

Peace in the Time of Pandemic



Transcript of webinar:

VIDARSHI

Hi. I'm Vidarshi Karunaratne and along with other members of the Mindfulness in Medical Education team, Michael and Naomi, I'd like to welcome you to our first Bitesize session; Peace in the time of pandemic. Over the last year the Covid-19 pandemic has highlighted our mental health vulnerabilities as individuals, as healthcare workers and as a nation. But mental health problems are far from new and have been described as being at epidemic proportions way before Covid-19. Now the latest NHS staff survey showed that 44% of all staff and 40% of doctors reported being ill because of work-related stress. But in 2019 this was 40% and in 2016 this was 37% of all staff. So, really an increase but not a dramatic one. So, we'd like to take this opportunity to talk about the stress which pervades our healthcare system. What exactly is it, how do we respond to it, what effects can it have on our minds and on our bodies? And discuss briefly possible strategies to deal with it. We understand that we have a very wide audience today so this is just a basic introduction to the topic and there will be time to ask questions at the end. But before the session starts in earnest, I'd like to hand you over to Michael our Chair for some housekeeping. Michael.

MICHAEL

Thank you Vidarshi. So, welcome everybody to our Bitesize session and I'd just like to introduce myself first as Chair of the group. I'm also a lecturer in medical education at Newcastle University. I'm just going to say a little bit about the housekeeping rules. So, first of all the session will last approximately 45 minutes, it may be slightly extended if we feel like we need to go on a little bit. If you do wish to ask a question, please use the chat field. So, this feature is available by clicking on the chat button at the bottom of your screen. Please make sure that you select the option to post on the chat to panellists and attendees so that everyone can see your comments and questions. If we don't get time to answer all your questions, we will provide a document after the webinar with any questions we are unable to address. The chat field is available for you to contribute to conversation. We may invite some participants to expand on their comments by asking their permission to make their audio and video live. Please respond via the chat feed that you are happy for us to add you as a temporary panellist to join the discussion and expand on your comments. So, the webinar is being recorded so a video of the webinar will be made available on the ASME website along with any other support materials. Closed Captions are available during the session and can be managed by you as a participant by clicking on the Closed Caption button at the bottom of the screen and if you are having technical problems, we ask that you make ASME aware by emailing events@asme.org.uk rather than adding it in the comments field. Ok, so I'm just going to pass you back to Vidarshi so, enjoy the session and I will speak to you later.

VIDARSHI

So, before we start the session, I'd like to invite you to a little mindfulness practice with me. So, inviting you now to adopt a posture that embodies a sense of dignity and of purpose. If you're sitting on a chair, feeling the weight of your body on that chair. If it feels comfortable and right to you, I'd like to invite you to close your eyes. Now really noticing that sense of contact between your feet and the ground. Really noticing the weight of your body on the seat. Noticing your posture. Your spine erect but not stiff. Noticing the posture of your neck again relaxed not stiff, perhaps tucking the chin a little bit. Feeling your hands on your lap or on your thighs. And when you're ready connecting to your breath, to the movement of your lower abdomen. Feeling the abdominal wall rise on the in-breath, and fall on the out-breath. Feeling the stretching of the abdominal wall on the in-breath, the deflation of the wall on the out-breath. If the mind is particularly busy, perhaps counting the breaths. In-breath one, out-breath one. In-breath two, out-breath two. Now just remaining with the breath for a while. If the mind wanders away, just noticing where the mind has been and bringing it back to the breath. Now slowly expanding your focus on the breath to the body as a whole. Feeling the body breathing, sitting here. And when you're ready slowly connecting back to this moment. Feeling your feet on the floor. Once again feeling the weight of your body on the chair. Opening your eyes and now returning to the session. So, I've shared some slides with you and I'm just going to turn off my video for a minute. It's a bit of a distraction. So, talking about stress. We've known about stress for a very long time as scientists and as medics and it was over a hundred years ago that Walter Bradford Cannon described the fight or flight reaction. And over 80 years ago this man Hans Selye who was a Hungarian endocrinologist noticed that rats exposed to various forms of unpleasantness showed similar changes in their bodies such as peptic ulcers, enlarged adrenal glands, and shrunken immune tissue. This general unpleasantness is now what we term as stress. And Selye is given the credit of introducing this term from physics into the medical lexicon. So, what exactly is stress? As Hans Selye said; 'everybody knows what stress is, nobody really knows'. That's a pretty accurate description because we all know about stress but how many of us actually really know about stress? So, Selye is given the credit of being the first to define this biological response. And he defines stress as 'a non-specific response of the body to any demand made upon it'. So, according to Selye an individual when challenged by some form of threat produce some kind of non-specific response in the body. However, we now know that this is not true. We know that there is a body of evidence that shows that the stress response is not the non-specific response but specific to the stressor, and the response can be tailored to the stressor and produce a so-called neuro-endocrine signature. So, a more accurate description might be 'stress is the response of the body to a demand'. Now since then there have been many other definitions of stress; biological, sociological, psychological but the important thing about all of this is that 'the stress response is an adaptive physiological response designed to help us through times of challenge'. So, what actually happens when we're stressed? So, first we need a stressor, an event, and this can be physical such as pain or haemorrhage, or it could be a psychological stressor like an exam. The stressors are then perceived in different sensory systems and processed by the brain. There are several possible postulated outcomes of a stressor and it's not just fight or flight. If an animal detects a potential threat and has not been seen by the predator it may become motionless, so-called attentive immobility. This increases the chance of being un-noticed by the predator. If an attack starts and escape is not available then another kind of immobility might set in, immobility under attack. When life is at extreme risk tonic or collapsed immobility may be used as a last resort. This is a reflexive and involuntary reaction characterised

by reversible profound motor inhibition. So, essentially, you're paralysed. There is relative unresponsiveness to external stimuli. All of these responses are not uncommon and they've been described for over three centuries amongst non-human animals. We now know that these responses are not uncommon in humans as well. And in the 1970s Suarez and his team argued that there were similarities between tonic immobility in humans and stillness reactions seen in women victims of rape, so-called rape induced paralysis. And since then, there have been numerous publications describing the prevalence of these reactions in traumatic events. The important point about these reactions is that they're involuntary, and evolutionary and they're designed at some level to protect us. And the reason I decided to mention these reactions in this presentation is that they're not uncommon in frontline workers either. For example, first responders like the police, healthcare workers in the stress of an emergency or a resus situation can undergo tonic immobility. And there's often a stigma, and misunderstanding attached to this response there can be guilt on the part of the victim, and really understanding that this is part of our defensive cascade, part of our evolutionary heritage and it's involuntary I would hope would bring some compassion and understanding to this experience. Now the psychologist Shelley Taylor of UCLA postulated another biological response to stress and she called this 'tend and befriend'. What Taylor suggests is that the stress response might be sometimes quite different to females as having dependent young makes it much harder to run or fight. So, this response to stress is more about taking care of the young and seeking affiliation within the group and possibly associated with the hormone oxytocin. So, we return to fight or flight. So, this is a very simplified depiction of the fight or flight response. And it's not meant to be scientifically accurate. it's meant to give us a feel for what is happening in our minds and our bodies when they're stressed. So, when the brain assesses the situation and decides fight or flight is the way forward the brain then prepares the body for that sudden burst of energy. It uses the autonomic nervous system and there are two parts to this nervous system; something known as the sympathetic arm and another part known as the para-sympathetic arm. The sympathetico-medullary system if stimulated it produces adrenaline and noradrenaline, it mediates arousal vigilance and mobilisation. And another system known as the hypothalamic pituitary axis also gears up and it produces glucocorticoids and other hormones. Blood is diverted from non-essential functions, there's increased blood pressure, increased cardiac output and blood is moved to essential areas such as the muscle. Both the hypothalamic pituitary axis and the autonomic nervous system also trigger the release of glucose into the blood as a form of energy. And again, I'd like to say that this slide is not scientifically accurate and there are other processes going on, and other hormones and mediators being released into the blood but the purpose of this slide is to hammer home this idea that the acute biological stress response is a response. The symptoms we feel when we're stressed or are in some kind of acute situation, that sense of vigilance, our pulse racing it's just our body doing what it was designed to do. So, again the slide is meant to bring a sense of compassion and understanding to our experience of stress. I also thought I'd mention from the perspective of the philosophies that underpin mindfulness. Stress is just considered one of those things. It's part of the process of living. And in the words of this gentleman Stanley J. Sarnoff who was a surgeon in the 1960s; 'if you had to define stress, it would not be far off if you said it was the process of living. The process of living is the process of having stress imposed on you and reacting to it'. So, the problem of course for the majority of animals on this planet is that stress is a short-term crisis. There's rapid activation and it's followed by recovery or death. The majority

of animals don't tend to dwell on problems of a global scale or ruminate about the past or the future. So, if this highly integrated system is activated either persistently or faces overwhelming adversity which doesn't result in death, the effects have the potential to be disastrous. So, what actually constitutes overwhelming adversity or a traumatic event? There are formal definitions published describing what describes what might constitute a traumatic event. So, ICD-10 is a general medical classification system published by the WHO and it defines a traumatic event as 'a stressful event or situation...of exceptionally threatening or of a catastrophic nature which is likely to cause pervasive distress in almost anyone'. And it suggests things like bombings as well as natural catastrophes might be included. DSM-5 is the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association and it has similar, slightly different definitions for a traumatic event. These definitions are important because they guide the diagnosis of PTSD. They are however imperfect as a percentage of the population still develop PTSD-like symptoms after so-called low-magnitude stresses such as a divorce or a road-traffic accident. However, following a traumatic event we don't all respond the same. Some people never experience any major problems and this is called resistance. Some people have symptoms similar to PTSD in the weeks after a trauma but then they recover and this is called natural recovery or resilience and others have continuing symptoms and they might then go on to get a diagnosis of post-traumatic stress disorder or some other diagnosis. So, what is PTSD? There are formal diagnostic criteria for PTSD which are not really within the scope of this talk but just to give a sort of flavour for it, PTSD is characterised by these sorts of symptoms; so hyper arousal symptoms, so you might be hyper vigilant which means that you're always on your guard you might have difficulty concentrating. There might be outbursts of anger or irritability, you might re-experience symptoms like flashbacks and intrusive thoughts. You may avoid thinking, talking about the incidents, avoid people, places, activities that remind you of the incident. There might be negative symptoms like depression and anxiety. You might lose interest in the world and in activities. Now the reason we snuck PTSD into this talk is PTSD is not just found in soldiers and victims of assault or abuse. Repeatedly witnessing traumatic events or being exposed to the details of traumatic events such as abuse can lead to PTSD or PTSD-like symptoms. So, in healthcare it's not uncommon. And it was highlighted in this recent publication in March by Neil Greenberg and his team in Kings College where around 709 members of staff working in ICUs in the UK were surveyed. 41% described themselves as doctors and 49 described themselves as nurses. 40% of respondents to this web-based survey were described as having PTSD-type symptoms. The other reason I wanted to mention PTSD is that out with this formal diagnosis many of us have experienced re-living situations in a negative way. So, I wanted to end this section about traumatic stress with this alternate definition of trauma which is from Pat Ogden; 'trauma refers to any threatening or overwhelming experience that we cannot integrate. After such experiences we are often left with a diminished sense of security with others and in the world, and a sense of feeling unsafe inside our own skins. Following this pandemic, I'm sure that many will be able to relate to this statement. So, returning to the stress response as I said the acute stress response is designed for short-term crisis and the same mechanisms that help us can have a negative impact on a wide range of systems in the body if they persist. And we don't have time to go through all of these but the general idea is chronic stress can increase your risk of a wide variety of health problems including heart attacks, heart failure, atrial fibrillation, diabetes both type 1 and type 2. If you get diabetes and you're stressed this can influence your ability to control it, it can cause immune dysregulation so, it can cause

immune suppression but it's also associated with auto immunity and auto immune diseases like rheumatoid arthritis. It can affect fertility and your menstrual cycle so oligomenorrhea, amenorrhea, it's associated with peptic ulcer disease, irritable bowel syndromes. Not great with ageing and of course it affects the mind as well. So just a quick word about the mind and the effects of chronic stress on the brain. Chronic stress on the brain is not great. It can lead to the development and maintenance of mental health problems such as major depression; it can affect the way we think about things and feel about things. Impair attention, our ability to form new memories, it can interfere with information processing. We know that glucocorticoids are toxic to the brain in chronic stress. So, there are lots of glucocorticoid receptors found in this part of the brain which is known as the hippocampus and it's involved in memory. And also, part of the brain known as the pre frontal cortex and in chronic stress the hippocampus can shrink in size. A role has been postulated for chronic stress in age related changes so in Alzheimer's disease and in also mild cognitive impairment there are higher than normal levels of basal cortisol secretion. So, to summarise we've talked about the stress response as an adaptive response designed to enhance survival. We've discussed how overwhelming adversity or traumatic stress may have long term negative consequences and how chronic stress can have a deleterious effect on the mind and the body. So, the next question is what can we do about it? There are many things but before we launch into that I'd like to invite you to join me in another short mindfulness practice and this practice is known as a three-step breathing space. So, before we start this practice, we usually adopt a posture to signal that we're stepping out of what we term in mindfulness automatic pilot. So, I'd like to invite you now to adopt a posture that embodies a sense of dignity, a sense of purpose and once again to connect to this moment. To really feel the weight of your body on the chair, feel that sense of contact between your feet, or the floor, feel the sensation of your hands on your lap or on your thighs. Closing your eyes if this feels comfortable for you. And in step one of the breathing space, becoming aware of what is going on for you right now. What thoughts are present, what feelings, what body sensations. Now letting these fade into the background. In step two gathering our attention to a single focus and again this is going to be the breath, the movement of the abdomen on each in-breath and each out-breath. So, feeling the rise of the abdominal wall with an in-breath. Feel the abdominal wall falling on an out-breath. If the mind is particularly busy once again counting the breaths. In-breath one, out-breath one. In-breath two, out-breath two. In-breath three, out-breath three. And so, on all the way up to five and then starting all over again. And step three expanding our attention from our breath to include the body as a whole. And when you're ready opening your eyes and once again re-joining this Bitesize session. So, what can we do about stress? What I'm about to say we all know. It's all about balance. And in science and medicine we use terms such as homeostasis, allostasis, liability threshold model to discuss the need of the body for balance in health. Eastern philosophies use different terminology the balance between yin and yang, dark and light, the balance of the chakras, energy etc. They're all fundamentally the same. This is about capacity so remaining within our capacity and finding ways to increase our capacity. I'd like to now introduce you to two concepts both described by the psychiatrist Dan Siegel. The first is the 'River of Integration'. On one bank of this river, we find chaos. Life feels turbulent, unstable and out of control. On the other bank lies rigidity where life is stagnant and fixed. You may try to control things and everything around you but at the centre flows the river. Here we find harmony and equanimity and our lives flow freely. We're energised, stable, flexible and coherent. An analogous concept also described by Dan Siegel is the 'Window of Tolerance' and this

concept is used in trauma sensitive mindfulness. So, the window of tolerance gives us a framework in which individuals who experience post-traumatic stress can gauge their level of arousal. Or, another way of looking at it, a level of stability. Analogous to the banks of the river of integration there are two zones. An upper zone, the zone of hyperarousal where basically there's some level of sympathetic overactivity and then there's the lower zone of hypoarousal. In a zone of hyperarousal, the person may be hyper vigilant, emotionally reactive, there might be disorganised cognitive processing, intrusive imagery etc. In the zone of hypoarousal there might be numbing of emotions, relative absence of sensation etc. With post-traumatic stress arousal can fluctuate between the two extremes and this is known as dysregulated arousal and our ability to self-regulate becomes seriously compromised. In the centre of this all is the window of tolerance. This is the optimal zone of arousal where concentration is at its peak. Thoughts flow, cognitive processing is unimpeded. The window of tolerance is not static it can show interindividual variation so, variation between people and it can show intraindividual variation so it can vary for someone perhaps depending on how they resourced they are, have they had enough sleep, enough to eat etc. The window of tolerance when it is very narrow, very stimulation is required for arousal to become dysregulated. I wanted to discuss this window of tolerance because I think it's a useful concept for anyone who wants to develop good mental wellbeing. We all have a window of tolerance that space between hyperarousal and stress when we're anxious or stressed about something and hypoarousal when we're just maybe under-stimulated or bored or exhausted. The window of tolerance also roughly corresponds to a measure of our resilience to life. So, resilience is our ability to adapt successfully in the face of stress or adversity. So, it's our capacity to maintain a normal or near-normal level of function, in other words remain in our window of tolerance when exposed to either a stressful or a traumatic event. Our resilience is not set in stone, there are factors which are difficult to modify. So, genome-wide association scanning has identified possible susceptibility associated with resilience and possible candidate genes have been postulated. Adverse life experiences especially if coupled with genetic susceptibility can make us more vulnerable to stress and trauma. However, there are many factors which are modifiable and most of us know a lot about these factors; diet, exercise, sleep, social support. Mindfulness-based interventions; yoga. There are also attitudinal qualities which are very unhelpful and can contribute and make us more stressed. Needing to control things, an over commitment to work and psychological inflexibility can all increase our experience of stress. So, how can mindfulness help us to stay within this window of tolerance and what is mindfulness anyway? So, this is a definition of mindfulness made famous by Jon Kabat-Zinn who is known as the father of circular mindfulness. So, 'Mindfulness means paying attention in a particular way on purpose, in the present moment and non-judgementally'. It doesn't really, it's a great definition and a very famous one but it doesn't really explain what mindfulness is. It doesn't really give us a flavour. So, this is a summary of the kind of things that we try to cultivate with mindfulness training. To know the mind, to shape or train the mind and to free the mind. So, in mindfulness training we try to train ourselves in awareness. We train ourselves to know ourselves, to know the habits of our mind and body. How do we feel like right now, what thoughts are present, what feelings, what body sensations? Where are we on this river? Are we on one of the banks or are we in the middle flowing? The mind has a life of its own so, rather than allowing the mind to control us or to take the trajectory of our life we learn to master our thoughts and to take those thoughts quite lightly. Eventually the intention is to liberate the mind from anger and sadness, and jealousy and all the emotions which are detrimental to our

wellbeing. And this line summarises the so-called mindfulness model of the mind; 'The mind is by nature radiant...It is because of visiting forces we suffer...'. In other words, overall, inside we're all ok. We sometimes allow visitors like anger and sadness to make us a bit crazy. So, how can mindfulness help us with this idea of a window of tolerance. First mindfulness can help us develop a sense of awareness? What is actually going on inside of us at this moment? Are we in a state of hyperarousal, where life is feeling stressful and chaotic? In a state of somnolence or lethargy or are we good, are we in our window of tolerance? Knowledge is the key. So, mindfulness teaches us to know ourselves. Next if we're in a state of stress we can utilise meditation, it could be a short practice like the three-step breathing space we carried out before or it could be a longer sitting or walking practice to return to this window of tolerance if we're in a state of hyperarousal. And there is good evidence that meditative practices, not just mindfulness but other meditative practices like transcendental meditation can influence our physiology such as reducing our heart rate and our blood pressure. If we're in a state of hypoarousal we can carry out some kind of thing, it's termed wise action, so, you might choose to mindfully do something to help us leave this zone of hypoarousal if we're tired, we might sleep, if you're in that state when you just don't feel like doing something because you are clinically depressed it's often wise to actually just do it. So, wise action can help us return from a state of hypoarousal back to our window of tolerance. Finally in the longer term mindfulness training can help us cultivate certain attitudinal qualities that reduce stress and promote psychological flexibility. So, teach us not to be attached to outcomes, to let go of control, go with the flow which can lessen the impact of any stressor. There's also evidence that practising regular mindfulness can actually alter the structure of the brain improving structures negatively affected by chronic stress such as the pre-frontal cortex and the hippocampus and reduce the effect of areas of the brain such as the amygdala which are involved in anger and fear and anxiety. So, in the long term through regular practice of mindfulness, we can increase our window of tolerance to a greater psychological flexibility and neuro-endocrine stability. And there are many studies looking at long-term meditators that suggest that mindfulness can have a trait effect and not just this sort of state affect which is temporary. Just a very quick word about meditation. Mindfulness is just one form of meditation and this is a classification system for meditations proposed Dahl, Lutz and Davidson. The thing to say is that different forms of meditation cultivate and train different parts of our mind and it is likely that they work with different pathways in the brain. So, if this path is new to you and you're discovering meditation for the first time it's worthwhile experimenting with it. Know that there is a whole world of different meditative techniques and one might be better for your particular needs. For example, compassion focus therapies are particularly helpful for people who are very self-critical. So, in a time that we're entering an era of personalised medicine we should also be considering an era of personalised meditation. Finally, I snuck this slide in to say something about trauma and mindfulness, if you do have a history of trauma or you think you're suffering from PTSD mindfulness can actually exacerbate trauma, it can exacerbate the symptoms of PTSD. It can also help people with histories of trauma and histories of PTSD but it's very important that if you decide to go down this path of mindfulness to find a trauma-sensitive mindfulness practitioner to help you in the correct way. Finally, to summarise so, today we talked about stress as a biological response to adversity. We very quickly discussed overwhelming adversity and traumatic stress. We also discussed chronic stress and the effects of chronic stress on the mind and the body. We touched on resilience, the river of integration and the window of tolerance and finally we touched

on mindfulness and mentioned some other meditative practices. So, I'd like to hand you back to Michael.

MICHAEL

Hi there. Thank you Vidarshi, that was really great, really interesting. I'm just going to open up now to questions or comments. So, just to reiterate if you wish to ask a question, please use the chat field initially and please make sure you select the option to post on the chat to panellists and attendees so that everyone can see your comments. We may invite some of you to expand on your comments so please respond via the chat that you are happy for us to add you as a temporary panellist to join the discussion and expand on your comments. So, we should have five or ten minutes, maybe a little bit longer if needs be. Would anybody like to share their thoughts? So, this may just be a question, maybe a comment that you want to come back on, maybe challenge what's been said a little bit, or maybe add something about your own experience perhaps. So, while people are reflecting Vidarshi I was just wondering whether it would be possible for you to give maybe an example from your own experience of how you've used mindfulness?

VIDARSHI

Well, I think, I mean I use it all the time everywhere. So, I think it's a great way if you've left work, when I used to work in central London, I used to use it all the time on the platforms. So, I'd do a little practice on the platform waiting for the train to come in just to settle my mind and to really make that break from work and coming home, that kind of thing. So, everywhere would be the answer to that.

MICHAEL

Thank you. We've got some comments now in the chat if you want to have a look as well. Thank you very much Angela, Naomi and Julian.

VIDARSHI

Yeah so, the first question is how can we help ourselves and others expand our window of tolerance? So, there's a short-term expansion in a sense, the here and the now, and that's the way I see it right. So, imagine you're at work, and you're actually slowly going out with your window of tolerance, your level of stress is increasing so to sort of come back into that window of tolerance in the short term, you can, you know I use these short mindfulness practices two of which we went through; the three-step breathing space and the earlier practice, to just bring myself back to that moment. Because sometimes when your mind is whirring you just need to reconnect with where you are here and now. The other thing is ask yourself is there a reason you're getting more stressed. I certainly know when I used to do nights and lots of on call, I often would skip meals and I would not drink and I wouldn't eat, and I'd neglect myself in certain ways just because I'd been so busy and you know by resourcing yourself can you return to that window of tolerance? So, it's about knowing yourself, knowing what triggers, what's triggered you, what are you lacking, why have you actually got out of your window of tolerance? And in the long-term there's a lot of very interesting research about the psychological aspects of stress. So, for example, control, our need to control. So, people who need to have this sense of control over their lives tend to get more stressed than people who are far more easy going and go with the flow. And there are lots of very interesting rodent experiments which look into this and primate experiments which look into it. And the mindfulness attitude is that actually none of us have any control over anything, and learning to really let life unfold has a big impact on stress. So, an example might be, I mean I remember I used to get quite stressed about professional exams and then in my final professional exam I decided to do it

differently. I decided I'm just going to do three hours of work every single day for the next few weeks and then go in there and do it, and not think about the outcome. So, actually letting go of the outcome and just doing what you need to do on a day-to-day basis makes a really big difference. And there are other things, psychological flexibility again being able to go with the flow is a big thing. Then meditation; there's evidence that suggests that actually the structure of our brain changes if we meditate regularly over a longer period of time and that in itself can improve your window of tolerance because you are reacting less and less to things that you might have reacted to in the past. I don't know if that answers your question, Angela? Michael, do you want to add to that or anything?

MICHAEL

Yeah, just a little bit. One of the things I would say is there are what we call formal practices of mindfulness meditation and informal practices. So, there's the kind of long practices if you like that you might do at home on a regular basis, maybe every day and then there are short practices like the three-part breathing space, and the techniques that you can use at any time throughout a day for example. So, those are great but also having that stable kind of long-term practice, a home practice of your own can be a really pro-active way of expanding your window of tolerance actually. Overtime you might find that actually that naturally occurs and you're slowly cultivating that through regular practice and re-wiring yourself if you like, if you want to look at it from a neurological perspective, to be able to do that. And so, when things do occur you actually navigate them much more skilfully and calmly as well.

VIDARSHI

I'd like to go onto this question from Naomi about how does mindfulness meditation exacerbate PTSD? Because sometimes our minds are busy for a reason and they're a distraction. And suddenly you're asking someone to concentrate and to bring their minds to places and things they might not want to do. So, for example, say in childhood trauma and you're teaching the body scan to someone with childhood trauma it can be very problematic to bring the mind to certain parts of the body because then they feel re-traumatized, they might have flashbacks of whatever happened to them. So, if anyone has a history of severe trauma, they should enter this path with care and with someone with experience guiding them. Someone who is an experienced trauma-sensitive mindfulness practitioner. There are all kinds of good things for people with histories of trauma that can come from mindfulness like self-regulation so it's not that it's not for them, it's just that they need to be a bit more careful. I mean there are lots of other things but that's kind of the gist of it. And on the website, I will post a list of references and one of the books is about trauma-sensitive mindfulness and there will be a lot more about it in that. So, from Julian here he mentions that I think sometimes when severely acutely stressed it can be very difficult to be mindful, stress can be overwhelming. Yeah, I agree and you know there are things that you can do to really connect. So, when you're stressed, or anyone is stressed you know your brain is going at a hundred miles per hour, your heart's thumping and all this kind of thing, to get yourself down from that is difficult. But there are all kinds of things that you can do which sound a bit crazy, try lying down and connecting to the earth with your body, feel the weight of your body on the earth, feel that sense of connection between your head and the floor, feel that sense of connection between your body and the floor. Then try and connect to the breath. It is difficult I agree and usually you know mindfulness, going on a mindfulness course is not recommended if you're already in a state of depression, or you're in a state of extreme stress because of that. So, mindfulness is, it's best to learn to swim before you're drowning. So, it's much better

to learn to be mindful at a time when life is not that bad. I hope that is helpful as well. Michael, do you want to add to that?

MICHAEL

Yeah, just something quite simple, thanks, I mean often people talk about stress as a resistance to the way things actually are. So, one of the things we're doing in mindfulness is cultivating or developing our capacity for awareness, to notice how things are in each moment so we can actually read a situation more accurately. And letting go of our attempts to control that, as Vidarshi has alluded to before, in other words accepting things as they are. And possibly seeing them, rather than seeing them as problematic, seeing them as a situation that needs a response rather than something negative or problematic. So, there's that element of it, that awareness and reading the situation more accurately but also having those abilities to ground yourself in the present through the breath, through the body and if you like come out of the head which is possibly exacerbating the stress through the kind of expansion of thoughts and trains of thoughts etc. that lead us down that track. And just re-connect with what's actually in your present experience, which is the body, which is the breath, which is your feet on the floor, whatever the sounds, any sense experience you can tune into and that can help to centre you again if you like, if you feel unbalanced.

VIDARSHI

And I want to add that you know yes, we're a mindfulness team but mindfulness is not the only thing. And you know many of us find time problematic and there are other practices like yoga and especially rigorous forms of yoga like Ashtanga yoga where you can use the breath and the body at the same time to ground yourself which can sometimes be more effective if you're in that state of severe stress. So, we're talking about mindfulness now but it's not the only thing that you can use to get yourself out of that, and to find that sense of balance. And sometimes just a really good workout with some ashtanga yoga, after that it's much easier to sit and do a longer meditative practice by just letting the body actually work through that adrenaline in a different way as well.

MICHAEL

We've maybe got time for one more response, or one more question before we start to bring the session to a bit of a close.

VIDARSHI

I think we've answered most of the questions. And I just want to address what Naomi says about; you don't want to bring yourself down from a state of hyperarousal and stress because it feels productive. I agree, I get it, sometimes there's a part of me that kind of misses it right the craziness of acute situations. But at the same time in the long term, it's worth remembering that it is damaging so yeah, I just wanted to say that. I mean I get it.

MICHAEL

There's also a difference between being in that situation and being quite unconscious or on automatic pilot as opposed to being conscious and actually purposefully, if you like, intentionally, staying in a certain level of arousal. Because we know a certain level of stress can be helpful, we know a certain level of stress builds us physical strength for example but if we go over that too much, too frequently for too long a time it can be eroding as Vidarshi says. But it is often the difference between consciously doing it with awareness as opposed to just going through the motions and being unaware of how it's affecting you etc.

VIDARSHI

And I think physiologically speaking you know when I was researching this ever so long ago and I'd learnt a bit about obviously stress in medical school, but then when I started to really research it and I realised the amount of damage that all these hormones that adrenaline, noradrenaline, especially glucocorticoids was causing in my body, the wish to put myself in that state of hyperarousal has dwindled. And I totally get it because it can be quite fun to be at that pace but at the same time when you realise the amount of damage you are doing to yourself in the now and also for the future it becomes a lot less attractive.

MICHAEL

I would add as well you might find that actually when you do put your foot off the pedal and find yourself more space then actually, you're just as productive, if not more productive. There's something about having clarity of mind that allows us to prioritise and know what needs to be done urgently, what we can put off for a day or two or whatever. There's something about being able to prioritise, that's really, really vital for doing our jobs well.

VIDARSHI

Ok, shall we draw this session to a close?

MICHAEL

Yeah. I'm just going to say a few things to close the session. First of all, we've got a little poll that Leigh Morrish is going to put on and we'd just like to ask you the question, would you be interested in attending a regular mindfulness meditation drop-in session facilitated by our team? We're thinking about possibly something maybe monthly, maybe half an hour or so. It'd be lovely to have your thoughts on that. And there's another question Leigh is going to put in the chat as well; if there's any other kinds of activities that you would like to see from MiME, if you've got any ideas about what else you would like support with or help with, or to say in the future, any thoughts in the chat would be really, really appreciated very much. So, while you're thinking I'm just going to bring the session to a close. Thank you very much indeed Vidarshi I found that really fascinating and I hope everybody else has too. Thanks everybody for participating in this session. There will be a video available on the ASME website of the session in a few days' time so please look out for that. And also, ASMEBITESIZE is now taking a break because of our upcoming ASM in July but will return in late summer for more sessions. So, for more details please visit the ASME events page at www.asme.org.uk/events. Thank you very much.

VIDARSHI

And thanks again for coming we really appreciated it.

MICHAEL

Have a nice evening everybody.

ENDS