

Living Well with a Long-Term Health Condition:

8. What is the Mind-Body Link?

Why this leaflet?

This resource is intended for people who are living with, or have recently been diagnosed with, a long-term health condition. It is an introduction to the way in which the mind and the body are closely linked, and how these links can affect and influence our experience of physical symptoms. It also explains how other approaches apart from medical treatments can help to manage the physical symptoms. If there are themes within this leaflet that you'd like to learn more about, please have a look at the other titles in the 'Living Well with a Long-Term Health Condition' series.

The suggestions here are appropriate for people managing all long-term health conditions, although you may need to adapt things slightly to your personal health needs. If you have concerns about anything or how to adapt things to your own particular needs, please ask your GP or your health care professional.

The full range of IMPARTS booklets can be found at:
<https://imparts.org/resources-self-help/>

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The mind-body link

When people come to hospital or visit a GP it is often because of physical symptoms. For some physical problems the diagnosis and treatment are clear. For example, if you have a broken leg your doctor can take an X-ray to confirm the break and put your leg in a cast. However, some health conditions are more complex and are affected by many different factors. For example, we know that the mind and body are closely linked and affect each other. It can help to understand this link in order to understand symptoms, manage them more effectively and improve mental wellbeing.

These ideas may be new to some people and could seem unusual at first. You may wish to read this leaflet in small chunks or with a friend or family member. In this leaflet, when we talk about the 'mind' we mean the collection of thoughts, feelings, beliefs, attitudes, memories, past experiences and personality that make up a person's experience of the world.

Is it all in my head?

No. Absolutely not! Your physical symptoms are not all in your head. However, the mind and the body are linked and one can influence the other, sometimes quite significantly. Our physical symptoms and experiences can influence how we are thinking and feeling. Similarly, our thoughts and feelings can influence our physical experiences.

Living with a long-term health condition can be hard. Occasionally, thoughts and feelings can affect symptoms and vice versa, but everything you experience is very real, not made up or imagined. We know that some patients have felt that their difficulties were dismissed as 'all in their head' by others, including healthcare professionals. Sometimes it's best to look at the whole mind and body to find the best way of managing a situation.

How does it work?

The brain and the body are constantly sending messages to each other. These messages tell the brain and body to make changes and adjustments to the way they are working depending on the situation you are in. For example, if your eyes told your brain a car was travelling towards you at speed, it would send a very fast message to the body to step back out of harm's way. Similarly, if your stomach was empty and your body needed energy, your brain would listen to that message and prompt you to seek food. So, the mind and body are in constant communication to keep you healthy.

Summary

The mind and the body are closely linked and affect each other. This is not the same as saying your physical symptoms are 'all in your head' or not real. It means that your thoughts and feelings can affect your body and that physical symptoms can have an effect on what you think, how you feel and what you do.

'Fight or flight' mechanism

An example of this close relationship between the mind and body is the 'fight or flight' mechanism. This is the alarm system developed to keep us safe from danger, like the threat of predators for example. It is triggered when you feel threatened, and it makes your body get ready for a fight or for running away (e.g. by making your heart beat faster and your muscles tense up). These physical symptoms are the result of the release of stress hormones in the body, such as cortisol and adrenaline.

This worked really well when there were predators around. Unfortunately, it is less helpful for modern day threats. These days things like money worries or fears about

the future can also trigger this 'fight or flight' response, although it is often not that helpful for solving those kinds of problems.

Stress

When the 'fight or flight' mechanism is activated occasionally, the body can cope and recovers well after the surge of stress hormones. This is sometimes called 'short-term or acute stress' and humans are designed to deal with this.

However, when the 'fight or flight' mechanism is activated too often the body has less chance to recover fully before the next stressful event. This is called 'chronic stress or stress that does not go away' and we are less well adapted to this kind of stress. Sometimes our body can behave as if it is under stress all of the time. This is not helpful for our health and wellbeing, either physically or mentally.

Summary

Our fight-flight response helps us identify and respond to threats. This has helped us over many years. However, when it is switched on over and over again, rather than occasionally, it is less helpful and can even work against our health and well-being.

The powerful role of thoughts

Even though we are not generally faced with dangerous animals every day, life presents lots of situations which can be perceived as threatening and trigger this stress response. Our thoughts about situations have a very important role, often determining whether this stress response is triggered or not.

For example, if you ran for the bus and immediately afterwards had uncomfortable symptoms like a pounding heart and sweating, you might have the thought, 'Gosh, I'm not as fit as I used to be' and continue your journey as usual without any great change in how you feel. However, if you had a family history of heart attacks and had a recent diagnosis of high blood pressure yourself, you might instead have the thought, 'I'm having a heart attack', and feel very frightened and call an ambulance. This example shows that the same experience, interpreted differently, can result in very different feelings and choices.

The mind-body link and your health

Some of the body's systems are more affected by the mind-body link than others. Sometimes it can be difficult to disentangle whether a symptom is due to a physical condition, illness, or stress. This can be particularly the case for some of the problems below.

Digestive System Changes

It is common to experience an upset stomach (e.g., nausea, diarrhoea, bloating or pain) during times of stress. There are lots of nerve connections between the brain and the gut. In fact, the gut is sometimes called the 'Little Brain' for this reason.

Most people have experienced this type of mind-body connection at one time or another. For example, maybe you have had a churning stomach when you were dreading something or needed the toilet urgently before something important like an interview.

Skin Conditions

People with skin conditions, including eczema or psoriasis, notice that during stressful periods their symptoms can become worse and respond less well to conventional treatments.

These flare ups can in turn increase stress creating a vicious cycle. For example, people may worry about their skin's appearance and how others will view them or be bothered by uncomfortable itching and the urge to scratch. These stresses can pile up, in some cases upsetting the skin further or stopping it calming down as quickly.

Heart Symptoms

Changes in the way the heart works are common in stressful or even exciting circumstances. For example, stress or excitement can cause the heart to beat faster and raise blood pressure. This is a normal part of the 'Fight-Flight' response. Although these heart symptoms can be unpleasant, they are not dangerous and should subside by themselves after some time without doing you any harm.

However, these normal changes in heart rate and blood pressure as a result of stress can be concerning for people with or without heart conditions. They can be very frightening if you are worried that the symptoms could be a sign of something serious. These fears, and the stress and anxiety that go with them, can increase these 'fight or flight'-related heart symptoms, creating a vicious cycle.

Breathing Difficulties

Shortness of breath is an unpleasant symptom which most people have experienced. For example, you may be short of breath after running for the bus, particularly if you are not used to running. Shortness of breath can also be connected to health conditions like asthma or chronic obstructive pulmonary disease (COPD). This shortness of breath can be a very frightening experience, particularly if you fear something awful might happen like passing out or not being able to get your next breath.

These thoughts, and the fear and anxiety associated with them, can bring on more physical symptoms, including more shortness of breath. These symptoms can make it seem even more likely that something awful is about to happen. For some people, this can even lead to a panic attack.

Pain

Pain is a complex symptom which can sometimes be difficult to understand and treat. This is because it is a very personal and subjective experience. It cannot be

seen on a scan, an X Ray or measured by a blood test. Pain is both a physical and emotional experience and is affected by the mind and the body. For example, the experience of pain can be affected by stress, anxiety and depression. Some pain conditions, like migraine and other headaches, can be triggered for some people, by physical and emotional stress.

Fatigue

Fatigue is another complex physical symptom which, like pain, is affected by physical and mental factors. Physical fatigue might follow physical activity, lack of sleep or long periods of wakefulness. Fatigue can also be a symptom of certain health conditions as well as being a side-effect of some medications.

People who experience health problems may often struggle with fatigue which can be very debilitating and is a combination of physical and emotional factors.

Summary

Some of the body's systems are well known to be affected by the mind-body link. Most people will have experienced changes in these body systems in response to stress or excitement at some time in their life.

How do the mind and body affect each other?

Both our body and our brain can affect or keep these physical changes going:

Stress Hormones and their Effects

The body's stress hormones, which include adrenaline and cortisol, are designed to have a short-term effect, giving us enough physical energy and strength to get out of dangerous situations. This surge of 'fight or flight' hormones can have temporary effects such as a raised heart rate, sweating, shaking, shortness of breath etc.

However, when these hormones are released frequently, they are thought to have a longer-term effect on the body, affecting how it works as a whole. This may make it harder for the body to keep all of its organs and systems working as they should, for example:

- The immune system may be less effective when stress hormones are released regularly, i.e., chronic stress. This may be because the body focuses on the task it sees as most important, avoiding the threat, rather than using energy to detect infections, for example, and keep them under control.
- Healing can also be slowed down. The body puts tasks that are not immediately essential, like repairing damaged cells, on the backburner. While this is okay in the short-term, in the long term it can cause physical problems by slowing down recovery.
- Digestion, like healing, can also be put on the backburner during times of stress which can lead to digestive discomfort such as abdominal pain, nausea, constipation, diarrhoea and bloating for example.

The way we Think About Things

The way that we think about things can also affect the stress response. If you are vulnerable to thinking in a certain way it can make it more likely that the stress response switches on, or that it keeps going for longer. This is sometimes called 'thinking style'.

You may recognise some of the examples below:

Thinking style	What you may think when you feel anxious or worried
Thinking the worst	These symptoms must be a sign of a very serious illness
Mind reading	They think I'm exaggerating. They probably think it is all in my head.
Predicting the future	These difficulties will get worse and worse, so I won't be able to return to work as I had hoped.
Overgeneralising	I've had one bad flare-up so far since my diagnosis. That means I'll get lots of flare-ups.
Jumping to conclusions	This new dose of medication won't work.
Discounting the positive	Today was a better day but it's bound to be a one-off.
Self-criticism and labelling	I can't do anything right. I'm a failure.
'Little rules' 'Shoulds', 'musts', 'oughts'	I should be able to cope with this and I ought to be doing more around the house.

If you think that you fall into some of these thought traps you might want to look at the other resource in this series:

- [Making Your Thoughts Work for You](#)

Making Sense of Your Condition

When you have a health problem, it is normal to try to make sense of it by working out what it means for you and your life. The way you feel about the problem and how you deal with it may depend on the answers to some important questions, such as:

- What kind of problem am I facing? Is it minor or serious?
- How do I feel about it? Am I worried, stressed or down about it?
- Can I cope with this problem and with how I feel about it?
- Are the things I'm doing to try to cope working?

Your answers will affect how you feel physically and emotionally. They will also have an effect on what you feel able to do day to day. In the long term, they may even affect how limited you are by your condition.

Expectations

Our expectations about what is about to happen can even affect the kind of experience we have. Sometimes our imagination or our best guess about what something is going to be like, especially if it might be painful or uncomfortable, can be worse than it actually is and cause additional stress. It can help to have as much information as possible about something we are worried about to avoid our imagination running wild! Always remember to get your information from a reliable source.

Feelings

Our feelings and emotions are also very closely linked to our thoughts and physical symptoms.

Feeling down or depressed can have effects on your body and vice versa. Fatigue, poor sleep, changes in appetite as well as increased aches and pains can all be associated with feeling down and depressed. It can be difficult to tell these physical symptoms apart from the other symptoms you may be having.

When you are frightened or anxious you can also get lots of physical symptoms such as a racing heart, sweating, shaking, feeling dizzy and feeling sick. Although these symptoms are not dangerous, they are often unpleasant and it can be difficult to work out whether it is due to anxiety, or the sign of a more serious condition.

The changes that happen in your body when you are angry are similar to those that happen when you are anxious. Your heart may beat faster, you may start to sweat and feel hot and tense. Others may notice you becoming quite flushed and red in the face.

Helpful and Less Helpful Choices and Behaviours

Some things you do will have a good effect on your body and mind such as eating a good diet, exercising and having a good sleep routine. Making time for enjoyable things such as hobbies and getting out and meeting people can also be very helpful.

Other things such as smoking, using drugs or drinking too much alcohol can have a bad long-term effect on your physical and emotional well-being even though they seem to help in the short term.

Avoiding things because of fear, feeling down, or physical discomfort can make life easier in the short term. This is because you do not have to face the thing you fear,

overcome the feeling of feeling low, or experience more unpleasant physical symptoms.

But in the long term this can be unhelpful. For example, you can become more anxious because you never find out if your fears would come true. It can mean that you keep feeling down or feel even worse because you never get a chance to have fun, pleasure and a sense of achievement.

Summary

While we do not fully understand how thoughts, feelings and reactions cause physical changes in the body, it is believed to be affected by a range of things. These include:

- Physical changes such as surges of hormones.
- What you think about, your beliefs and what you think is happening.
- Your emotions, such as anxiety, anger and feeling down.
- The things you choose to do – or not do – in order to cope.

Positive links between your mind and body

The mind-body link can give us good effects on our physical and emotional state. We know for example that we can often get similar physical effects when we are excited about something, or something really good is happening. We connect the physical feelings with the good or exciting thing that is happening and label those feelings as 'excitement' or 'feeling good'. This can often give us a burst of energy. The same physical effects change our feelings about them depending on why we think the physical effect is happening.

This shows us the power of thoughts in how we experience what is happening.

What can you do?

There is a lot of information in this leaflet about how the mind and the body can affect each other, often without us really knowing.

There are many things that you can do to reduce the distressing and worrying symptoms that you might be feeling because of the mind-body link. The best way to deal with the feelings is often about coping with them in as effective way as possible. Understanding what is happening can also be a good start as it often reduces the uncertainty.

Remember that the mind-body link is an essential part of being human and your aim is to manage the feelings as best you can. If you think you would like to find out more have a look at the other resources in this series:

1. [Making the Most of Your Life](#)
2. [Living an Active Lifestyle](#)
3. [Managing Anxiety and Worry](#)

4. [You Sleep](#)
5. [Problem Solving](#)
6. [Making Your Thoughts work for You](#)
7. [Finding More Help – psychological help explained](#)
8. [What is the Mind-Body Link](#)
9. [Coping with Low Mood and Depression](#)

King's Patient Advice and Liaison Services (PALS)

This is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is located on the ground floor of the Hambleton Wing, near the main entrance on Bessemer - staff will be happy to direct you.

Their website can be found here: PALS – King's College Hospital NHS Foundation Trust (kch.nhs.uk/patientsvisitors/help-and-support/pals).

Tel: 020 3299 3601 Fax: 020 3299 3626 Email: kch-tr.pals@nhs.net

Providing feedback

We welcome your feedback on this series of leaflets, please use the QR code or the link below to access a short survey. <https://forms.office.com/e/R86s27qqfa>



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