

erimenopause - also known as the menopause transition - is experienced by millions of women every year. Describing the months or years leading up to the menopause, the symptoms of perimenopause can be very similar to those of menopause itself, but it can often be the case that some of these symptoms change or disappear over time.

"The most common symptoms are hot flushes and night sweats, but there are also other symptoms that are less thought about," explains Dr Louise Newson, who specialises in treating women going through the perimenopause and menopause. "Migraines, palpitations, memory problems, low mood, anxiety, joint pain, muscle stiffness, poor sleep, reduced libido," she adds.

It's the more obscure symptoms - migraines, low mood, tiredness - that many women fail to identify as part of perimenopause, something Newson partly puts down to the "big taboo" of the menopause itself.

"The perimenopause sort of creeps up - we're not taught about it at school, or even at medical school," she says. "Life is busy for lots of women - if you haven't got the knowledge, or [if] you're not aware of the symptoms, you might just think vou're stressed."

This lack of knowledge can have a severe impact. Not realising that symptoms are part of a bigger picture, many women fail to seek treatment. Newson describes patients who falsely believe their memory loss is due to dementia, or who are incorrectly prescribed high doses of antidepressants by doctors who hadn't taken hormonal changes into account.

But there may be other options. The Perimenopause Challenge is a category in the AXA Health Tech & You Awards that aims to find technologies that help women track the symptoms of perimenopause - enabling them to get better support and information. The Grace Wristband, developed by designer Peter Astbury and 2018 winner of the category, operates by easing one of the worst symptoms of the perimenopause - hot flushes.

At the onset of a hot flush, says Astbury, the hypothalamus (the part of the brain that regulates body temperature) is falsely triggered. The Grace Wristband contains a set of sensors that detect this reaction, activating a "cooling tile" that delivers "intense cooling to the

Main: designer Peter Astbury at Loughborough Design School Wristband

wrist". The goal is to "use this sensation to signal to the hypothalamus that the body should retain heat" - a Above: the Grace response directly opposite to a hot flush.



'The hope is that the **Grace will** help more women feel they can talk openly about menopause'

This could, says Astbury, prevent women from waking up in the night with hot flushes, alleviating many of the sleep-related issues faced during perimenopause.

Astbury describes one woman going through perimenopause who, waking up sweating 15 or 20 times a night, would get up and run her wrists under cold water to cool down. "I realised at that point that creating a product that could deal with night sweats was just as important as helping with hot flushes during the day," he says.

Astbury started developing Grace when he was just 22 and attending Loughborough University - a time when, perhaps

unsurprisingly, he knew "next to nothing about menopause".

"When you have an idea as a designer," he says, "you normally do a quick Google search - 99% of the time, it already exists. But in this case, the more I researched, the more I realised that an effective, non-invasive solution for symptoms like hot flushes had still not been created."

During his research, Astbury heard stories from many women - and it was this that left the biggest impression. "I regularly receive messages from women desperate to be involved as research participants so they can use Grace as soon as possible," he says.

As Newson - who was one of the judges for the Perimenopause Challenge category - points out, women's health issues are not always discussed in an open or comfortable way; something Astbury hopes will change.

"I think the UK, and the west in general, have developed an environment where people don't feel comfortable talking about things like perimenopause because of associations with ageing," he says. "Many cultures don't suffer from the same taboos as us - one study of Mayan culture found that the menopause was associated with freedom and status, and was therefore a positive milestone in life."

The design of the wristband, says Astbury, is an attempt to break down this stigma. "The aim is for women to wear Grace with confidence - the hope is that more people will feel they can openly talk about menopause."

Astbury is hopeful that a change is taking place: "Women are increasingly talking openly about menopause and its effects," he says. "I hope that this change gains traction and that our culture continues to evolve and become more and more open about all health-related topics."

Dare to dream

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