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Painful *conversations.*

ENTER

Is improved healthcare communication the key to overcoming the paradox of pain?

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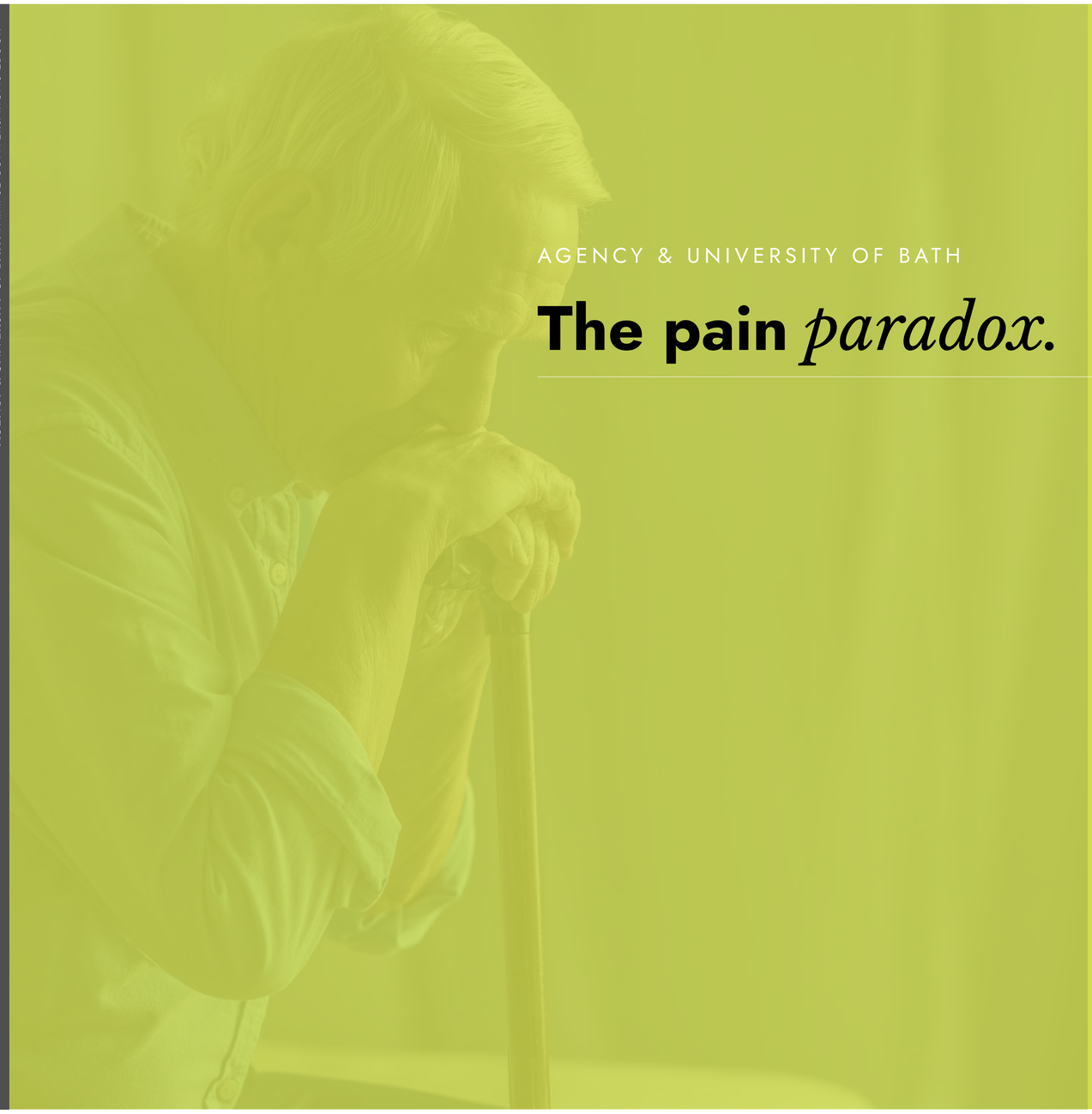

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The pain *paradox.*

INTRODUCTION

The pain *paradox.*

Is improved healthcare communication the key to overcoming the paradox of pain?

> Shared decision making is a meeting of two experts, where the doctor is the expert on the medical issues and available treatment options, while the patient is the expert on their own values and preferences.
>
> **Dr. Larry Allen**
> Professor of Medicine
> University of Colorado, School of Medicine, Aurora [REF]

Our society relies on individuals dealing with chronic pain to express their feelings, even though pain is often hard to put into words.

This can lead to a sense of injustice that can derail lives.

Consider this: At any one moment, around 20% of the world's population is experiencing chronic pain [REF].

If 740 million people populate Europe, that means 148 million people experience pain, which is the combined population of Germany and France.

But pain is elusive and often hard to report on, measure, or even record - it does not show itself in any blood test or scan. We lean on the words of chronic pain sufferers to describe their agony, which often proves challenging as people struggle to communicate their suffering.

This communication gap can lead to isolation.

Those in chronic pain often feel unheard, fostering mistrust in friends, family and even healthcare professionals (HCPs) that their suffering isn't understood.

The crucial solution lies in fostering a culture that acknowledges and understands pain and facilitates effective communication so we, as pain experts, can support people with chronic pain to better outcomes.

When pain strikes, rationality can often take a backseat. Individuals caught in its grip might feel unheard, suspicious of non-immediate solutions, and unable to make well-informed decisions.

Scepticism from peers can then drive people away from treatments, trapping them in a cycle of unrelenting pain.

To address this, we must develop processes for pain management that consider the difficulty of pain communication and simplify messaging to guide individuals toward early pain management.

Around 10 million Britons suffer from near-daily pain, which dramatically impacts their quality of life [REF].

The UK has nearly 28 million people who live in the shadow of everyday pain, with this number predicted to escalate due to an ageing population [REF].

Within this landscape, 1 in 4 UK adults are living with chronic pain [REF].

Astonishingly, 24% of UK adults use opioid painkillers, while 23% are on waiting lists for surgery or pain management programmes [REF].

Depression also shadows chronic pain, affecting 60.8% of sufferers, often leading to a greater number of missed work days [REF].

Notably, depression is four times more prevalent among chronic pain sufferers than those without pain [REF].

To mend this, we must assist individuals in gaining a new perspective to comprehend the complicated nature of pain.

This will enable them to make informed choices that can lead them towards self-reliance and take back control.

How can we achieve this transformative shift?

Effective communication is key.

It fosters trust between experts and individuals and allows the distribution of important information, paving the way for effective, informed decisions.

In collaboration with Professor Christopher Eccleston from The Centre for Pain Research at the University of Bath, this article will explore:

- The current challenges with pain management.
- Guidance to self-manage chronic pain.
- How we can avoid the pain paradox.

We will unveil how improved communication fosters trust in understanding pain and its implications, leading to empowered decision-making and self-management of chronic conditions.

WHAT ARE

the current problems *with pain management?*

Access to effective solutions for pain management is severely limited, resulting in a heavy reliance on ineffective and potentially harmful options [REF].

But what are the key factors that contribute to this problem?

01

Increasing Number of People in Pain:

How many people are affected? The prevalence of chronic pain in England is a pressing concern, affecting 15.5 million people (34% of the population) [REF].

What is even more concerning is that by the age of 40, two out of every five people find themselves grappling with this persistent condition [REF].

As the population continues to age, the demand for effective pain relief options will escalate.

The projected growth of older adults, who are more prone to chronic pain, highlights the urgency of addressing this issue, as individuals aged 65 and over are expected to account for 24% of the population by 2043, representing approximately 17.4 million people [REF].

Why does this issue need to be addressed?

By recognising the increasing number of people in pain, we can prioritise the development of comprehensive strategies and interventions that effectively manage chronic pain and improve the quality of life.

02

Chronic Pain Destroys Lives:

Chronic pain can profoundly affect individuals' ability to carry out daily activities and perform optimally in the workplace.

The limitations and discomfort caused by chronic pain may result in disability and a higher number of missed work days, leading to reduced productivity and increased healthcare costs.

As a result, individuals with chronic pain may encounter workplace discrimination or a lack of understanding from co-workers and employers, creating additional challenges and utilising valuable resources within HR departments.

Why does this need to be recognised?

Recognising and addressing the impact of chronic pain on the healthcare system is crucial to implementing effective strategies that support individuals in managing their pain, promoting workplace inclusivity, and ensuring the efficient allocation of resources.

Chronic pain has a devastating impact on individuals, disrupting their ability to function and enjoy a good quality of life.

However, this problem extends beyond the lack of effective solutions.

It is heightened by the prevalent but mistaken belief that individuals should simply endure their pain without seeking self-management strategies. This misconception arises from a lack of familiarity with other pain management approaches.

What does this call for?

Addressing the root causes of this problem requires a multifaceted approach. By empowering individuals with chronic pain to actively manage their condition, we can enhance trust, their sense of control and informed decision-making.

WHAT ARE

the current problems *with pain management?*

03

Insufficient Funding for Research:

The current state of pain management research reveals a concerning lack of funding and focus.

What are the consequences?

The majority of research efforts have been directed towards the development of painkillers, resulting in limited exploration of self-management strategies beyond medication.

This imbalance in research priorities poses a significant challenge for healthcare decision-makers who are seeking comprehensive tools and interventions to effectively address chronic pain.

The insufficient funding allocated to research in pain management restricts the availability of evidence-based approaches and alternative options that could significantly improve outcomes for individuals living with chronic pain.

Why does this need to change?

It is crucial to recognise the importance of diversifying research efforts and investing in innovative strategies to expand the toolkit of HCPs and provide people with a wider range of effective and sustainable solutions for managing chronic pain.

By diversifying research efforts, we can explore and develop a broader range of interventions and treatments that go beyond medication, including non-pharmacological approaches and self-management strategies.

04

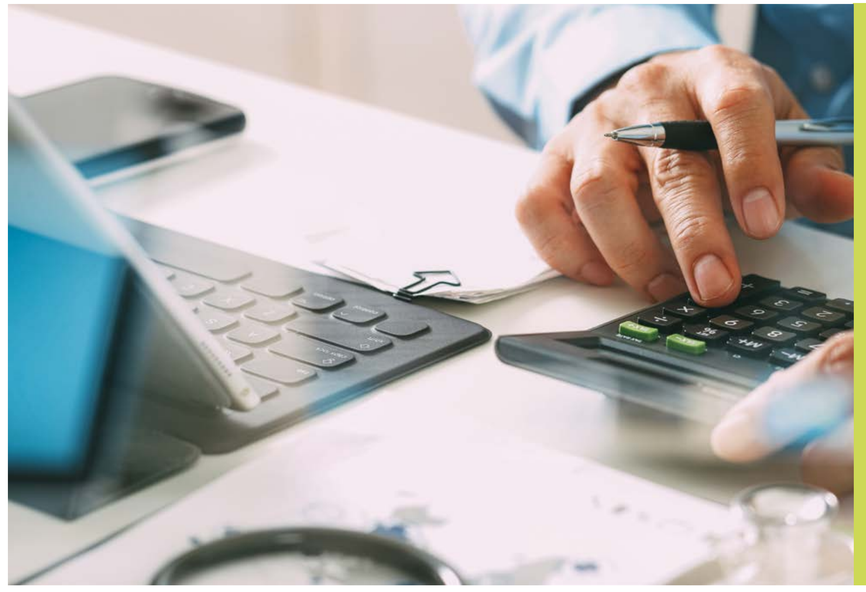
Lack of Awareness of Self-Management Options:

Over time, people have grown accustomed to the availability of pain relief options, leading to a dependence on healthcare services to alleviate their discomfort.

What are the consequences?

This reliance on external solutions has hindered the development of self-management strategies, preventing people from taking an active role in managing their own pain.

As a result, individuals often rely solely on HCPs to provide immediate relief without exploring other options or addressing the underlying causes of their pain.



WHAT ARE

the current problems *with pain management?*

05

The Balance of Responsibility:

The debate surrounding self-management revolves around the balance between relying solely on HCPs and carrying some of the responsibility individually.

It's encouraging to witness people naturally gravitating towards seeking HCPs' guidance, a reflection of the belief placed in the healthcare system.

However, the demand for medical attention over recent years has grown substantially, reaching a point where the healthcare system's capacity could be better.

As a consequence, there's a growing need for people to become well-versed in self-management practices.

This shift isn't intended to replace professional care but to complement it.

Empowering individuals to actively participate in their health management can significantly alleviate the burden on HCPs and ensure more efficient healthcare delivery.

06

A Guided Approach:

Understanding self-management doesn't imply navigating the complexities of health alone. Instead, it involves a collaborative partnership between people with chronic pain and HCPs.

Self-management involves informed decision-making supported by trustworthy information sources. In this light, HCPs transition from being sole providers of medical advice to becoming trusted navigators.

Their role extends beyond diagnosis and treatment recommendations; they guide people towards reliable sources of information and appropriate strategies.

This collaboration ensures people are equipped with the necessary knowledge and tools to effectively manage their well-being while steering clear of misinformation or misguided practices.

By combining HCP expertise with people empowerment, a balance is struck that benefits both parties, resulting in improved healthcare outcomes and strengthened patient-provider relationships.

Why should we promote informed decision-making?

Encouraging people to embrace self-management techniques can empower us to actively participate in the pain management journey, fostering a sense of control and promoting long-term well-being.

By shifting the focus from dependency to self-efficacy, individuals can explore a wider range of effective pain management strategies, enhance their overall quality of life, and return to the workplace.

WHAT ARE

the current problems *with pain management?*

07

An Epidemic Putting Pressure on Resources:

With the National Health Service (NHS) struggling to keep up with demand, a lack of resources and the appeal of private healthcare on the rise, we find ourselves in the midst of an epidemic of suffering.

Trust in traditional healthcare avenues, such as GPs, is being challenged, leading many to seek answers from "Dr Google" or anywhere else advice can be found.

With the NHS already stretched and unable to keep up with the influx of patients requiring further assistance, many people have turned to private healthcare services to solve their pain [REF] [REF] [REF].

In 2021 more than 250,000 people opted to go private as NHS waiting lists reached over 6.6 million, a number that exceeds the population of Ireland [REF]. However, this increased demand will restrict access to the private sector for future patients.

Whether public or private, pain care is ripe for reimagining, disruption and reinvention.

In this era of uncertainty, reliable information and accessible care have become more vital than ever.

Guidance to self-management *of chronic pain.*

There is a strong link between communication and motivating behavioural change.

So, to address these challenges, we first need to grasp the true nature of pain and how it affects people.

Once we're on the same page, we can have open conversations that aim to understand and value their pain experiences.

Trust starts to grow from there. With that trust, we can begin to notice their efforts and suggest various options for pain management.

It's vital to be clear about what these choices will bring.

As trust deepens, we can introduce the idea of sharing responsibility. This means they're not alone in this journey. And over time, they'll be in control, making choices and directing their own treatment.

How do we approach this topic?

In order to effectively address the needs of individuals with chronic pain, it is crucial to establish a sense of trust and understanding.

People with chronic pain require a supportive environment where they feel listened to, believed and valued.

A lack of ability to properly communicate causes chronic pain to feel inherently unfair to the person experiencing it.

Research by Professor Michael Sullivan from McGill University in Montreal illustrates that over time this manifests into a feeling of unjustness by the person who experiences the pain [REF][REF].

By this point, the person in pain no longer trusts anyone who may offer potential treatment options to their painful experience—no matter how well-evidenced.

Each time a potential treatment fails, they might feel as if they're being held responsible for the outcome.

This is not the reality, and we must assure people they are not at fault.

Research into the phenomenon known as the Nocebo effect by Dr Luana Colloca from the University of Maryland in the US also suggests that the language we use has a vital role in communicating pain [REF].

This could therefore be the missing link to rebuilding that trust.

Building this trust is essential for encouraging people to embrace evidence-supported pain management strategies that promote their overall well-being, productivity and independence.

Although seeking quick and easy solutions may be tempting, it is important to recognise that taking the opposite approach, i.e., investing time and effort into self-management, often yields the best outcomes.

Who can adopt this approach?

This shift in perspective is not only applicable to HCPs but also extends to companies and organisations [REF].

By reframing your thinking and actively supporting the message of self-management, employers like yourselves can contribute to a culture that prioritises the needs and empowerment of individuals with chronic pain.

Evidence-supported intervention for *self-management of chronic pain.*

So far, this article has highlighted the current problems facing pain management.

If we can successfully influence behaviour with effective communication, we can guide people in the right direction.

This article will now provide insight into evidence-based alternative solutions for effective pain management, barriers to these interventions and solutions to prevent these barriers from arising.

01

Exercise Programmes and Physical Activity:

Regular exercise has been found to be an effective way to manage many chronic pains.

Exercise interventions have illustrated that exercise can provide significant pain relief in people suffering from chronic lower back pain [REF], reduce inflammation [REF] and improve function in patients with osteoarthritis [REF].

Participating in supervised group exercise programs tailored to individuals aged 16 years and above provides a supportive environment for managing pain effectively [REF].

These programmes take into account people's specific needs, preferences and abilities, ensuring that exercises are safe and suitable for each participant.

Why is this an effective solution?

Encouraging individuals to engage in regular physical activity helps manage pain and brings about long-term general health benefits.

If people are encouraged to identify the underlying cause of their pain, exercise programmes can be tailored to meet their specific needs and limitations.

It is important to enact behavioural change by empowering individuals to take control, make informed decisions and incorporate physical activity into their daily lives as a sustainable way to self-manage chronic pain [REF].

Therefore, exercise represents a safe and non-pharmacologic option for managing chronic pain that can significantly benefit a person's overall health and quality of life.

Evidence-supported intervention for
self-management of chronic pain.

02

Psychological Therapy:

Why should psychological therapy be considered?

Psychological therapy plays a significant role in the management of chronic primary pain.

Consideration should be given to approaches such as cognitive-behavioural therapy (CBT) for individuals aged 16 years and above who are experiencing chronic primary pain [REF].

These therapies (when delivered by HCPs with appropriate training) can effectively address the psychological and emotional aspects associated with pain [REF].

What is the evidence?

Evidence suggests that CBT is effective in reducing the severity of pain and its impact on everyday life [REF].

It has also been shown that 56% of children who were treated with psychological therapies reported less pain compared with 22% of children who did not receive psychological therapy [REF].

Therefore, by incorporating psychological therapy into treatment plans, people can develop coping strategies, improve their quality of life and take an active role in their overall well-being.

Evidence-supported intervention for *self-management of chronic pain.*

03

Virtual Reality Interventions:

Virtual reality (VR) holds promise as a method for delivering self-management interventions.

By immersing individuals in a virtual environment, VR can deliver effective CBT under the control of patients in their own homes [REF].

It offers a unique opportunity to create immersive experiences that engage multiple senses, such as visual and auditory stimuli, which can alter the perception of pain.

What is the evidence?

In a randomised controlled trial involving adults with chronic low back pain, a VR psychological intervention (Rohkea™) reduced fear of movement, self-reported disability, pain intensity and pain interference [REF][REF].

No adverse events associated with VR were reported, and participants in the trial were generally positive about the VR experience [REF].

In the US, EaseVRx is now FDA-approved and provides access to relaxation and attention management interventions [REF].

What makes VR so appealing?

VR interventions can be tailored to individuals' specific needs and preferences, allowing them to choose experiences that best suit their pain management goals and granting them a sense of control [REF].

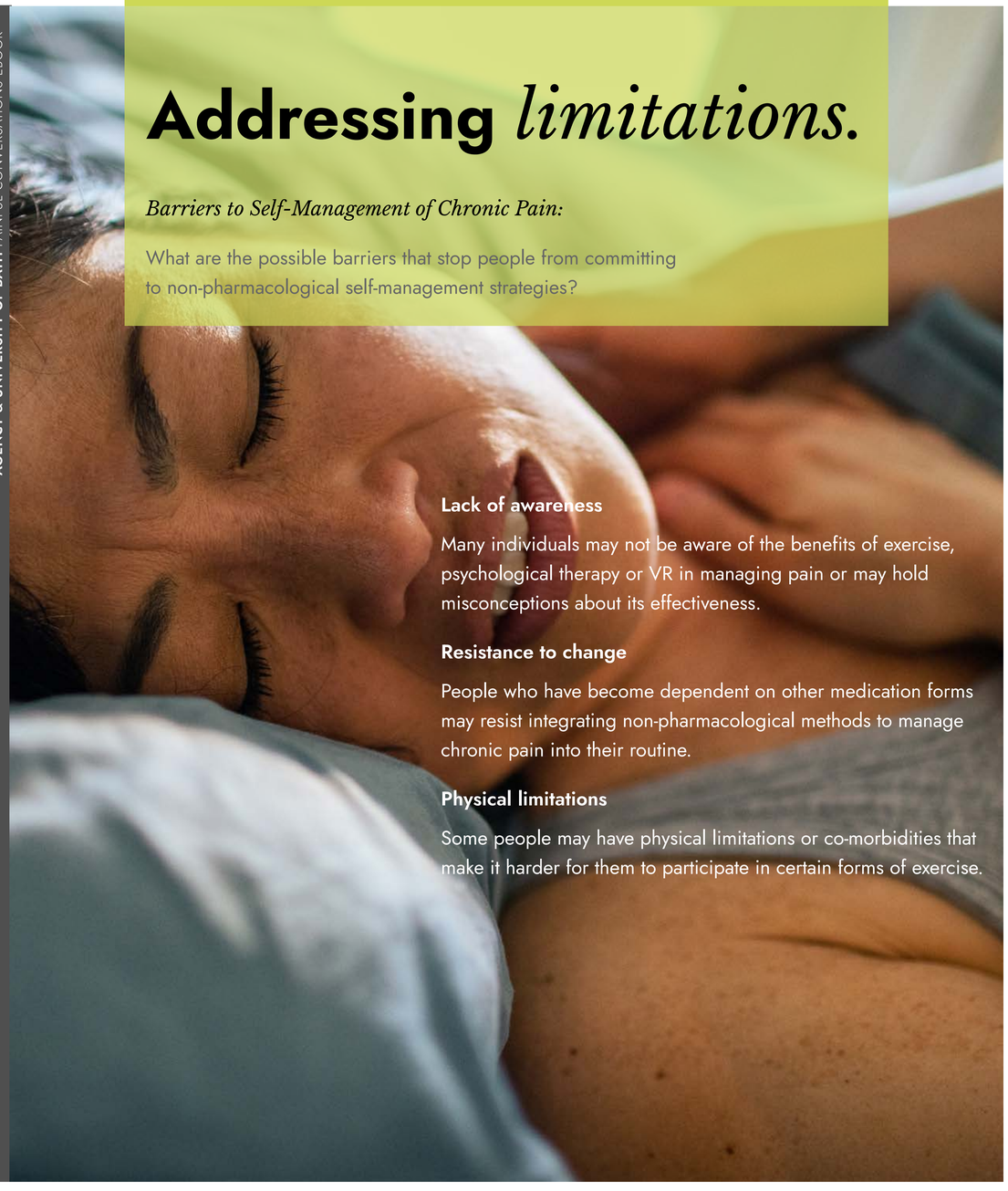
Whether it's exploring serene landscapes, engaging in interactive games, or participating in guided relaxation exercises, VR provides a safe and non-pharmacological approach to pain management [REF][REF].

VR is also a convenient and accessible tool for individuals seeking alternative methods to self-manage their pain.

Addressing *limitations.*

Barriers to Self-Management of Chronic Pain:

What are the possible barriers that stop people from committing to non-pharmacological self-management strategies?



Lack of awareness

Many individuals may not be aware of the benefits of exercise, psychological therapy or VR in managing pain or may hold misconceptions about its effectiveness.

Resistance to change

People who have become dependent on other medication forms may resist integrating non-pharmacological methods to manage chronic pain into their routine.

Physical limitations

Some people may have physical limitations or co-morbidities that make it harder for them to participate in certain forms of exercise.

Lack of resources

Limited access to facilities, equipment, or specialised exercise programs can prevent people from engaging in non-pharmacological interventions. Financial constraints can also restrict participation.

Lack of motivation

Motivating people to initiate and maintain an exercise routine can be challenging. Lack of motivation, low adherence and difficulty incorporating exercise into daily routines can slow progress.

Likewise, individuals may be resistant to therapy, find it difficult to prioritise mental health, or struggle with motivation to participate in long-term therapy programmes.

Health literacy

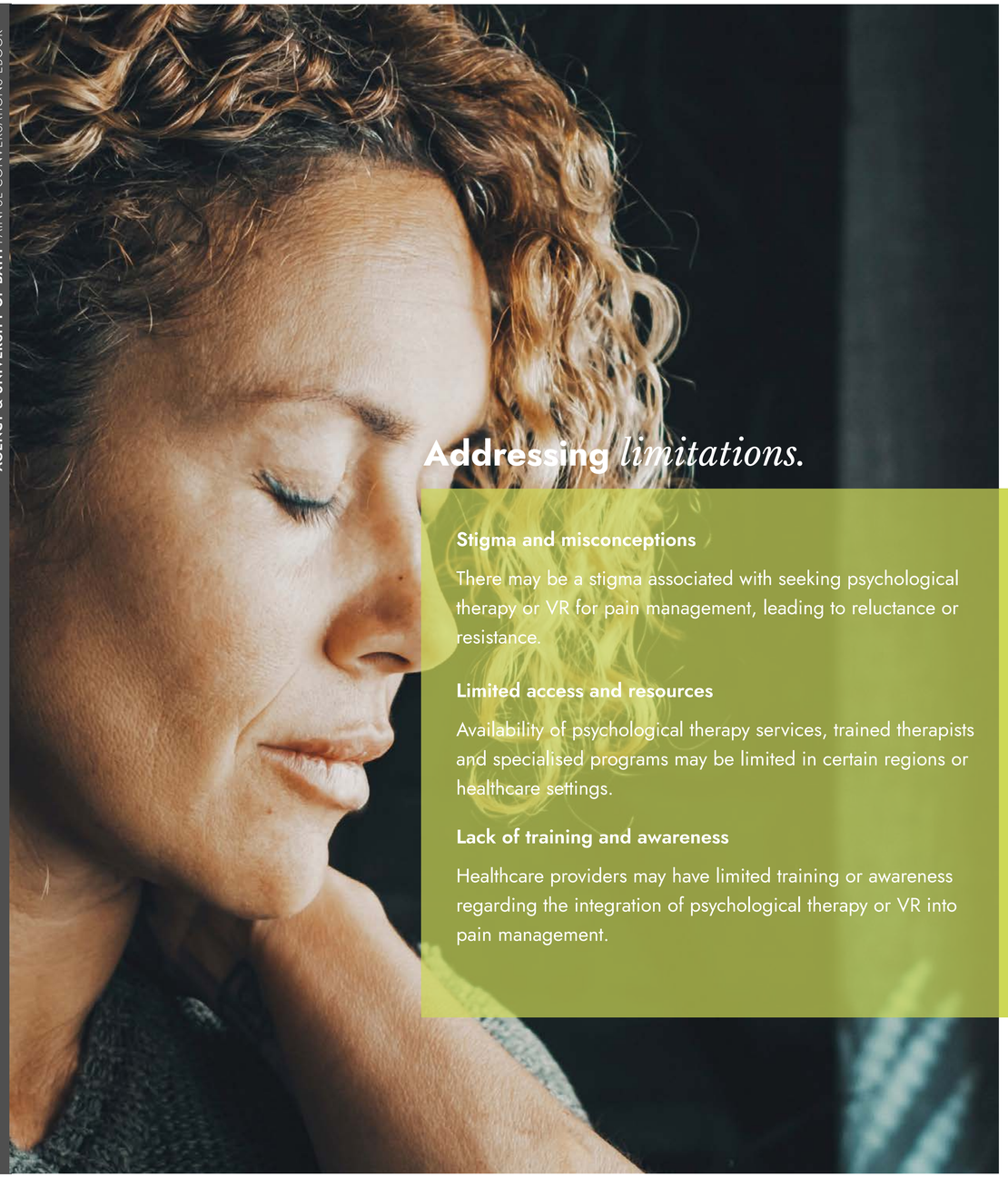
People with low health literacy may struggle to understand the importance of non-pharmacological alternatives for pain management.

Cultural and social factors

Cultural beliefs, social norms and personal preferences can influence peoples' attitudes towards non-pharmacological methods for self-management of chronic pain.

Time constraints

People may perceive a lack of time in their daily routines as a barrier to incorporating these alternative interventions.



Addressing *limitations.*

Stigma and misconceptions

There may be a stigma associated with seeking psychological therapy or VR for pain management, leading to reluctance or resistance.

Limited access and resources

Availability of psychological therapy services, trained therapists and specialised programs may be limited in certain regions or healthcare settings.

Lack of training and awareness

Healthcare providers may have limited training or awareness regarding the integration of psychological therapy or VR into pain management.

Limited referral networks

Establishing robust referral networks with mental health professionals and therapy providers can be complex.

Limited research and evidence

The evidence base for the effectiveness of VR in specific pain conditions is only starting to be built.

Patient expectations

People may have preconceived ideas about the role of psychological therapy or VR in pain management.

Some may be resistant to exploring psychological interventions or VR or have unrealistic expectations about quick fixes or complete pain elimination.

Why should we address these barriers?

Addressing these barriers and finding ways to overcome them is crucial to promote the adoption and successful implementation of non-pharmacological self-management interventions for managing chronic pain.

By overcoming these barriers, together, we can enhance trust, empower individuals with a greater sense of control over their health and enable informed decision-making.

The *solutions.*

How can we overcome these barriers and continue to empower people to self-manage their pain?

Through Ongoing Communication and Education

We can develop and implement educational programs and materials that raise awareness about the benefits of non-pharmacological methods for self-management.

We should also supply evidence-based information to people, emphasising how these methods can reduce pain, improve function and enhance overall well-being.

Anti-stigma campaigns can be launched to challenge negative perceptions surrounding mental health and therapy.

This will encourage open discussions and promote positive narratives to normalise seeking psychological support for pain management.

Through Personalised Approaches

We need to adopt a patient-centred approach that takes into account individual needs, preferences and goals. Together, we should collaboratively develop personalised plans that align with peoples' abilities, interests and lifestyles.

Through Healthcare Provider Training

We should provide training and continuing education for HCPs on the role of non-pharmacological interventions in pain self-management.

By doing this, they will be equipped with the knowledge and skills to effectively communicate and prescribe these interventions to people, addressing any concerns or misconceptions.

Through Referral Systems

Strong referral systems and interdisciplinary collaboration can be established with other HCPs, such as physical therapists, exercise specialists and pain management experts.

This will ensure seamless coordination and communication to facilitate access to specialised programs and services.

Through Increasing Accessibility

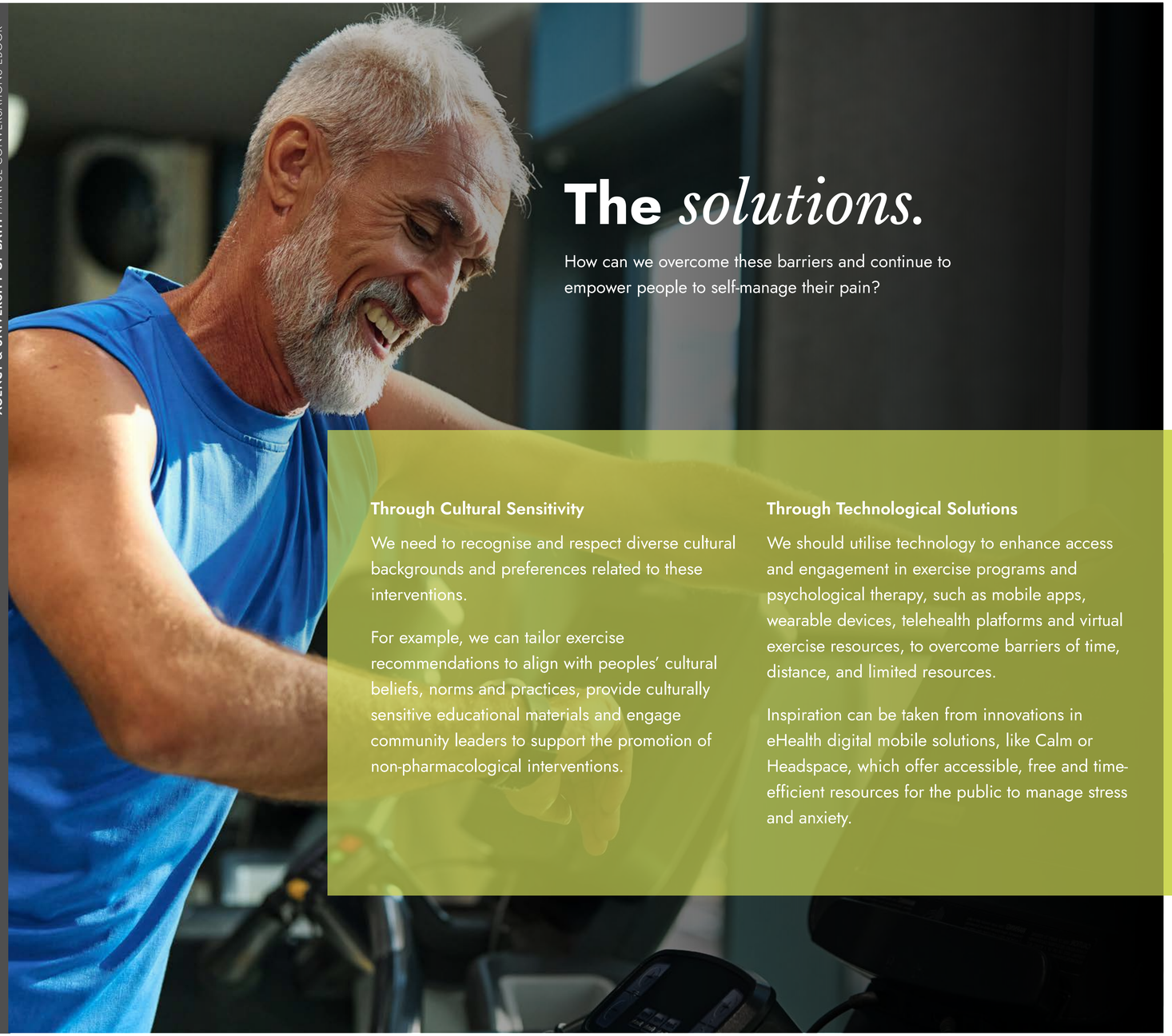
Together, we should identify and promote accessible options regarding non-pharmacological interventions for people with chronic pain, including community-based programs, online resources and low-cost alternatives.

HR managers and HCPs could offer support by providing information on local facilities, exercise classes and support groups that cater to people's needs.

Through Motivational Strategies

We should implement motivational strategies to enhance people's engagement and adherence to exercise programs, psychological therapy and VR.

We should utilise behavioural change techniques, goal-setting, progress tracking and positive reinforcement to motivate and sustain this motivation over time.



The *solutions.*

How can we overcome these barriers and continue to empower people to self-manage their pain?

Through Cultural Sensitivity

We need to recognise and respect diverse cultural backgrounds and preferences related to these interventions.

For example, we can tailor exercise recommendations to align with peoples' cultural beliefs, norms and practices, provide culturally sensitive educational materials and engage community leaders to support the promotion of non-pharmacological interventions.

Through Technological Solutions

We should utilise technology to enhance access and engagement in exercise programs and psychological therapy, such as mobile apps, wearable devices, telehealth platforms and virtual exercise resources, to overcome barriers of time, distance, and limited resources.

Inspiration can be taken from innovations in eHealth digital mobile solutions, like Calm or Headspace, which offer accessible, free and time-efficient resources for the public to manage stress and anxiety.

Through Long-Term Support

HR managers and HCPs should offer ongoing support, follow-up, and monitoring to people engaging in non-pharmacological interventions for pain self-management.

We should provide regular opportunities for people to discuss their progress, address challenges and receive guidance or modifications to their plans.

This will enable people to feel like their pain is valid and considered, which will strengthen trust in the workplace and healthcare system.

Through Research and Evidence Generation

Through supporting and funding research initiatives to build a stronger evidence base for the effectiveness of self-management interventions in pain management, we can encourage the development of clinical guidelines and best practice recommendations based on thorough research.

Avoiding the *pain paradox.*

What would the future look like if we avoided the pain paradox?

People suffering from chronic pain could feel satisfied with the additional options presented to them while also having access to help from healthcare decision-makers when they genuinely need it.

They may be empowered to feel in control of their healthcare once more, reframing their thinking from mistrust and despair to trust and positive thinking.

By embracing non-pharmacological self-management strategies, people could experience an increased quality of life and improved personal and working relationships.

They may also reduce the likelihood of painkiller tolerance and addiction while minimising the risk associated with alternative, unregulated treatment options.

For others in similar situations, these changes create an opportunity to become self-management ambassadors.

Sharing their experiences and supporting others through established networks can help reduce the stigma surrounding chronic pain and serve as examples of successful self-management.

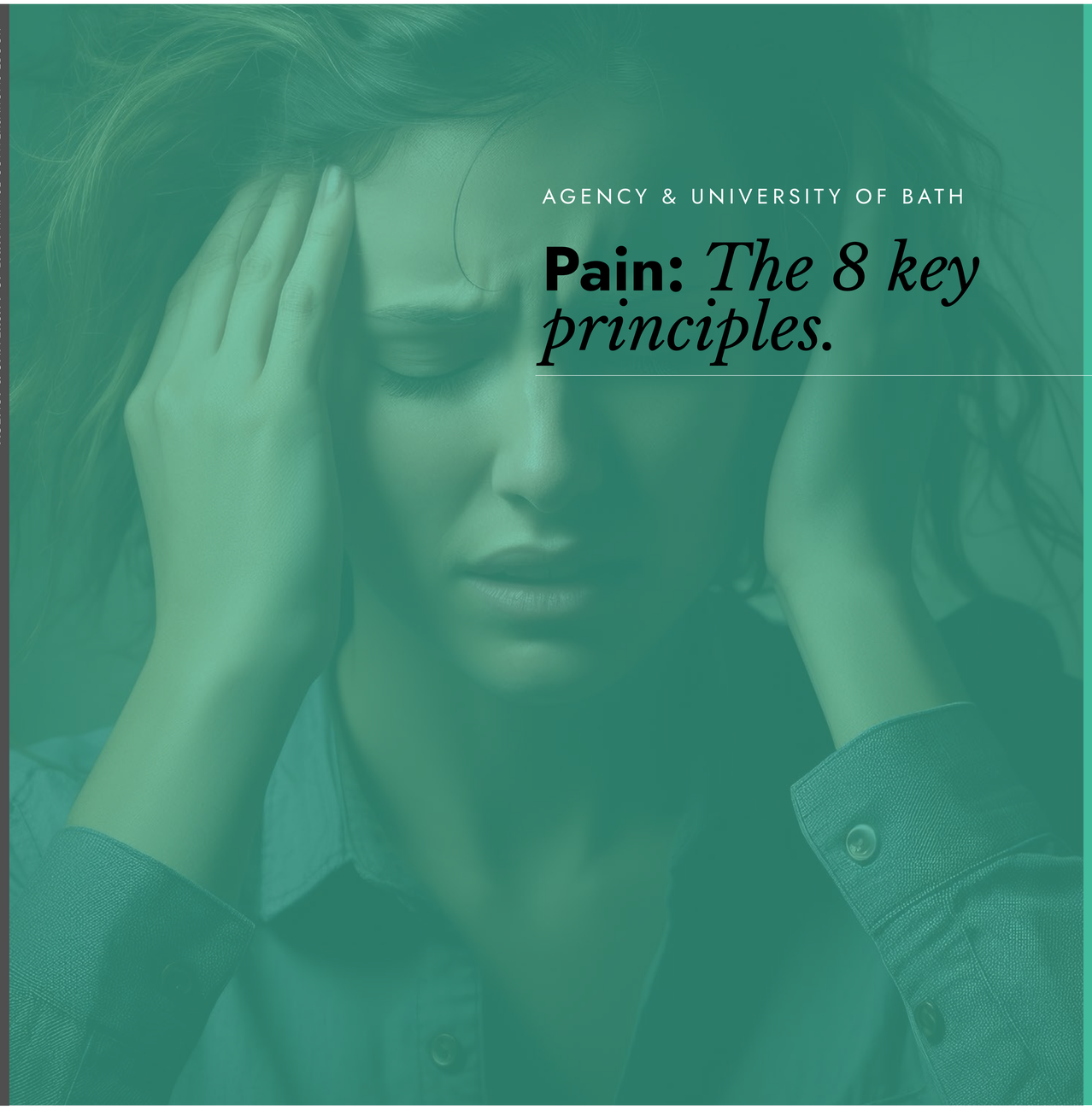
With a focus on self-management and evidence-based alternatives, we can enhance participation and public trust, empowering individuals with a greater sense of control and a return to normality.

Your *next steps.*

If you would like to hear more on the topic of pain research, contact Professor Christopher Eccleston.

Need help with communicating with patients? Get in touch with AGENCY to see how we can help you enhance trust, empower individuals with a greater sense of control and enable informed decision-making.

Get in touch now at **www.agencybristol.com**



AGENCY & UNIVERSITY OF BATH

Pain: *The 8 key principles.*

INTRODUCTION

Pain: *The 8 key principles.*

A staggering 15.5 million people in England suffer from chronic pain (34% of the population) [REF], **a number which eclipses the 4.8 million people currently living with diabetes across the entire UK** [REF].

This underscores the pressing need for us, as healthcare professionals (HCPs) and an industry, to deepen our understanding and enhance our capacity to treat chronic pain effectively.

But where do we begin?

In 2019, a survey conducted by the European Pain Federation at the EFIC Congress shed light on the unmet needs of chronic pain patients [REF].

This survey illuminated several key issues, which included:

- Lack of knowledge about how to manage chronic pain in primary care.
- Lack of resources/time to assess and manage chronic pain.
- Lack of sufficient tools to identify patients at risk for functional impairment.

This lack of knowledge and understanding of chronic pain is due to the complexity and nature of the topic [REF].

Therefore, our journey toward addressing chronic pain comprehensively must start with addressing these fundamental challenges.

What *is pain?*

To tackle the issue of the limited knowledge surrounding pain within the healthcare field, it's essential we follow a systematic approach.

As suggested by Professor Christopher Eccleston, Director of the Centre for Pain Research at the University of Bath and expert in evidence-based medicine and digital therapeutics, the first step involves examining why this knowledge gap exists.

He believes this gap largely stems from the complex and elusive nature of pain, which is a paradox that's challenging to categorise. There are eight significant reasons behind this complexity.

Therefore, we must share knowledge of pain's essence to ensure we possess a comprehensive grasp of pain.

We need to promote better communication - a crucial factor that will enable us to assess and treat pain effectively.

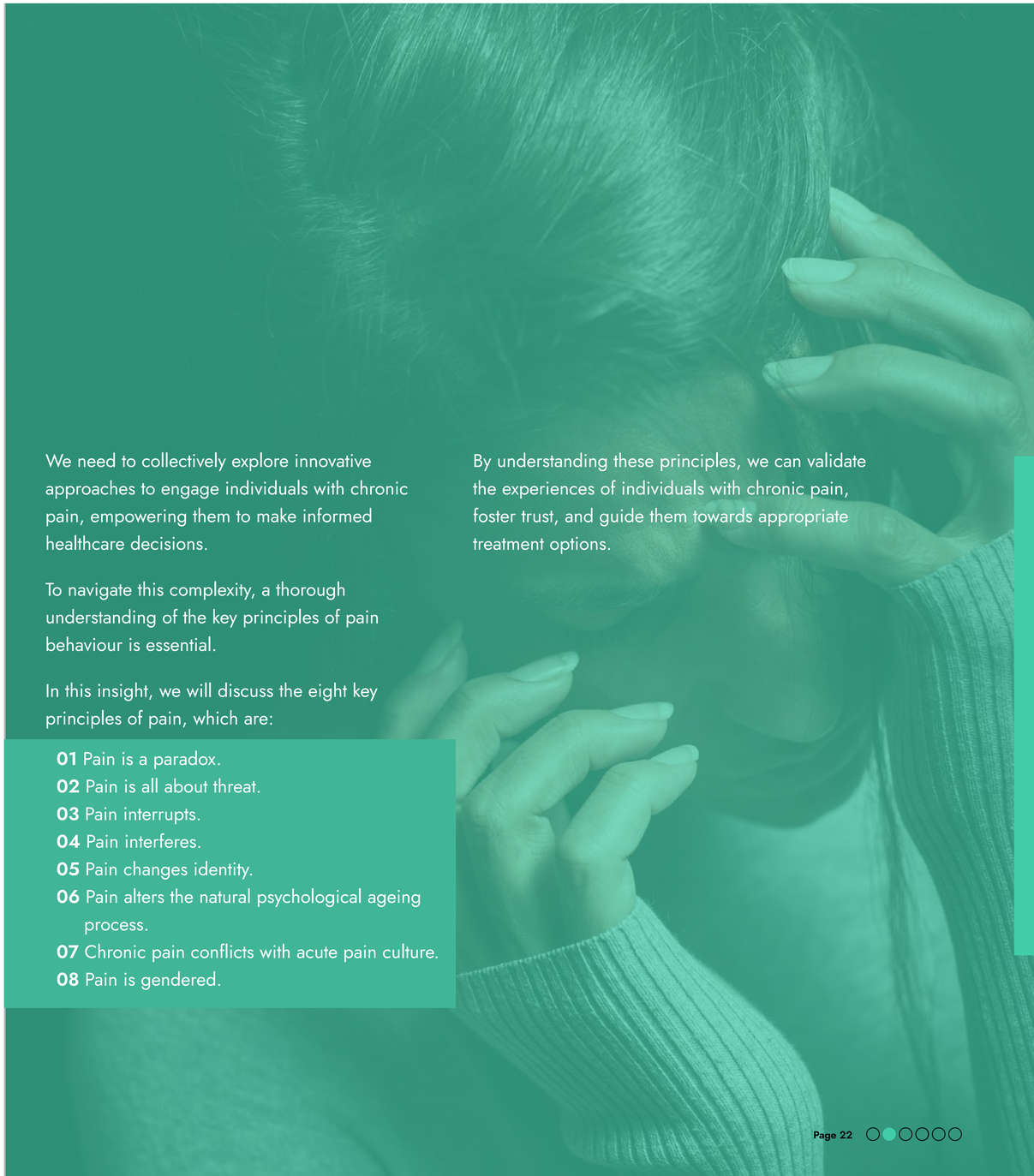
This collaborative effort has the potential to significantly improve patient healthcare outcomes and will mark an advancement in pain management within the healthcare community.

Pain is more than a physical sensation.

Pain goes beyond physiological trauma; it encompasses many factors such as psychology, social dynamics, environmental influences, emotions, and behaviours [REF].

Chronic pain, in particular, has a profound impact by reshaping behaviour and impairing rational thinking, often leading to adverse outcomes [REF] [REF][REF].

Communicating effectively with individuals with chronic pain poses a difficult challenge due to the condition's intricate nature, resulting in a lack of understanding and an inability to treat it.



We need to collectively explore innovative approaches to engage individuals with chronic pain, empowering them to make informed healthcare decisions.

To navigate this complexity, a thorough understanding of the key principles of pain behaviour is essential.

In this insight, we will discuss the eight key principles of pain, which are:

01 Pain is a paradox.
02 Pain is all about threat.
03 Pain interrupts.
04 Pain interferes.
05 Pain changes identity.
06 Pain alters the natural psychological ageing process.
07 Chronic pain conflicts with acute pain culture.
08 Pain is gendered.

By understanding these principles, we can validate the experiences of individuals with chronic pain, foster trust, and guide them towards appropriate treatment options.

WHAT ARE

The 8 key *principles of pain.*

01

Pain is a paradox.

It's crucial to recognise that approximately 20% of individuals worldwide suffer from chronic pain [REF], a staggering statistic that amounts to roughly 148 million people in Europe alone, equivalent to the combined populations of Germany and France [REF][REF][REF].

This issue, as David M. Morris noted in "The Culture of Pain," represents an immense but often invisible crisis at the centre of contemporary life [REF].

The paradox lies in the fact that despite its prevalence, chronic pain often remains hidden, silenced by the very nature of the sensation itself.

This complexity makes it challenging to articulate the experience accurately.

Societal factors, such as the instinct to conceal pain as a sign of weakness, discourage open expression.

Additionally, the frustrating and perplexing nature of pain's treatment, or lack thereof, leads to avoidance in discussions.

Chronic pain is frequently underestimated, primarily due to the difficulty patients face in effectively communicating their pain to HCPs and loved ones.

When engaging in conversations about pain, we must be prepared to navigate discussions with individuals who may be reluctant to broach the subject or avoid it altogether.

02

Pain is all about the threat.

Pain, at its core, serves as a vital alarm system designed to alert us to potential dangers in our environment.

It's a sensation deeply rooted in our survival instincts.

When we engage individuals in pain assessments, we ask about their experiences to better understand their condition: How does it feel? Where is the pain located?

However, it's essential to recognise that when people are in pain, their responses often reflect the disruptive and frightening nature of the sensation itself.

Pain's existence is intricately linked to our instinctive need for safety and survival, compelling us to retreat from danger and facilitate the healing of injuries.

Chronic pain, characterised by the fear of further injury, catastrophic thinking regarding coping mechanisms, and the potential development of depression, arises primarily from the persistent pain within the individual's body rather than external environmental factors.

In pursuing effective pain management and patient care, let us remember the relationship between pain and survival.

WHAT ARE

The 8 key *principles of pain.*

03

Pain interrupts.

Pain is designed to interrupt our activities and redirect our focus when potential dangers are in our environment.

In the context of chronic pain, this interruption becomes a persistent source of stress, even when the pain signal itself is not aversive.

Experimental studies have compellingly shown that both induced and chronic pain can significantly impair our decision-making abilities, concentration, and memory.

What's more, the constant presence of pain can detrimentally affect our financial decision-making, as pain interrupts our thought processes, potentially resulting in less sound financial choices.

This underscores the far-reaching impact of chronic pain, which not only affects physical well-being but also interferes with various aspects of life, including cognitive functioning and financial stability.

As HCPs, it's essential to consider these multifaceted effects of chronic pain when devising treatment plans and supporting patients in their journey toward improved well-being.

04

Pain interferes.

Chronic pain extends its impact far beyond physical discomfort.

It imposes significant losses in function, work capabilities, and, to a certain extent, even interpersonal relationships.

This persistent pain operates as a disruptive, threatening force, repeatedly interrupting individuals' lives and hindering their daily journey.

Pain is more than just a sensory experience; it represents an interruptive, menacing function that obstructs people from realising their goals, plans, and ambitions.

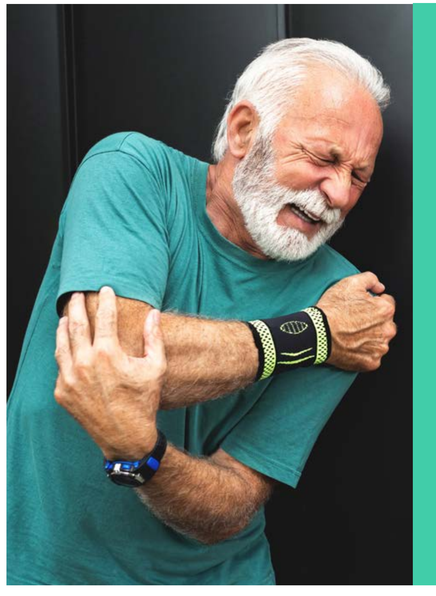
This interference can manifest in deeply personal ways, where individuals may fear simple acts of compassion, like hugging their own children, due to the apprehension of pain.

Similarly, the loss of independence as they rely on others for basic tasks can be profoundly distressing.

It's essential to recognise that pain's interference doesn't only affect the individual experiencing it; it also affects their loved ones.

This is because life planning and activities are often intertwined within cherished relationships.

As HCPs, we need to appreciate the holistic impact of chronic pain, addressing not only the physical aspects but also the emotional and interpersonal dimensions of our care and support.



WHAT ARE

The 8 key *principles of pain.*

05

Pain changes identity.

The activities and passions individuals hold dear define their identity and shape their sense of self.

Chronic pain presents a barrier to engaging in what one loves.

It obstructs the journey toward becoming one's true self, the person they aspire to be, and the person society expects them to become.

This interference extends beyond mere activities; it threatens something fundamental within us that distinguishes our character.

Chronic pain can create a disconnect, making individuals question whether the person in pain is genuinely them, altering not only their engagement in activities but their very sense of self.

In cases where younger individuals contend with musculoskeletal diseases, they may struggle with the misconception that such conditions are exclusively associated with older age.

This can lead to resistance to seeking treatment, as it implies an unwelcome identity shift. Some may even avoid treatment to sidestep the notion that they are prematurely "ageing".

As HCPs, we need to acknowledge these complex dynamics and work collaboratively with people with chronic pain to preserve not only their physical well-being but also their sense of self and identity.

06

Pain alters the natural psychological ageing process.

Chronic pain, especially when stemming from musculoskeletal conditions, presents a unique challenge as it disrupts not only our physical capabilities but also our ideas of ageing and personal development.

As we age, we accept that certain activities become more challenging, and our goals may need adjustment.

However, chronic pain thrusts us into a sudden and often unwelcome halt. It can be seen as accelerating the ageing process, robbing us of the comfort and ease of movement we once enjoyed.

Pain interferes with the natural ageing process, forcing us to confront a difficult question: Do we accept pain as an inevitable part of getting older, or do we take steps to address and ease it?

Chronic pain forces us into this internal struggle, challenging our perceptions of ageing and urging us to choose how we navigate this complex journey.

As HCPs, we need to engage in compassionate and supportive communication with people dealing with chronic pain, acknowledging its many impacts on their lives, including their sense of ageing and self-acceptance.

WHAT ARE

The 8 key *principles of pain.*

07

Chronic pain conflicts with the acute pain culture.

In our clinical practice, pain management often relies on using analgesics, reflecting the cultural acceptance of these medications in our society.

This analgesia culture has long held the belief that pain is typically short-lived, diagnostically valuable and that acute withdrawals are necessary for repair and improvement.

As we grow and develop, we are taught to view pain as a transient experience that we should push through, withdraw from temporarily, and ultimately emerge stronger.

Chronic pain operates on an entirely different level.

It is not short-lived, rarely diagnostically illuminating, and withdrawal from daily life can prove toxic and dangerous.

Chronic pain cannot be pushed through or avoided as it is continuous and ever-present.

We need to recognise and navigate these differences, adjusting our treatment strategies and approaches to address the unique challenges of chronic pain.

08

Pain is gendered.

Women, in general, feel more pain.

It's important that we confront the dissimilarities in pain management that often affect women and men differently.

Scientific reviews consistently show that women are more frequently diagnosed with chronic pain than men [REF].

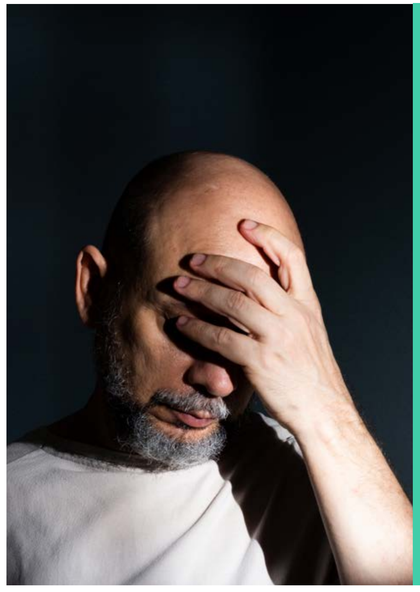
Paradoxically, despite their higher prevalence of pain, women often receive less effective pain relief [REF][REF][REF], fewer pain medications with opioids [REF][REF][REF], more antidepressants [REF][REF][REF] and mental health referrals compared to men [REF][REF][REF].

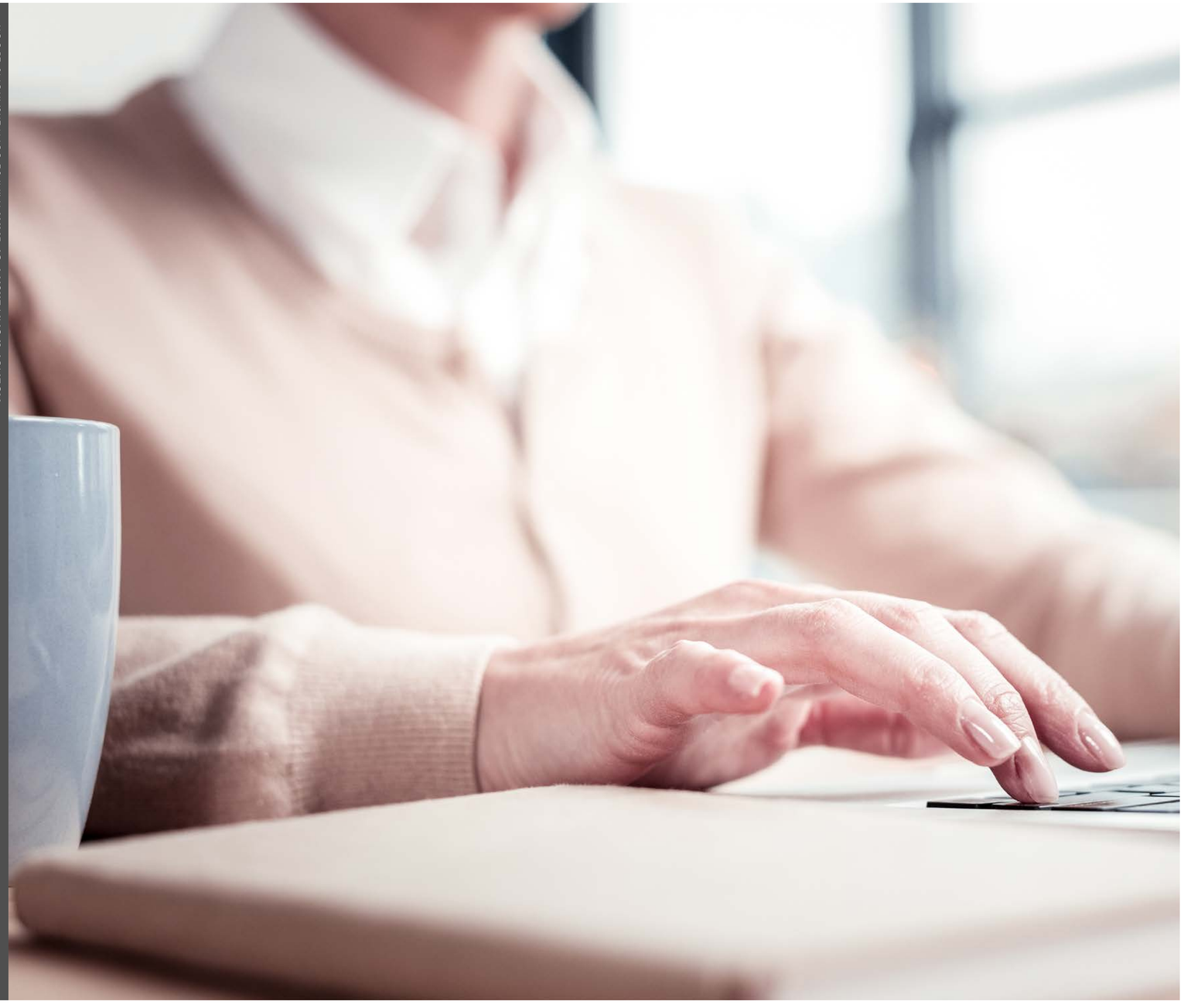
Moreover, it's troubling that most analgesic communication is targeted towards men, while many analgesic studies exclude women, even though they bear the brunt of chronic pain diagnoses.

On the other hand, men are less likely to report pain than women [REF][REF], which may stem from societal perceptions of masculinity.

For men with chronic pain, the suffering often poses a threat to their sense of masculinity, resulting in feelings of frustration, irritation, shame, and grief as they deal with the loss of what they perceive as a core aspect of their identity [REF].

It is our responsibility to address these gender-specific pain management challenges and ensure that everybody, regardless of gender, receives equal care and support.





Conclusion.

As we navigate the complexity of chronic pain, it's important that we collectively steer away from the terrible consequences of misunderstanding and underestimating this chronic condition.

By embracing a future where we prioritise empathetic communication, holistic treatment, and gender-sensitive care, we can guide individuals living with chronic pain to find the support, validation, and effective solutions they deserve.

Together, we can transform the invisible chronic pain crisis into a visible triumph of compassionate healthcare and improved quality of life.

Your *next steps.*

If you would like to hear more on the topic of pain research, contact Professor Christopher Eccleston.

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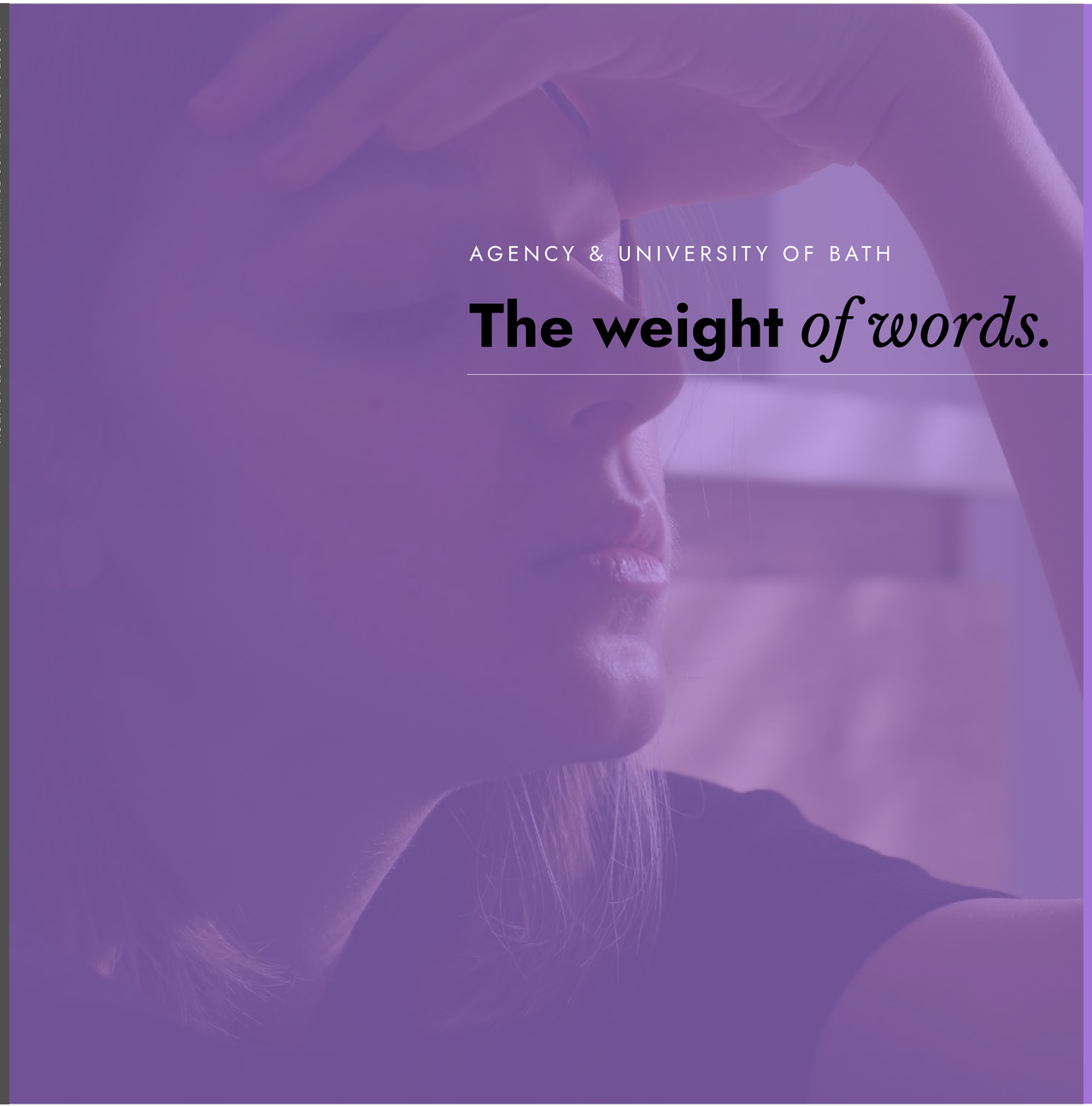


AGENCY & UNIVERSITY OF BATH

The weight *of words.*

INTRODUCTION

The weight *of words.*

The Power of Effective Communication in Healthcare

Have you ever wondered what impact your choice of words has on others?

In healthcare, effective communication is the foundation for successful patient-provider relationships, fostering trust, informed decision making and better health outcomes, especially in the context of chronic pain management.

Why does effective communication hold so much power?

For medical marketing managers and healthcare decision-makers (HDMs) who share a common goal of creating strong relationships between providers and individuals living with chronic pain, understanding the role of communication is vital.

At the heart of effective communication lies trust and credibility. When individuals feel reassured and well-informed, trust in their healthcare providers deepens. This trust, in turn, fosters adherence, as individuals are more likely to follow treatment plans, actively engage in their own care and make informed decisions.

By recognising this, we can create transparent and honest communication practices that establish strong patient-provider relationships, ultimately leading to improved health outcomes for those dealing with chronic pain.

Communication is a powerful tool that can eliminate fears, reduce anxiety and empower patients to actively participate in their treatment journey.

People value honesty in their interactions with healthcare professionals. They seek assurance that they are not being lied to, manipulated or made to feel small or patronised.

Honesty breeds trust, and trust is the basis on which the patient-provider relationship is built.

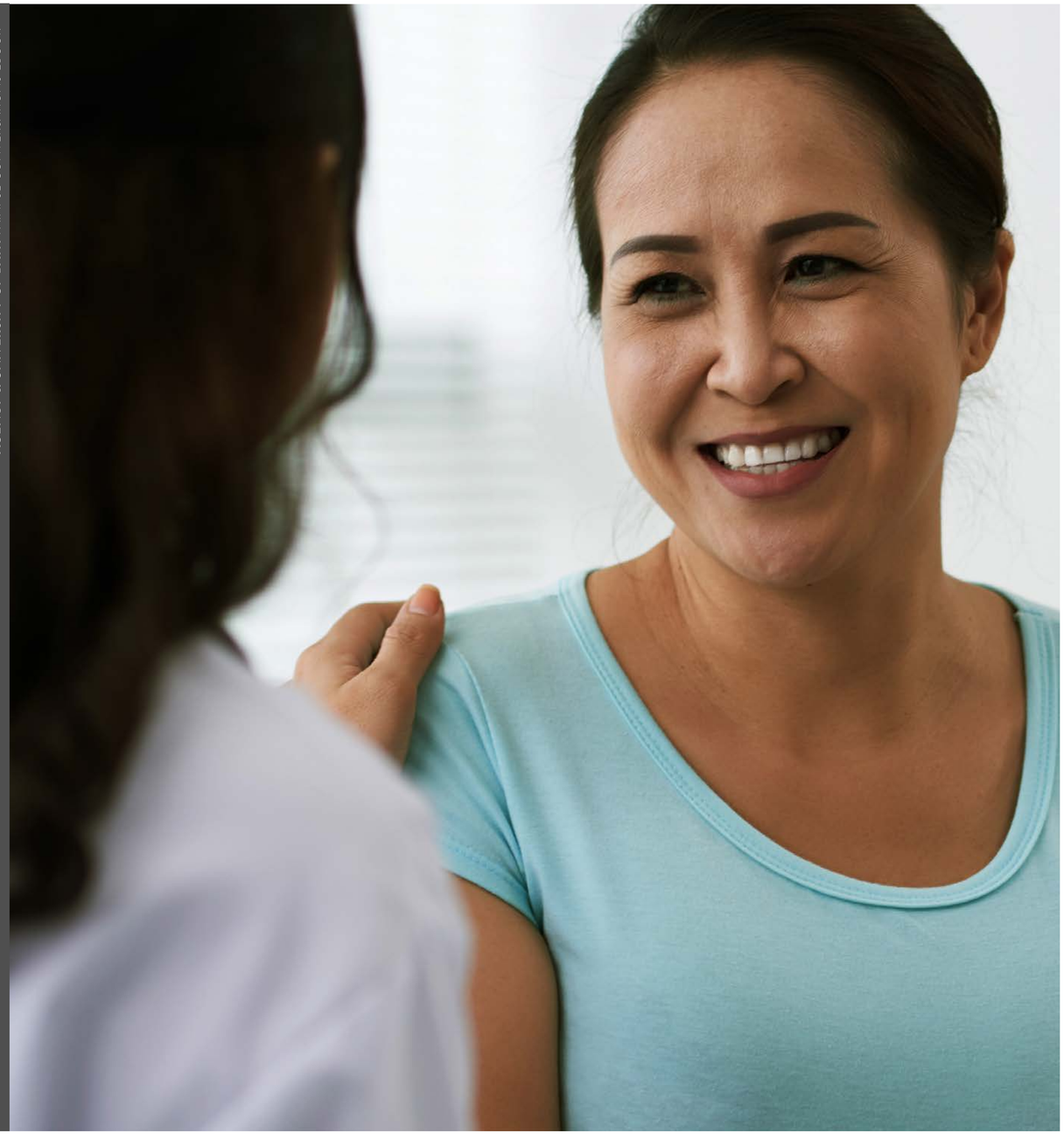
Why do the words we use to address people matter?

Words hold immense power, capable of provoking hope or doubt. It is essential to choose them wisely while ensuring that the information provided is accurate, clear and empathetic to instil trust and informed decision-making.

This article, inspired by the Painful Conversation Series hosted by Professor Christopher Eccleston from The Centre for Pain Research at the University of Bath and Dr Luana Colloca, an expert in Placebo from the University of Maryland in the US, will:

- Explore how communication contributes to the placebo and the nocebo effect.
- Address the current problems facing healthcare communication.
- Provide insight on how to effectively communicate with people with chronic pain.
- Highlight how the future of healthcare communications holds the potential for positive change.

By looking at the relationship between communication and these phenomena, you can gain invaluable insights into strategies and approaches that enact change, shape positive patient experiences and lead to improved health outcomes.



The balance *of communication.*

Finding the right balance between over-explaining and under-explaining is a skill that hinges on understanding the specific needs and concerns of individuals living with chronic pain.

It is important to understand that when and how we communicate can induce biological, psychological and behavioural changes in people, influencing overall outcomes.

The consequences of communication in healthcare can be highlighted by the following factors:

01 The placebo effect

02 The nocebo effect

03 Behaviour

04 Biological explanations

01

THE PLACEBO EFFECT

The power *of belief.*

The placebo effect is a phenomenon in which patients experience therapeutic benefits or symptom relief despite receiving an inactive substance or sham treatment. The placebo effect showcases the powerful role that our beliefs, expectations and perceptions play in influencing our physical well-being.

In a clinical trial comparing traditional vs sham acupuncture as well as clinician communication of positive vs neutral expectations among patients with knee osteoarthritis, no difference was reported between traditional vs sham acupuncture [REF][REF].

However, patients who saw optimistic clinicians trained to communicate a high expectation of benefit reported significantly more satisfaction with treatment and pain improvement than patients who saw clinicians who communicated a neutral expectation of benefit [REF].

Interestingly, a study investigating the relationship between judgments of surgeons' voice tone and their malpractice claims history found that by controlling for content, ratings of higher dominance and lower concern/anxiety in their voice tones could identify surgeons with previous claims compared with those with no claims [REF]. Emphasising a clear association between poor communication and malpractice in surgeons.

These findings demonstrate that relationships between patient-clinician communication and clinical outcomes are established partially by patient perceptions of the visit experience.

When healthcare professionals effectively communicate with patients, providing them with clear and honest information, positive expectations can be fostered, which enhances the placebo effect.

When people are reassured and well-informed about their treatment, they are more likely to develop positive expectations and beliefs in its efficacy. This positive mindset can activate neurobiological pathways and lead to actual physiological changes.

By optimising the placebo effect through effective communication, we can improve patient outcomes, increase treatment adherence, and promote overall well-being.

02

THE NOCEBO EFFECT

The dark side *of communication.*

The nocebo effect is the opposite of the placebo effect, as individuals experience negative side effects or worsened symptoms due to negative expectations or beliefs about a treatment [REF].

In this situation, patients who are not given active treatments may still experience the same side effects as those receiving active treatment solely because they expect them to occur.

This highlights the power of our expectations and perceptions.

The words used during communication with healthcare professionals play a pivotal role in the nocebo effect. Negative or alarmist language can heighten pain perception and intensify the patient's experience.

Additionally, poor communication that leads to fear, anxiety or misunderstandings can inadvertently contribute to the nocebo effect.

The influence of news coverage concerning the human papillomavirus vaccine is a great example of the nocebo effect.

Human papillomavirus vaccines have been proven to be safe and effective in reducing HPV infections that can lead to cervical cancer. However, due to negative media coverage, many people hold negative beliefs relating to the experience of unpleasant side effects following vaccination, affecting uptake [REF].

A study assessing the influence of news coverage on adverse event reporting in response to Gardasil vaccination in New Zealand over a 7.5-year period found that heightened levels of news coverage about the Gardasil vaccine increased adverse event reporting rates (73 reports per 100,000 doses). This was partially driven by increased Google search results [REF], illustrating that the news media plays a fundamental role in disseminating health information and influencing public opinion.

To mitigate its negative consequences, accurate information, clear explanations, and realistic expectations are required.

We should therefore provide transparent and comprehensive information, address concerns and offer reassurance to help minimise anxiety and alleviate the nocebo effect.

Creating an environment of trust and open communication is essential for individuals with chronic pain to receive the accurate information they need.

As discussed previously, when there is trust between healthcare professionals and patients, it fosters a sense of security and confidence in the healthcare journey.

Open communication allows patients to openly express their concerns, ask questions and actively participate in their own care.

By providing accurate information, we can help patients develop realistic expectations and make informed decisions about their treatment options. This promotes better health outcomes as patients are empowered to actively engage in their pain management, adhere to treatment plans, and effectively navigate their healthcare journey.

Establishing trust and open communication is crucial for ensuring that individuals with chronic pain receive the support and information necessary to promote positive expectations and achieve better overall health outcomes.

03

BEHAVIOUR

Why should we stop underestimating the power of language and communication?

Our behaviour is intricately linked to our perception and experience of pain and can be shaped by our thoughts and feelings.

The words we use and the commentary we receive can have a significant impact on our ability to shape our psychological responses to pain.

Negative or distressing language can actually exacerbate pain, while positive commentary has the potential to alleviate it [REF].

Our thoughts and the way we communicate with ourselves and others can play a crucial role in managing and mitigating pain, emphasising the importance of adopting a positive and empowering mindset.

04

BIOLOGICAL EXPLANATIONS

To understand pain, it is often valuable to explore the biological explanations alongside the psychological aspects.

Have you ever wondered how your mind and body interact when experiencing pain?

While psychological factors play a significant role in how we perceive and respond to pain, some individuals may seek a deeper understanding of the biological mechanisms involved.

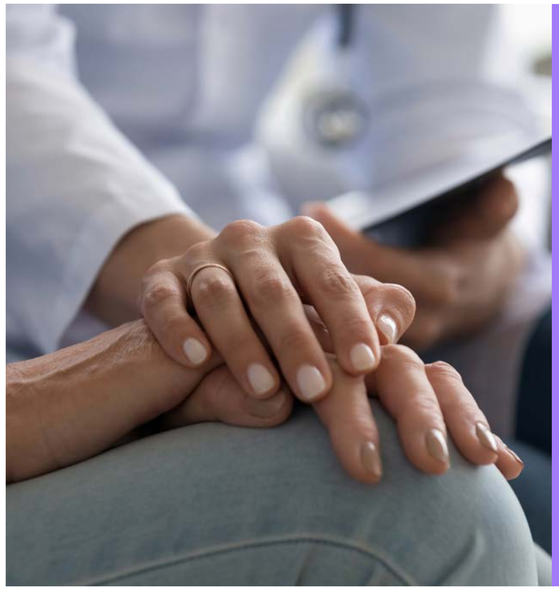
You may find satisfaction in learning about the interplay between their mind, body and the physiological processes underlying their pain experience. By delving into the biological explanations, individuals gain a more comprehensive understanding of the complex nature of pain, which can contribute to a sense of empowerment and informed decision-making regarding their healthcare.

Recognising the importance of both the psychological and biological aspects, healthcare professionals can provide holistic care that addresses the multifaceted nature of pain and meet the need of patients seeking a deeper understanding of their condition.

What are the potential pitfalls?

As people who want to enact a change in mindset, we must be cautious about this approach as over-explaining a concept to a patient may result in information overload and confusion, potentially triggering the nocebo effect.

Therefore, it is crucial that the right balance between over-explaining and under-explaining is struck in order to provide reassurance to people with chronic pain.



What will happen *if nothing changes?*

INCORRECT ASSUMPTIONS:

What are the common misconceptions surrounding the placebo effect?

Many people mistakenly believe that inducing the placebo effect is a simple task. However, harnessing the power of the placebo effect requires a deep understanding of the complex relationship between the mind and body.

Some individuals assume that the placebo effect is solely about deceit, involving the act of misleading individuals into believing they will experience positive outcomes. However, psychotherapy, which is widely recognised as a legitimate form of treatment, leverages similar psychological approaches to provoke positive changes in patients.

But is deception necessary?

In open-label placebo studies, where patients are informed that they will receive either a treatment or a placebo, analgesic effects have been observed, highlighting the importance and influence of communication alone [REF][REF].

This approach eliminates the need for deception, as information is not withheld from the patients.

Why is control important?

Involving patients in the decision-making process and offering them a sense of control allows effective communication and empowers individuals, leading to improved patient outcomes and a strengthened patient-provider relationship.

By acknowledging the broader applications of the placebo effect, we can appreciate its potential as a valuable therapeutic tool beyond notions of deception.

What will happen *if nothing changes?*

LACK OF TRUST:

What factors lead to a lack of trust in the healthcare system and its providers?

Information provided by healthcare professionals can be easily misunderstood by patients or vice versa, resulting in a breakdown of trust. This can leave individuals feeling invalidated and rejected, particularly when they feel their pain or concerns are being dismissed or minimised.

A study aiming to gather insight into patient-provider pain communication challenges found that there are communication barriers between nurses and patients that can affect patient outcomes [REF].

The results revealed that communicating with patients about pain is often inconsistent, subjective and a complex process [REF].

Why should we reassess how we address people?

The results mirror previous studies highlighting perception gaps between a patient's self-report of pain and a provider's assessment of the patient's pain, with the patient reporting greater pain severity and healthcare providers underestimating the patient's pain intensity [REF].

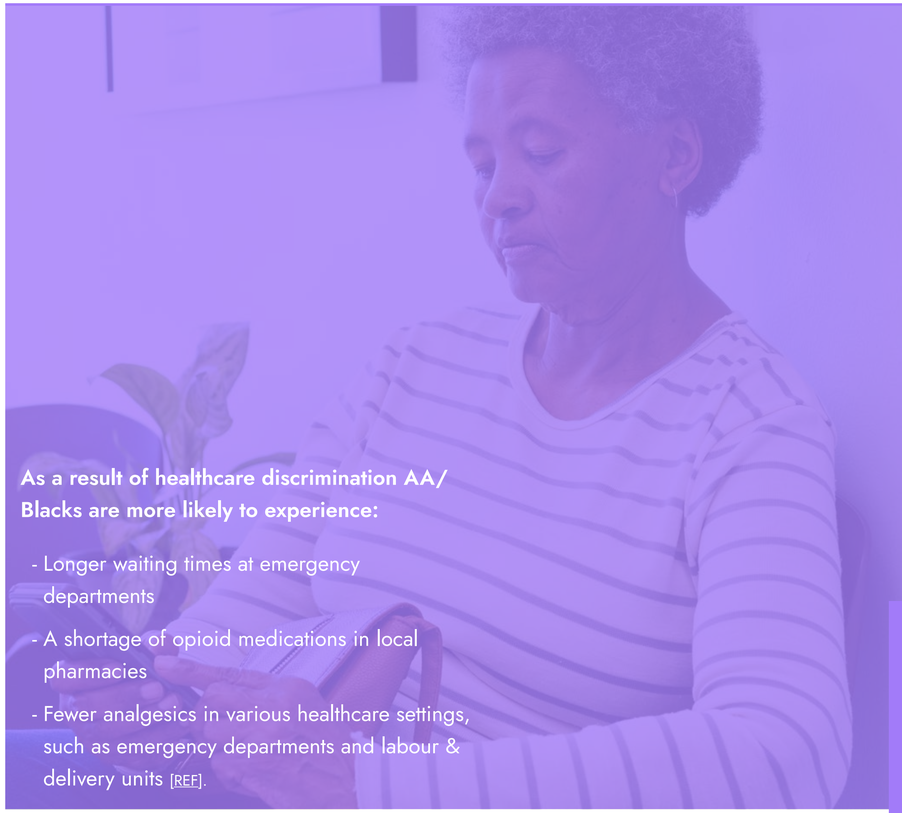
This finding underscores the need for improved communication practices in healthcare, particularly when it comes to discussing pain. It emphasises the importance of addressing these challenges to enhance patient-provider interactions and ultimately improve patient outcomes.

What happens when we encounter bias?

Experiences of healthcare discrimination, whether based on race, gender, or other factors, can erode trust in the system as a whole.

A study analysing the placebo effects in healthy and chronic pain participants who self-identified as either African American/black (AA/black) or white found white participants reported stronger expectations of pain relief, greater conditioning strength effects and placebo effects than their AA/black counterparts [REF].

The study illustrates how pain is unique to each individual and how false beliefs about pain perception between AA/Blacks and Whites may drive biased medical judgments in the healthcare setting [REF].

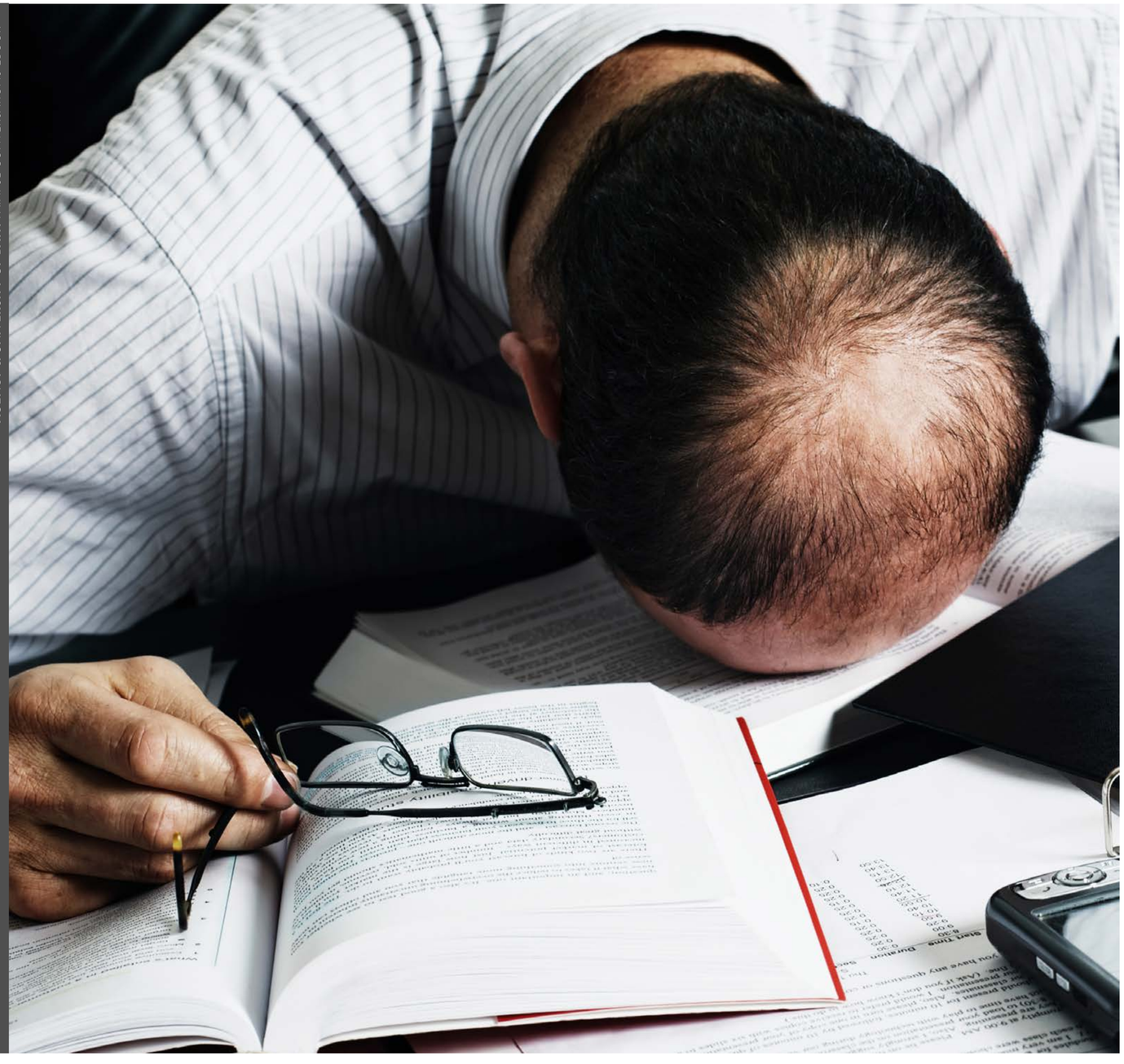


As a result of healthcare discrimination AA/ Blacks are more likely to experience:

- Longer waiting times at emergency departments
- A shortage of opioid medications in local pharmacies
- Fewer analgesics in various healthcare settings, such as emergency departments and labour & delivery units [REF].

When people encounter bias or unequal treatment, their confidence in healthcare providers and institutions can be severely compromised.

Addressing these issues and fostering trust requires us to actively listen, validate patient experiences and work towards eliminating healthcare disparities to rebuild and strengthen the patient-provider relationship.



What will happen *if nothing changes?*

INFORMATION OVERLOAD:

What are the consequences of information overload in healthcare?

Are we doing more harm than good?

While it is important to provide people with relevant information, an excessive amount of information can be overwhelming and counterproductive.

When individuals are bombarded with too much information, there is a risk of feeding false expectations or unrealistic beliefs about their pain or treatment outcomes.

Information overload can also trigger the nocebo effect, amplifying negative expectations and anxieties, leading to worsened symptoms and poor well-being.

To stop these detrimental effects, we must find the balance between providing necessary information and ensuring it is delivered in a digestible way.

By focusing on clarity, relevance and addressing peoples' specific concerns, we can help people navigate the complexities of their healthcare journey without overwhelming them with excessive information.

What needs *to change?*

TONE OF VOICE:

The tone of voice we use in healthcare communication is a crucial element that needs to change. When we talk to someone, it triggers biological, psychological and behavioural changes within them.

It is essential to recognise that people deeply appreciate honesty and dislike being deceived or made to feel inferior or belittled.

Effective communication goes beyond conveying information; it involves framing discussions correctly and using the right words.

For instance, consider the context of injections. When individuals are told they will experience a "sting" or "sharp pain" without being provided with a positive insight like "this is temporary,"their perception of pain or condition can worsen, triggering the nocebo effect. This emphasises the importance of reassurance in healthcare interactions.

How can words affect us emotionally?

Words used in communication can also cause emotional suffering, triggering feelings of rejection, invalidation, and isolation. The experience of being isolated with pain can intensify hyper fixation, causing individuals to focus more on their pain, heightening their suffering.

Effective communication requires careful consideration of the words we choose to ensure they convey empathy, understanding, and support. It is crucial to acknowledge that communication has the power to both harm and heal.

By incorporating honest and open communication into our conversations, validating people's experiences, and creating an alliance with them, we can reduce distress and improve painful situations [REF]. For example, saying, "It's going to be painful, but we are doing X, Y, Z to make the pain tolerable," can offer both the honesty and reassurance that people seek.

Ultimately, in healthcare communication, reassessment of tone of voice and word choice is vital to cultivate trust, enhance the patient experience and ensure positive health outcomes.

Bringing *people together.*

WHY SHOULD COLLABORATION BE ENCOURAGED?

Bringing people together is crucial for progress and innovation, particularly in breaking down the barriers that have been created between science, art, and philosophy in our society.

In order to move forward, it is essential that we strive to eliminate these barriers and encourage interdisciplinary collaboration.

Scientists, in particular, need to adopt a more open-minded approach and consider perspectives from other disciplines. Evidence suggests that being around people who are different from us makes us more creative, more diligent and harder working [REF], with interdisciplinary collaboration helping to identify gaps in knowledge and areas for further research [REF].

By bringing together scientists, artists and philosophers, we can create a meaningful exchange of ideas and foster a mutual understanding that transcends disciplinary boundaries, leading to fresh perspectives, innovative solutions, and a deeper understanding of complex issues.

By creating spaces for discussions and actively seeking out diverse viewpoints, we can adopt mutual understanding and create a shared vision for progress, even when tackling difficult or uncomfortable topics.

The merging of disciplines and thinking outside the box allows for greater creativity and expands the possibilities for transformative breakthroughs.

By addressing and openly discussing challenging topics, we can promote empathy, understanding and ultimately find better solutions.

Collaboration and bringing people together are key to dismantling barriers, expanding our perspectives, and creating a more inclusive and transformative society.

How can we *enact this change?*

RAISING AWARENESS:

Raising awareness among healthcare services and medical device providers, for example, about the importance of effective communication pre-intervention or prescription, is crucial for improving patient outcomes.

Effective communication at this stage sets the foundation for a positive patient-provider relationship and enhances patient understanding. Healthcare services and medical device providers play a vital role in shaping the communication strategies employed by healthcare professionals.

By increasing their awareness of the impact of effective communication, they can prioritise and advocate for practices that promote patient-centred care, informed decision-making and better treatment outcomes.

How can this be achieved?

Conducting workshops on the state of pain management and the importance of the consent of patients can provide valuable insights and promote an understanding of the challenges faced by individuals with chronic pain.

Organising workshops and training programs focused on effective communication strategies can equip healthcare professionals with the necessary tools to address chronic pain and build strong patient-provider relationships.

Publishing relevant content on platforms like LinkedIn can also help distribute knowledge and promote best practices in healthcare communication. These resources will ultimately support healthcare professionals in effectively engaging with patients and providing them with the information they need to make informed choices about their healthcare.

DISCUSSIONS WITH PATIENTS:

Striking the right balance between over-explaining and under-explaining is crucial to ensure that information is effectively conveyed to the target audience.

Patients value honesty, clarity and reassurance, and it is important to acknowledge that pain is a personal experience that goes beyond the scientific aspects of treatment [REF].

By actively listening to patients and tailoring communication to their individual needs, we can create trust and better understanding.

COLLABORATION:

Social interaction and meaningful conversations play vital roles in improving understanding and empathy. For best practice, we should actively engage in research on target audiences, including patients, to gain insights into their unique perspectives and needs.

Collaborations and discussions with experts from diverse fields, such as scientists, artists and philosophers, can offer fresh perspectives and lead to innovative approaches in healthcare communication.

By promoting interdisciplinary collaboration, we can create a more holistic and comprehensive understanding of pain and its management.

How can we *enact this change?*

MARKETING COMMUNICATIONS:

Marketing communications should accurately reflect the nature of pain and its treatment. It is essential to avoid creating unrealistic expectations that may negatively impact patient outcomes.

Clear and transparent messaging can help set realistic expectations and build trust between healthcare providers and patients. By aligning marketing communications with the realities of pain management, accurate information can be promoted, misconceptions can be removed, and the overall effectiveness of healthcare communication can be enhanced.

By implementing these strategies, we can begin to enact meaningful change in healthcare communications, promoting effective and compassionate care for individuals with chronic pain.

THE FUTURE

The significance *of effective communications.*

In this article, we aim to emphasise the significance of effective communication in healthcare and highlight the potential impact it has on patient outcomes.

We have discussed the placebo and nocebo effects, illustrating how communication can shape peoples' expectations and experiences. We have identified barriers such as lack of trust, information overload and the need for reassessment of tone of voice. These challenges can undermine the patient-provider relationship, hinder informed decision-making, and contribute to negative health outcomes.

By addressing these problems head-on by raising awareness, fostering collaboration and promoting transparent communication, we can bridge these gaps and create a healthcare environment that prioritises trust, control and informed decision-making.

By actively working towards better communication practices, we can elevate the standard of healthcare delivery and provide a future encompassing:

POSITIVE OUTCOMES:

Effective communication has the power to foster trust, instil confidence and create a supportive environment.

How can this help you?

When we communicate in a reassuring and empathetic manner, people are more likely to have positive expectations, leading to improved treatment outcomes [REF]. By highlighting clear and compassionate communication, we can enhance patient experiences and promote better health outcomes.

THE FUTURE

The significance *of effective communications.*

REDUCING THE NOCEBO EFFECT:

The nocebo effect, where negative expectations lead to adverse outcomes, can be mitigated through effective healthcare communication. We all have a part to play in providing accurate and clear information about treatments, potential side effects, and realistic expectations.

The PSY-HEART-I trial illustrated that brief expectation-focused psychological intervention (EXPECT) prior to heart surgery improved disability and quality of life six months after coronary artery bypass graft surgery (CABG) [REF].

EXPECT significantly reduced stress-associated biomarkers (i.e., adrenaline) after surgery and reduced inflammation after surgery and six months after surgery compared with the standard of care [REF].

By addressing fears, concerns and misconceptions, we can help minimise unnecessary harm, empower patients and improve treatment outcomes.

ESTABLISHING TRUST AND CREDIBILITY:

Why is trust the foundation of effective healthcare communication?

When patients feel reassured and well-informed, they are more likely to trust their healthcare providers, follow treatment plans and actively engage in their own care.

How can we establish trust?

Moving forward, we should prioritise transparent and honest communication practices to establish strong patient-provider relationships.

By building trust and credibility, we can create a supportive environment that facilitates open dialogue and collaboration.

PROMOTION OF INFORMED-DECISION MAKING:

Why is informed decision-making crucial for patient-centred care?

People have the right to be informed about their health conditions, treatment options and the associated risks and benefits.

Clear and unbiased communication enables individuals to make informed decisions about their healthcare.

What are the next steps?

Together we should ensure that healthcare professionals are trained to effectively communicate complex medical information in a manner that is understandable to patients.

By promoting informed decision-making, we empower individuals to actively participate in their healthcare journey.

The future of healthcare communications holds immense potential for positive change. By embracing effective communication strategies, medical marketing managers and HDMs can foster trust, reduce the nocebo effect, establish strong patient-provider relationships and promote informed decision-making.

These advancements will enhance trust, empower individuals with a greater sense of control and enable informed decision-making.

Your *next steps.*

If you would like to hear more on the topic of pain research, contact Dr Luana Colloca and Professor Christopher Eccleston.

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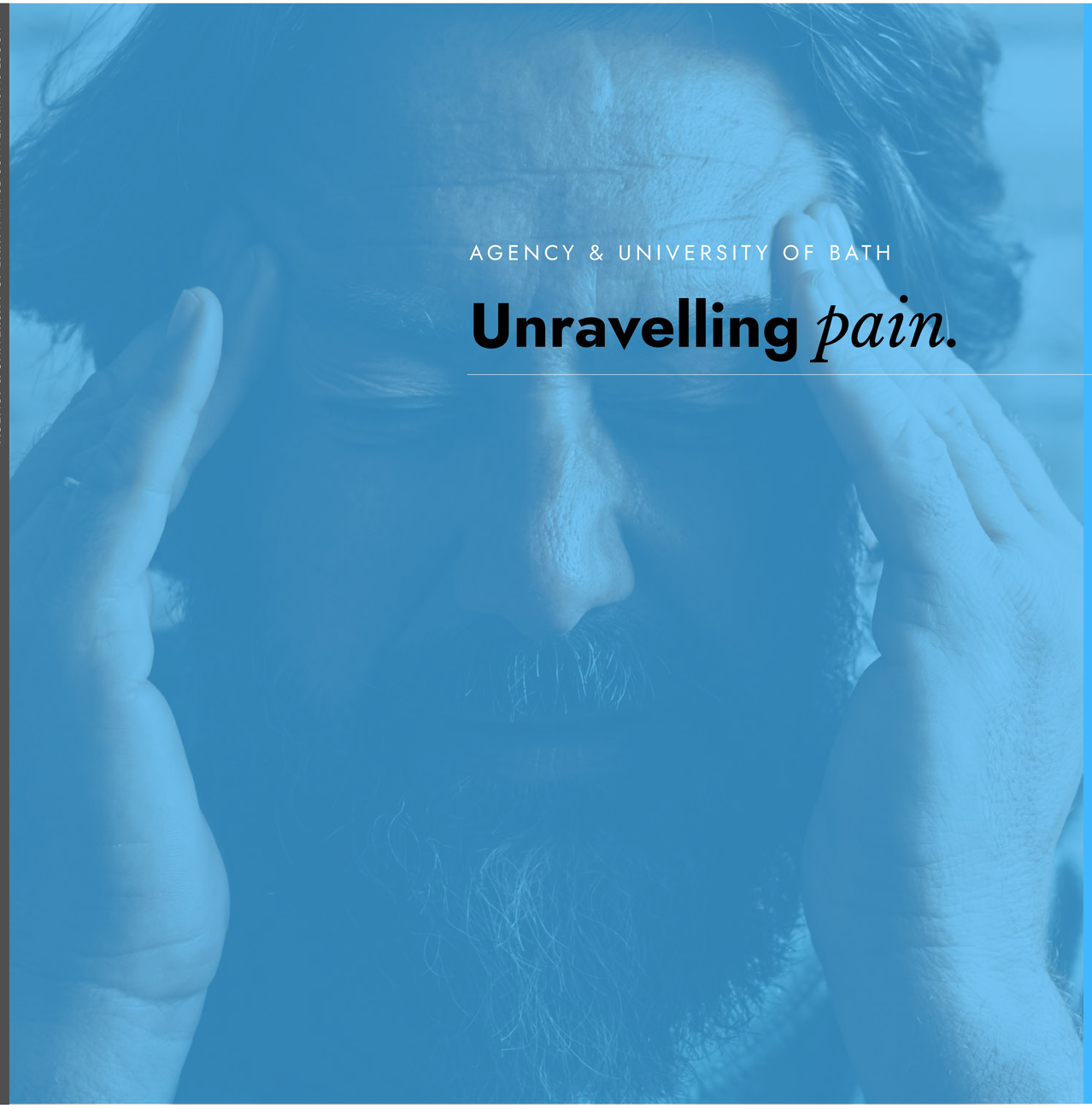

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Unravelling *pain.*

UNRAVELLING PAIN

A conversation about why *communication about pain is important.*

Have you ever heard people with chronic pain mention that their pain 'Is not fair'?

Chronic pain affects over a third of the UK population [REF]. This is just under 28 million adults.

Pain is an inherently tricky feeling to put into words. It is a lot more than just a physical sensation.

Psychological, emotional, and biological components are attached to it [REF].

These components can influence the intensity at which people feel pain.

Depending on multiple factors, chronic pain patients may feel that their situation and pain are unjust and unfair.

Chronic pain could influence a person's daily life as it could affect how they see the world, whether the world is unjust and unfair or magnifying future threat values of the pain stimulus.

Additionally, some chronic pain patients experience this pain despite having no physiological marker for it.

This lack of physiological markers makes it difficult for healthcare professionals (HCPs) to diagnose and treat the patient's chronic pain. It is also difficult for people to convey this pain to HCPs and loved ones.

THE LACK OF VERNACULAR IN THE TOPIC OF PAIN COMMUNICATION:

The topic of pain and its descriptions must have a well-defined vernacular built around it to communicate it.

For one, pain is subjective to everyone and depends on an individual's physiological, emotional, and cognitive differences [REF].

Pain being subjective means that it can't be directly observed by those not experiencing it [REF].

The minimal descriptive language to express the nuances of pain, such as "sharp", "throbbing", or "burning", and the use of metaphorical expressions only shows a basic description of the sensation and often fall short of fully encapsulating the feeling.

What does the lack of language regarding pain cause?

This inability to communicate their suffering makes the person's loved ones and HCPs unable to understand the person's chronic pain due to it being difficult to describe.

The inability to understand a person's chronic pain makes it difficult for loved ones and HCPs to empathise and treat it.

This lack of understanding isolates people with chronic pain, making them feel frustrated and misunderstood by HCPs and loved ones, subjecting them to an unjust situation.

Describing pain is only possible with a language to communicate it effectively.

This lack of communication could lead to HCPs misdiagnosing people with chronic pain leading to ineffective treatments to control their pain.

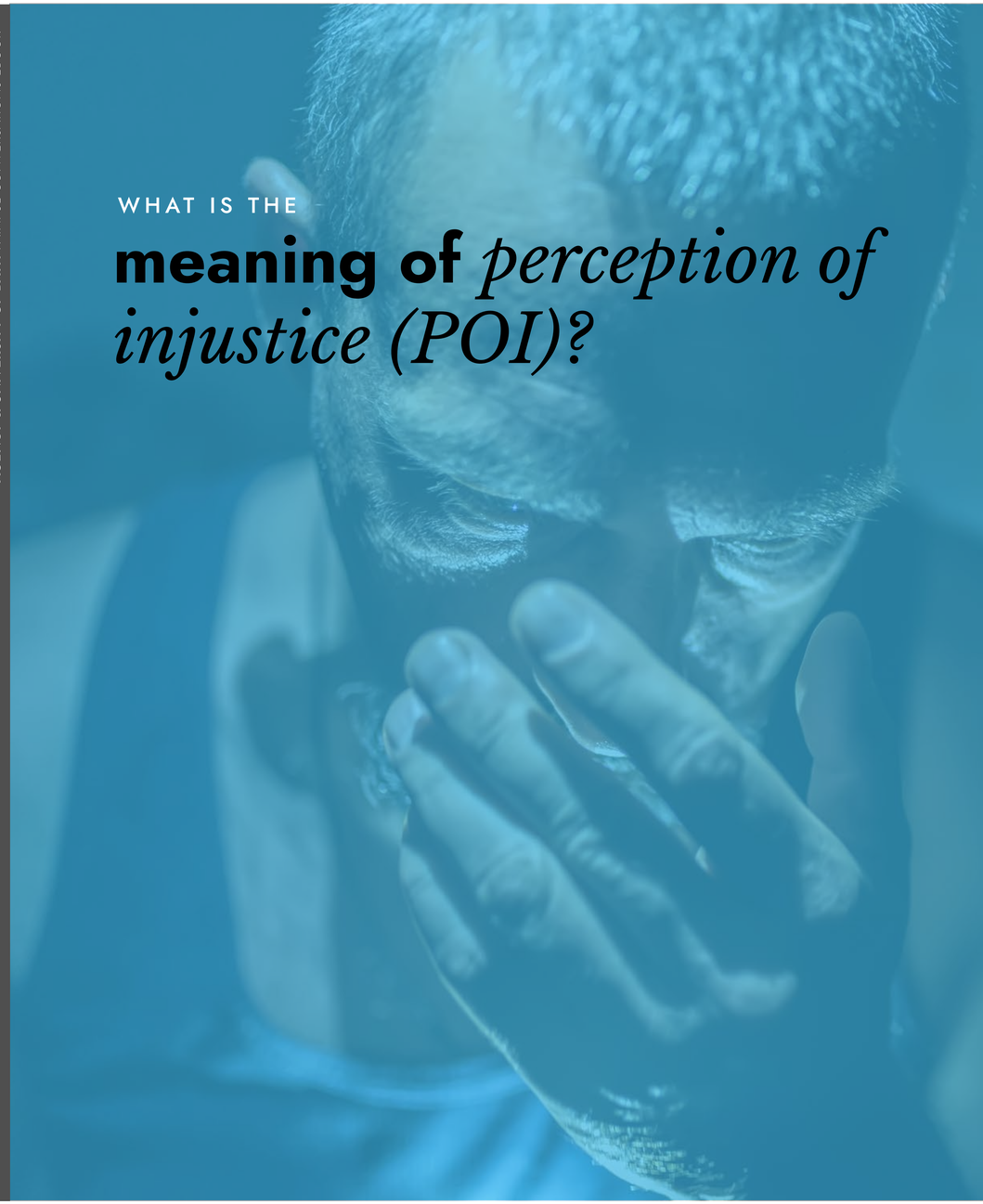
This leads to further isolation as the person with chronic pain believes no one understands their situation.

The culmination of all these factors could result in people with chronic pain no longer trusting any offer of potential treatments, no matter how well-evidenced, as they feel that no one understands their pain, therefore 'How can people help them?'.

As a result, we need to find more effective ways to communicate not only with patients with chronic pain but with their loved ones, the general public, and HCPs as well so they would be able to understand what a person with chronic pain is experiencing to prevent isolating them and increase recovery speed.

This article will:

- Explore the link between people with chronic pain and psychosocial factors such as perceptions of injustice and catastrophising thinking.
- Address how high perceptions of injustice can affect people with chronic pain, healthcare professionals, and companies.
- How can effective medical communication and other strategies help with this problem?



WHAT IS THE

meaning of *perception of injustice (POI)?*

Perception of injustice is a terminology used in a psychosocial setting. According to Sullivan, Scott, and Trost:

> Pain-related injustice perception is conceptualised as a cognitive appraisal reflecting the severity and irreparability of pain- or injury-related loss, externalised blame, and unfairness [REF].

Perceptions of Injustice are measured using the Injustice Experiences Questionnaire (IEQ) developed by Dr Sullivan and his team [REF].

Dr Michael Sullivan also mentions that:

> Perceived injustice has been shown to contribute to adverse pain outcomes independent of the variance associated with other pain-related psychosocial factors such as pain catastrophising and fear of pain [REF].

WHAT DRIVES HIGH LEVELS OF POI?

A study by *Scott et al.* aimed to systematically investigate the sources of injustice in patients following painful musculoskeletal injury [REF].

In this study, participants with whiplash injuries in motor accidents addressed various sources of injustice. This includes the other vehicle's driver, the HCP, the insurer, and family members.

The study found that participants were more likely to identify the insurer and HCPs as the primary sources than the person responsible for the accident.

Whilst insurers and HCPs do not intend to contribute to psychosocial risk factors that result in a longer recovery, it does highlight the need for a change in procedure to avoid contributing to the emergence of perceptions of injustice.

TRAIT-LIKE-CHARACTERISTICS OF POI

Recently, there has been evidence that perceptions of injustice have trait-like characteristics.

Whilst it is possible to change a person's behaviour, it is challenging to alter trait-like characteristics.

Yakabov et al. mentioned that perceived injustice could be construed as a dispositional variable [REF]. This would mean that perceptions of injustice are unique responses to situations that result from one's own experience.

Additionally, *Yakabov et al.* studies highlight that trait-perceived injustice might reflect tendencies to see adverse events as injustice and is associated with higher ratings of pain intensity, pain behaviour, sadness and anger, and pronounced display of pain behaviour [REF].

PERCEPTIONS OF INJUSTICE IN A WORKPLACE SETTING

Perceptions of injustice can be measured in various ways in a workplace setting. Examples include fair play, promotion, and work flexibility.

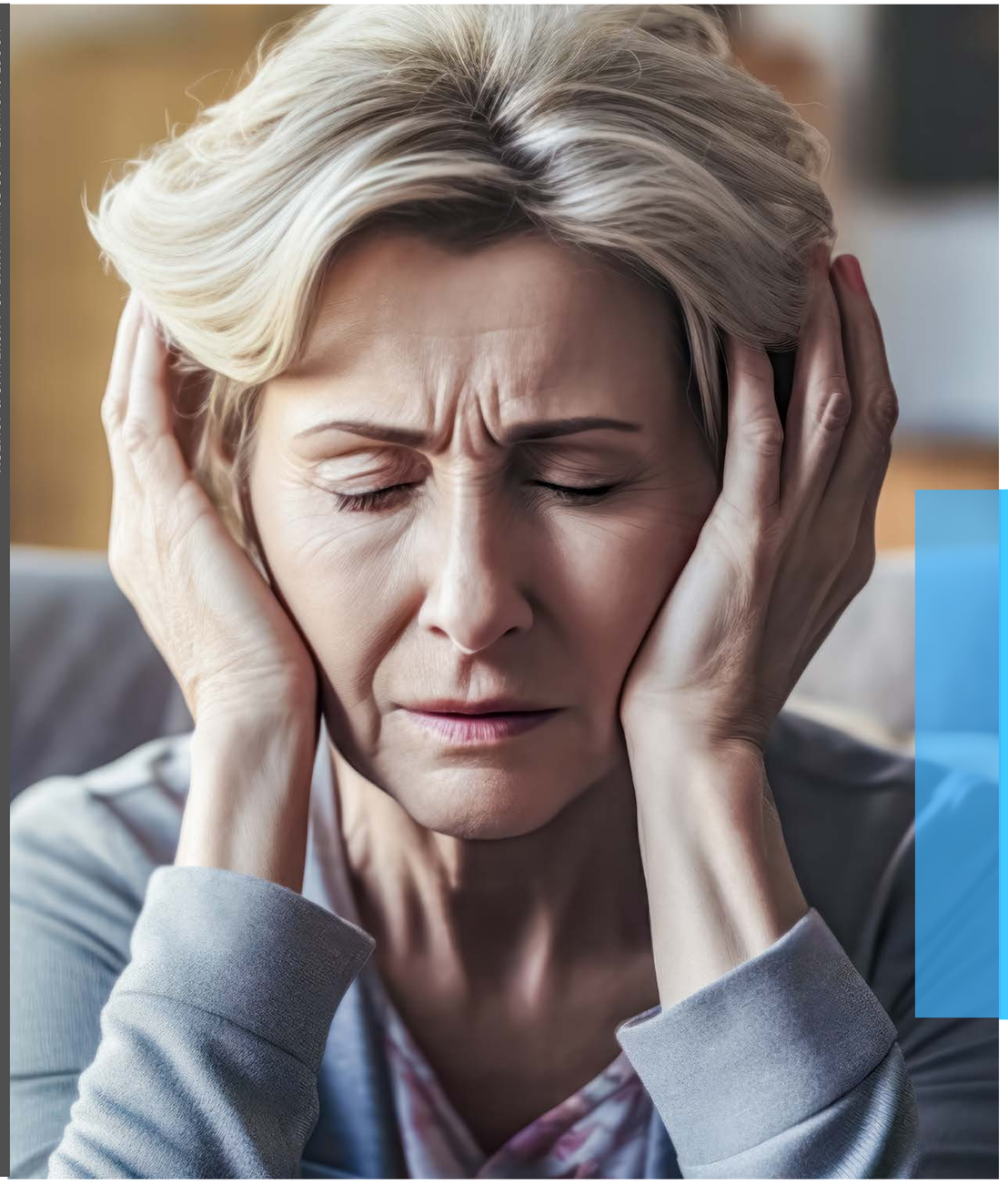
McParland, Gasteen, and Martijn Steultjens found that although men were satisfied with pay, male employees with chronic pain had lower perceptions of distributive justice regarding rewards such as recognition, promotion or benefits [REF].

Whilst some outcomes may be set, employees with chronic pain may perceive that other, more flexible outcomes and opportunities are withheld due to their pain conditions [REF].

McParland et al. mentioned that this finding is consistent with other studies. This demonstrates individuals with chronic pain can feel under threat of being stigmatised at work [REF][REF].

Additionally, *McParland et al.* suggest that employees with chronic pain may have weaker perceptions of distributive justice reflected on issues associated with working conditions [REF].

This includes flexible work hours, adjustment to the type of work, and working hours needed to manage pain.



WHAT IS

catastrophic *thinking?*

Imagine having chronic pain that interferes with your life and changes your perception of yourself.

No matter what you do, the pain doesn't disappear, and HCPs can't find the reason behind your pain.

You don't feel understood because you cannot effectively communicate your experience to everyone.

As a result, you start reacting with extreme caution when you suspect something may cause further pain.

This is how catastrophic thinking (CT) starts. It is "an exaggerated negative mental set brought to bear during actual or anticipated painful experience" [REF].

This psychosocial construct is measured using the pain catastrophising scale (PCS), encompassing the three critical factors associated with CT: helplessness, rumination, and magnification [REF].

This helplessness and rumination of CT seem to come from depression, and the magnification factor comes from patients' anxiety.

Literature shows that CT is associated with a substantive magnitude of constructs, such as anxiety and depression [REF] [REF].

Additionally, CT is associated with a temporal summation of pain and a greater inflammatory response [REF][REF].

As mentioned earlier, several studies suggest that pain catastrophising impacts pain outcomes similarly to perceptions of injustice [REF][REF].

How does the perception of injustice *affect people with chronic pain?*

MENTAL HEALTH:

Trost et al. investigated the association between perceived injustice and psychological outcomes, such as depression and post-traumatic stress symptoms, among individuals in rehab following spinal cord injury (SCI) [REF].

It was found that perceived injustice was significantly associated with depression and post-traumatic stress symptoms.

These findings were supported by similar studies on patients with musculoskeletal pain and fibromyalgia [REF][REF].

It was also found that anger inhibition mediates the relationship between perceived injustice and depression.

This relationship between depression and anger inhibition has been previously demonstrated [REF] [REF]. The finding is in line with previous research by *Scott et al.*, who found that anger inhibition partially explains the association between perceived injustice and depression [REF].

CORRELATIONS BETWEEN PERCEIVED INJUSTICE AND SEVERE PAIN INTENSITY:

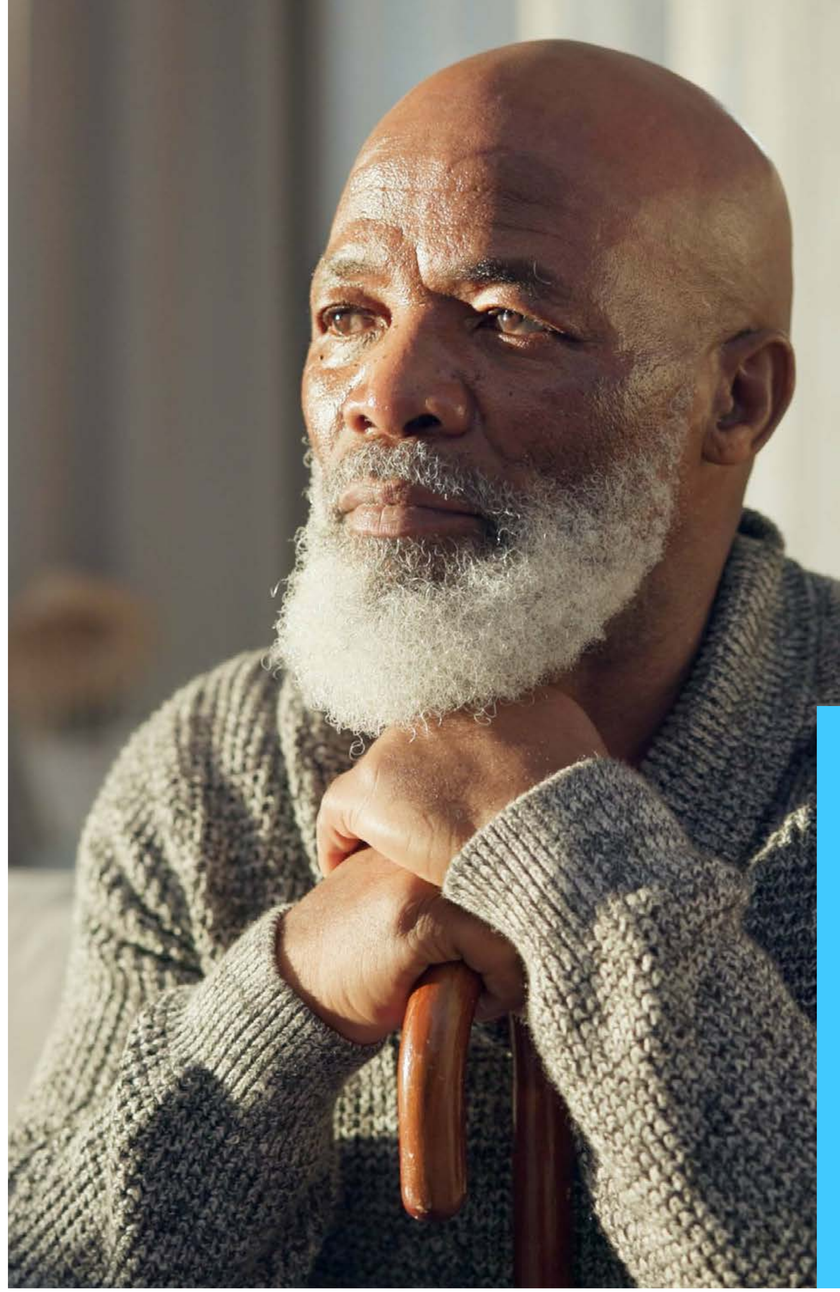
While most studies correlate with pain intensity and POI, not all do [REF].

Silje Endresen Reme et al. found most study participants have an overlap between perceived injustice and displayed severe pain intensity [REF].

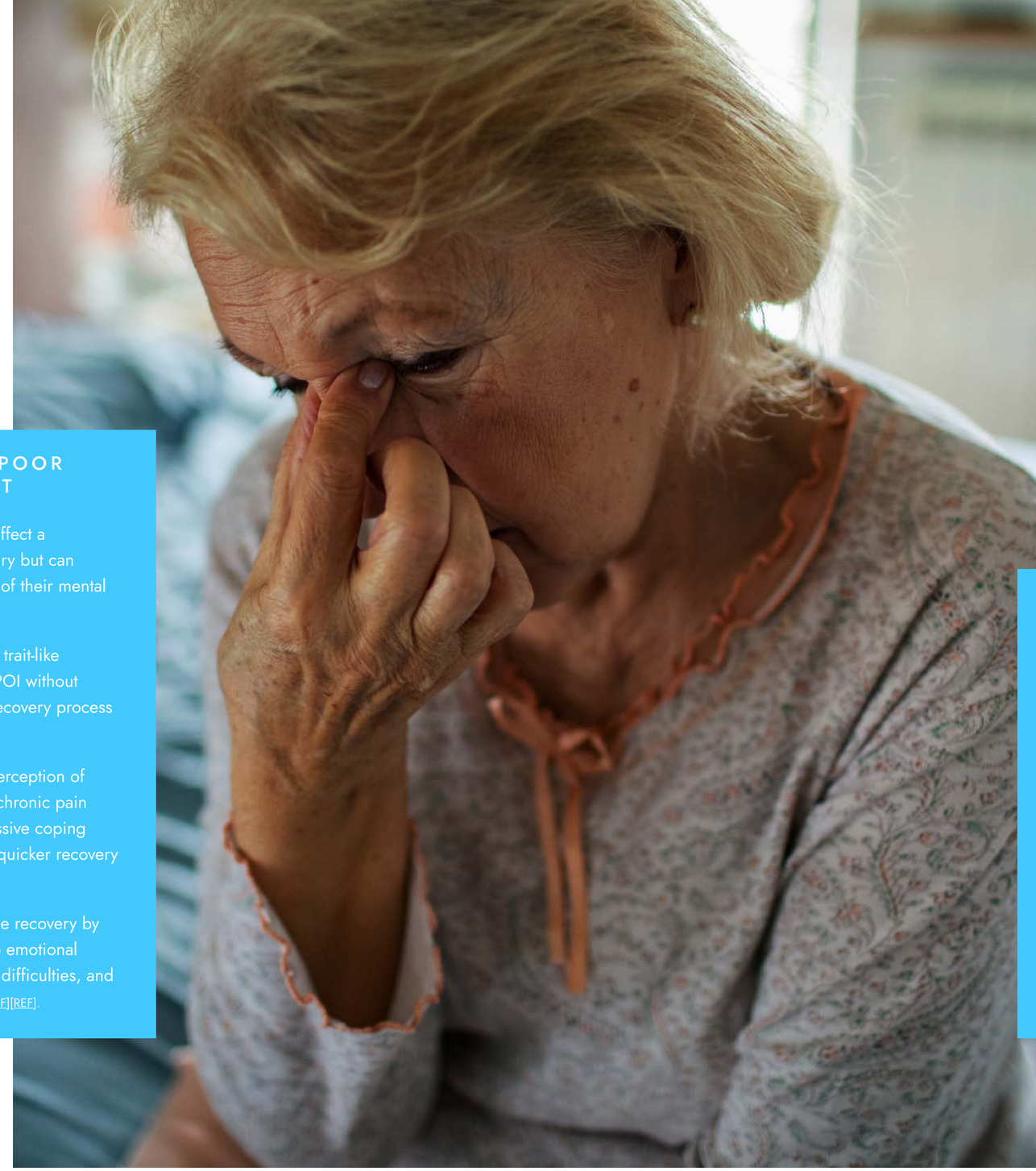
However, not all participants with extreme pain intensity showed high levels of perceived injustice.

The study concluded that extreme pain intensity could be present without high levels of injustice, but high levels of perceived injustice rarely present without extreme pain intensity.

Therefore, pain-related injustice appears to be a unique feature inherent in some patients with extreme pain and should not be considered another expression of extreme pain intensity.

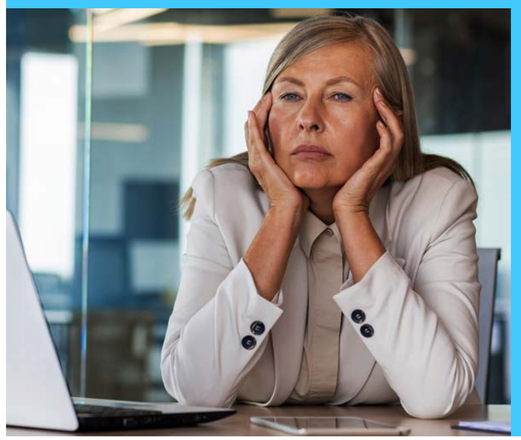


How does the perception of injustice *affect people with chronic pain?*



AFFECTING WORK PRODUCTIVITY

Perceived injustice has been associated with greater chronicity and severity of pain, prolonged work disability, reduced functioning, the persistence of symptoms of depression and post-traumatic stress, heightened displays of pain behaviour, and medication use [REF].



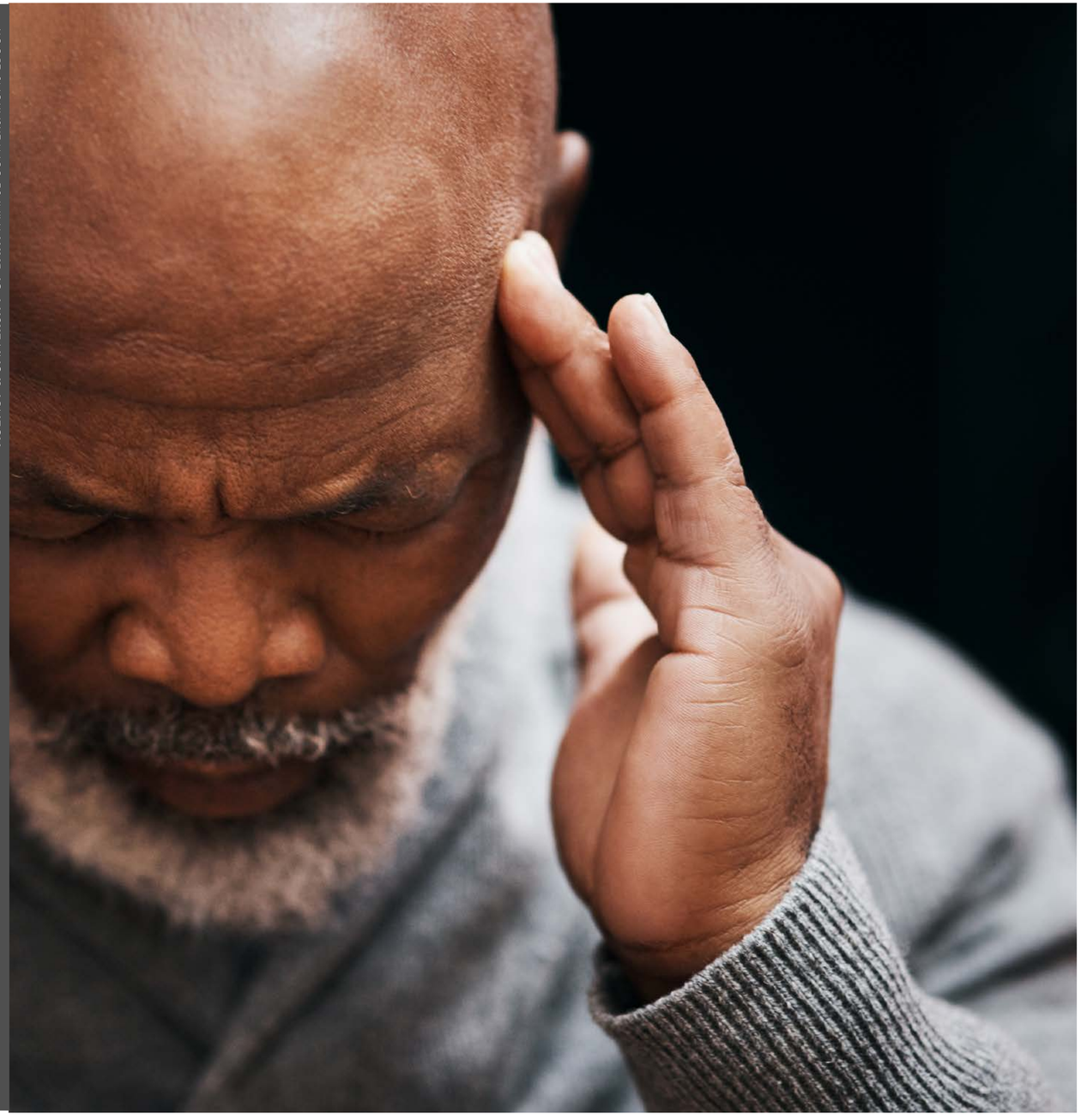
DELAYED RECOVERY/POOR RESPONSE TREATMENT

Perceptions of injustice don't only affect a person's physical recovery after injury but can also negatively impact the recovery of their mental health as well.

Carriere et al. mention that POI has trait-like characteristics that could augment POI without eliciting events and impeding the recovery process [REF].

Scott et al. mentioned that a high perception of injustices could cause people with chronic pain to feel "stuck" and thus result in passive coping mechanisms that do not facilitate a quicker recovery [REF].

Perception of injustice could impede recovery by leading people with chronic pain to emotional distress, attentional disengagement difficulties, and maladaptive coping mechanisms [REF][REF].



How does the perception of injustice *affect HCPs?*

HIGHER PERCEPTIONS OF INJUSTICE MEAN A SLOWER RECOVERY RATE:

HCPs want their patient to be in less pain as soon as possible and to recover comfortably.

As mentioned earlier, a high perception of injustice could affect the recovery of patients with chronic pain.

This would mean that patients would be in pain longer than they should.

IMPEDING DUTY OF CARE:

Not understanding the cause and severity of a person's chronic pain could lead to a misdiagnosis and subsequent undertreatment.

Undertreatment of a person's chronic pain would mean the pain remains, resulting in an unmet HCP duty of care to their patients.

Additionally, the chronic pain remaining could affect a person's decision to go to an HCP.

They could be more hesitant to receive future treatment, further exacerbating the pain and problem, potentially making it more challenging to treat.

How do perceptions of injustice *affect companies?*

REDUCED WELL BEING:

Employees with chronic pain and a high perception of injustice may experience heightened stress, anxiety, and emotional strain, such as higher levels of anger [REF][REF].

IMPAIRED JOB PERFORMANCE:

As mentioned previously, high levels of perceived injustice have been associated with prolonged work disability.

This could be due to high POI increasing the severity of pain and is correlated with symptoms of depression and post-traumatic stress.

Imagine yourself trying to produce a high level of work while you are in intense pain and with your mental health deteriorating.

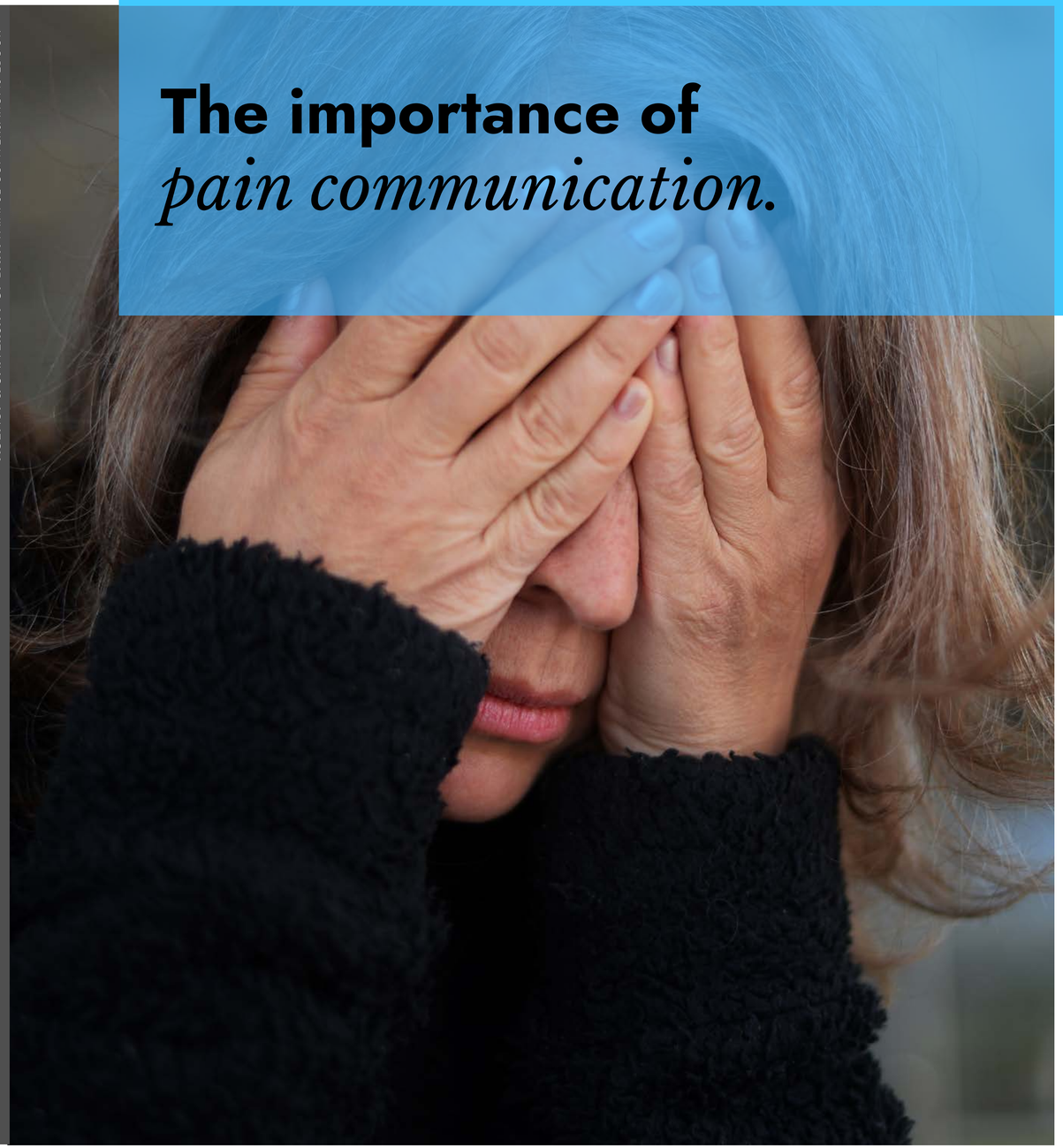
It would be next to impossible to accomplish work tasks efficiently.

HEALTHCARE COSTS:

Employees with a high POI due to chronic pain may delay seeking any future necessary healthcare services due to mistrust of HCPs' treatments.

This could exacerbate health issues and increase healthcare costs for employees and the company.

The importance of *pain communication.*



To effectively communicate about pain, HCPs need to pay attention to information sought across different modalities.

These include speech, nonverbal pain behaviours, and co-speech gestures.

However, it is to be noted that although these modalities play a significant role in pain communication, it is more complex than that, and several factors influence communication.

These factors include different experiences of pain between people, the nature of the pain, and social and cultural context [REF][REF][REF].

The level of communication about pain can be further suppressed or exaggerated depending on factors such as cultural norms, conditioning or reinforcement, and the interests of the person with chronic pain [REF][REF].

A study by Rowbotham et al. found that participants at higher pain intensity find it more difficult to communicate verbally about their pain [REF].

At the same time, the study found that the more intense the pain is, participants produced significantly longer verbal pain descriptions and more co-speech gestures [REF].

By not describing the pain adequately and receiving improper communication about pain, HCPs may inadvertently under-assess or misdiagnose patients with chronic pain.

This would result in patients not receiving proper treatment, thus remaining in intense pain. Even worse, this could create a future aversion to further treatment.

The importance of *pain communication.*

THE CHRONIC PAIN PARADOX:

David M. Morris wrote in his book The Culture of Pain that [REF]:

'Chronic pain constitutes an immense invisible crisis at the centre of contemporary life.'

This sentence encapsulates the paradox on the topic of chronic pain that despite it being an 'immense crisis', it remains 'invisible'.

John M. Hyson mentioned that chronic pain does not receive the same media attention as other conditions such as cancer, AIDs, or tuberculosis [REF].

John M. Hyson further explained that it is not seen as a public health problem because it is not fatal, has no biological purpose, and works in secret.

A DIVISION IN PAIN COMMUNICATIONS:

There is some level of division between the levels of chronic pain communication.

This division is between chronic pain caused by a known condition and chronic pain without physiological markers.

For chronic pain caused as a result of a condition such as osteoarthritis, there is a level of understanding of the underlying mechanisms of the pain.

It enables HCPs to objectively assess and quantify the pain's severity to a certain level, allowing for a more accurate pain management strategy.

Although there still isn't a language to encapsulate the entirety of the patient's pain experience, it still provides a foundation for discussions between the person with chronic pain and HCPs for clear explanations of the origin, progression, and potential treatment.

However, for chronic pain with no physiological markers, without knowing the source and underlying mechanisms causing the pain, HCPs would treat the patient with no clear goal of solving the root of the problem.

Not knowing what needs to be treated to reduce the patient's pain eliminates any way for HCPs to build a foundation of discussion between them and the chronic pain patient.

Establishing a *line of communication.*

A high level of perception of injustice is slowing the recovery process, isolating people with chronic pain, and making them feel that they are in an unjust situation. The inability to correctly communicate with people about their pain due to the lack of language could cause people to feel that there is no one who can empathise with them. To tackle this problem, we have to find effective ways to communicate the topic of pain with the general public, HR managers, and HCPs.

EFFECTIVE COMMUNICATION

The first step is to effectively communicate better with patients with chronic pain and with the general public as a whole.

According to a review, people with chronic pain view effective communication as listening to, encouraging, understanding, and understanding why the patient is in pain [REF].

A study by Porter et al. shows that patients with OA reported higher levels of self-efficacy for pain communication are associated with lower levels of pain and physical and psychological disability and pain catastrophising [REF].

The study also stated that partners of people with chronic pain reported lower levels of negative affect, the higher the level of self-efficacy for pain communication.

The importance of effective pain communication is further emphasised in the guidelines of the National Institute for Health & Care Excellence (NICE).

To quote from NICE Guideline No. 193:

"The evidence in this review suggested that the features of communication style were of vital importance in the context of consultations with people with chronic pain."

Additionally, we can raise awareness and challenge misconceptions about chronic pain by utilising strategic communication approaches.

We would also promote a more empathic, compassionate, and supportive approach to people with chronic pain.

Examples of such strategic communication approaches include:

EDUCATIONAL CAMPAIGNS

The development and execution of comprehensive educational campaigns can raise the topic of chronic pain and challenge any misconceptions.

This approach would involve the creation of materials such as brochures, pamphlets, websites, and videos which will provide accurate information on chronic pain for the education of the general public on the subject.

To show how an educational campaign can help, according to *Nkhata et al.*, just the campaign message 'stay as active as possible' is enough to increase study participants' awareness and influence health beliefs and healthcare utilisation behaviours [REF].

Examples of educational campaigns on chronic pain include Flippin Pain, a public health campaign to change how we think about, talk about, and treat persistent pain, and the National Awareness Campaign, which is associated with the British Pain Society.

Establishing a *line of communication.*

CONTENT CREATION

By writing high-quality and empathetic content and highlighting patient stories and experiences, we can raise awareness among the general public and HCPs on how people with chronic pain feel.

This content would include a personal narrative to humanise the issue and foster understanding.

By doing so, we can raise awareness of chronic pain and the injustices people with chronic pain feel, validate their feeling of pain, and provide peer support.

MULTIMEDIA PRODUCTIONS:

Using podcasts, animations, and video series can delve into the experience of people with chronic pain.

Examples of multimedia productions on chronic pain are a film starring Jennifer Anniston called Cake and an episode in the series 'House' called Painless [REF][REF].

Both of these productions shed light on the life of a person with chronic pain and how living with long-term pain could affect a person's mental and physical health.

The use of this type of resource would be able to show the lives of people living with chronic pain to foster empathy and promote a deeper understanding of the issue.

SOCIAL MEDIA ENGAGEMENT:

Around 60% of the world uses social media, making it an invaluable tool for raising awareness.

Social media can initiate conversations about chronic pain, share stories of people with chronic pain, dispel myths, engage with the general public, and provide thought-provoking content.

Changing the *language.*

In the insight 'The Weight of Words', we discussed how the words HCPs used in a clinical setting could impact patients.

It is no different in this setting as well. Sometimes patients can feel blamed for their pain if the right words are not used.

For example, catastrophising thinking is used as a terminology for HCPs.

However, when a person with chronic pain hears this in their diagnosis, they could feel that the HCPs are saying they are overreacting to the pain or that their pain is not real.

The NICE guidelines state that:

"Moderate quality evidence from four studies suggested that the use of lay language and understandable terminology is helpful when communicating with people with chronic pain."

This does not apply solely to HCPs; we should be mindful of our language.

Phrases such as "You don't look like you are in pain", "It can't be that bad", or "It is all in your head" could instil a sense of blaming in people with chronic pain.

We should try empathising with people in chronic pain instead of invalidating their feelings.

Changing the *language.*

AN EARLY EDUCATION OF PAIN AND AWARENESS IN THE WORKPLACE:

Pain catastrophising is a common construct measured in paediatric chronic pain, and perceived injustice is associated with pain and functional outcomes in children and adolescents with chronic pain [REF][REF].

A study on paediatric chronic pain patients with a mean age of 15 years by Miller et al. found that perceived injustice was associated with higher pain intensity, catastrophising, functional disability and poorer emotional, social, and school functioning [REF].

All of these effects could be detrimental to the growth and development of adolescents.

Awareness of chronic pain in the educational system could create a future generation that is more empathetic and understanding of people with chronic pain.

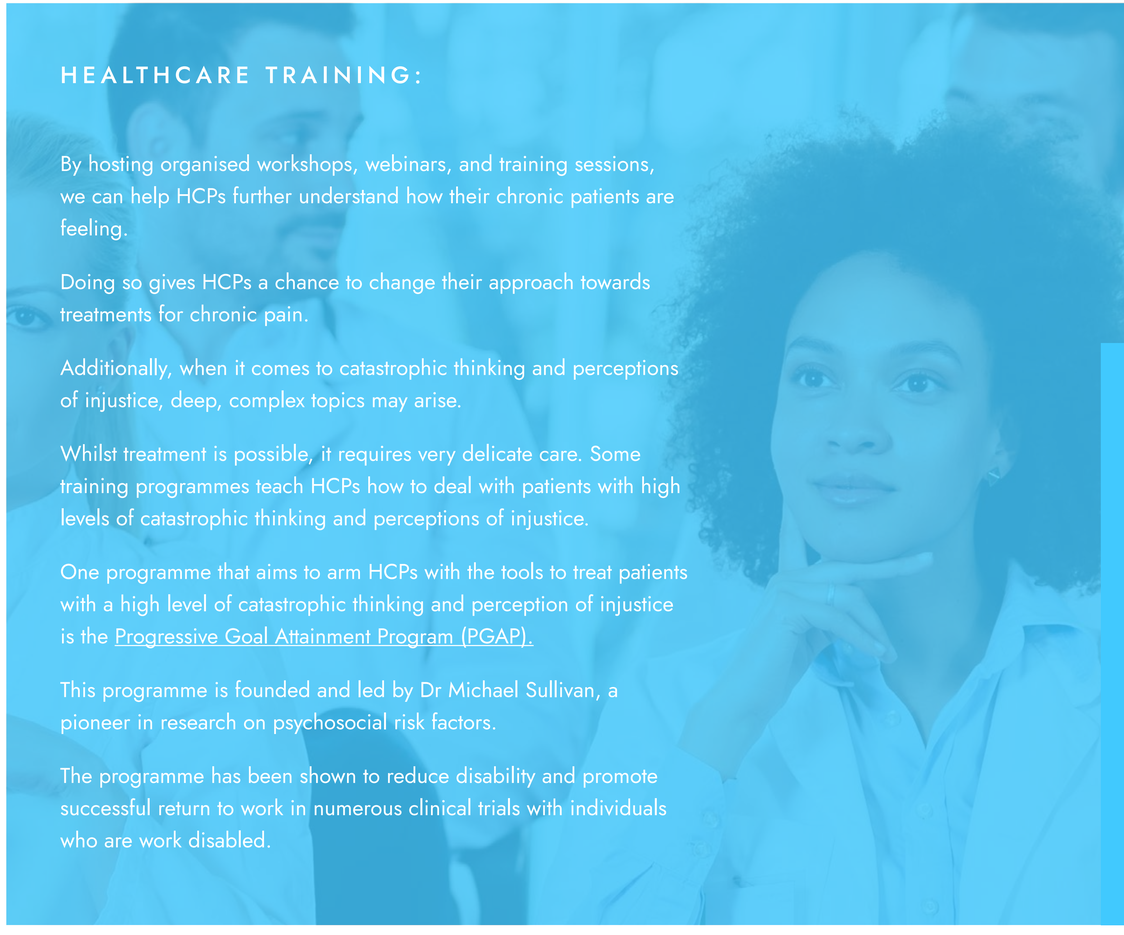
By incorporating the subject of perceptions of injustice and catastrophising pain, we could help adolescents think about whether they fit into this category.

This would allow us to identify individuals with catastrophic thinking and high perceptions of injustice earlier, allowing treatment before it further develops and affects their mental health.

Raising awareness of chronic pain in a workplace environment would foster a more empathetic workplace environment where people with chronic pain are not isolated.

Doing so could increase workplace productivity and efficiency while improving the workforce's mental health.

HEALTHCARE TRAINING:



By hosting organised workshops, webinars, and training sessions, we can help HCPs further understand how their chronic patients are feeling.

Doing so gives HCPs a chance to change their approach towards treatments for chronic pain.

Additionally, when it comes to catastrophic thinking and perceptions of injustice, deep, complex topics may arise.

Whilst treatment is possible, it requires very delicate care. Some training programmes teach HCPs how to deal with patients with high levels of catastrophic thinking and perceptions of injustice.

One programme that aims to arm HCPs with the tools to treat patients with a high level of catastrophic thinking and perception of injustice is the Progressive Goal Attainment Program (PGAP).

This programme is founded and led by Dr Michael Sullivan, a pioneer in research on psychosocial risk factors.

The programme has been shown to reduce disability and promote successful return to work in numerous clinical trials with individuals who are work disabled.

What happens if we *don't do anything?*

If we don't tackle this communication barrier on the topic of pain, then people will not be able to understand and empathise with people with chronic pain.

People with chronic pain would have no emotional support from friends and family, which could drive them to isolation and lead to mental health deterioration.

If adolescents with catastrophising thinking and high perceptions of injustice are left unchecked, it may cause further developments of the psychosocial factors, resulting in an isolated society with a negative outlook where depression and anxiety rates are rampant.

HCPs would not be able to communicate effectively with people with chronic pain, leading to misdiagnoses, undertreatment and subsequent breakdown of trust between people with chronic pain and HCPs.

Overall, a world without effective communication on the topic of pain would mean people with chronic pain could have higher levels of catastrophic thinking and perceptions of injustice, leading to a slower recovery rate and feelings of being misunderstood.

PREVENTING ISOLATION FOR SOMETHING PEOPLE HAVE NO CONTROL OVER:

People with chronic pain have no control over their pain and are isolated due to the lack of effective language to describe their experience.

By establishing an effective communication line on pain to the general public, people would be able to understand and empathise with the plights that people with chronic pain go through.

Friends and family of people with chronic pain would be able to understand the problems their loved one is going through. With this understanding, they could provide emotional and physical support to the chronically ill individual.

Adolescents with high levels of catastrophic thinking and perceptions of injustice could be identified and treated before further effects on their mental health as a method of prevention over cure.

HCPs would be able to better communicate with their chronic pain patients and understand their pain better, which could lead to more effective treatment plans.

HCPs would be able to treat patients with chronic pain with high perceptions of injustice and catastrophising thinking, overcoming a significant barrier to an effective recovery.

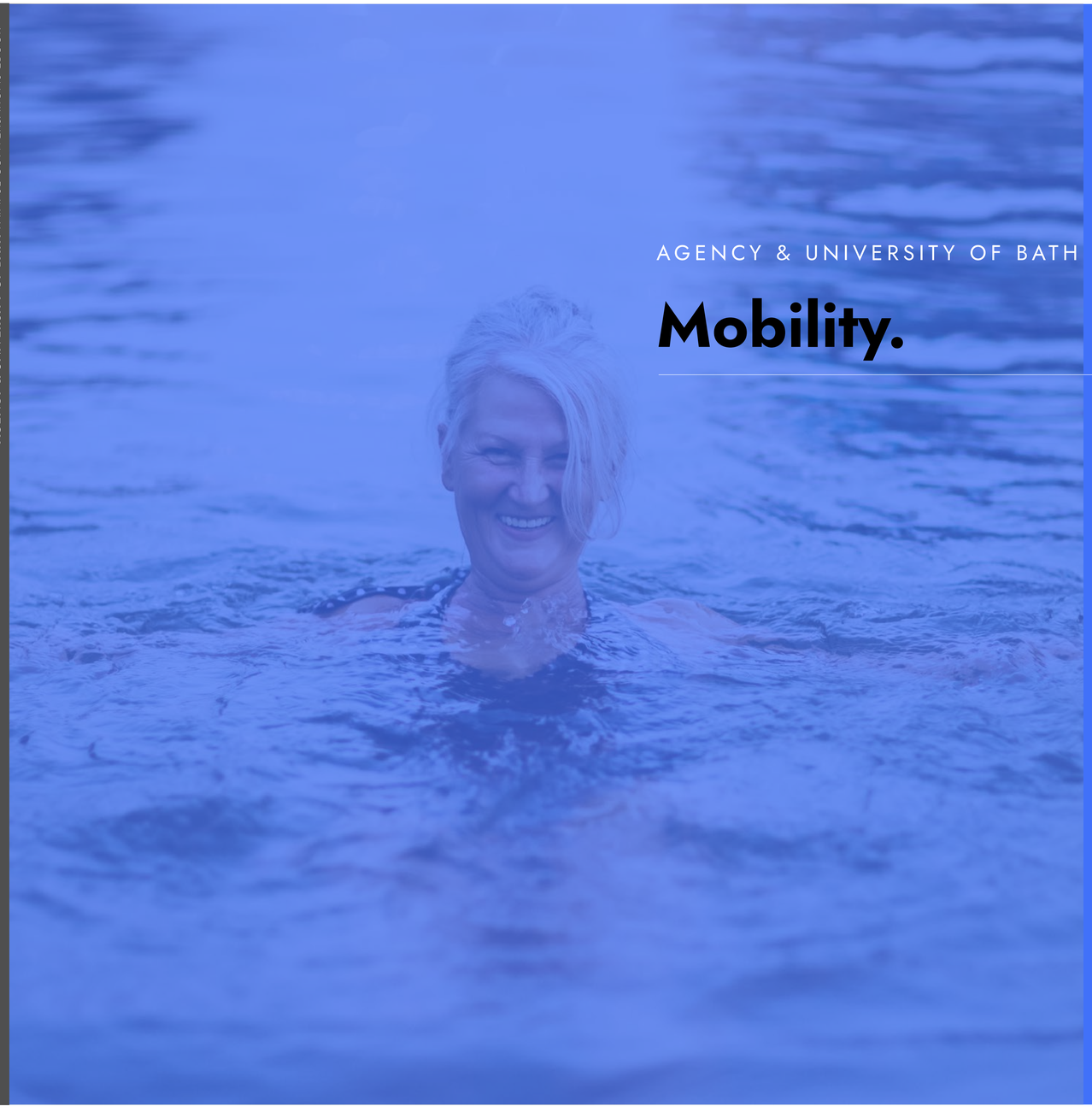
By establishing an effective line of communication on pain, we could help better understand the pain points of people with chronic pains and prevent them from being isolated.

Your *next steps.*

If you would like to hear more on the topic of pain research, contact Professor Christopher Eccleston.

Need help with communicating with patients? Get in touch with AGENCY to see how we can help you enhance trust, empower individuals with a greater sense of control and enable informed decision-making.

Get in touch now at **www.agencybristol.com**



AGENCY & UNIVERSITY OF BATH

Mobility.

INTRODUCTION

Mobility.

As a medical professional, are you concerned about the future of healthcare if we cannot empower people to move more?

You'll likely be aware that reduced mobility is strongly linked to an increased risk of developing co-morbidities such as cardiovascular disease, type II diabetes, and cancer, as well as the deterioration of musculoskeletal health [REF] [REF] [REF].

These co-morbidities highlight the cyclical nature of reduced mobility. When people aren't moving, they are more likely to become ill. This makes them less likely to move, which worsens their situation.

Such a scenario creates astonishing knock-on effects for patients, healthcare professionals and across society as general health declines, healthcare demand outstrips supply and treatment options become limited.

So ultimately, getting people to move more can prevent many adverse outcomes.

Based on work by Professor Richie Gill, this article outlines how you can significantly reduce the burden of chronic diseases and associated healthcare costs in the UK by encouraging the public to prioritise mobilisation as a critical component of care.

In doing so, you can help improve the general population's health and well-being and contribute to a more sustainable healthcare system for the future.

Throughout this article, we'll cover:

- The impact mobilisation has on reducing the risk of co-morbidities in the general population.
- How mobilisation can lessen the burden on the healthcare system.
- The role you have in promoting mobilisation as a preventative measure.
- How you can encourage and support individuals in maintaining regular physical activity.

The true impact *of reduced mobility.*

THE PHYSICAL SYMPTOMS:

Reduced mobility has been consistently linked to an increased risk of developing co-morbidities, leading to a cascade of health issues.

A study published in The Journals of Gerontology found that mobility disability predicts subsequent difficulty in the instrumental activities of daily living (IADLs) and activities of daily living (ADLs), and difficulty in these tasks is predictive of future dependency on outside help [REF].

The study also found that disability (defined as difficulty in these tasks), independent of its causes, is associated with an increased risk for:

- Mortality.
- Hospitalisation.
- High healthcare costs.
- Need for long-term care.
- Higher health care expenditures [REF].

Frailty and co-morbidities can exacerbate mobility disability and disability in general [REF].

Hence, once individuals experience conditions that cause pain, stiffness, or general ill health, they tend to avoid movement, exacerbating their health problems and making them more susceptible to additional conditions.

Osteoarthritis (OA) is a prime example. OA, characterised by excessive wear of cartilage, joint degeneration and chronic pain, often leaves people hesitant to engage in physical activity, further contributing to their sedentary lifestyle [REF].

Managing OA becomes challenging due to limited early treatment options, resulting in delayed interventions.

Approximately a third of people aged 45 years and over in the UK (8.75 million people) have sought treatment for OA, with the number of people in the UK consulting a HCP about OA set to rise from 4.7 million in 2010 to 8.3 million by 2035 due to the effects of obesity and the ageing of the population [REF] [REF].

The current demand for later treatment options, such as total knee arthroplasty (TKA) as a first-line procedure, has started to surpass the available supply [REF].

TKA procedures are becoming increasingly common in young adults globally. Still, they are not a guaranteed solution, with reports of new or persistent pain post-operation in 1 out of 8 patients [REF] [REF].

There are many other treatments for OA besides surgery, and an active lifestyle can not only prevent co-morbidities but can also reduce the burden on the National Health Service (NHS) by increasing population healthcare independence.

However, it is crucial to recognise that many cases of OA could have been avoided if individuals had engaged in regular physical activity and maintained mobility from the outset [REF]. Therefore, keeping people mobile could significantly improve current and future demand on the NHS and the broader healthcare system.

THE CURRENT STATE OF THE NHS:

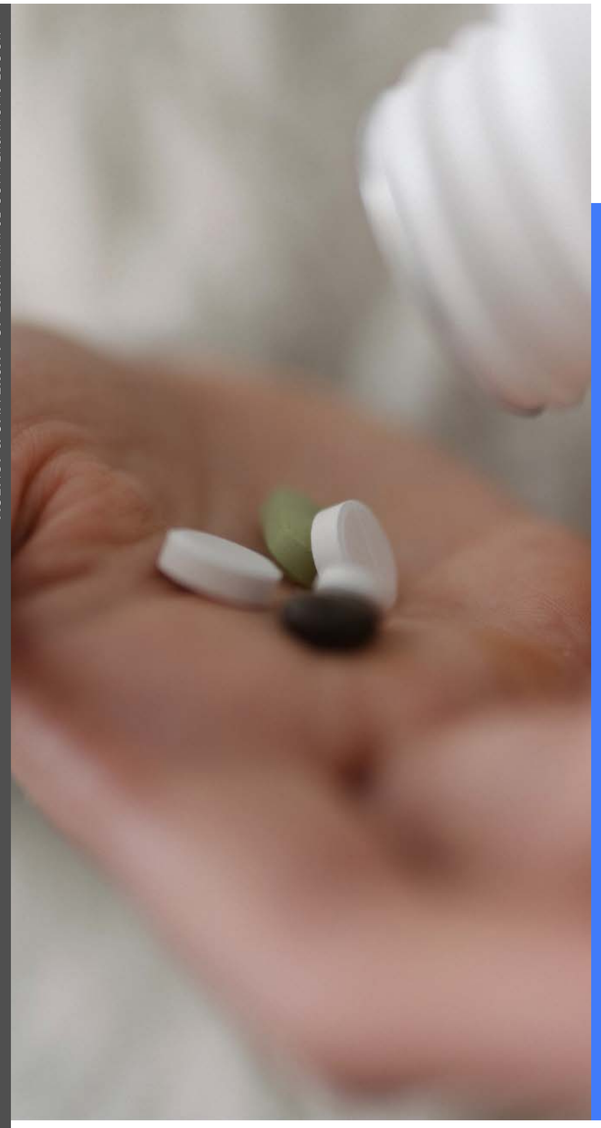
The current state of the NHS presents a significant challenge regarding patient flow and the ability to handle the growing numbers within the system.

Patient traffic is already overwhelming. In 2022, the total number of patients on the NHS waiting list for knee replacement surgery reached six million; of these, over 18,500 had been waiting for more than two years for surgery [REF].

Heightening this problem is the fact that the population is both increasing and ageing, leading to a greater demand for healthcare resources. To alleviate the strain on the NHS, it becomes crucial to focus on preventive measures that can keep people healthy for longer periods.

Encouraging individuals to engage in regular physical activity and adopt healthier lifestyles is essential. As HCPs, we are responsible for empowering people and providing them with the necessary support and guidance to lead active and healthy lives. Promoting movement and preventive care can lessen the burden on the NHS and improve people's outcomes in the long run.

Addressing this issue and finding effective solutions to reduce the backlog and ensure timely access to healthcare services is crucial.



THE RUSHED SOLUTION:

The current healthcare landscape presents a pressing concern as the demand for treatments outweighs the available supply. This situation is particularly evident in the case of TKA, as the estimated increase for TKA is projected to be 139% by 2040 and 469% by 2060 [REF].

As the number of people requiring TKA continues to rise, there is a risk of running out of implants, leading to prolonged periods of pain and limited treatment options.

As a medical professional, you are compelled to address peoples' pain and discomfort. In such circumstances, prescribing opioid pain relief becomes a common solution.

Opioid-related deaths in England and Wales have reached an all-time high, with opioid prescriptions increasing by 127% since 1983 [REF]. In the USA, opioid-involved overdose deaths rose from 21,089 in 2010 to 47,600 in 2017, followed by a significant increase in 2020 with 68,630 reported deaths and again in 2021 with 80,411 reported overdose deaths [REF].

The potential for an escalating reliance on opioids poses a severe threat to individuals and the healthcare system as a whole. Without an adequate supply of alternative treatments and interventions, the UK may follow similar trends observed in the USA and enter a catastrophic opioid epidemic [REF].

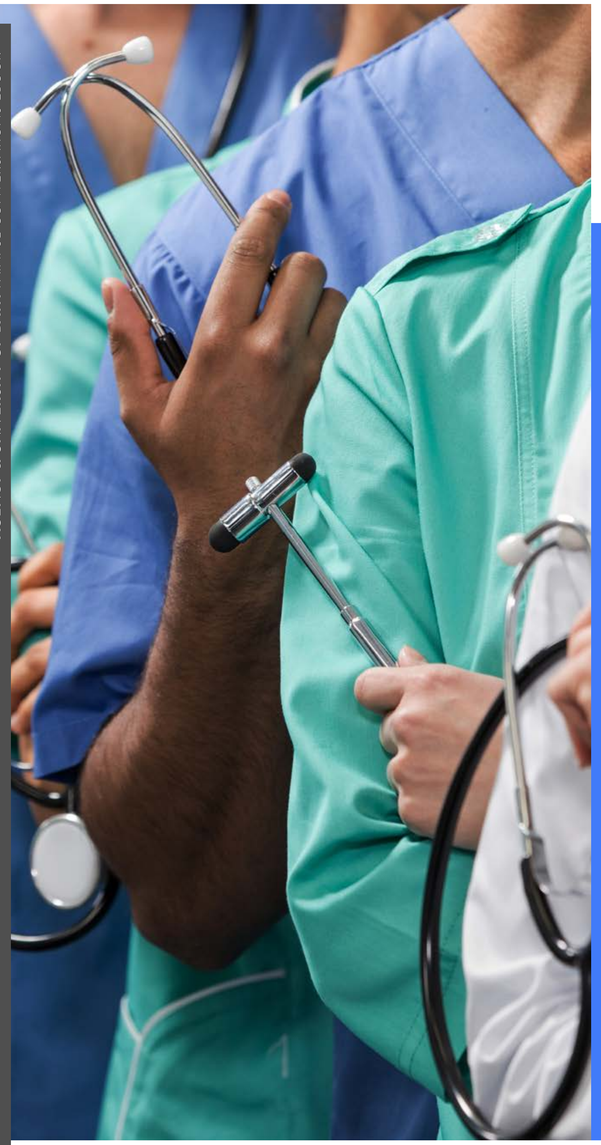
The adverse outcomes are plain to see from the stats alone and hit even harder when you hear directly from someone recovering from addiction:

"You can become addicted to prescription opioids and not even realise you have a problem till it's too late. In the haze of the high and loved ones saying they're worried about you, you lie to yourself and them and say you need the pills, that you need them, or the pain will be unbearable. Not realising you are not just taking the medicine for pain - you now need it daily to just to get out of bed. Without it, you're physically sick. Your whole body hurts, and you know the answer to fix it all is the opioids."

- An individual from Toledo, Ohio, who has overcome addiction [REF].

It is crucial to recognise this potential trajectory occurring in the UK. Therefore, becoming mobile and engaging in regular physical activity emerges as a vital solution to mitigate the demand for treatments and the reliance on more potent painkillers.

By encouraging people to prioritise movement and an active lifestyle, you can play a pivotal role in preventing the development of co-morbidities that require intensive treatments.



RISE IN WORKFORCE PRESSURES:

Public satisfaction with the NHS has fallen to its lowest level since 1997, with just 36% of people stating they are content with the way the health service is run and performing [REF].

If the healthcare system cannot provide effective solutions, public trust in the entire system will further falter. HCPs like yourself already work tirelessly to support the public, and if nothing changes, you may start to feel taken for granted.

You are fundamental in keeping the general population healthy and out of hospitals. As the demand for healthcare rises, people will increasingly require hospital care. Still, the inability to provide this care may result in friction with hospital staff and people losing trust in the system. This can cause a rise in stress levels for both the public and you, leading to a vicious cycle where HCPs leave the practice and relationships with hospitals become strained.

"The NHS workforce in England is in crisis: urgent action is required to tackle a vicious cycle of shortages and increased pressures on staff."

The King's Fund [REF].

The number of permanent qualified GPs working in England fell from 27,064 in December 2021 to 26,706 in December 2022 [REF]. In contrast, across England, the number of patients per fully-qualified GP has risen over recent years, from 2,100 to 2,300 between October 2018 and October 2022 [REF].

According to recent reports, a third of GPs in England plan to leave direct patient care in the next five years [REF], and a quarter of GP practices could close as a result of workload pressures [REF].

The existing strain on patient flow and the projected rise in an ageing population during an ongoing shortage of GPs highlights the urgency to address the widening gap between healthcare demand and available resources.

Encouraging individuals to prioritise physical activity and adopt an active lifestyle not only reduces the risk of the onset of chronic conditions but also lessens the pressure and stress on the healthcare workforce by keeping more people out of hospitals and reducing the demand for extensive treatments.

By promoting mobility as a means of maintaining good health and preventing disease, you, as HCPs, can contribute to a more sustainable healthcare system, enhancing individual outcomes and rebuilding public trust in the NHS.

THE MENTAL, PHYSICAL AND EMOTIONAL IMPACTS:

As an HCP, you are likely aware of the increasing pressures within the healthcare system and the personal toll it can take.

While you likely entered the healthcare profession with a desire to help people, you may be experiencing chronic excessive workloads and insufficient resources. This has been associated with feeling overwhelmed, stressed and out of control. These factors have been linked to potential negative impacts on patient care quality, medical errors and patient dissatisfaction [REF].

The high levels of stress endured by HCPs as a result of staff shortages and excessive workload have also been associated with various illnesses, including cardiovascular disease, addictions, cancers, diabetes, depression and early mortality [REF].

Common symptoms reported by NHS staff as a result of increased workforce pressures [REF]:

- Burnout (tiredness).
- Anxiety.
- Depression.
- Panic attacks.
- Post-traumatic stress disorder (PTSD).
- Self-doubt.
- Isolating from others.
- Lowered immunity.

Additionally, the emotional stress of this situation can affect your personal life and relationships, leading to interpersonal conflicts and disturbed sleep patterns [REF]. This lack of quality sleep worsens stress levels, creating a cyclical pattern of stress and sleep disturbance.

How can we overcome *the challenges?*

A SHIFT IN FOCUS:

As a HCP, the desire to help people is embedded in the firm belief that good can be done by improving the health and well-being of others. However, it's essential to consider whether the current approach of encouraging people to rely so heavily on your profession is beneficial.

A shift in emphasis is needed that focuses on empowering the general public to take control of their own health and well-being. By emphasising the power and control that people have over their own lives, you can help illustrate how individuals can be the heroes of their own stories and make a positive difference in their own lives.

This shift in focus is as rewarding and fulfilling for you as it is for the general public, as it enables you to offer education and insight to encourage people to make a change.

So far in this article, we have highlighted the problems associated with reduced mobility among the general population and the adverse effects on you and the healthcare system. We will now discuss how you can help encourage the public to take ownership of their health and proactively seek solutions that will save them and healthcare services in the long run.

What needs *to change?*

To guarantee a more sustainable healthcare system, there needs to be a significant shift in how the public approaches their health.

With the NHS on the brink of collapse, the only viable option is for the general population to take ownership of their health and well-being.

We understand that, as HCPs, you have been advocating for patient empowerment for years. This is not a new concept. However, the reality is that achieving widespread behaviour change on a societal level is a complex and multifaceted task.

In the following sections, we will explore strategies and approaches that you can adopt to reframe the solution and effectively empower people to become active participants in their health and well-being.

By understanding the barriers and implementing targeted interventions, you can pave the way for meaningful progress in promoting a culture of self-care and personal responsibility.

So what does change look like?

GETTING PEOPLE TO MANAGE THEIR LIFESTYLE:

Several studies have indicated a direct correlation between reduced mobility and the incidence of OA due to insufficient joint lubrication leading to the continuous wear of cartilage due to physical inactivity [REF][REF][REF][REF]. The key to maintaining musculoskeletal health and stabilising joints is balancing reducing weight and improving muscle strength.

The general population needs to be educated on the idea that exercise is a form of preventative care and should be regarded as the primary treatment option rather than surgery. With your insight, the public can evaluate the most appropriate and effective exercise regimen for them. This can range from aerobic exercise (i.e., walking) to stretch work, strength training and balance training [REF][REF].

However, to prevent hospital overcapacity, additional measures to ensure a healthy, active lifestyle is maintained must be implemented.

To support the population, you and your colleagues need to promote schemes such as:

- Group exercises.
- Training sessions.
- Reward schemes.
- Free gyms.
- Physiotherapy sessions.

All can help maintain the public interest in participating in regular physical activities.

Furthermore, recent technological advancements, such as wearable technology, virtual reality (VR) and augmented reality (AR), have been shown to drive compliance with exercise routines and, therefore, offer a solution to tackle reduced mobility [REF].

Adopting an active lifestyle has large-scale benefits on a person's overall health and well-being, as being active and mobile can reduce the risk of developing co-morbidities [REF].

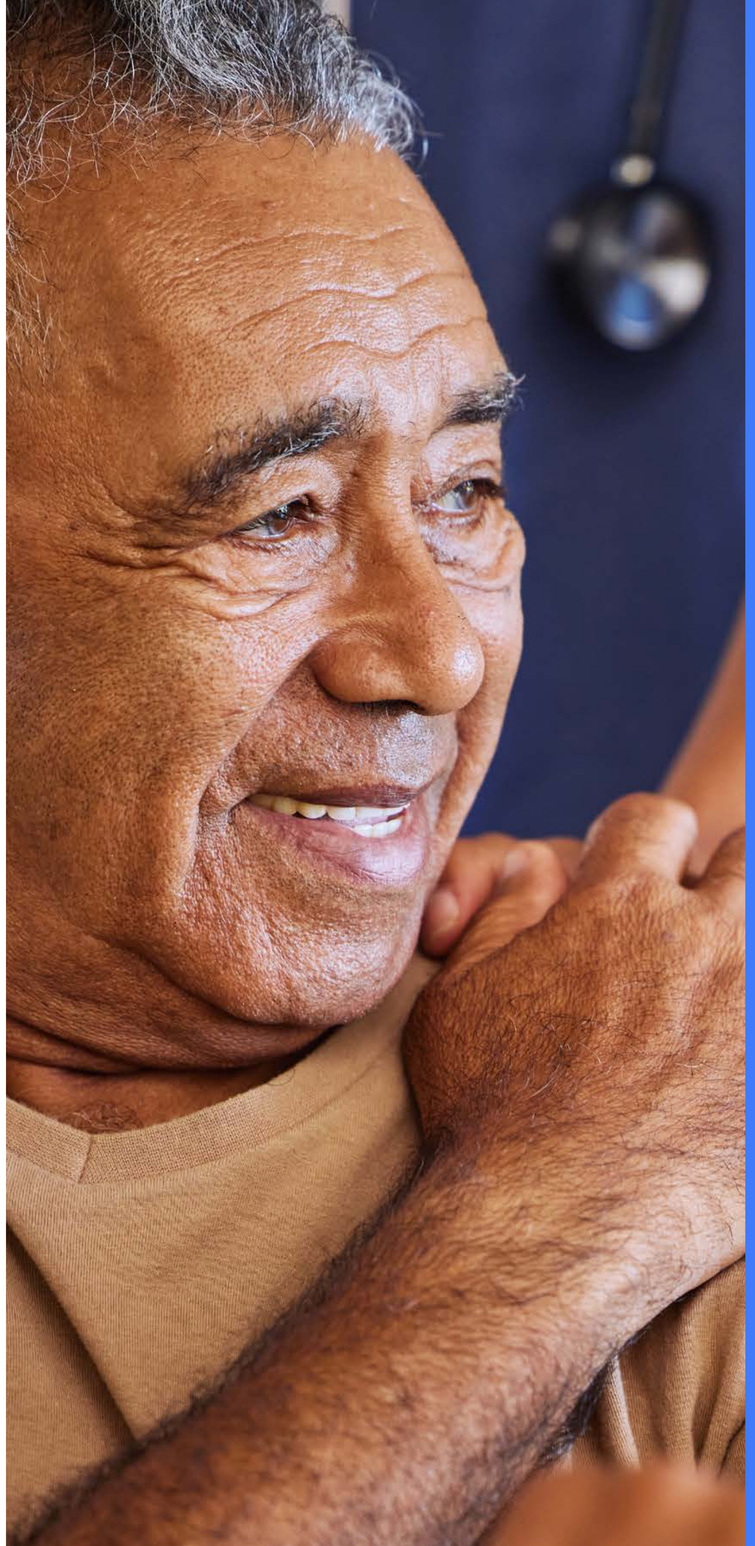
For example, physical activity has been shown to improve cognitive function and reduce the risk of developing Alzheimer's disease by 45% and dementia by approximately 30% [REF][REF].

Similarly, maintaining adequate levels of physical activity and a healthy diet reduced the risk of cardiovascular disease, several types of cancer and mortality [REF][REF].

It needs to be emphasised that the general population are the heroes of their own stories, with the power to become active, maintain physical activity, reduce their risks of co-morbidities and lessen the strain on the healthcare system.

Being active should not only be encouraged to lower the likelihood of developing OA and comorbidities but also be seen as a strategy to enhance recovery after surgery.

It has been demonstrated that prioritising mobility in the recovery process post-operation reduces pain and the risk of postoperative complications [REF]. This effectively enables people to return to being mobile and independent, thus reducing care costs, the length of stay in hospital and bed blocking [REF].



HOW DO WE DRIVE THIS CHANGE IN PEOPLE'S BEHAVIOUR?:

As HCPs, building trust with the public is crucial for facilitating behavioural change and empowering them to take control of their health.

To establish this trust, it is essential to first listen to people, recognise their pain and genuinely understand its impact on their lives.

By actively engaging in consultations and sharing stories of how certain conditions can affect individuals, you demonstrate empathy and establish a foundation of mutual understanding.

Once the individual feels heard and understood, it becomes crucial to explain the limitations and challenges of current options (i.e., TKA, opioids).

You could discuss the reasons behind these limitations, such as the scarcity of implants, the risks associated with opioids as a long-term solution and the presence of co-morbidities.

By providing transparent explanations, you could help people understand that you are striving to find the best solution within the existing constraints. And let them know what the risks are if they don't attempt to help themselves.

With this understanding in place, it is time to introduce the real solution: Mobility.

The real solution: *Mobility.*

Your talks with patients could attempt to frame mobility as a way for people to actively improve their condition and enhance their well-being. By doing this, you'll empower them to take charge of their health by highlighting the positive impact increased activity can have on their pain and overall quality of life.

As movement is the ultimate solution to reducing the problems OA can cause [REF][REF][REF], you could help empower the public to seek out solutions proactively by guiding them to the realisation and possible ways to become mobile rather than relying on surgery as the option to correct their pain.

By positioning movement as a self-led solution, people will feel a sense of empowerment and ownership over their health journey.

Therefore, conversations highlighting mobilisation as a preventative measure need to be initiated.

As a larger number of the population will live longer than previous generations, the public should want a longer life to be associated with good health rather than spending a fraction of it hospitalised, immobile and suffering from co-morbidities.

People need to be encouraged to be more preventative. On a personal level, they need to change their mindset to increase their activity in a timely manner, so issues that are creating barriers to their mobility are addressed.

Provide a call to action that encourages people and emphasises that by taking proactive steps to improve their mobility and overall health, they not only help themselves but also contribute to lessening the burden on the NHS.

Through simple educational strategies, you and your colleagues have the ability to offer advice and assist people in implementing change in their lives.

For OA, the most effective action is to reduce body weight through moderate exercise and a healthy diet in order to reduce compressive stress on the joints and delay disease progression [REF][REF].

Finally, you could draw parallels to the public's response during the COVID-19 pandemic, where they were encouraged to stay home and protect the NHS.

Utilise various channels such as face-to-face appointments, telephone consultations, informative leaflets, engaging posters and accessible eBooks to deliver these messages effectively.

What will happen *if nothing changes?*

Failure to address the situation and adopt an active lifestyle will lead to a decline in musculoskeletal health among the population, coupled with an increased incidence of co-morbidities [REF][REF].

The recent surge in demand for TKA among younger individuals is illustrative of the lack of awareness among HCPs and the public regarding other preventative measures and non-operative strategies for OA [REF]. As the total number of patients on the waiting list for knee replacement exceeds six million [REF], the sudden rise in demand for TKAs is unwarranted in a healthcare system that has reached capacity.

With a higher percentage of the population suffering from co-morbidities due to immobility and adding to the waiting list, more people now suffer from chronic pain with limited solutions offered, augmenting an already fractured relationship with the NHS.

With job satisfaction at an all-time low among HCPs, [REF], leaving the healthcare system seems to be the only viable option to avoid workforce pressures and burnout. However, the remaining HCPs are left to face the consequences.

The current state of the NHS has made headway for the development of a vicious cycle, where increased workload, increased stress and friction within the workplace results in staff shortages [REF].

Workforce burnout has also been shown to impact the quality of patient care [REF]. A report by the Health and Social Care Committee highlights how elevated stress among HCPs contributes to medical errors, inadequate care quality and dissatisfaction among patients [REF]. If no action is taken, the burden will only heighten.

Additionally, reduced mobility, co-morbidities and leaving employment due to burnout can result in socioeconomic problems such as poverty and reduced household income. [REF] People suffering from chronic pain will have to give up work and depend on a carer who may also have to leave full-time work in order to care for this person [REF].

In a time of insufficient benefits and a rising cost of living, leaving work and lessening household income, whether from reduced mobility and the associated co-morbidities or burnout, is not plausible.

The *future.*

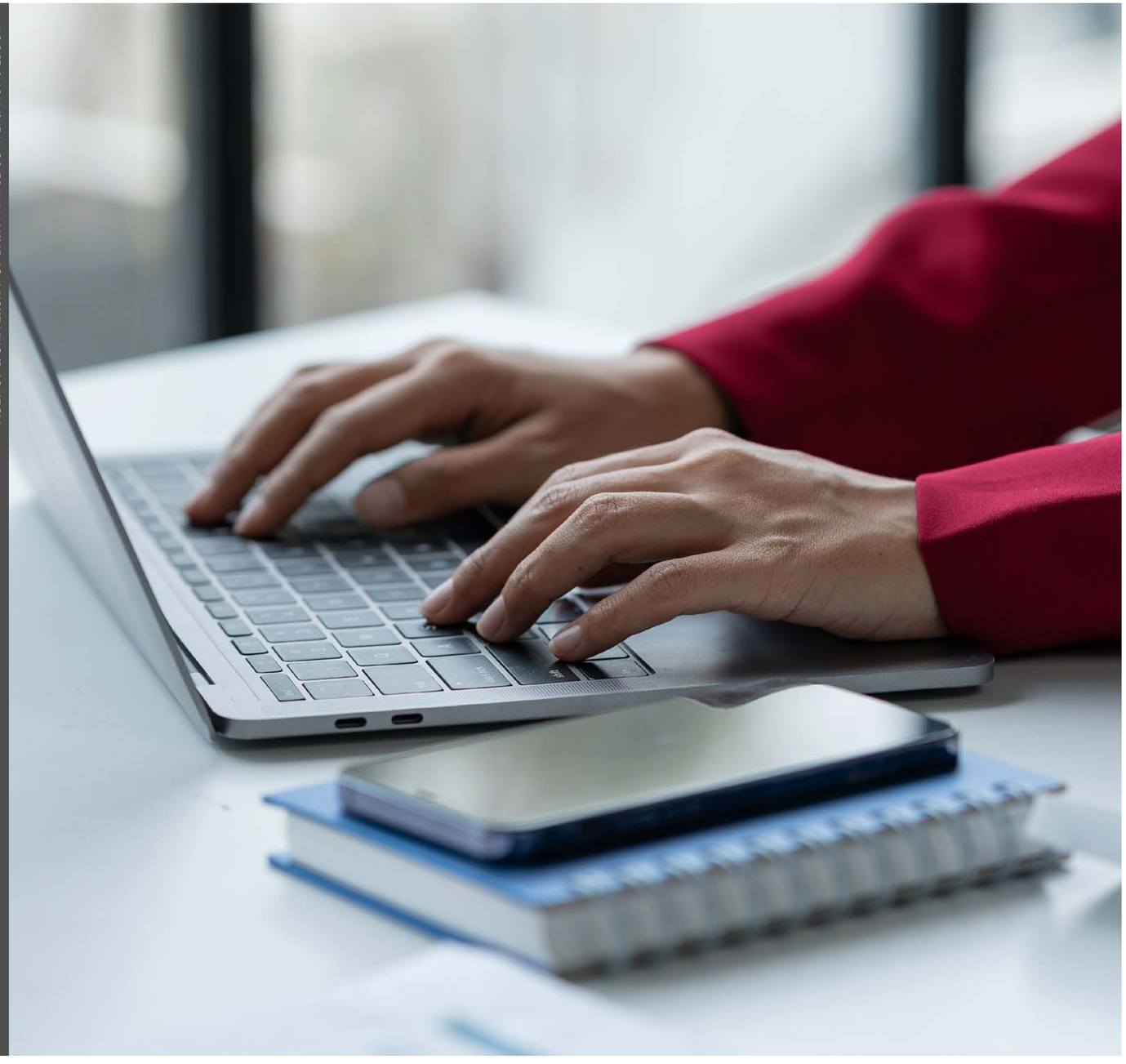
If you use your authority as a HCP to demonstrate empathy, educate and raise public awareness on the importance of mobility in guaranteeing quality of life, you'll help to build trust between your treatment pathways and the public so you can make the recommendations that will help the healthcare system to successfully regulate supply and demand.

By empowering the general population to take control of their own health, you can assist the public in preventing the development of co-morbidities that put a strain on the healthcare system.

With you and your colleagues working together as a functional unit due to relieved pressures, there will be a better flow of patients through the system, reducing waiting times and allowing people to receive timely and appropriate care. As a result, you will feel in control of your workload and be able to provide better care to the public.

By establishing the right boundaries with the general population and ensuring that they have access to sufficient care when they really need it, you can build strong, long-term relationships with them, resulting in better outcomes and a healthier population.

A future where people are encouraged to take responsibility for their own health by becoming more mobile is one where the healthcare system is more efficient, effective, patient-centred and trusted.



Your *next steps.*

If you would like to hear more on the topic of mobility as a treatment, then consider reading more work from Professor Richie Gill.

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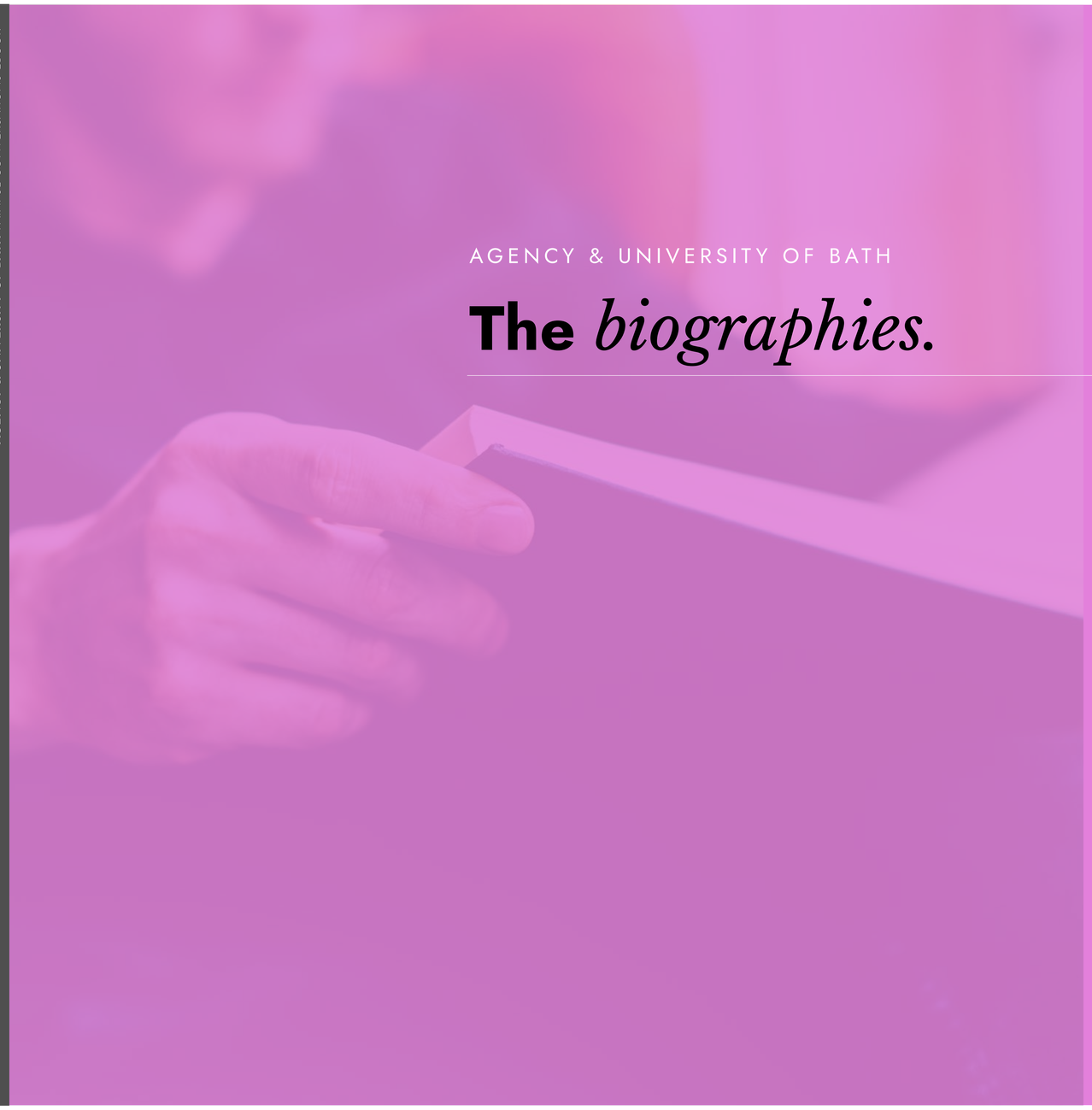

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The *biographies.*

Professor Christopher Eccleston

PROFESSOR CHRISTOPHER ECCLESTON - BIOGRAPHY:

Professor Christopher Eccleston is a distinguished figure in the field of medical psychology, renowned for his significant contributions to pain research and management. Born into the realm of academia, he currently holds the position of Professor of Medical Psychology at the University of Bath, UK, where he directs the Centre for Pain Research. His journey has been marked by a relentless pursuit of understanding the intricate interplay between physical experience, cognition, and emotion, particularly in the context of chronic pain.

In 1995, Professor Eccleston laid the foundation for the Bath Pain Management Unit, an initiative that would become a cornerstone in the treatment of chronic pain. Up until 2011, he directed the unit, pioneering intensive treatment programs that catered to both adolescents and adults living with the challenges of chronic pain. His innovative approaches have left an indelible mark on the landscape of pain management.

He continues to innovate pain management solutions, working to develop novel virtual reality rehabilitation treatments. He consults internationally on the development of new treatment programmes and centres, with visiting positions at Great Ormond Street Hospital, London, The University of Helsinki, Finland and the University of Ghent, Belgium.

At the heart of Professor Eccleston's academic pursuits lies a deep-seated interest in unravelling how individuals interpret physical sensations, the influence of social and cognitive factors on actions in pain, and the emotional context that shapes rehabilitation concerning pain management. His multifaceted responsibilities encompass driving innovation in pain management, leading research endeavours, and providing consultancy in pain and rehabilitation.

Professor Eccleston's research portfolio covers crucial areas such as evidence-based pain management, self-management of chronic illness, assistive rehabilitative technology, adolescent chronic pain, parenting, and attentional mechanisms of analgesia. His passion for forging alliances between neurobiology and experimental psychology has driven him to address grand challenges in predicting, treating, and managing chronic pain.

Professor Eccleston has authored and co-authored a staggering 300 papers to date, solidifying his position as a thought leader in the field. His contributions extend beyond academic journals, with notable publications including "Embodied: The Psychology of Physical Sensation" (2016), "European Pain Management" (2018) and "Work and Pain: A Lifespan Developmental Approach" (2020), all published by Oxford University Press.

In 2018, Professor Eccleston won the Ronald Melzack Award for Contribution to Pain Science, recognising his commitment to advancing pain research.

As Professor Christopher Eccleston continues to shape the discourse surrounding pain management, his vision extends to creating new models of care across Europe, aiming to enhance access to treatment. His dedication to the intersection of neurobiology and experimental psychology sets a powerful precedent for future chronic pain research and management endeavours.

Dr Luana Colloca

DR LUANA COLLOCA - BIOGRAPHY:

Dr. Luana Colloca, born and raised in Italy, embarked on a remarkable journey that led her to become a distinguished physician-scientist with a profound impact on the field of neuroscience and pain modulation.

During her formative years as an MD student at the University Magna Graecia of Catanzaro School of Medicine in Italy, Dr. Colloca discovered her passion for neuroscience. This revelation occurred while attending the course of neurophysiology, sparking a keen interest that would shape her future endeavours. Fuelled by this newfound fascination, she decided to blend her medical expertise with a commitment to research, setting the stage for her dual role as a physician and scientist.

Her academic achievements include an MD, a PhD in Neuroscience from the University of Turin Medical School in Italy, and a master's degree in Neuroethics from the same institution. However, her journey was not without challenges. Facing difficulties securing a position in academia in Italy, Dr. Colloca persevered, eventually undertaking post-doctoral training at the Brain Imaging Centre at the prestigious Karolinska Institute in Stockholm, Sweden. This opportunity was made possible through the IASP Collaborative Research grant from the International Association for the Study of Pain.

Following this international experience, Dr. Colloca spent five years as a senior research fellow at the National Institutes of Health (NIH) in Bethesda, further honing her skills and contributing to the advancement of knowledge in her field. Eventually, she found her place at the University of Maryland School of Nursing and School of Medicine in Baltimore, where she currently serves as a full-time Professor and holds the UMB Named Inaugural MPower Professorship award.

In her role as an MPower Distinguished Professor, Dr. Colloca also directs the Placebo Beyond Opinions Centre, where her team conducts groundbreaking research on human pain modulation. Her NIH-funded program explores the intricate interplay of neurobehavioural and genetic factors in expectancy-induced analgesia, particularly in patients suffering from chronic pain.

Dr. Colloca's research contributions have significantly impacted the understanding of psycho-neurobiological bases for pain modulation in humans. Her multifaceted approach, integrating psycho-pharmacological, neurobiological, and behavioural perspectives, has garnered international recognition. Her work has been published in esteemed journals such as Biological Psychiatry, Pain, JAMA, NEJM, and Lancet Neurology.

The profound impact of Dr. Colloca's research is evidenced by her impressive citation rate and over 230 invited lectures. Her work has reached global audiences and has been featured in renowned publications and media outlets, including National Geographic, The New Scientist, Nature, Washington Post, Science Daily, and more.

In addition to her research accolades, Dr. Colloca has received prestigious awards such as the Dubner Award and Patrick Wall International Award from the International Association for the Study of Pain (IASP). She actively contributes to the field through leadership roles in international organisations like IASP and the Society for Interdisciplinary Placebo Studies (SIPS). Locally, she serves as the CTSA TL1 Program Director at the University of Maryland and holds a significant editorial role as a Section Editor for PAIN and PAIN Reports journals.

Dr. Luana Colloca's journey exemplifies resilience, dedication, and a relentless pursuit of knowledge in the realm of neuroscience and pain modulation, leaving an indelible mark on the scientific community.

Professor Richie Gill

PROFESSOR RICHIE GILL - BIOGRAPHY:

Professor Richie Gill's journey in academia and healthcare engineering began with his pursuit of Aeronautical Engineering at the University of Bristol. He earned his Bachelor of Engineering in Aeronautical Engineering in 1989, marking the start of his passion for the intricacies of engineering.

Continuing his academic journey, Richie Gill pursued a Doctor of Philosophy in Engineering Science at the University of Oxford. His doctoral research delved into "The Mechanics of Heelstrike During Level Walking," showcasing an early interest in biomechanics. This work, completed in 1996, laid the foundation for his future contributions to the field.

Eager to expand his impact on healthcare, Professor Gill pursued further studies in Medical Engineering. His pursuit culminated in a Doctor of Science degree from the University of Bath in 2022, where he focused on "Optimising Treatment for Osteoarthritis of the Hip and Knee."

Currently holding the prestigious position of Professor of Healthcare Engineering in the Department of Mechanical Engineering at the University of Bath, Professor Richie Gill has become a leading figure in the field. With over 30 years of academic experience, he specialises in biomechanics, musculoskeletal mechanics, and orthopaedic devices.

Professor Gill has held key leadership roles in various professional societies. Notably, he served as the President of the British Orthopaedic Research Society from 2018 to 2020 and as Vice-President of the European Orthopaedic Research Society from 2016 to 2018. His commitment to advancing orthopaedic research is further exemplified by his roles as Chair and Past Chair of Trustees for the British Orthopaedic Research Society.

Professor Gill has left a lasting impact on the field with more than 230 published papers, two patents, and a focus on orthopaedic engineering, hip and knee joint function, implant functionality, biological systems modelling, healthcare engineering, and medical imaging. His dedication is reflected in his role as Co-Vice Chair of the Centre for Therapeutic Innovation (CTI) and theme lead for Medical Devices and Imaging.

In his ongoing fellowship for the Institute for Mathematical Innovation (IMI), Professor Richie Gill is leading efforts to predict the risk of osteoarthritis from medical imaging data through advanced shape analysis—an initiative poised to revolutionise the understanding and treatment of this prevalent condition.

Professor Gill's impact extends beyond academia, as demonstrated by his roles as Track Chair for the European Society of Biomechanics and his term as President of the British Orthopaedic Research Society (2018-2021).

Professor Richie Gill's legacy is one of relentless dedication to advancing healthcare engineering, biomechanics, and orthopaedic research. His multifaceted contributions continue to shape the future of medical innovation, ensuring a lasting impact on both academia and healthcare.

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