began studying subjects with Irritable Bowel Syndrome, a condition with stress related changes to the gut flora. By using supplements they hoped to restore healthy function to the

bowel. The hypothesis was that the rebalanced gut then sends its newfound healthy message upstream to the emotional brain. Preliminary findings showed this bottom up treatment as potentially helpful. Current studies are investigating if such supplementation may also have a role in treatment of anxiety and depression. Early days, though still interesting to keep an eye out for this bottom up approach.

Vicarious traumatization (VT)

Trauma is contagious, C. G Jung.

While there are many similarities between burnout and VT there are important differences in causation and symptoms. To suffer from VT one **must** be working in the frontline with traumatised populations in some capacity whether as a psychotherapist, lawyer, social worker, aid worker. In one U.S. study it was suggested that up to a third of frontline workers had VT.

VT symptoms range from sleeplessness to anxiety, to full blown PTSD with intrusive imagery, as if the worker is re-experiencing trauma. Charles Figley (6) who writes extensively on compassion fatigue considers the empathic engagement with the clients story the common source of VT.

If story is the common source how does this translate into actual symptoms? In attempting to answer this question we look at the ANS again.

Up to now we have been looking at the ANS through the prism of response to stress, everyday events leading to high (sympathetic) and low (parasympathetic) arousal states.

With imbalance we develop burnout symptoms as outlined earlier. The mechanism behind the development of this burnout can be seen as nonverbal brain to brain, heart to heart, body to body communication.

With VT all of the foregoing is again possible but there is also a distinct difference which centres on the following fact. Our bodies are no longer just responding to stress, they are responding to *perceived danger or threat too*.

When we perceive danger or threat, the nature of our stress response changes significantly. Firstly, there is a more intense usage of our ANS, a resultant higher chemical load leading to deeper more intense activation states.

Secondly, in addition to stronger physiological activation we typically have some element of automatic movement initiated by the body. This movement is mediated through our brainstem as a defensive response to perceived threat or danger. This movement is either active or passive (7).

Active movements have often gone by the shorthand flight or fight, which really doesn't do them full justice as we can also stop a fall, crouch, turn the wheel of the car etc.

If active defence is unsuccessful or not possible we default to a passive option. Here we cannot move physically so we remove ourselves from the experience of threat in another way.

Passive defence tends to exist on a spectrum. First we become numb, typically through the torso, progressively cutting off from feeling states to the point

where we take refuge in the head, in thinking. If passive defence deepens further we become spacy and lightheaded and may even progress to a leave-taking of the body e.g. through the top of the head or back of the chest.

So how does this knowledge apply to development of VT?

Well in the resonant/transferential phenomena that surface while working with traumatised individuals our brainstem reacts *as if* under threat.

It is worth remembering that our empathic engagement is both explicit and implicit. Explicitly we are triggered by the words and images that emerge as our clients relate their traumatic past (story). Implicitly we are triggered by the nonverbal, traumatic activation and emotion that accompany such a story (storyteller).

Either way the stimulation of our defensive responses over and over, minute by minute, hour on hour means we are prone to developing VT symptoms.

Threshold and symptoms

Symptoms of burnout and vicarious traumatisation are mainly visceral. An ability to notice the early arising of said symptoms would provide a warning system allowing us to nip things in the bud.

Unfortunately we fail to notice or ignore these symptoms for a host of reasons some of which are discussed here:

1. Basic brain architecture

If you take a moment right now as you are reading this to pause and, *without looking*, notice your

feet on the ground. Good. Now before this was suggested chances are you hadn't noticed them. This is because by and large our brain blocks us from becoming aware of signals arising from the body.

This is generally a good thing. We have at least 70 trillion cells sending information millisecond by millisecond to our brain. Just as well most of these signals remain outside our awareness, below threshold.

Only when these signals are adjudged to be significant is a threshold crossed whereby they enter our awareness.

The set point of this essential threshold has been changed by a range of cultural phenomena.

This change is best summed up by the words of James Joyce (8) in speaking of Mr Duffy in *Dubliners* 'he lived at a little distance from his body'

Our left brain, primarily our frontal cortex allows us to abstract, to step back from the world. This capacity has strengthened considerably in the last few hundred years facilitating scientific observation and analysis and some would argue much of the progress made in Western culture (mc gilchrist, 9).

However, balance has been lost between the past and future oriented thought-based left brain and the present moment oriented emotion and body-based right brain. We have removed ourselves from the rhythms of the natural world around us. The nearest expression of this natural world is easily overlooked; it is our animal body.

In practical terms this disembodied state we occupy has altered the threshold at which we notice symptoms. Symptoms are visceral and we have left the dancefloor. Consequently, signals need to be pretty strong before we register them at all. For example, looking at some common medical symptoms, the first wash of heartburn may already be an ulcer, the initial grip of chest pain may already be angina even though these conditions take years to develop.

Bringing this back to psychotherapy, how often am I getting affected by my client in resonance/transference but am unaware of this because it is subliminal?

Denial of symptoms

One of the symptoms of an approaching nervous breakdown is the belief that ones work is so terribly important that to take a holiday would bring all kinds of disaster'

Bertrand Russell

Of course when we actually **do notice** symptoms we find ways to ignore or over-ride them. As suggested by Russell, the over-ride can have strong psychological components. My not-enough-ness, my just-one-more-thing-ness, my vicarious gratitude, my seductive indispensability, my grandiosity of purpose.

Our left brain bias also contributes to this driven-ness. For tasks our left brain has a rhythm of beginning, middle, end, next. Next task. Next. And so on.

On the other hand the task rhythm of right brain is beginning, middle, end, rest. And rest. And so on.

Both are good as long as they are in balance. As we know such is not the case. Throughout the day drops of rest, large and small, are bypassed. The net effect is that our capacity to rest becomes compromised and we come to see rest as simply doing nothing.

As health is not the absence of illness, rest is not necessarily the absence of activity. Rest is a tangible positive state mediated by chemicals. Too often we indulge in empty rest, sat slumped in front of the television.

Rest being compromised means that sleep now takes on its job. In simple terms, sleep helps us leave one day behind and get ready for the next. By taking on this extra work sleep too becomes compromised and we end up with sleep disturbance. Typically we look to deal with sleep disturbance without considering our relationship to rest.

Treatment and prevention:

'Within this very fathom long body, with it's perceptions and thoughts, there is the world, the origin of the world, the cessation of the world and the path leading to the cessation of the world'

Rohitassa Sutta Samyutta
Nihaya

For me this quotation points to the importance of embodiment, a theme that will run through the following section on treatment and prevention

With the speeding up of modern life and 'doing' states that we are talking about it is tempting to think that for recovery from burnout to occur the opposite is needed. In other words, slowing down.

However, to my my mind it is just that, oppositional. This creates or sets up a struggle with our deeply ingrained habits towards doing and speed. Now we will do slowness.

A way out of this conundrum is to instead orient towards stillness. We can gain stillness through being still but also through movement, be that walking meditation or dancing. As the Taoist quote says, 'Stillness in stillness is not enough. We need stillness in movement'(10).

The internal room gained from such practices allows rest to return to its rightful place as a fullness, a lived and breathed experience in and of the body.

This provides a deep balm to the nervous system, to the body and mind. A potentially positive side-effect of restored inner spaciousness is the fillip it can provide to creativity. From a neuroscientific perspective creativity requires a sense of temporal and personal spaciousness (11), something that is lost in burnout.

Exercise:

It is not news to say that exercise has many health benefits, causing the release of beneficial chemicals, especially where the heart rate is appropriately increased during the recommended 150 minutes a week.

What of quality over quantity? My bias is that exercise be at least partially embodying.

For example you see people on treadmills in the gym or doing laps of the pool. How many are feeling their feet touch the ground, are feeling their limbs breaching the waters surface?

Simple attention deeply changes these movements. Don't take my word for it. Try it and see.

While we can bring awareness to any movement practice; it is so much the better if the practice inherently emphasises some body awareness such e.g. forms of dance, tai-chi, qi-gong or yoga.

This kind of attention can help us recover a sense of the body as fluid. We are more than 70 percent water yet how often do we experience this ground state? More typically our bodies feel solid or 'not there'. In the view of Emily Conrad in her book 'Life on Earth' (12) 'Movement is not what we do, it is who we are'.

She sees movement as a means to reconnect to our fluid nature, where health arises in the balance between moving our body and being moved by it. This need of embodied movement is all the greater for therapists who can be pretty sedentary creatures.

Brain Bias

Negative over positive

Our limbic system (principally the amygdala) is particularly interested in threat or negative emotions. Researchers say that our brains are Velcro for negative experiences and Teflon for positive experiences and that we need 5 positive to counteract 1 negative.

Deliberate cultivation of positive states have been advocated by a number of authors. Rick Hanson emphasises this through a practice he calls 'taking in the good', well described in his eponymous website (13). Christopher Germer,(14) Kristin Neff (15) and Paul Gilbert (16) advocate the development of loving-kindness and compassion practices in a clinical setting.

A practice adapted from the above sources - that can promote a feeling of well being and shift heart rate variability (HRV) in the direction of coherence is to simply place one hand over the heart and one hand over the belly while holding an intention of gratitude and kindness towards oneself.

Negative versus neutral

In addition to having little truck with positive states, the limbic system is not the least interested in perceived neutral states, where nothing much is happening.

We can turn this knowledge of the workings of the limbic system to our advantage.

If relatively speaking we are only reacting to drama then we will have little drive to act preventatively. We will walk 5 miles daily after the heart attack but not walk 1 mile daily before. Therefore taking a preventative course of action must be a decision, a contract with self as if we wait to feel like doing something we may be waiting for a while.

Secondly, our bodies are subtly wired to a permanent hyper-vigilance. This is a baseline state often somewhere between ready and alert. This chronic state is habitual which means by definition it is outside our awareness and therefore not coming to the attention of our limbic sentinel.

Think of going for a massage. Even light touch can make us aware of the tension we are holding. The small additional pressure raises the signal and brings the underlying holding pattern into consciousness.

This background state is very influential on our reactivity, on the degree to which minor demands leave us feeling swamped or saturated. We pay attention to foreground screams while ignoring back ground whispers.

This is like constantly bailing out water from a sinking ship while never thinking to repair the hole beneath the waterline.

A practice to counteract our baseline tension is to simply shift our vision from central narrow focus to wide peripheral vision and back to central, taking control of the camera lens so to speak. This practice is augmented if we are fortunate to have a natural living vista to look on .e.g the sea, trees, a mountain. Indeed a view with a horizon naturally shifts us into a more spacious peripheral vision as any child getting that first glimpse of water on the day trip to the beach knows.

Mindfulness

Mindfulness has become very popular of late, supported by evidence gleaned from a plethora of studies based on the 8 week format developed by Jon Kabat Zinn (Mindfulness Based Stress Reduction, MBSR) or its elaboration developed by Teasdale, Zegal and Williams (Mindfulness Based Cognitive Therapy, MBCT). Results have shown that Mindfulness can lead, amongst other things to decreased burnout, increased empathy, decreased anxiety, decreased depression, increased wellbeing.

While a firm advocate of the benefits of mindfulness practice I do have a bias here in keeping with the theme of embodiment.

If we take an experienced or novice meditator and place them in a brain scanner and have them begin a classical mindfulness practice such as focussing on the breath, then the same area of the brain has been shown to light up, the medial prefrontal cortex.

This means that people are paying attention and can cultivate this ability which is good. However, it doesn't mean that people are embodied.

I hold that there is a significant difference between noticing the body and being embodied. Bud Craig (16) is an authority on the insula, an area of the brain responsible for our sense of embodied awareness. This area is well developed in meditators whom cultivate more embodied awareness e.g certain forms of Vipassana practice.

Preventative practices cont'd


2. For VT

If we accept that our therapeutic engagement with traumatised clients (story and storyteller) activates fight or flight type defensive responses from our brainstem; if we further accept that most of these responses are occurring outside of our conscious awareness below threshold. Then any preventative practice for VT must start on the basis that we *are already being impacted, even if we don't feel it.*

Under the radar we are gradually cumulatively being edged towards a mobilised state yet still we sit. Sitting ducks. I have worked with the London Ambulance Service and anecdotally their therapists and call centre workers develop more VT than paramedics. This could be training related. I would speculate that the paramedics are also protected by their mobilisation, by actually getting to move in the face of situations of threat or danger.

Therefore preventative practices for VT need to include movement, preferably movement related to active defend type actions. Examples would include practising a strong gesture of push, pressing a wall, clearing our immediate personal space with sweeping motions and kicking out.

And finally ... Hidden messages

A range of spiritual and psychotherapeutic traditions point to a place in us that is not so affected by our biography. Whether Almass's Sufi 'essence', Buddhist 'pristine awareness', Winnicott's 'going on being', or Jung's archetypes, there is a transpersonal aspect that while separate also reflects into our personal lives. Sometimes this reflection happens in the form of body symptoms, a warning shot across the bows. A call not only to seek rest, exercise and space. A call not only to turn to things again that give us joy and contentment. But a call to stop and attend, to deeply attend and decipher the coded signals rising from the body unconscious. For therein may lie a vital message for each one of us. 



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