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PAIN NEWS

A PUBLICATION OF THE BRITISH PAIN SOCIETY



'The stories we find ourselves in'

ISSN 2050-4497



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The stories that we find ourselves in

Dr Rajesh Munglani *Senior Editor and Vice President*

Every journey with pain is a deeply personal and mostly an unwanted journey. These stories belong not only to the people suffering enduring pain but also with those who treat and care for them.

Each story will be unique with descriptions of pain, suffering, disappointment, grief, resilience and perhaps also triumph.

In this issue, there are many such stories both from sufferers of persistent pain and also from a healthcare professional, Dr Steve Johnson, a GP dealing with pain and suffering on a daily basis.

I hope they will inspire you to contribute your own story.

We also have three articles submitted by medical students for the Pain Relief Foundation annual medical student essay competition and an introduction by Dr Tim Nash.



'I wish it need not have happened in my time', said Frodo. 'So do I', said Gandalf, 'and so do all who live to see such times. But that is not for them to decide. All we have to decide is what to do with the time that is given us'.

—J.R.R. Tolkien, *The Fellowship of the Ring*

Pain News editorial Summer 2024

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As always, the popular (tabloid) press like to catastrophise or dramatise unfortunate medical events. The New Year has heralded concerns about pregabalin and the rise in availability and use of synthetic opioids. The Office for National Statistics collated the number of times pregabalin has been mentioned on death certificates in the United Kingdom from 2010 to present. Graphical representation of this was shared in a recent *Sunday Times*¹ issue, demonstrating the stark almost exponential increase in its association with deaths, as recorded by the coroner. From NHS data, it is known that the number of prescriptions for pregabalin is increasing, and that it is not currently recommended as first-line intervention for epilepsy, hence most likely prescribed as a pain management intervention. The detailed recording of particular drugs on UK death certificates is relatively new, which is in itself an interesting area that could be researched. However, the sheer numbers of deaths associated with pregabalin perhaps does warrant the provocative headline, ‘*Anxiety drug pregabalin killed my son . . .*’.

COVID-19 has been so unfortunate for many, a few positives to take away from this experience include the collegiality and effective way our NHS supported our nation in a crisis. Also, the NHS has discovered new ways of working, some better received than others and perhaps also a new insight/awareness of chronic fatigue syndrome (CFS)/myalgic encephalitis (ME) due to the recognition of ‘Long Covid’. A recent study of the impact on people with ME/CFS has demonstrated the systemic nature of this long undervalued condition.² In this study of over 200 people in the United States, causal mechanisms remain unclear; however, the physiological effects appear to have a stronger foundation than previously thought. Clearly, the psychological aspects of this condition have long been overplayed, and its association with Epstein-Barr or other viral exposure overestimated. Indeed, the legitimacy of chronic fatigue is no longer in question; in the United States, there is a research strategy and associated funding via the National Advisory Neurological Disorders and Stroke (NANDS) Council Working Group for ME/CFS, to explore options for research into ME/CFS.³ With this impetus and growing evidence perhaps it is time chronic fatigue got a rebrand.

Back pain continues to be the most common form of chronic pain presenting at pain clinics in the United Kingdom. A recent

national enquiry⁴ funded by Grünenthal, Pfizer, Novartis and Janssen addressed the prevalence and socio-economic factors associated with musculoskeletal problems in the United Kingdom. They found that poor musculoskeletal health was strongly associated with poverty, education and employment type. Basically, people who live in more deprived areas are more likely to experience musculoskeletal problems, and this reflects similar findings to the Marmot review.⁵ Health inequalities, including many socioeconomic factors, rather than simply biology, are major contributors to the development of chronic musculoskeletal pain. Hence, health and well-being services should be proactively targeted at people living in deprived areas, especially those where there are many poor and homeless, and these underserved groups’ particular needs given closer attention.

This love–hate relationship with opioids is not going to disappear soon. How far have we come from referring to morphine as the ‘gold standard’ for analgesia? Opioids were once viewed as post-operative enablers, the post-operative aid to early mobility and faster discharge home. More studies are challenging the amounts and individuality of the prescribing of opioids in relation to surgery.⁶ Indeed, opioid-free anaesthesia⁷ is the subject of a 2023 systematic review and meta-analysis. The findings of this review were inconclusive, because of the lack of sufficiently powered studies. However, it is exceedingly interesting that such studies are being considered. I’m curious to know what the ethical considerations of each study were, and how the particular ethics committees considered these. Surely, the bad press regarding the new synthetic opioids⁸ (nitazenes, some up to 25 times more potent than fentanyl) should herald a rethink about opioid prescribing in general, the services to test for these substances and the support for people with existing drug dependency in the United Kingdom.

Finally, why do some people experience chest pain after COVID-19? In a Chinese case-controlled study,⁹ angiography was used to assess the incidence of coronary microvascular dysfunction (CMD) in a group of patients who had a history of recent COVID-19 and others who had no diagnosis of COVID-19. The images were compared between the two groups, 58

patients in each, and patients who had had long-term COVID-19 experienced a higher incidence of CMD, suggesting COVID-19 as an independent risk factor for developing microvascular dysfunction.

Do enjoy the spring and summer months, and hopefully see you at the ASM in Nottingham this year!

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Summer 2024

Roger Knaggs



Welcome to this summer issue of Pain News. As I am writing this column, it finally feels as though the weather has changed from the damp and miserable conditions that we have experienced over the last few months to a little more seasonal sun and warmth.

You will have read in April's electronic newsletter our new Executive Director, Jo Brown, has started. She is keen to meet as many British Pain Society (BPS) members and the community as possible. With the recent review and update of the BPS, the vision and mission, we are embarking on a strategic planning process for the Society that will support our growth over the next few years. Your input and insights are invaluable as we shape the future of our organisation. Please take the time to introduce yourself to Jo and share your thoughts on what you value and envision for the BPS.

As Arun Bhaskar completes his term as Immediate Past President, we are all grateful for his commitment and leadership over the last few years. He had no idea that a global pandemic was just around the corner. Despite these unforeseen obstacles, his leadership has been instrumental in navigating the society through turbulent waters.

I would like to take the opportunity to thank our volunteers who have and continue to dedicate so much time,

enthusiasm and resources to advancing our mission. The Executives and Council are elected to work on your behalf and to represent you. We are committed to fostering your active involvement in the society's endeavours. Keep an eye on our monthly newsletter for opportunities to volunteer, and please do share your successes and stories with us so we can celebrate them together.

One of big developments over the last year has been an increase in the Society's educational offering. Several SIGs held in-person study days in autumn 2023 which were well attended and appreciated. April was a particularly busy month for the BPS's educational programme with several SIG webinars and a further webinar on chronic pain and the menopause. I am grateful to Kate Thompson and members of the Education Committee who have worked tirelessly to create this exciting and diverse programme. Your attendance and honest feedback inspire us to continually improve. We welcome your suggestions for future topics and invite you to contribute your expertise to our educational offering.

The BPS is a member organisation and is **YOUR** Society. Your voices matter, and I remain eager to hear from you on pain-related issues and ways in which the BPS can enhance its visibility and influence. I commit to taking the time to read and respond to all emails received, and try to facilitate as many of your innovative ideas as possible.

I hope that you find time for some rest and relaxation over the summer among all your work priorities as well as supporting those you see in clinic.

Thank you for your ongoing support and dedication to the BPS.

With best wishes,

A handwritten signature in blue ink that reads "Roger Knaggs".

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My experience with persistent pain

Sashira Dandeniya



Imagine having a constant pain. No, I don't mean your spouse, the boss or the Inland Revenue (although all painful in their own ways!). I'm talking about a physical pain that won't go away. This is chronic pain and I'd never given it a moment's thought until it happened to me at the tender age of 42 years.

Yes, I've got a chronic pain issue – let's call it 'persistent pain', as it's increasingly being referred to (a less depressing label in my opinion). I have deep, aching, burning pain in my right shoulder and I've been on sick leave for three and a half years because of it. It's an insane amount of time away from work and the thought of this alone stresses me out. I'm an Economist by training and work in financial services, but I'm basically an office monkey and spend most of my time at a computer. This is where my pain condition seems to have stemmed from – a type of repetitive strain injury (RSI), caused by working long hours over many years at a laptop in bad posture. Right now, I'm unable to do more than 100 minutes of

computer work in a day (in 10 sessions of 10 minutes spread through the day). That's actually pretty good because when this first happened, it was more like 5 minutes in total. But that's not going to cut it in my job where I'm basically chained to my computer. In fact, most jobs require computer use in this digital age and I'm not sure what else I could do that doesn't require it (it's not like I can act, and I'm no Adele). I should add that it's not just computer work that causes me pain; housework, driving, washing, using my phone and even sleeping can all cause pain in my shoulder. On a good day, it's like background noise that I can semi-ignore and live with. On a bad day, I take to the sofa in resigned agony.

The good news is that I'm finally starting to see the light at the end of the tunnel (more on that later) but it's taken a long time to get a grip on it, and what an emotional rollercoaster it's been. Stressful things I've had to deal with are the following: (1) daily pain, (2) being unable to work, (3) doctors, (4) the judgement and lack of support from others because I generally look okay, (5) 'pacing' activity and learning to do things differently, (6) reduction in income and (7) guilt, fear and uncertainty. None of these have been easy. But the first challenge was around simply accepting the diagnosis.

The thing about persistent pain is that it doesn't always start out as persistent pain, and this can make it a particularly confusing experience. There is usually something else that triggers it – in my case, it was an RSI-related injury to my shoulder sustained at work. For ages, I thought the injury was the problem. Even when it was first mentioned that I could have a chronic pain condition, I didn't really understand it. I couldn't reconcile the pain I felt so viscerally in my shoulder, with persistent pain, which is a nervous system condition where the brain produces pain needlessly. It took me ages to understand what was wrong with me. I went through one GP, four consultants, three physios, two pain psychologists, three alternative therapy practitioners and several quacks on this journey, none of whom offered a full explanation of this condition, and it was exhausting.

I thought I had tendonitis of the rotator cuff, bursitis and osteoarthopathy of the acromioclavicular joint (try saying that after a few shots), at least, that's what the scans said at the time. I was initially prescribed anti-inflammatories and physiotherapy to remedy this. However, after months of rest,

rehab and steroid injections, I was still in pain. It was around 6 months into my sick leave when the idea that I might have 'chronic pain' was first mentioned by my physio. Apparently, my shoulder should have healed by now, so it was likely to be my brain that was the problem, unhelpfully continuing to produce pain signals when there was no longer a need.

I found this hard to believe. My shoulder would hurt whenever I did too much of anything. It responded to rest and anti-inflammatories (although the latter gave me terrible gastritis). How could it be a 'brain thing?' And why would my brain do that?

I'd also had a long history of pain in my right wrist/arm/shoulder, which had been attributed to inflammation in the tendons caused by excessive computer use. This latest episode, like all my previous episodes, was triggered by working long hours at the computer, but I was now 42 years and I thought that this was just a progression of the RSI I had lived with since the age of 25 years – it was simply getting worse with age, spreading up my arm, to my shoulder and neck. However, apart from one long period off work when I was in my 30s, the pain had always settled. With the help of the 'reasonable adjustments' (occupational health lingo for supportive and ergonomic equipment) provided by my employer, I had always been able to continue working, albeit with frequent bouts of low-level-but-manageable pain. However, now the pain seemed to be permanently unmanageable.

My physio explained that the results of the scans did indeed indicate physical injury – there were structural issues which had occurred over time, most likely from spending too much time at a computer. As a result, certain muscles had weakened and others had been overused, causing the tendonitis, bursitis and so on. So yes, there was a physical dimension to my condition, but the degree of pain I was feeling after this amount of time, for this type of injury, was abnormal. This is the very definition of chronic pain.

So why was my brain still churning out pain? I decided to find out. I knew nothing about chronic pain, but then again, I knew nothing about 'regular' pain either. All I knew was what I had experienced in the school-of-life. With the help of some books recommended by my physio and Dr Google, I learned some surprising things.

Nobody likes pain (cue *Fifty Shades of Grey* jokes), but without it, we probably wouldn't have made it this far as a species. The body actually has a 'pain mechanism' and it exists to protect us. It is a brilliant, complex and nuanced

system that has ensured our survival for thousands of years. Pain is not produced by the nerves of wounded tissue as some kind of by-product of damage, as I had thought. Pain is produced in the brain, in response to the detection of damage (or potential damage) and it is a deliberate action on the brain's part, to alert us to damage and encourage us to take action to protect the body.

There's so much more to it than that, and I can't pretend to understand exactly how this works. The pain mechanism is phenomenally complicated, involving a number of bodily systems acting in coordination (i.e. the nervous, endocrine and immune systems), taking into account a myriad of data in a split second. These data range from sense-related information like sight and touch to memories of similar injuries we might have experienced, to even our current emotional state. Hence, pain is said to involve a complex interplay between biological, psychological and social factors – the 'bio-psycho-social model of pain'. It is a complex and seamless system, but it is not infallible – sometimes it goes wrong. Chronic pain is one example of what happens when the pain system malfunctions. Phantom limb syndrome and fibromyalgia are others.

Why does the pain mechanism sometimes malfunction? This is a difficult question to answer because we still don't know everything about pain. But modern pain science believes that persistent pain is a kind of over-protective mode that the brain has switched on, making it continue to produce pain because it thinks there is still a need to protect the body.

This resonated with something my physio said, which was that persistent pain can occur when pain is ignored. If we don't listen to our body, the brain increases its effort to protect the body by increasing the volume of these signals. And then unfortunately, the volume can get stuck on 'high'. When I hurt myself at work, I did not heed the pain signals. I was working on a very stressful project, and although I was in pain, I felt like I could not leave my team in the lurch (I've always been overly conscientious, it's a bad habit I'm trying to kick). But the pain got worse and worse, and eventually I was forced to down tools – perhaps this was my brain's way of making me stop and look after myself.

However, when I did listen to my body and rest, why didn't the pain stop? The pain did in fact reduce with rest. But now, my shoulder was acutely sensitive to any activity, with just small amounts of anything being enough to send me into fits of pain which would take days to reduce. I was stuck in what is known as a 'boom-bust' pain cycle. After rest, I would restart activity, but I'd somehow do too much and cause a major pain flare-up, and then I'd need to rest again to get the pain under control.

My experience with persistent pain

Then I'd repeat the cycle. Note that it is very easy to inadvertently overdo activity, especially as doctors recommend that you keep moving and I am an impatient person who finds it hard to sit still. My sisters call me 'the collie'. In those early days, I was still working out my pain boundaries and pain is a frustratingly slippery thing when you really look at it.

It's as if the brain has become stuck in 'protect' mode and is now sensitive to anything it deems threatening, thus creating pain unnecessarily. The central nervous system has become overly sensitised, a phenomenon known as 'central sensitisation'.

Some of the pain literature proposes that certain people might be more susceptible to central sensitisation. For example, people who have had adverse childhood experiences or other traumas, or people with certain personality traits such as being anxious or self-critical. Basically 'stressy' people, like me, who can't take a crap without overthinking it. I don't want to generalise here on personality/experience (the root causes of central sensitisation being multifaceted), but it does make sense that people who exhibit a high degree of chronic stress in their body (whether they're conscious of it or not) might be the ones prone to central sensitisation and thus chronic pain.

I've had mental health struggles in the past and had extensive therapy in my 20s and 30s, so I know all about stress and how it can mess you up. Yet I still found it hard to accept that I had a pain condition that was likely to have been caused by stress. As mentioned, I couldn't believe that my shoulder was not the source of the pain. Second, this would also mean that my brain was the issue, and so perhaps this was some kind of psychosomatic illness. A dark voice in my head said, 'This is all your fault'.

A wave of guilt hit me. Had I done this to myself? For most of my life, I've been chronically stressed and I hated myself for being this way. I wish I could be more relaxed. I wish I could sleep better. Everyone else seemed to be able to just get on with things, so why couldn't I? Despite all the work I had done on myself, the years of talking therapy, inner child work, CBT, NLP, EMDR and so on, it clearly hadn't helped because now I had a chronic pain condition. Great.

To be fair, the therapy *had* helped – but maybe there was more work to do. My past therapeutic work was mainly CBT-based, which centres on how the mind creates stress through its thoughts, but now I realised that stress was also deeply embedded in my body (I didn't know about the mind-body connection back then). I knew that I had a lot of muscle tension. I have always had concrete shoulders and I'd get

horrible pain in my head, neck and jaw when I was stressed. The way my muscles operated under stress was the physical manifestation of what was going on in my head and until now, I had been completely unaware of this. To get my muscles to behave differently was not going to be easy – much like my thoughts, my muscle movements were a habit formed over decades and it wouldn't be possible to change this overnight.

I guess I've been hardwired for stress since childhood. I was always sensitive, but watching my mother die of cancer when I was a child didn't help. Nor did having a father who was grieving, moody and emotionally absent for years. I had two younger sisters and when mum died, I was now second in command in our house, which was more responsibility than I was ready for. I developed the rock-and-roll trait of being hyper-responsible. I also was hyper-vigilant to my father's moods, and I was afraid he would leave us too, so I strived to make him happy the only way I could, which was to be what I thought he wanted me to be – the 'good girl', who helped out at home, did well academically and got a job in finance at a prestigious company. I landed that 'prestigious' job, but I didn't get very far in it because it fundamentally wasn't me. For years I tried to make myself into someone I'm not and further lost myself. I floundered in my career. Romantic relationships failed. I was riddled with anxiety and never felt safe in life. The stress of all this manifested in emotional symptoms like anxiety and depression, and physical ones like tense shoulders (among other things). So, it's really not surprising that I have developed persistent pain in this area.

When I was growing up, the attitude towards stress was generally dismissive. It was thought to be 'in your head' and therefore imagined and not real. If you suffered from stress, you were somehow weak and deficient. I guess I unconsciously absorbed this message, which is why I hated myself for being so affected by stress. Thank God this attitude is changing as the scientific and medical establishment finally recognise the very real effect of stress on the mind and body. We now know that while stress is intrinsic to our survival mechanism, it is supposed to be short-lived, a quick burst to help us escape that tiger bounding towards us. Nowadays, we're not running from life-threatening danger anymore, so that same stress response is being deployed in ways which are lower level, but more pervasive. A prolonged, chronic stress response is damaging and can cause all manner of health conditions, like central sensitisation, perhaps.

Learning about pain has helped me realise that persistent pain is a very real condition. It is a dysfunction of the pain mechanism and sufferers feel actual pain. It also helped me understand why this might have happened to me. When I look

back, I have had other episodes of ‘unexplained’ pain in my body that eventually receded (e.g. irritable bowel syndrome (IBS), vaginismus) so perhaps I do have a sensitised nervous system. And maybe my ‘stressy’ personality has been a factor here. I say this about myself with compassion now – I know why I am the way I am, and much of it has to do with childhood experiences and the coping mechanisms I developed, which my immature child-self had no control over. In the same way I learned to stop blaming myself for my years of depression, I also slowly stopped blaming myself for this persistent pain condition.

It took me 2 years to reach this understanding and accept my diagnosis, and with acceptance came a change in my attitude. All this time, I had believed my problem was physical and so I had been pushing myself to get better by aggressively pursuing physio and activity. But this achieved nothing, and I remained stuck in the boom-bust pain cycle. However, when I accepted my persistent pain condition, I realised that what I really needed to do was to make my brain feel safe. I had to be gentler with myself.

Just before I had this epiphany, two important things happened:

The first thing is that after 14 years of being ‘persistently single’, I met the love of my life. I was always ok with being single (thanks to my abandonment issues), but I am a romantic too and never lost hope of meeting someone, despite my 20-year run of bad luck. I was on the London online dating scene, which in your 40s is painful enough without persistent pain adding to the mix. But this man came from the North, completely unexpected, out of the blue – we met randomly in a restaurant. Unlike the men I am accustomed to, he is kind, tender, funny and lovely. He brings a softness and playfulness into my life that had hitherto felt hard and heavy.

No, falling in love has not made my pain go away, as some people asked me (I found this quite irritating; did they think that all I needed was someone to go to Sandals with?). However, while my pain levels remain business as usual, having someone in my life who shows me consistent love, care and acceptance helps my general emotional state. When I am close to him, I feel a sense of calm, deep in my body – he’s like a balm for my raw nerves. I never met anyone who made me feel safe like this before.

I am lucky to have family and friends, but it is hard to talk to them about what I am going through. The elders of my family

just don’t understand. A couple of friends questioned and even teased me about it – this is the challenge of having a condition that is invisible; no one sees my pain unless I am in a severe flare-up and then I am usually at home alone. My boyfriend doesn’t fully get it either, but he tries, and crucially, he believed me when I told him about it. He asks me about every doctor’s appointment, even accompanying me to some. I can talk to him when the pain flares up and I feel disheartened. He celebrates every little progression I make in my activity level. He’s been there for me like no one else and has reminded me of the simple power of a few kind words and a hug. He helps me be gentle with myself.

The second thing that happened was less romantic, but nevertheless, also significant in my recovery; I changed my medical team (again) as I had become frustrated with my lack of progress. My new consultant’s approach was more holistic and involved reducing my dependence on amitriptyline (which I had been taking for a few years now and was struggling with at high doses), supplementing with CBD oil, continuing with exercise and focusing on pacing activity. The best piece of advice he gave me was that ‘to do more, I needed to do less’, a paradoxical statement that left me perplexed – this could not be more at odds with our fast-paced, modern culture which is all about ‘do more’, ‘be more’ and so on. However, these words turned out to be the key.

I was a harassed Speedy Gonzales, always rushing, trying to be efficient and ‘get shit done’. But now, I started to properly pace activity which meant slowing down. Hang that laundry in stages, not all at once. Do five reps of my shoulder exercises instead of 10. Slowing down meant I paid more attention to my posture and could listen more carefully to my body’s pain signals, using them as a guide and taking care to stop activity when the pain was low level, rather than carrying on until it was worse. Of course, I had tried this before, but this time I deeply understood that I had to make my brain feel safe. I let go of trying to hurry my recovery and instead, just let my body take the time it needed to heal.

Yes, it took much longer to do things initially and my inner collie would get frustrated, but my more laid-back approach allowed me to tune into my body and I noticed that my pain levels started to moderate. I’d get less of those severe flare-ups that would take me out for days. I could better engage with the physiotherapy. By doing less, I suddenly found that over time, I was indeed able to do more. I could suddenly hang an entire load of laundry in one go, or type for 10 minutes without triggering horrible pain. Now I could start reducing the amitriptyline dose too, and despite the initial increase in pain as I

My experience with persistent pain

titrated down, by sticking with my gentler pace, the pain settled, and the unpleasant side effects of the drug started to abate.

'Doing less to do more' works, but changing one's ingrained habits takes time – my doctor didn't tell me that – and it would be nearly another year before I would start to feel a sustained improvement. Slowly but surely, I'm getting closer to that light at the end of the tunnel and although I may not be 'cured' (and I'm not sure I'll ever be totally pain free), I'm starting to feel much better on a daily basis. Perhaps my brain is beginning to trust me to take care of myself as I begin to work with it, instead of against it.

I'm hopeful that I will be able to return to work soon and move on with my life. However, if I'm honest, I am worried. Right now, I have the luxury of being able to listen to my body. I can increase or decrease activity depending on my pain levels. But when I'm back in the 'real world', will I be able to do that? Will I be able to work to a pace that suits me? How will my body cope with the stress of work? What happens if my pain flares up again?

Persistent pain and stress go hand-in-hand, but I'm not sure this is widely understood. Stress has never had a higher profile. We know so much more about it. We know that stress leads to a number of health conditions and diseases, yet we as a society continue to collectively perpetuate the very behaviours and attitudes that increase stress. Yes, we do need to take some responsibility individually for improving our resilience, but it sometimes feels like swimming upstream because, to borrow a phrase from the renowned physician Gabor Mate, we live in a toxic culture that normalises behaviours that are not good for us. Still, we have to try, because managing stress is a big factor in managing persistent pain.

My doctor's advice of 'doing less to do more' applies not just to persistent pain sufferers. I think many of us long to do less things in a better way, that is, in a way that is more mindful, less rushed and more in tune with our bodies. If we could only live and work in this way, perhaps we would all be healthier, happier and, ultimately, more productive.

Pain Relief Foundation annual student essay prize



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Tim Nash *Trustee, the Pain Relief Foundation*

At my instigation, the Pain Relief Foundation (PRF) started an annual medical student essay competition, in the late 1990s I think. My hope was to increase the profile of Pain Medicine within the profession and to stimulate interest early in people's careers as early as possible. I had been deeply involved in developing recognised training in pain medicine. Around 1982/3, I presented a paper based on the then Intractable Pain Society's (IPS) Committee discussions on the training requirements for specialising in Pain Medicine to the annual meeting of the Tutors of the Faculty of Anaesthetists of the Royal College of Surgeons. While Secretary of IPS, I was involved in discussions with the Dean of the Faculty (my old boss at Addenbrooke's). The Faculty of Anaesthetists were at the cusp of founding their own college, now the Royal College of Anaesthetists. Intensive care had posed problems for the new college, who had to collaborate with the Royal College of Physicians, so the college progressed the idea slowly, but eventually the Faculty of Pain Medicine came into being. I had also done surveys to see how other countries training measured up to the Standards for Training of the International Association for the Study of Pain (IASP) and for the Working Party on Education and Standards of the European Federation of Chapters of IASP.

When I moved to Liverpool, I became Honorary Director of Pain Studies within the Department of Neuroscience of the Medical School. I had added aspects of pain and its management into the problem-based learning clinical scenarios of the new Liverpool Medical School course while editing the first study guides for their second clinical phase. I had also encouraged and facilitated the development of special study modules in pain medicine around the Mersey Region.

The annual essay competition was originally advertised in all the Medical Schools in the United Kingdom, with the winner being invited to Liverpool, expenses paid, to present their essay to one of our weekly educational meetings and to be presented with their monetary prize. The essays were judged by a panel of consultants from the Walton Centre for Neurology and Neurosurgery Pain Service. After I retired in 2006, it became clear that there was a need to expand the competition to include other health groups, and the running of the competition was taken over by the chair of the PRF Education Committee.

The competition is for an essay on an aspect of chronic pain of up to 3,000 words and is now open to Medical, Physiotherapy, Nursing, Occupational Therapy and Clinical Psychology Students. There are three first prizes of £500 and three second prizes of £100. The winning essays are all presented at one of the Pain Relief Foundation and Walton Centre Clinical Pain Multidisciplinary Team education meetings and put up on the PRF website. The competition is advertised in all UK medical schools, universities and hospital intranets, on the Pain Relief Foundation Website and on social media. The students initially submit an abstract of their essay, which is assessed by three judges from the Education Committee, and if successful, they are invited to submit their full essay. The essays are distributed again between the judges, who select their top choices, and the chair of the committee then makes the final selection.

We have become impressed by the standard of submissions and especially the winners, and last years winning entries will be published over the this and the next two issues of Pain News.

Traditional Chinese medicine and its role in chronic pain management

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Introduction

One way of characterising chronic pain is ‘pain that endures beyond a reasonable period for tissue healing to occur’.¹ Although there is no definitive timeframe, it is frequently arbitrarily categorised as persisting for a duration exceeding 12 weeks, with shorter durations categorised as acute or sub-acute.¹ Regardless of duration, chronic pain is a life-altering condition that exacts a toll on patients, encompassing financial, social and psychological effects.² Throughout my medical education, I have had the privilege of witnessing the remarkable impact of Traditional Chinese Medicine (TCM) in the management of chronic pain. My interest was piqued in third year when I undertook a 2-week course on the basics of TCM; we studied the principles, theory and many different forms such as acupuncture, herbal medicine and massage therapy. Following this my interest remained, and I chose to undertake my elective in rural India and Nepal, where resources are scarce and alternative forms of medicine (such as TCM) are routinely practised. One example is I spent time with an acupuncturist and witnessed firsthand the transformative relief it provided to farmers suffering from chronic pain due to the intensity of their work.

These experiences inspired me to write this essay, and as such, I want to explore how despite the advancements of Western medicine when treating chronic pain, there are unfortunately weaknesses, for example, side effects including tolerance and addiction, underscoring the need for a more holistic approach.² TCM, in contrast to conventional pharmacological approaches, seeks to address the root imbalances contributing to the pain.² TCM practitioners embrace a holistic approach considering not only the physical aspect but also factors such as lifestyle, emotional well-being and external influences.³ The Western medical community’s increasing recognition of TCM’s efficacy is evident through the inclusion of acupuncture in the National Institute for Health and Care Excellence (NICE) guidelines for chronic pain management.^{4,5}

Furthermore, this essay endeavours to explore the potential roles of herbal medicines, dietary therapy and acupuncture in conjunction with Western medicine, noting the key difference in

practice between the two; Western evidence-based medicine alongside largely anecdotal TCM. It aims to assess whether these components of TCM have promise in contributing to a more comprehensive and patient-centred approach to chronic pain management. In summary, I aim to examine the possibilities of incorporating TCM, with its holistic ethos, into Western pain treatments. Such integration could ultimately offer patients a broader and potentially more effective approach to their pain management.

Current management of chronic pain

Pain is an inherent part of the human experience, and with chronicity, extends its reach into the lives of patients with its financial, social and psychological burdens.¹ A meta-analysis of chronic pain prevalence found approximately 28 million adults are affected by the condition in the United Kingdom.¹ Moreover, chronic pain has emerged as one of the leading causes of disability worldwide,⁶ and as our population ages and develops more co-morbidities, the burden of chronic pain continues to surge.⁷

To address this growing concern, NICE endeavours to guide clinicians in reducing the burden of chronic pain.³ Their recommendations advocate for a multifaceted approach, encompassing both non-pharmacological interventions such as psychological therapy and physiotherapy, as well as pharmacological treatments, ranging from tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) to opioids and analgesics.³ However, even with the continued advancements in Western medicine, marked challenges remain, including the development of tolerance, dependence and side effects to these medications.³ While this essay acknowledges the continued impressive progress made in Western medicine, it also recognises its limitations.

Principles of TCM

TCM is a holistic system of healthcare that has evolved over thousands of years and is deeply rooted in the principles of

balances and harmony.³ It considers the body, mind and spirit as interconnected aspects of an individual's health.³

TCM offers a diverse range of healing practices designed to promote harmony within the body and its surroundings.⁸ TCM's philosophical core rests on the balance between Yin and Yang, two opposing yet independent forces.⁹ Within the body health is synonymous with the coexistence of Yin (the passive, cool and nurturing aspect) and Yang (the active, warm and transformative aspect).⁸ According to TCM philosophy, functional activities (such as movement, learning) of the body are classified as Yang, while the material basis of vital functions (blood and bodily tissue) belongs to Yin.⁸ TCM states that the interaction between Yin and Yang generates Qi,⁸ and disruptions in the equilibrium between Yin and Yang can result in a disruption of Qi.⁸

Qi is a fundamental concept in TCM, representing vital energy or life force that flows throughout the body and it is considered essential to life itself.⁹ When Qi is hindered or disrupted in its natural flow, it can manifest as pain or illness, both mentally and physically.⁹ These disruptions can be triggered by a variety of factors, including emotional stress, physical trauma or imbalances within the body.⁸

TCM practitioners employ an array of diagnostic techniques to gain an insight into an individual's overall health. These techniques include pulse examination, tongue analysis and, most importantly, patient history.³ This assessment allows the formulation of personalised treatment strategies that target specific imbalances of Qi, Yin and Yang.³ Primary healing practices to achieve this include acupuncture, cupping, meditation, Chinese herbs and dietary therapy, as well as practices such as 'Tiuna', 'Qigong' and 'Taijiquan' more commonly known as Tai Chi.⁸ Now we understand the philosophy behind TCM, I will discuss two promising treatments for chronic pain that interest me the most.

Herbal medicine and diet

Herbal medicine is a cornerstone of treatment for TCM, utilising many natural substances such as plants, minerals and animal products, to restore balance and promote healing from within the body.⁸ These herbal treatments aim not only to alleviate pain symptoms (or symptoms of other diseases) but also to address the underlying cause of ailments.⁸ In TCM, diet therapy is pivotal, viewing food as both sustenance and potent medicine. Practitioners customise diets based on individual conditions, guided by the ancient theory of hot and cold from Shennong Bencao Jing dating back to 200 AD.¹⁰ This theory

suggests that those with cold syndromes should consume foods with hot properties, and vice versa.¹⁰

TCM places a strong emphasis on personalised treatment, recognising that every patient is unique, and each formula is carefully selected and tailored to suit an individual's needs. It seeks to restore the balance of Qi and address specific imbalances within the body.⁸ For instance, ginger, used in TCM for 2,500 years, has been celebrated for its diverse therapeutic applications.¹¹ It has been used to combat muscle pain, reducing swelling, ease arthritis symptoms and relieve headaches. Its historic and traditional use has led to research showing it inhibits arachidonic acid metabolism (arachidonic acid-derived prostaglandins contribute to inflammation as intercellular pro-inflammatory mediators, and they also promote the excitability of the peripheral somatosensory system, contributing to pain exacerbation¹¹). One paper, in 2010, demonstrated that daily consumption of ginger effectively relieved pain in patients suffering from osteoarthritis.¹¹ Subsequent studies¹²⁻¹⁴ have corroborated these findings, further showing that TCM and its treatments hold promise.

Turmeric (with its active component curcumin) is another traditional medicine in TCM and serves as a potent analgesic agent. Curcumin possesses the ability to regulate inflammatory cytokines.¹⁵ In a 2018 study of 201 participants, the administration of turmeric over a 12-week period resulted in a significant reduction in pain-related symptoms associated with osteoarthritis when compared to a placebo group.¹⁵ In addition, a systemic review of preclinical and clinical studies has highlighted the potential for turmeric to serve as an effective sole analgesic or as part of combination strategies involving opioids, non-steroidal anti-inflammatory drugs (NSAIDs) or paracetamol.¹⁶ This underscores the versatility of turmeric in pain management.

Finally, capsaicin (derived from chilli peppers) represents a natural remedy with a unique mechanism of action.¹⁷ Its topical application has long been recognised as a treatment option for various pain conditions as intense or repetitive exposure to capsaicin leads to reversible and selective loss of nociceptive nerve endings.¹⁷ A randomised controlled trial comparing topical diclofenac with capsaicin supplementation demonstrated superior pain relief when capsaicin was added to the treatment regime as opposed to diclofenac alone.¹⁷ Notably capsaicin has proven to be well-tolerated in combination therapy with no documented drug interactions.¹⁷

However, as patients increasingly combine medications and herbal supplements, concerns regarding potential interactions between the two have arisen.¹⁸ Herbal medicines and their

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sellers, being largely unregulated, may present further safety issues.¹⁹ Some herbs used in TCM have been found to interact with medications, either duplicating their effects or rendering them ineffective.¹⁸ Ye Lian Qiao (St John's wort) is used as a supplement for depression and is one of the most taken herbal supplements in the United States. It is known to induce liver enzymes, potentially reducing the therapeutic efficacy of certain medications as well as causing unsafe and life-threatening conditions with others by inhibiting different enzymes (such as serotonin syndrome when taken with SSRIs¹⁸). Understanding the compatibility of herbal remedies and medications is crucial for patient safety and the development of safer treatment protocols. However, dietary therapies remain significantly understudied, primarily because conducting high-quality research, such as double-blind randomised controlled trials, is challenging and expensive. In addition, the inability to patent and profit from natural substances such as 'ginger' diminishes the incentive for pharmaceutical companies to invest in extensive studies.¹¹ Consequently, the scepticism lingers around TCM due to its perceived lack of empirical evidence in comparison to pharmacological medications.

It is important to note that despite potential risks associated with herbal medicines, a 2004 BMA report highlights that the risks associated with prescribed medications can be substantially higher, with adverse drug reactions resulting in 250,000 UK hospital admissions per year.²⁰ The first-line recommended pharmacological management for chronic pain in adults includes antidepressants, such as SSRIs.²¹ These drugs have several side effects, including gastrointestinal bleeding, anxiety and electrolyte imbalances.²¹ Another medication utilised is amitriptyline, a TCA.²¹ This drug has common side effects including drowsiness and QT prolongation, as well as the overdose risk associated with a high mortality.²¹

Diet therapy in TCM and synergy with Western medicine

The TCM concept of individualised dietary therapy aligns well with the principles of Western medicine. Research in Western medicine has revealed improper diet can contribute to various diseases, including cancer. A study from 2019 reported that dietary risk factors were responsible for 11 million deaths in 2017, surpassing other risk factors like tobacco use.²² Recognising the role of diet in health underscores the importance of dietary choices in both TCM and Western medicine.²²

The global significance of herbal medicine

The World Health Organization (WHO) acknowledges that herbal medicines form the primary basis of healthcare for over four billion people worldwide.¹⁹ Furthermore, an estimated 85% of traditional medicine practices globally involve plant extracts, which have laid the foundation for modern medicine,²³ as many modern drugs have their origins in traditional herbal use. Between 35,000 and 70,000 plant species have been screened for medical compounds and over 200 modern drugs are derived from plants.²³ Familiar herbs such as turmeric, ginger and St John's wort all trace their roots to TCM and are increasingly utilised in the West for their anti-inflammatory, antidepressant and anti-emetic properties.⁹

Ultimately a balanced integration of TCM practices and Western medicine may offer comprehensive and effective solutions to address the complex health needs of patients with chronic pain.⁹

Acupuncture

A growing number of individuals are exploring alternative therapies to complement or even supplant conventional treatments. One such practice gaining popularity in the West is acupuncture, which traces its origins back to 200 BC, as documented in the medical text 'The Yellow Emperors Classic of Internal Medicine'.²⁴

At the heart of acupuncture lies the concept of stimulating the body's innate healing mechanism, restoring the balance of Qi and in the process, promoting healing and pain relief.²⁴ It involves the strategic insertion of fine, sterile needles into specific acupoints (Figure 1). The acupuncture points are mapped to 14 main meridian channels, through which Qi flow (see Table 1).

One meridian channel relates to 12 inner organs and each acupuncture point can treat multiple disorders and pain symptoms (see Table 2).

These needles can harmonise the Qi, ultimately bringing a state of well-being and the alleviation of pain.²⁵

The methods of acupuncture are diverse depending on the technique employed, whether it be traditional needle insertion, dry needling, heat acupuncture, electroacupuncture or laser acupuncture.²⁵ Research has helped understanding on the underlying mechanisms of acupuncture; it is believed that acupuncture's effectiveness may be attributed to the release of

Figure 1. Acupuncture chart with a series of points.



Table 1. The acupuncture points are mapped into 14 meridian channels through which Qi flows.

| Meridian channel | Number of points |
|-------------------|------------------|
| Lung | 1 |
| Large intestine | 20 |
| Stomach | 45 |
| Spleen | 21 |
| Heart | 9 |
| Small intestine | 19 |
| Bladder | 67 |
| Kidney | 27 |
| Pericardium | 9 |
| Triple energizer | 23 |
| Gallbladder | 44 |
| Liver | 14 |
| Governing vessel | 28 |
| Conception vessel | 24 |

Meridian channels are like a network which can be compared to the circulatory system in Western medicine. Each meridian has a specific number and acupuncture points meaning.

endorphins, natural pain-relieving chemicals in the body, which reduce pain perception and promote a sense of overall well-being.²⁶ Moreover, acupuncture may influence the release of neurotransmitters such as serotonin and norepinephrine,

Table 2. Commonly used acupuncture points and what they help to treat.

| Acupuncture point | Treatment for |
|------------------------------|--|
| Stomach Channel: ST36 | Digestive Disorders, Immune Deficiency, Fatigue/Exhaustion, Emotional Issues |
| Spleen Channel: SP6 | Irregular Menstruation, Digestive Disorders, Immune Disorders |
| Liver Channel: LV3 | Headaches, Emotional Issues, Irregular Menstruation, High Blood Pressure |
| Governing Vessel: GV20 | Vertigo, Ear/Nasal Disorders, Mental Disorders |
| Conception Vessel: CV12 | Digestive Disorders, Intestinal Issues |
| Conception Vessel: CV6 | Fatigue/Exhaustion, Weak Spleen Qi, Low Abdomen Organ Energy |
| Large Intestine Channel: L14 | Immune Disorders, Face Pain |
| Kidney Channel: KI3 | Asthma, Insomnia, Sore Throat, Lower Back Pain |
| BL13 | Asthma, Bronchitis, Nasal Congestion, Sore Throat |
| BL14 | Palpitations, Stress/Anxiety, Depression, Panic Attacks |
| BL15 | Circulatory Problems, Palpitations, Stress/Anxiety, Poor Memory, insomnia/Night Sweats |
| BL18 | Hepatitis/Cirrhosis, Jaundice, Stress, Depression, Anger/ Irritability |

For example, Stomach Channel ST36, located on the front of the leg and below the knee, this point treats digestive disorders, immune deficiency, fatigue and other illnesses.

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helping to regulate mood and pain perception.²⁶ In addition, it has shown promise in reducing inflammation and modulating the autonomic nervous system, shifting the body towards the parasympathetic system, responsible for relaxation and restoration.²⁷

Acupuncture's integration into Western medicine

Acupuncture has gained recognition in Western medicine for its efficacy in alleviating various types of pain, including chronic pain, postoperative pain, headaches and neuropathic pain.^{24,26} Notably, acupuncture has shown to be beneficial in conditions such as osteoarthritis, fibromyalgia and chronic lower back pain.^{24,26,28} Western medicine has started to recognise acupuncture's role in pain management as evidenced by the revised guidelines issued by NICE in April 2021, which now includes acupuncture as a recommended treatment option alongside exercise programmes, psychological therapies and pharmacological therapy.³

Despite its ancient origins, acupuncture's effectiveness is supported by academic studies. A 2018 meta-analysis encompassing 20,827 patients across 39 trials found acupuncture to be superior to placebo techniques in managing various painful conditions, including back pain, osteoarthritis, neck pain or headaches.²⁶ Importantly, the effects of acupuncture were observed to persist over time and the benefits could not be attributed to placebo effects.²⁶ However, the quality of evidence regarding real acupuncture versus sham acupuncture remains a subject of debate, raising questions about the placebo effect.²⁹

Fibromyalgia, a challenging condition characterised by widespread pain and other debilitating symptoms, has seen mixed results from acupuncture.³⁰ While some studies suggest success – a 2021 meta-analysis noted improvements in symptom relief and quality of life³⁰ – nevertheless, multiple studies failed to establish acupuncture's superiority over sham treatments, indicating that there remains a mixed perspective regarding the effectiveness of acupuncture interventions.³¹

It is important to emphasise that acupuncture is considered generally safe, with regulated needles required to be thin and sterile. Minor side effects including nausea, fainting, bruising or temporary worsening of pain have been reported.³² Major or rare side effects may include such as lung puncture, infection transmission or bleeding.³² A study of 34,400 reported acupuncture treatments revealed a rate of 0–1.1 major adverse effects per 10,000 treatments.³²

In conclusion, acupuncture has garnered recognition and acceptance in Western medicine for its benefits in pain management. While further research is needed to establish its efficacy, studies so far demonstrate its positive effects as an adjunct to exercise, physical therapy or drug treatments.^{24–26} It is essential to acknowledge acupuncture's effectiveness may be intertwined with the patient's beliefs and willingness to engage with the treatment process.²⁶ An open and patient-centred approach to healthcare may enhance the benefits of acupuncture, which, when administered safely, offers a promising avenue for pain relief.

Conclusion

I find it fascinating how TCM originates from a time without the diagnostic equipment or pharmacological advancements we have now, yet certain aspects, such as acupuncture, are now incorporated into our treatment guidelines in the practice of evidence-based medicine.⁴

The staggering volume of studies on acupuncture and Chinese herbal medicine (over 20,000 and 30,000, respectively) published in peer-reviewed journals worldwide, as documented on PubMed, underscores the growing interest and recognition of TCM's potential in Western medicine and with a large percentage of that aimed at chronic pain.³ Alongside this, herbal medicine holds promise for further exploration. Its potential lies in its ability to alleviate pain and to do this without negative side effects often associated with conventional pharmacological approaches, such as dependence and withdrawal.^{20,21} Moreover, TCM offers a holistic approach that extends beyond symptom management. It allows individuals to strengthen their bodies through diet choices, exercises and lifestyle modifications: a prophylactic approach to disease prevention that ultimately mitigates the onset of pain.³

I do recognise that there are several limitations to the implementation of this: the health service in the United Kingdom is under-staffed and under-resourced, and a holistic approach would mean longer consultations, among many other things.³³ In addition, there is less incentive in the current academic setup for pharmaceutical companies to run trials on herbal medicines, making it much harder for them to be accepted into an evidence-based medicine community.¹¹ However, in pursuit of chronic pain management, the integration of TCM practices into Western medicine holds immense potential. By embracing this approach, we can provide patients with a broader spectrum of treatment options that not only alleviate pain but also enhance their overall well-being.

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Chronic pelvic pain: how effective are current diagnostic and treatment guidelines in the field of chronic pelvic pain?

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Introduction

Chronic pelvic pain (CPP), as defined by the Royal College of Obstetricians & Gynaecologists (RCOG),¹ is pain in the lower region of the abdomen or pelvis, lasting greater than 6 months. CPP affects one in six women in the United Kingdom, and is a common presentation in primary care.¹ Being a complex condition, a broad range of biological, psychological and social risk factors are implicated. Symptoms can be debilitating, resulting in withdrawal from work, sexual dysfunction, psychosomatic symptoms and a greatly reduced quality of life (QoL).² Furthermore, inappropriate or narrow unimodal treatment approaches can lead to prolonged suffering, increased frequency of appointments, unnecessary surgical interventions and greater strain on healthcare services.^{3,4} CPP should, therefore, be managed by a multidisciplinary team (MDT) with the shared goal of providing holistic, ongoing care.

The aetiology of CPP is broad. Biological causes include pelvic inflammatory disease (PID), endometriosis, adhesions, uterine abnormalities and chronic inflammation.⁵ Psychological and social factors are extensive, including comorbid depression and anxiety, prior traumatic childbirth and comorbid pain disorders.^{6,7} Figure 1 displays a wide range of CPP-related symptoms and categorises those broadly by underlying pathology. Yet, there is widespread overlap and many of the more generalised symptoms can also be identified in other chronic pain syndromes, such as fibromyalgia and chronic back pain.^{8,9}

Diagnosis is frequently delayed, with individuals describing the process as distressing and drawn-out.¹⁰ An empathetic approach from the investigating clinician is key for effective long-term management, in addition to early involvement from the MDT.¹¹ Often, a specific underlying pathology is not found despite diagnostic testing.¹² Diagnosis is further complicated

by the broad spectrum of symptoms caused by multiple pelvic organs, including the uterus, bladder, pelvic floor and rectum.¹³

There are currently two sets of guidelines laying out a framework for diagnosis and management of CPP in the United Kingdom and Europe, the first being the RCOG's¹ 'Initial management of chronic pelvic pain', which lays out a basis for diagnosis and treatment of individual pathologies which cause CPP. The second major guideline was developed by the European Association of Urology (EAU)¹⁴ 'Guidelines on chronic pelvic pain', providing a broader scope on the multiple causes of CPP in both males and females, with consideration of a wider range of treatment options. Both sets of guidelines were published in 2012. Throughout this essay, these two guidelines will be referenced in relation to current diagnostic and treatment recommendations. The National Institute for Health and Care Excellence (NICE) guidelines in the United Kingdom are more broadly based upon treatment of other chronic pain syndromes. For instance, NICE^{15,16} guidelines currently refer to generic chronic pain syndromes for those over 16 years of age, only providing CPP guidelines in the context of endometriosis.

Treatment of underlying cause is important; however, it has been shown that patients with CPP who received holistic treatment have far better outcomes than those treated only with biological-medical interventions for a single condition.¹⁷ In more recent years, guidelines have moved away from the biological, single-organ approach, and embraced a more multifaceted treatment path. However, current evidence suggests fully holistic treatment guidelines have not yet been achieved.^{1,14,15}

This essay will outline the prevalence, aetiology and symptoms associated with CPP and consider the effectiveness of current diagnostic methods. The main aim of this essay is to assess how effective current treatments are in managing CPP.

Figure 1. Table adapted from multiple sources, demonstrating the symptoms of chronic pelvic pain categorised by pathology.

| Pathology | Predominant symptoms | Overlap conditions |
|----------------------------------|---|--|
| Irritable Bowel syndrome | <ul style="list-style-type: none"> Tenesmus Abdominal/pelvic pain Chronic headaches Constipation/diarrhoea Bloating | <ul style="list-style-type: none"> Endometriosis PCS |
| Adenomyosis | <ul style="list-style-type: none"> Pelvic pain (predominantly cyclical) Dysmenorrhoea Menorrhagia Backache Dyspareunia | <ul style="list-style-type: none"> Endometriosis Primary CPP PID PCS |
| Pelvic congestion syndrome (PCS) | <ul style="list-style-type: none"> Dyspareunia Bloating Dull/aching pelvic pain exacerbated by long periods of standing, walking or sitting | <ul style="list-style-type: none"> IBS MSK-related CPP Adenomyosis Primary CPP |
| Pelvic inflammatory disease | <ul style="list-style-type: none"> Sudden onset pelvic/lower abdominal pain PV discharge Pyrexia Liver capsule pain (uncommon) | <ul style="list-style-type: none"> Endometriosis Primary CPP Adenomyosis IBS |
| Endometriosis | <ul style="list-style-type: none"> Pelvic pain Dyspareunia Abnormal PV bleeding Menorrhagia Extra-peritoneal symptoms (lungs, eyes, rectum bleeding) | <ul style="list-style-type: none"> Adenomyosis Endometriosis |
| Musculoskeletal-related CPP | <ul style="list-style-type: none"> Pelvic spasm Pelvic pain worse on sitting or lying down Dyspareunia Lower back pain | <ul style="list-style-type: none"> IBS PCS |

See Reference section for individual references.

Prevalence and aetiology

A population-based study by Ayorinde et al.¹⁸ found 14.8% of women over the age of 25 years had CPP. CPP was more likely to be experienced by women of childbearing age, and interestingly, by those with university degrees or other higher education qualifications.^{12,18} Although prevalence varies by country around the world, this essay focuses on CPP in the United Kingdom, United States and Europe.

Pathological conditions causing CPP include endometriosis, interstitial cystitis, PID, pelvic adhesions, musculoskeletal disorders and irritable bowel syndrome (IBS).^{5,19} A study

conducted by Shoukat et al.¹³ found that the two most common identifiable pathologies causing CPP were endometriosis, followed by adenomyosis. However, more psychosocial factors tie into the aetiology of CPP, including post-traumatic stress disorder, depressive disorders and prior adult or childhood sexual trauma.^{6,20} The long-term pathology of CPP is complex, and suggested to be influenced by biological factors persisting after acute injury, such as the immune system, type-C nervous fibres (implicated in delayed secondary pain) and ascending and descending pain pathways.^{21,22} Often, more than one underlying cause of CPP is implicated.

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Diagnostic methods

The RCOG¹ guidelines suggest diagnosis starts at initial appointment, in which women are able to describe their symptoms in length and voice concerns. An empathetic clinician is essential, and it has been demonstrated that when a clinician listens and responds to concerns, efficacy of diagnosis and treatment is greater.²³ This aspect of diagnosis should not be overlooked, and with an in-depth clinical assessment and examination, unnecessary and uncomfortable investigations can be avoided. The EAU¹⁴ highlights the importance of assessing concerns at first appointment, as underlying beliefs about symptom causation can be approached with either reassurance or further investigation.

A thorough history may be sufficient to diagnose an underlying cause, such as IBS. Pain diaries may also be useful in identifying patterns which align with specific conditions.¹ The EAU¹⁴ also stresses the importance of assessing psychological distress and mood disorders in the initial consultation, in order to ascertain how pain is affecting day-to-day life.

Further examinations include abdominal and pelvic examination. This may be followed by swabs for sexually transmitted infections, if appropriate. The effectiveness of scans in the field of CPP varies according to pathology. Transvaginal ultrasound, transabdominal ultrasound and magnetic resonance imaging (MRI) may be used where appropriate, and can be effective in reducing the need for diagnostic laparoscopy if conditions such as endometriosis or adenomyosis are suspected.²⁴ Furthermore, when considering effectiveness from a psychosocial angle, ultrasound scans are relatively non-invasive, efficient and can provide immediate reassurance.²⁴ They have also been shown to be effective for diagnosis of pelvic venous congestion, a condition leading to increased venous pressure in the abdomen.^{25,26}

Diagnosis of CPP, especially in the context of endometriosis or intra-pelvic abdominal pathology, used to consider laparoscopy the gold standard. However, both RCOG¹ and EAU¹⁴ recommend it is used more sparingly, as surgery has associated risks. A study investigating pathology associated with CPP found that 65% of women had a diagnosable condition upon carrying out the procedure.²⁷ However, over one-third of women – within a subgroup selected for an appropriate diagnostic laparoscopy – had no pathology identified.²⁷ Not only is it expensive, but it can frequently lead to no conclusive diagnosis. Furthermore, unrealistic expectations can arise with assumptions that discovering an underlying cause will lead to a ‘cure’ or the most effective treatment, when this is not always the case. Therefore, laparoscopy should only

be considered after thorough non-invasive testing and a detailed history and examination.

As suggested by both the RCOG and EAU, as CPP is often a condition of multiple causations and pathologies, one diagnostic test is insufficient. Rather, a full assessment by the clinician, appropriate bedside tests and early referral to specialist care centres for in-depth assessment are the most effective, multidisciplinary approaches to diagnosis of CPP.

Long-term management of CPP

As CPP is a multifaceted condition, effective treatments must be multidimensional, and address the bio-psychosocial needs of the patient. In this essay, criteria for effectiveness include addressing risk factors and consequences, utilising a holistic, MDT approach and, where possible, showing an overall improvement of symptoms.

Pharmacological approach

Medical approaches are usually pharmacologically based and target symptom control. For example, if the pain is IBS-related in nature, antispasmodics, laxatives or other agents may be used for symptomatic relief.^{28,29} In conjunction with this, RCOG guidelines advise dietary modifications to control symptoms, which suggests greater effectiveness when different management methods are used together. Furthermore, up to one-third of women experiencing CPP have IBS, so considering this during diagnostics and management should make for more effective treatment of women within that subgroup.²⁹

The RCOG¹ suggests that women with any form of cyclical pelvic pain should be offered a trial of hormonal-based treatment for at least 3 to 6 months before considering diagnostic laparoscopy. Oral contraceptives (OCs) are usually first line, particularly for cyclical pain and endometriosis-type symptoms. A recent 2020 study showed that over a 6-month period, women with CPP taking an OC had an 87.7% decrease in CPP, compared to 12.1% in the group receiving only non-steroidal anti-inflammatory (NSAID) therapy.³⁰ This supports OCs being effective for alleviation of pain-related symptoms.

Further hormonal medications include gonadotropin-releasing hormone (GnRH). Robert et al. conducted a randomised control trial in which 100 women received either a GnRH drug or placebo for symptomatic relief of CPP. Women receiving the GnRH analogue experienced significantly fewer symptoms than those receiving the placebo drug.³¹ This could prove a useful alternative when OCs are contraindicated or deemed unsuitable for specific patients.

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Other forms of treatment include progestogens. A Cochrane review concludes that women being treated with progestogens compared to a placebo tended to have greater improvements in their CPP after 9 months of treatment.³² However, one included study demonstrated that goserelin (a GnRH analogue) was actually more effective in improving women's pelvic pain score at 1 year, compared to those taking progesterone.³³ In conjunction, mood and sexual function were also reported to have improved to a greater extent than those taking progesterone.³² This suggests that although targeting CPP from a medical perspective, the secondary effects of improving symptoms can have better psychological outcomes, leading to an increased QoL.

These and multiple other trials provide a bank of evidence in supporting efficacy of hormonal-based medications for symptomatic relief of CPP. These medications can be particularly effective when used for cyclical pelvic pain. However, care should be taken when prescribing hormonal medications due to the risk of side-effects such as bloating and mood swings, which could worsen symptoms. In addition, oestrogen-based medications can increase the risk of thrombosis.³⁴ Comorbid conditions and mood disorders should be considered when prescribing hormone-based medications, to support women holistically while on treatment. Hence, the EAU¹⁴ strongly suggests these medications should be gynaecologist-initiated in order to provide the most appropriate therapy.

Analgesia-based methods are part of a combined approach to managing CPP, aiming at symptom control in the context of either more long-term management or further diagnostics. Since many cases of CPP are accountable to conditions involving inflammation, it would follow that NSAIDs would reduce inflammation and therefore improve pain-related symptoms.³⁵ However, this should be done after assessing individuals for risks factors which may lead to gastric irritation and bleeding.³⁶ Furthermore, it would be ineffective to use analgesia as a single treatment method, as this does not consider underlying pathology, nor psychosocial risk factors and comorbidities.

Surgical approaches

Surgical methods double as both diagnostic and management of CPP. They can be effective for treating some forms of CPP, although they are not effective for treating all symptom groups.

Laparoscopy is the most common form of surgical intervention in the field of CPP. It is predominantly used as a

diagnostic method. However, it can also be used to administer treatments, such as cysts aspiration and adhesiolysis.^{27,37} Although seen as an effective method for diagnosing intra-abdominal pelvic pathology, it is important to note that in clinical trials, only 50% of women are found to have diagnostic abnormalities during the procedure.³⁸ However, other smaller-scale studies have found it can prove diagnostic in up to 66% of women presenting with symptoms, and guide treatment for specific pathologies, leading to more effective symptom management.³⁷

CPP can be caused by adhesions, although these are often asymptomatic in individuals not experiencing CPP. The RCOG¹ does not support the use of surgery for division of fine adhesions, but considers it to be useful when thick vascular adhesions are identified. A systematic review of trials using adhesion removal for treatment of CPP concludes there is no compelling evidence to suggest long-term symptom management.³⁹ Furthermore, due to the nature of surgery and scar formation, there is a risk that adhesions may re-form and cause worsening pain.³⁹

Surgeries such as laparoscopic uterine nerve ablation (LUNA) have been trialled as a method of achieving symptom control. A double-blind randomised controlled trial (RCT) of women who were grouped according to being endometriosis-positive and negative used LUNA in an attempt to improve CPP.⁴⁰ Although there was a significant improvement in dysmenorrhoea, there was no improvement in any other form of CPP symptoms. This may be linked to a unimodal approach not fully managing the underlying causes of pelvic pain, nor the psychosocial impacts of the condition.

It is important to touch upon hysterectomies, both as a surgical treatment and a reminder that CPP can affect QoL to such an extent that major surgery is necessary. The EAU¹⁴ highlights that patients suitable for hysterectomy must be selected carefully, as pelvic pain can continue post-operatively. In one study, 11.6% of women who underwent hysterectomy reported pain after the procedure.⁴¹ Another China-based study reported that 27.7% of women who underwent the procedure for CPP reported post-operative chronic pain.⁴² Although for the majority of women in these studies hysterectomy has been effective for symptom control, it is notable that up to a quarter of women post-surgery may have worsening symptoms.

Surgical intervention comes with inevitable risks, including side-effects from anaesthetic agents, prolonged recovery times and increased risk of deep vein thrombosis.⁴³ Therefore, it would be more appropriate to consider the effectiveness again in terms of a more multi-modal approach, alongside

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psychological techniques and trials of hormonal or analgesia-based treatment prior to surgical intervention.

Psychosocial approach and complementary therapies

Psychological disorders such as anxiety and depression are both a risk factor for and consequence of CPP. An Australian study used a cross-sectional analysis method to assess women with CPP for anxiety and depression symptoms. Up to 53% of women were found to have moderate to severe anxiety and 26.7% experienced moderate to severe depression.⁴⁴ Beliefs surrounding pain and catastrophising were also linked to higher levels of pain. This is not to suggest that CPP is purely psychological, rather that mood constitutes a part of the complex interplay of factors which manifest as CPP. Hence, psychosocial factors must be addressed to effectively manage the condition.

Cognitive behavioural therapy (CBT) is commonly used in chronic pain syndromes, and hence under NICE guidelines it can be used in the psychosocial management of CPP. There appear to be few studies investigating the effectiveness and long-term outcomes of CBT in the field of pelvic pain. One trial showed improvement of sexual function after women with CPP underwent a CBT programme, although no other symptoms were evaluated.⁴⁵ Yet, since CBT has been shown to improve chronic pain syndromes such as fibromyalgia and chronic back pain, it is likely to be useful in the field of CPP.⁴⁶ Pelvic pain-specific psychotherapy may be more effective since CPP has unique symptoms and features.

The RCOG and EAU do not currently suggest many alternative therapies. Emerging evidence suggests complementary therapies and exercises may help to improve both QoL and symptoms. One RCT investigates using yogic interventions in women with CPP and measured pain score outcomes and QoL indicators, as opposed to standard management with analgesia.⁴⁷ The group which completed 8 weeks of yoga therapy and relaxation experienced a significant decrease in pain-related scores, compared to women being treated with NSAIDs alone. However, further studies are needed before this could be adopted as part of an integrated management plan for women suffering from CPP. However, since there are few contraindications, yoga or gentle exercise programmes could form a part of a holistic treatment plan for CPP.

Further adjuncts include pelvic therapy, acupuncture, acupressure, and exercise programmes. Results are overall beneficial. However, the use of these methods is uncommon, and rarely used for CPP in the United Kingdom.^{48,49} Consequently, it is challenging to assess how effective these

are for CPP management, but could provide an area for further study and evaluation.

Summary

Current NICE guidelines do not address CPP-specific treatments. The RCOG and EAU map out a range of different options for treatment of CPP and conditions which cause pelvic pain symptoms, although some have limited evidence to suggest ongoing effectiveness. More emphasis needs to be placed on using a combination of treatment methods to optimise symptom control and an update of both 2012 guidelines would be appropriate due to emerging evidence for new therapies. Alternative therapies could provide symptom relief to appropriate groups of patients while also providing holistic, enjoyable activities to improve chronic pain. Further innovation might focus on making these combined treatments available to patients in developing countries and more rural communities, to improve access to CPP treatments.

Conclusion

CPP is common, and distressing for those affected. Management must consider the wide range of symptoms caused by CPP, from the pain and discomfort to secondary mood disorders. Consequently, there are few situations in which management of CPP with one treatment alone is effective. Each individual should have a thorough assessment, and where necessary, early referral to specialist services should be sought in order to receive specific further assessment or treatment. Although the RCOG and EAU promote an integrated approach to management, greater emphasis should be placed on alternative therapies, which seem to provide real relief for patients experiencing CPP at both low risk and low cost. Further research is needed on the most effective analgesia for managing CPP, as well as psychological therapies such as CBT. Overall, CPP treatment guidelines should be updated to place greater emphasis on integrated approaches to diagnosis and management of CPP, in order to provide the most effective long-term management.

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Intrinsically linked: the importance of managing mental health alongside chronic pain

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Introduction

The National Health Service (NHS) defines chronic pain as pain occurring for more than 3 months despite therapeutic interventions.¹ Chronic pain exists on a broad spectrum of many identifiable causes and conditions yet its global effects on an individual have consistency.² Living with chronic pain has a multidimensional impact on patients' livelihoods, affecting many aspects of living such as social relationships, career opportunities and the performance of household tasks.³

Patients with chronic pain (PwCPs) are at a significantly higher risk of being comorbid with affective conditions, such as depression and anxiety.⁴ In a 2016 paper, it was noted that PwCPs were up to six times more likely to be comorbid with depression and that 50% of the individuals studied also experienced anxiety.⁵ Reciprocally, psychiatric conditions increase the probability of experiencing chronic pain. This may be through physical symptoms⁶ and through fear-avoidance factors, for example, by directing attention towards the intensity of pain.⁷

A further bidirectional relationship occurs through shared neural pathways. Pain is processed by ascending and descending neural tracts that intersect with the processing of anxiety and depression.⁸ Sharing these pathways means that one condition increases the likelihood of aggravating the other.

Because of these tightly linked relationships, living comorbid with chronic pain and a mental health condition can significantly affect patients, tying them into a persistent spiral. Chronic pain is recognised as an individual risk factor for suicide by the World Health Organization (WHO). PwCP are at a twofold (or greater) risk of experiencing suicidal behaviours. When comorbid with depression, this risk significantly increases due to an exacerbation of active thought processes towards suicide.^{9,10}

Complexity of care must also be considered. Many problems exist, such as the clinical implementation of therapies, drug

side effects and barriers in communication between healthcare specialties. These can negatively impact how PwCP receive holistic care for their condition.

There is certainly a need to pay attention to the mental health status of PwCP. Providing support for one condition may be helpful in managing the other and having good mental health is critical to the overall wellbeing of PwCP.

This essay will aim to explore the importance of managing mental health alongside chronic pain by examining the social, psychological and physical links between chronic pain and mental health symptoms. It will also explore various psychological and pharmaceutical therapies used to support mental health and comment on their efficacy in reducing the impact of chronic pain.

Depression and anxiety

Depression

Depression is the most common psychiatric comorbidity to chronic pain.⁴ The description of depression as a 'pervasive low mood'⁶ is very apt. It exists as a constellation of symptoms with great differences in presentation between patients. There are also great disparities in exact diagnostic criteria. However, it is generally accepted that when depression interferes with patient functioning, it has become pathological. Experiencing symptoms of depression can be very disabling and increases the risk of suicidality in PwCP, adding to the importance of addressing it when managing chronic pain.²

Anxiety

Anxiety can be described as a feeling of unease or dread in response to a perceived threat. It is a necessary survival mechanism that everyone experiences in their lives. However, for many, it may become pathological. A mixture of physical and sociological symptoms with consistently elevated levels of anxiety can be described as a generalised anxiety disorder (GAD).⁶

Figure 1. Mind map displaying the signs and symptoms of depression as per NHS¹¹ guidance.

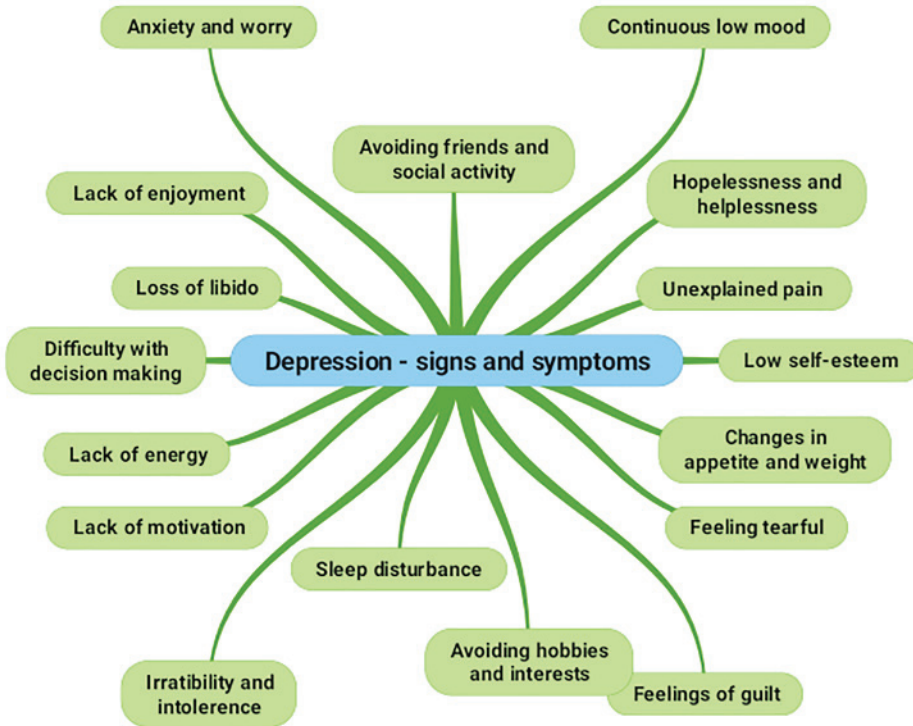


Figure 2. Mind map displaying the signs and symptoms of anxiety as per NHS¹² guidance.



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GAD is highly prevalent in people with chronic pain, with it being the second most diagnosed psychiatric comorbidity, after depression.⁶ A 2019 study saw it diagnosed in 50% more PwCP than patients without.⁴ Anxiety and depression share notable similarities in symptoms. In fact, chronic pain is often linked to anxiety through shared symptoms with depression, rather than as a direct comorbidity.⁴

The bidirectional nature of chronic pain and mental health

Socially

Pain has been redefined as an emotional experience, as well as physical. This means that the patient's environment and mood contribute to their experience of pain.⁶ Because of this, it is important to consider the social effects of chronic pain, alongside psychological and physical, when looking to support a patient's mental health.

Employment opportunities. The stress caused by unemployment is a notable social link between poor mental health and chronic pain. In a 2018 study, more than 25% of the individuals surveyed were unemployed due to chronic pain. This led to financial difficulties, disadvantages in career progression and feeling restricted to their homes.³ Experiencing higher financial difficulties is one of the factors that causes chronic pain to be an individual suicidal risk. While it does not directly increase the pain felt, it adds an extra burden to the individual's livelihood, increasing the risk of comorbid depression.⁹

Isolation. Continuing with the restrictive nature of chronic pain, reduced social opportunities are another significant link. When reading patients' stories, a key point mentioned was isolation. It was felt that people around them could not truly understand what they were going through, as they had not experienced chronic pain themselves. They also noted that there was a lack of understanding of how their illness presented. Being capable of doing an activity 1 day did not mean that they could do it every day. However, it was difficult for people with no direct experience to understand why, and the PwCP found themselves losing friends as a result.¹³ Being comorbid with anxiety and/or depression further reduced their social life, as the individuals felt less capable of keeping up with social activities and it was harder to be distracted from the pain.³ The experience of chronic pain was lonely, yet also prevented them from going out and meeting people.

Isolation can have a profound effect on people's mental health, leading to worsened depression.^{14,15} It was also felt that reaching out and socialising became harder the longer they felt isolated, leading to increased anxiety. Because being distracted is an important way to reduce perception of pain,¹³ isolation can lead to a greater focus on pain intensity. This reciprocally makes it even harder to keep up with a social life. A spiral effect of worsened mental health, chronic pain and isolation can be created.¹⁶

As the intensity of pain felt increases with anxiety and depression,⁴ it is unsurprising that being supported with strong and understanding social connections would result in feeling distracted from the pain. It was noted that meeting with support groups was helpful in reducing isolation. Interacting with people who could personally relate to their experiences, and listening to similar stories, made them feel less alone and was useful in the management of their illnesses.¹³

Psychologically

Fear-avoidance model. The fear-avoidance model is well-accepted and explains how chronic pain becomes disabling. It utilises key emotional aspects of chronic pain, such as fear and self-perception, which are negatively affected by anxiety and depression.⁵

Pain acts as an alarm to immediate threat and nociceptive stimuli, and in acute cases, it will pass once the threat is avoided/the injury has healed. This means that pain interrupts the person's attention, directing it towards the threat, with the aim being to avoid more injury. However, in cases of chronic pain, there is no threat to avoid, and this interruptive mechanism becomes harmful.⁷ Some of the negative effects include widening the individual's perception of situations which may cause pain, leading to avoidance of more situations. This can result in social isolation and a reduced ability to perform tasks, worsening the experience of existing depression and anxiety in PwCP.³ Likewise, catastrophic thinking (a symptom seen in anxiety and depression) escalates the distractive nature of pain. Increased attention towards pain can exacerbate the intensity felt and worsen its impact on the individual's livelihood.⁷

Physically

Ascending and descending pathways. It is established that chronic pain causes anxiety and depression, which reciprocally aggravates the pain.¹⁷ However, the exact processing of chronic pain and the roles of common neural areas are uncertain. A current understanding is built on the idea of

balances between the ascending processing pathway and the descending analgesic pathway. These pathways affect and are affected by, depression, anxiety, fatigue and more.⁸

The ascending pathway is formed from two distinct pathways – medial and lateral. The medial pathway processes the suffering aspect of pain, and the lateral pathway identifies the type of pain.¹⁸ It is nociceptive and sends signals to the spinothalamic tract to inform of dangerous stimuli. However, in some types of chronic pain, non-harmful signals may be processed as nociceptive, resulting in pain when ordinarily there would be none (allodynia).¹⁹ Due to the individual nature of pain, this hypersensitivity may vary between patients with the same chronic pain diagnosis. In addition, not all chronic pain syndromes physically relate to the nociceptive pathway.²⁰

The descending pathway determines the body's response to pain. It functions by giving context to pain perception and inhibiting pain at the level of the spinal cord. Its reduction in certain chronic pain conditions, such as fibromyalgia, is evidential of its role in suppressing pain. Its deficiency is thought to be a primary cause of chronic pain.⁸ A relevant descending pathway involves opioid receptors, primarily, mu, delta and kappa. This system helps regulate pain, stress and emotions. Opioids are normally released in proportion to pain. However, in chronic pain, mu receptor function is decreased resulting in less activation, and thus less inhibition of the pain.²¹

Other important descending pathways can be serotonergic and/or norepinephrinergic.¹⁹ These pathways can be closely related to the opioid system and are involved in the regulation of anxiety and depression.^{21,22} Closely related pathways in the processing of anxiety and pain can be indicative of the bidirectional nature of chronic pain and mental health. However, it should also be noted that the comorbidity may also result from shared neural mechanisms presenting as two separate conditions, rather than two distinct conditions actually being present.¹⁷

Shared neurotransmitters. Neurotransmitters are the messaging components of the nervous system. The neurological systems for processing pain and depression share two key monoamine neurotransmitters (serotonin and norepinephrine) among others.²³ An increase of noradrenaline and, lesser so, serotonin has an analgesic response as well as benefitting mood and mental health.¹⁹ Because of this relationship, some antidepressants, such as certain SNRIs (selective norepinephrine reuptake inhibitors), may have analgesic effects. This is different from improving pain via treating depression, rather the crossing pathways of shared neurotransmitters allow pleiotropic effects of the same drugs.¹⁰

Sleep. Anxiety and poor mental health results in impaired sleep.²⁴ Insufficient sleep then worsens chronic pain through increasing flare-ups, spontaneous pain episodes and hyperalgesia.²¹ Reciprocally, excessive sleep deprivation causes more anxiety and worsened mental wellbeing.²⁵ A network analysis of shared symptoms between depression, anxiety and chronic pain found that pain symptoms were particularly linked to negative mental health outcomes when sleep problems were involved.⁴ This is because sleep processing is closely related to pain pathways in much the same way as depression and anxiety, through opioid receptors and shared neurotransmitters. Maintaining good sleep is important to support mental wellbeing. Vice versa, supporting good mental health is vital to keep a full sleep schedule and reduce the intensity of chronic pain.

Supporting mental health and wellbeing

The bidirectional nature of chronic pain and mental health means that the prevalence of comorbidities is common. A 2016 review found that up to 61% of PwCP were also comorbid with depression and 1%–10% with GAD. Reciprocally, patients with depression were 4× more likely to have chronic neck and/or lower back pain and patients with anxiety disorders were 2–3× more likely to develop chronic migraines.⁵ Because of these high prevalences, it is essential that adequate mental health support is provided to PwCP, examples being through support groups and psychological and pharmaceutical therapies.

Clinical management

Effective clinical management can be influential in reducing the impact of comorbid affective disorders. However, chronic pain, anxiety and depression are generally diagnosed and treated separately by different specialties. Patients would benefit from stronger communication between multidisciplinary services to allow for more accurate and individual treatment plans.¹⁰

Support groups

As previously mentioned, meeting like minded people and listening to relatable experiences can reduce social isolation. This is important as feeling isolated can worsen depression and anxiety.³ Support groups led by people who experience chronic pain can provide advice and expertise, as well as friendship and motivation. Quotes from a qualitative study described how friendships formed helped support them through flare-ups and mental health crises. However, possible drawbacks occurred when the groups were too focussed on negative aspects of chronic pain; this was sometimes a reason for dropping out.²⁶

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Other barriers included being unable to regularly attend due to pain flare-ups and a lack of patient-led support groups in some places. Overall, support groups were considered a positive and safe method of managing mental health and chronic pain.

Cognitive behavioural therapy

Cognitive behavioural therapy (CBT) focuses on changing behaviour which exacerbates catastrophic thinking, suffering and disability from chronic pain. It can be applied alongside the fear-avoidance model to target catastrophising and avoidance behaviour which leads to the disabling nature of chronic pain.⁵ There is little evidence for its usefulness in directly treating pain. However, it can reduce the depression and anxiety which coincide with it.²⁷

In controlled scenarios, CBT was found to be useful. Its positive aspects include altering negative thoughts towards the pain and teaching coping strategies, such as time-based pacing and relaxation. It is also very safe, with little risk of making the experience of pain worse for the patient.¹⁰

However, its efficacy is different in practice with as many as 50% of patients not benefitting from psychotherapies.⁸ This could be caused by limited access to trained psychologists who can give bespoke treatment for an individual's pain disorder and mental health condition. CBT care is often generalised when translated into clinical practice and trained staff are often stretched between many patients.¹⁰ Overall, while it is safe and generally useful in the management of comorbid mental health problems, there are significant problems with delivering CBT treatments on a population level.

Antidepressants

Antidepressants are a first-line treatment for clinical depression, and there is growing evidence of their efficacy in managing chronic pain.² This is possibly due to the shared nature of monoamine neurotransmitters, particularly serotonin and norepinephrine.¹⁰ It is also possible that the analgesic mechanism is physically separate from their antidepressant mechanism. This is evidenced by the pain-relieving effects appearing quicker than their antidepressive effects.¹⁹ Either way, certain types of antidepressants, especially SNRIs and TCAs (tricyclic antidepressants), may be helpful in reducing allodynia, hyperalgesia and supporting affective comorbidities.²

However, there is also a risk of negative side effects, such as gastrointestinal (GI) bleeds and insomnia.^{2,23} There is limited evidence in their efficacy for reducing neuropathic pain and

fibromyalgia. Also, the individual nature of chronic pain means that better evidenced antidepressants, such as duloxetine, are still not helpful for every patient.²

Overall, antidepressants are primarily useful in treating psychiatric disorders, with a possibility of also reducing the impact of chronic pain. However, the complexity and individual nature of chronic pain means that there is no guaranteed effective treatment for everyone with any specific medication.

Conclusion

In conclusion, intrinsic links exist between chronic pain and mental health. There are many social, psychological and physical connections between the two, and it is important to acknowledge the multidimensional nature of chronic pain when looking to treat comorbid anxiety and depression. Reciprocally, keeping good mental health is a significant part of reducing the intensity and impact of chronic pain. Methods to support mental health include psychological and pharmaceutical therapies. Group therapies give voice to the patients' expertise in the management of their condition and help reduce social isolation. Behavioural therapies, such as CBT, may be useful in altering negative thoughts and behavioural patterns which increase the disabling nature of chronic pain. In addition, evidence towards the analgesic nature of some antidepressants exists.

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I recovered from 14 years of chronic pain

Elizabeth Reilly



I developed chronic pain after a seemingly trivial accident in the summer of 2005. I was going for an evening walk with my husband, in the glorious Gloucestershire countryside, after a hot summer's day. As I climbed over a stile – an action I had performed hundreds of times before – it collapsed under me, and my right leg skidded off, shearing away to the ground on the far side, in a forced abduction. Nothing hurt at the time, but the next morning, I woke up and could not walk. I did not know it then, but my life – at the age of 55 years – had changed forever.

I had severe pain in my groin, which persisted despite many sessions of physiotherapy, dozens of exercises, ice and heat applied several times a day and painkillers taken, it seemed, by the handful. After about a fortnight pain also came on in my lower back, where it stayed for the next 14 years. During those years, desperate to get rid of it, I had dozens of treatments including steroid injections, more physio, chiropractic, acupuncture, massage and all kinds of bodywork. They all worked – for a while. Nothing lasted. I bought various aids which were supposed to ameliorate symptoms and did not attend a Pain Management course and spent hours on the Internet trying, and failing, to find answers as to the cause of my problems.

Some treatments did help – prolotherapy injections to strengthen over-stretched pelvic ligaments, a hip arthroscopy to clean up torn cartilage in my hip and exercises that specifically targeted my weakened gluteal muscles. These

procedures helped rectify the structural damage in my body caused by the awkward fall. But my back pain persisted, although I had not injured my back. And – here was something strange! As soon as one part of me was 'fixed', pain came on in other parts of my body such as my left knee, my left shoulder and my thighs, none of which I had damaged. My body also often felt 'tight' all over. I saw more professionals and spent more money, to no avail. The possibility that I had fibromyalgia did not help since, according to my general practitioner (GP), no-one knew what caused that condition. I was depressed and frightened – what on earth was the matter with me?

Then, in July 2019, I read, quite by chance, an article on *The Guardian* website, which led me to a completely new way of thinking. I read about the role of the brain in pain, and how it can change physically to produce 'central sensitisation', where the nervous system goes into overdrive and previously normal sensations generate intense pain. I remembered, at this point, that we had been told this on my Pain Management course, although I had not really taken it in at the time, nor had we been told that this situation could be reversed. The author of the newspaper article, however, had cured her own pain using methods developed by the American doctor, John Sarno, a pioneer in the field of what is now called mind-body medicine.

Dr Sarno realised that back pain is caused by stress. If one is living with stress, or even has unresolved historical stress, something – in my case falling over a stile – can trigger the brain in to developing pain pathways that can then become conditioned in the body. This really resonated with me, as I was indeed living with a good deal of stress at the time of my fall. In his books *The Mindbody Prescription*, *Healing Back Pain* and *The Divided Mind*, Dr Sarno encouraged his readers to try to understand the causes of their stress by thinking psychologically, rather than being concerned about structural problems with their spines, such as disc herniation or degeneration. Indeed, it has been shown on magnetic resonance imaging (MRI) scans that such disorders exist in people who do not have back pain.

Following on from the works of Dr Sarno, I read *Chronic Pain your Key to Recovery* by British physiotherapist Georgie

Oldfield, founder of SIRPA (Stress Illness Recovery Practitioners' Association), who simply refers to chronic pain as stress illness, as does Dr David Clarke in his wonderfully titled *They Can't Find Anything Wrong*. Ms Oldfield's book, endorsed by Dr Sarno himself, is a clearly written, easily understood account of mind-body symptoms and how, using various techniques, one can heal from them. Another very influential text I acquired was *Unlearn your Pain* by Professor Howard Schubiner, a distinguished professional in the field of mind-body medicine, who has been voted one of the America's top doctors on three occasions. The brains of pain sufferers have 'learned' to feel pain, but it is now known that it can be 'unlearned', and their bodies can be freed from the 'fight-or-flight' mode in which they often become stuck.

I began to work with the techniques in my small library of books, and subsequently with the methods prescribed in the online healing programme *curablehealth.com*, later joining one of its online groups for mutual support with other pain sufferers. All of these resources showed how one can heal from persistent pain, not by working on one's body, but by re-training one's brain, although it must be stressed that one's pain is very real and is not 'all in your head'.

Our brains are 'neuroplastic' and have the ability to change and adapt. The techniques prescribed for reprocessing pain involve education, journaling, various brain-training exercises, mindfulness meditation and understanding of one's personality traits. There are now books, websites, podcasts and a whole range of tools devoted to this way of healing – even an app for

your phone! It is not easy work, but the great thing is that it can be done by oneself – without the need for any injections, treatments, exercises or medication – and all for the outlay of just a few pounds spent on readily available books and possibly an online healing programme.

I had to work at it. It was not a straightforward journey and I had setbacks that had to be overcome. But I had enough success after only 3 months to know that I was on the right path, and gradually, after many more months, my back pain and all my other symptoms subsided.

We all live with stress, increasing amounts of it, in our permanently switched on 24/7 world. Our bodies and brains evolved to run away – periodically – from lions, not to check our phones every 10 seconds. So, we need to understand our stress and, where possible, find ways of reducing it. And when it comes to persistent symptoms we can learn, with mind-body techniques, to heal from even the most seemingly intractable pain and maybe even begin to understand ourselves better in the process. For anyone suffering from chronic pain, or other unexplained symptoms, that has to be a goal beyond price.

Author's Note

This article is based on my book 'Back in Charge – how I healed from chronic pain', published by Troubador £12.99 (Amazon.co.uk: Kindle Store). It is available from myself, from Amazon and from all major bookstores. An ebook is also available from Amazon at £7.99.

Believe

Chris Bridgeford *Chairman, Affa Sair*



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S Sage

I recently spoke to a group of pain clinicians and have to admit I was really nervous. ‘Why on earth were you nervous?’ You may wonder. ‘You’ve written plenty over the last couple of years and have now spoken in many Teams and Zoom calls’.

Well, the thing is, like the vast majority of chronic pain sufferers, my truthfulness has been called into question so many times. Sometimes it was polite, sometimes it was a straightforward ‘You’re lying!’ And it’s actually been medical professionals who have said it to me. That’s mostly because my history with chronic pain goes way back to the late 1970s. Things are changing, but there are still too many dark places and closed minds to navigate.

So, there I was facing 20 people I’d never met but have an in-built fear of. I couldn’t help it. I dare say there is a psychological term for what I was feeling but all I know was I was not at my best that day and waffled a fair bit. What stuck in my mind from the 30 minutes of nervousness has led me to this article.

BELIEVE

One of the questions I was asked was, ‘What do you, as a patient, want from a visit to a Pain Clinic?’ I used the example of that wonderful Apple TV series ‘Ted Lasso’. The plot of the

series revolves round an American Football coach who ends up the coach of a British football team. His success in making the losing team champions is put down to the word ‘believe’ displayed on a yellow poster above the dressing room door. It was for the players to believe in themselves, but for me and my chronic pain peers, it is what we want the pain clinicians, we see to do first and foremost – believe in what we’re telling you. Say that when you first meet a patient and I guarantee you the patient will be instantly at ease, more relaxed and willing to tell you everything you need to know.

I’m often asked what the worst thing is about living with chronic pain. My answer is usually not the pain but the fatigue. However, this year, I’ve been reminded that the absolute worst thing is not being believed, not by strangers you meet, but by your own friends or, worse, your family.

It is absolutely devastating to realise that you were right to wonder if family members really believed how hard life was for you. That little voice in your head, supported by the constant onslaught of modern society’s selfishness and hatred, never

keeps silent. It’s always there destroying your confidence and self-belief. The continual onslaught from the Government punishing you and your kind for being in need. The newspaper headlines pretending you cost the country far more than what is spent on failed government projects and handouts to government-backing company directors, supporters, and donors. The stories proclaiming that your need for pain-controlling drugs is a lie and that you are really a hopeless addict. The distressing and humiliating interrogations by people paid to deprive you of your fully deserved and tax-given rights. All of these add real stress and worry to a body already wracked with invisible relentless pain. But what really makes you wonder whether it is worth carrying on, is the thought that people who are supposed to love and care for you think you exaggerate your hardships and actually choose to spend most of your time isolated and unable to go outside.

Oh, if only the pain was accompanied by changes in skin colour, ugly boils, spots, gouges, and misshapen limbs. Then, there would be no doubt what you go through, though I suspect there would still be some who think you’ve done it all to yourselves. We have become such a horrible society in these last dozen years or so. Those in power keeping the poor at each other’s throats so we’re too distracted to see the real crooks and charlatans.

Believe me when I tell you that your belief is so important to me and my like and, who knows, just the expression of that belief may well save a soul from utter devastation and may well lessen their intractable pain.

Isn’t that what you want to achieve?



Chris Bridgeford is Chairman of the Scottish Charity Affa Sair – Scots for ‘awfully sore’. They currently have around 650 members, an information-filled website at www.affasair.org and a well-used private Facebook group where most member interactions take place.

Affa Sair advises the Scottish Government on Chronic Pain matters as one of the members of the National Advisory Committee for Chronic Pain. The charity has taken part in many consultations and surveys from universities and health organisations around the country.

Her safe place

Dr Steve Johnson



I hear the clatter of inexpertly used crutches coming down the corridor before my door flies open and Linda falls in to my room. She launches herself at the patient chair and sits down in a tangle of crutches and limbs. She is wearing a new-looking pastel-pink tracksuit with pristine white trainers. Her long blond hair is pinned up in a loose bob so that random strands fall over her eyes and neck and ears. At 54, she attracts the second glances of males and, from a distance, she could pass for 34. Up close, her blonde hair has grey roots, the full lips and the taut skin over her cheekbones give way to looser, lined skin around her neck and her bosom has an unnatural lift for her age. Linda has lived a full and varied life. She has three children, all now in their early thirties, has spent time in prison and is a survivor of sexual abuse as a child and of physical and sexual abuse during her marriage.

‘I’ve come for my injections Doctor Johnson’, She announces, readying her crutches for the short journey to my examination couch. ‘And don’t forget my sick note’.

Linda appears once every 6 months or so and instructs me to provide a sick note (‘Arthritis of knees and thumbs’ is the diagnosis I write) and to inject both knees, both thumb joints

and occasionally a tennis elbow from one side or the other. For the last 20 years or so, she has been signed off sick and repeat prescribed oramorph, diazepam and zopiclone. How she began these medications is a mystery from the depths of time. In times past, she has managed to procure large quantities of these drugs from us and other primary and secondary care doctors, and we are now engaged in a keen battle with her to limit the amount we prescribe. So, we prescribe weekly, and (at her request) the medications are delivered by the chemist to her house. This may sound like a straightforward arrangement, but there are many steps from a prescription being generated to the medicines turning up at her house. If there is any hiccup in the supply chain, Linda is on the phone to the receptionists and subjects them to a torrent of vituperation which is impressive in both the breadth of its vocabulary and imagination of its sentence construction. When referring to her medication, she always uses the preface ‘my’, as if she has an inalienable right to have them prescribed. We abandoned trying to get her off these medications years ago. The best we feel we can achieve is limiting the quantity.

One of her children has moved away leaving a son, a daughter, and an ex-husband who live in different locations within the practice area and are patients at the practice. Her ex-husband, Mike, is short and lean, he always wears a bandana and leather jacket. On the surface, he is polite and jovial but, Linda tells me, he is capable of delivering a savage beating for the most trivial of reasons. The son, Ricky, is in and out of prison for drug-related and violent offences. He sustained a fractured jaw in a fight which is now malaligned and causes him constant dental issues. He has a phobia of dentists and is frequently on the phone to us demanding pain killers, sleeping tablets and antibiotics. Like his mother, he is impossible to reason or negotiate with and any hint of reluctance on our part results in threats of physical violence to us, our colleagues and our loved ones. Linda’s daughter, Tammy, is the spit of her mother in appearance and is similarly abrupt in manner, but when you are bracing yourself for a demand or confrontation, she is disarmingly reasonable and pliant.

While readying the injectables for Linda, I watch her traverse the room to my couch in a comically affected display of disability. There are groans and sighs as she gets onto the

Her safe place

couch and positions herself. With the gentlest of touches, I pull her tracksuit a little further up to clear her knee but she flinches and winces in pain. It is tempting to write her off as a bad actor feigning illness. But the truth is she is clever, resourceful, and a survivor.

I give my standard spiel. 'It's best for both of us if you could relax your muscles, breathe slowly in and out and close your eyes?' Linda does so.

When I now hold her knee in readiness to inject I can tell that the muscles of her thigh are relaxed. Her kneecap moves freely at the bidding of my hand, and she is absolutely still as I approach her knee with the needle. I am perfectly able to feel the particular resistance of needle piercing skin then the easy passage through subcutaneous tissues and then the second, subtly different, resistance as the needle goes through the joint capsule and on into her knee joint. The same with the other knee, and then, while injecting one of her thumbs, my needle scrapes against bone. I tense slightly awaiting her reaction but there is not even a flicker of movement. I cannot bring to mind any other patient who is so easy to inject.

'I'm sorry about the left thumb, Linda. I am sure that was unpleasant. My bad, I wasn't in quite the right place.

'No worries, Dr Johnson'.

I ask her how she manages to stay so still and compare her favourably to other patients who tense or flinch at the vital moment.

'Oh well, Dr Johnson. In my mind I just take myself to my safe place'.

'Your safe place?'

'Yes, that's it'.

She does not elaborate, but suddenly it dawns on me how she might have developed this amazing skill that so few people possess. No words are spoken, but I can tell that she knows that I have just fitted another piece into the jigsaw of her multilayered character. I sense our mutual respect deepening a little more.

When the Doctor loses it ...

Dr Steve Johnson



Letting anger have its way with me has got me into a fair bit of trouble over the years – broken equipment, complaints from upset patients, mistakes from clouded judgement, a bicycle thrown into the river . . .

Occasionally, there have been positive results or maybe that's just wishful thinking?

Grant had just turned 60. He was well-off and lived alone in a spacious flat in a sumptuous riverside apartment block near the centre of town. In Grant's version of the-story-of-his-life, he had taken early retirement a decade earlier when the company he had co-founded was bought out by a competitor. Then, his money-grabbing wife had left him and robbed him, via the divorce courts, of a large chunk of his cash pile and the two teenage children he adored. His now ex-wife, Rebecca, who was also my patient, told a different version of events. In her version, Grant's business partner, exhausted from years of carrying the company single-handedly, had brokered the sale of the company to release himself from the nightmare of a business partnership with an alcoholic. The nightmare of being married to an alcoholic had ended for Rebecca when, with the support of her AI-Anon group, she had left Grant, taking their two teenage children.

My encounters with Grant tended to follow a distinct pattern: drunk, he would phone his ex-wife or his ex-business partner or one of his children and harry them about how much he had sacrificed for them and how little appreciation they showed him. Whether they responded with sympathy or annoyance, Grant would quickly bring the conversation around to how they had ruined his life and how he planned to teach them all a lesson by killing himself. His ex-wife and ex-partner would just hang up but his children, unable to bring themselves to call his bluff, would end the conversation by telling him they were calling for medical help. I would get a call from the paramedics asking if I could visit to assess whether he was truly suicidal and needed hospital attention or whether he could be safely left at home to sober up. I would cycle round to the flat, give the paramedics permission to leave and talk to Grant. The first few times I listened sympathetically to his monologues of self-pitying grandiosity for a while before concluding that he was safe to leave to sober up. But, I quickly tired of that and my visits became shorter and my attitude more curt. On other occasions where I had not been called and he had been transported to hospital, I would receive a discharge summary about an A&E attendance or a short hospital stay. The report would normally end with a suggestion that the general practitioner (GP) organise a referral to the drug and alcohol support services as Grant had expressed willingness to address his alcohol issues. I duly made the referrals, but this would be followed by a note a few weeks later saying he had failed to engage when invited, so I stopped bothering to refer after the first few times.

In the middle of a particularly busy Monday morning surgery, my consultation was interrupted by a phone call from our receptionist, Renate.

'Can you speak with the paramedics? They're on site with Grant McCain'. My heart sank. A cheery paramedic came on the phone.

'Hi Doc, are you familiar with Grant?'

'Yes'

'We were called by his daughter after a suicide attempt and when we arrived he was sat on the floor holding a knife. He told

When the Doctor loses it ...

us if we took a step closer he'd cut his throat. His legs were bare and we could see stab wounds to his left thigh. He said he had tried to cut the main artery to his leg. We talked him down and gently took the knife away from him and he started crying. He's had a fair amount to drink, a couple of empty whiskey bottles nearby. We've cleaned up his wounds. The question is whether he needs psych assessment?

'I'll come and see him', I said, 'I won't be long but you may as well leave'.

'Are you sure, Doc? We can hang on till you get here?'

'I'm sure. The same thing has happened many times before'.

'Ok, Doc, but I think we'll just remove the knife to be on the safe side'.

I finished up with the patient in my room and cycled round to Grant's flat. As I was going out the back door, I heard Renate announcing to the waiting patients that Dr Johnson was off on an emergency visit and would be back as soon as he could.

I could feel rage welling up as I cycled to his flat and I started cursing. 'You f***ing waste-of-space shitfaced lush'. I muttered, and then more loudly, 'Why don't you just waste my time and fuck up my day?' And finally – full on shouting. 'Shit'. I blurted out. Like a Tourettes sufferer. 'You shitfaced, dipso lush'.

I knew the code to the main door and the paramedics had left the door to his apartment ajar so I punched in the numbers on the keypad, sprinted up the stairs, taking two at a time and stormed into his flat, flinging my stuff to the ground. Grant was sat slumped at the kitchen table, an empty glass and a half-empty bottle of Bells beside him. He jumped when I slammed the front door.

'You selfish piece of s**t. I've had to leave a waiting room full of sick patients to come round here and nanny you. You just can't stop pouring the stuff down your throat, can you?' Grant began protesting, a torrent of self-pity. I cut him off.

'I don't want to hear it'.

I took the bottle from beside him and started emptying it down the sink. Then, I started opening cupboard doors and pulling out bottles of alcohol and upending them in the sink. I went into the lounge and opened the sideboard. I carried an armful of bottles of spirits back to the kitchen, unscrewed the tops and upended them in the sink. In the cupboard in the hall,

I found two cases of red wine. I pulled open his cutlery drawer, found the corkscrew and started pulling the corks. Grant struggled to his feet and tried to grab the corkscrew from me, muttering something about the vintage. I pushed him away and he stumbled and fell against a kitchen cupboard. I upended the uncorked wine bottles in the sink.

'That's my property, you can't do that'. He slurred. 'I'll call the police . . . I'll call the GMC'.

I located his cordless phone and threw it at him. 'Be my guest'.

I went into his bedroom and rifled through the wardrobe and drawers, but I could find no more bottles. I went back into the kitchen. Grant was still on the floor. I wanted to shout at him some more, but my rage was subsiding and I could not think of anything else to say. I stood there for a few moments and then left. I cycled slowly back to the surgery and when I arrived I called the next patient in. It was Robbie, an army vet from Northern Ireland with post-traumatic stress disorder (PTSD). I apologised for keeping him waiting.

'No worries, Doc, just need some more of my sleepers. I hope you'll be pleased with me, I've made them last as we agreed. I've had a good few months if I'm honest. Yeah, I'm in a good place'.

I never saw Grant again in person. He remained my patient until his death a few years later from a massive gastrointestinal haemorrhage. I still received frequent hospital attendance reports so I assumed that when the paramedics were called and they told him they were going to call his GP he said, 'No, just take me to the hospital'.

So, did my outburst achieve anything other than a selfish fleeting catharsis? In all honesty? No. The expensive ambulance conveyances and hospital attendances continued unabated and, like a snowball rolling down a hill, Grant's physical and mental health continued its decline to a predictable end. Maybe the end arrived more quickly and brought blessed relief to Rebecca, their children and possibly Grant himself?

Later that year, cycling back home in the snow along the towpath after a late visit, I got a puncture. I had spent half an hour already that day mending a puncture in the other wheel. I threw the bike in the river and called my wife to come and pick me up in the car. With a guilty conscience, I later drove back to retrieve the bike from the river.

